KME FIRE APPARATUS

Corona Fire Department

Quote # QUO0000008470 (Rev 6)

April 18, 2023

DESIGN CLAUSE

QTY: 1

These specifications outline the components, installation methods, and operational characteristics KME is agreeing to provide in order to meet the purchaser's requirements. Subject to the terms of the purchase agreement, other construction details not explicitly listed in these specifications will be determined at the discretion of the builder. In the event the purchaser desires a different construction or installation not already described in these specifications, additional charges may apply, and quoted lead time commitments will be adjusted.

PROPOSED BY - KME FIRE APPARATUS - CALIFORNIA

QTY: 1

KME Fire Apparatus is pleased to offer the proposed vehicle to meet the intent of the fire department specifications.

KME Fire Apparatus is a leading manufacturer in custom and commercial fire fighting vehicles.

Questions or concerns pertaining to this proposal can be answered by contacting the following KME personnel:

KME Fire Apparatus
4725 Troy Ct.
Jurupa Valley, CA 91761

Phone: (800) 328-1033 / (909) 937-3326

Fax: (909) 937-1762

E-mail: kmeca@kovatch.com

PROPOSED SERVICE BY - KME FIRE APPARATUS - CA

QTY: 1

SERVICE CENTER AND PARTS DEPOT

KME Fire Apparatus
FACTORY BRANCH - CALIFORNIA

KME APPARATUS SERVICE STATEMENT

The proposed KME Fire Apparatus vehicle is offered with complete single-source service performed by the regional KME factory service center.

Service is provided by:
KME Fire Apparatus
4725 Troy Ct.
Jurupa Valley, CA 91761
Phone: (800) 328-1033 / (909) 937-3326
Fax: (909) 937-1762
Email: kmeca@kovatch.com

John Whitney - Service Manager

Service Center Capabilities:
KME Fire Apparatus in Ontario, CA. celebrates fourteen (14) years of operation and employs twenty (20) people. The factory owned operation employs nine (9) full-time service mechanics two (2) certified paint and body technicians and two (2) fabrication technicians to handle any service-related issues or

operational improvements that you may desire.

KME Fire Apparatus employees EVTCC and ASE certified technicians, along with PPG and DuPont certified body shop technicians.
KME Fire Apparatus operates five (5) mobile service trucks that offer In-Station Service repairs to your apparatus when needed. We also have towing available should your unit need to travel to our service facility.
KME Fire Apparatus offers a twenty-four (24) hour service plan in which assigned service personnel carry pagers; one (1) man is always on call to handle any truck that is down and out of service.

KME Fire Apparatus offers:
Sheet metal repair and fabrication
Pump and electrical repair
Aerial ladder service and repair
Booster tank repair and replacement
Minor or major refurbishment capabilities
Mobile pump testing at your facility

KME Fire Apparatus offers factory authorized service and repairs to all makes of fire apparatus equipped with Hale, Waterous and Darley Pumps.

KME Fire Apparatus has the largest inventory of apparatus parts in Southern California and offers quick turn-around parts delivery when your unit is down. We also offer a large loose goods line and apparel to service the fire industry.

KME Fire Apparatus contact information, of proud service professionals.

Service Contacts - (951) 685-1237
John Whitney - Service Manager
Alfred Dominuez - Warranty

Parts and Loose Goods Sales - (951) 685-1237
Matthew Groth – Parts Manager

KME Fire Apparatus employees are protected by Workman's Compensation Insurance.

A 1 Million Dollar Garage Keepers Liability Insurance Coverage and a 25 Million Dollar Product Liability Insurance Policy protect your fire department and your fire department equipment.

FAIR ETHICAL & LEGAL COMPETITION

QTY: 1

In order to ensure fair, ethical, and legal competition, neither original equipment manufacturer (OEM) nor parent company of the OEM shall have ever been fined or convicted of price fixing, bid rigging, or collusion in any domestic or international fire apparatus market.

There will be no exceptions.

MATERIAL & WORKMANSHIP

QTY: 1

All equipment furnished shall be guaranteed to be new and of current manufacture, to meet all requirements of these specifications.

All workmanship shall be of high quality and accomplished in a professional manner so as to insure a functional apparatus with a pleasing, aesthetic appearance.

CONTRACT ADMINISTRATOR

QTY: 1

The successful bidder shall designate a contract administrator to provide a single point interface between the purchaser and the contractor on all matters concerning the contract.

APPROVAL DRAWING

QTY: 1

A detailed drawing of the apparatus shall be provided to the purchaser for approval before construction begins. A copy of this drawing shall also be provided to the manufacturer's representative. Upon purchaser's approval, the finalized drawing shall become a part of the total contract.

The drawing shall show, but is not limited to, such items as the chassis make and model, major components, location of lights, sirens, all compartment locations and dimensions, special suctions, discharges, etc. The drawing shall be a visual interpretation of the apparatus as it is to be supplied.

DELIVERY

QTY: 1

Delivery of the apparatus to the customer shall remain the bidder's responsibility.

On initial delivery of the fire apparatus, a qualified and responsible representative of the contractor shall demonstrate the apparatus and provide initial instruction to representatives of the customer regarding the operation, care, and maintenance of the apparatus and equipment supplied.

EXACT BLUEPRINT WITH BID

QTY: 1

A scale drawing of the specific apparatus being proposed shall be submitted WITH THE BID.

Drawings of similar units or demo units shall not be permitted.

Bidders should be clear that this provision is requiring a SCALE drawing of the truck which is actually being bid.

The drawing shall be done at the manufacturer's facility by the manufacturer's engineering department in order to guarantee the accuracy of the drawing.

Failure to comply with this requirement shall be grounds for rejection of the bid!

FAMA MEMBERSHIP

QTY: 1

The apparatus manufacturer must be a current member of the Fire Apparatus Manufacturer's Association (FAMA).

MANUFACTURED IN UNITED STATES

QTY: 1

The entire apparatus shall be assembled within the borders of the Continental United States to insure more readily available parts (without added costs and delays caused by tariffs and customs) and service.

COOPERATIVE PURCHASING

QTY: 1

The Manufacturer shall be pleased to allow other public agencies to use the purchase agreement resulting from this invitation to bid unless the bidder expressly notes on the proposal form that prices are not available for tag-on.

The condition of such use by other agencies shall be that any such agency must make and pursue contact, purchase order/contract, and all contractual remedies with the successful bidder.

Such tag-ons shall be done so that the original purchasing agency has no responsibility for performance by either the manufacturer or the agency using the contract.

PRODUCTION LEVEL ELECTRICAL DRAWINGS

QTY: 1

KME shall provide production level harness drawings for the specific unit to be built.

INSPECTION TRIPS (1)

QTY: 1

The successful bidder shall provide one (1) factory inspection trips to the apparatus manufacturer's facility.

Transportation, meals, lodging, and other requisite expenses shall be the bidder's responsibility.

ACCOMMODATIONS FOR THREE (3)

QTY: 1

Accommodations shall be for four (3) Fire Department representatives per trip.

The factory visits shall occur at the following stages of production of the apparatus:

TRIP ONE (1) AT FINAL COMPLETION

QTY: 1

Final inspection upon completion.

AIR TRANSPORTATION (1000 MILES OR MORE)

QTY: 1

Travel arrangements more than 1000 miles from the manufacturing facility shall be via commercial airline transportation.

The {Company} maintains the right to inspect the apparatus, within normal business hours, at any other point during construction.

Expenses incurred during non-specified inspection visits shall be the responsibility of the {Company}.

During inspection visits, the {Company} reserves the right to conduct actual performance tests to evaluate completed portions of the unit.

Testing shall be accomplished with the assistance and resources of the contractor.

COMPLETION INFORMATION

QTY: 1

The contractor shall supply, at the time of delivery, at least one (1) copy of the following documents.

- Owners name and address Apparatus manufacturer, model and serial number
- Chassis make, model and serial number
- Front tire size and total rated capacity in pounds
- Rear tire size and total rated capacity in pounds
- Chassis weight distribution in pounds with water and manufacturer mounted equipment, front and rear
- Engine make, model, serial number, rated horsepower, rated speed and governed speed
- Type of fuels and fuel tank capacity
- Electrical system voltage and alternator output in amps.
- Battery make, model and total capacity in cold crank amps (CCA)

- Transmission make, model, and serial number. If so equipped chassis transmission PTO(s) make, model and gear ratio
- Pump make, model, rated capacity in gallons per minute (liters per minute where applicable) and serial number
- Pump transmission make, model, serial number and gear ratio
- Auxiliary pump make, model, rated capacity in gallons per minute (liters per minute where applicable) and serial number
- Water tank certified capacity in gallons or liters
- Paint manufacturer and paint number(s)
- Company name and signature of responsible company representative
- Certification of slip resistance of all stepping, standing and walking surfaces.

If the apparatus has a fire pump or an industrial supply pump, the pump manufacturer's certification of suction capability.

If the apparatus has a fire pump or an industrial supply pump, a copy of the apparatus manufacturer's approval for stationary pumping applications.

If the apparatus has a fire pump or an industrial supply pump, the engine manufacturers certified brake horsepower curve for the engine furnished, showing the maximum governed speed.

If the apparatus has a fire pump or an industrial supply pump, the pump manufacturers certification of hydrostatic test.

If the apparatus has a fire pump or an industrial supply pump, the third party certification of inspection and test for the fire pump (if applicable).

If the apparatus has an aerial device the third party certification of inspection and test for the aerial device.

If the apparatus has an aerial device, all the technical information required for inspections to comply with NFPA 1911, Standards for Testing Fire Department Aerial Devices.

If the apparatus has a fixed line voltage power source, the certification of the test for the fixed power source (if applicable).

If the apparatus is equipped with an air system, test results of the air quality, the SCBA fill station, and the air system installation.

Weight documents from certified scale - showing actual loading on the front axle, rear axle(s) and overall vehicle (with the water tank full but without personnel, equipment and hose) shall be supplied with the complete vehicle to determine compliance with NFPA-1901.

Written load analysis and results of electrical performance tests.

If the apparatus is equipped with a water tank, the certification of water tank capacity by the tank manufacturer.

FMVSS REQUIREMENT

QTY: 1

The chassis shall be certified by the apparatus manufacturer as conforming to all applicable Federal Motor Vehicle Safety Standards in effect at the date of contract.

This shall be attested to by the attachment of a FMVSS certification label on the vehicle by the contractor who shall be recognized as the responsible final manufacturer.

RECORDS

QTY: 1

The successful bidder shall be responsible for preparing and maintaining a record file of parts and assemblies used to manufacture the apparatus.

These records shall be maintained in the factory of the bidder for a minimum of twenty (20) years.

File shall contain copies of any and all reported deficiencies, all replacement parts required to maintain the apparatus, and original purchase documents including specifications, contract, invoices, incomplete chassis certificates, quality control reports and final delivery acceptance documents.

The {Company} shall have access to any and all documents contained in this file upon official written request.

GENERAL CONSTRUCTION

QTY: 1

The complete apparatus, assemblies, subassemblies, component parts, etc., shall be designed and constructed with the due consideration to the nature and distribution of the load to be sustained and to the general character of the service to which the apparatus is to be subject.

All parts of the apparatus shall be designed with a factor of safety, which is equal to or greater than that which is considered standard and acceptable for this class of equipment in fire fighting service.

All parts of the apparatus shall be strong enough to withstand general service under full load.

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

Bidder's specifications must meet minimum requirements of N.F.P.A. Pamphlet #1901 and all State and Federal Department of Transportation vehicle regulations at time of sale of unit.

The apparatus shall be designed and constructed, and the equipment so mounted, with due consideration to distribution of the load between front and rear axles that all specified equipment, including a full complement of specified ground ladders, full water tank, loose equipment, and firefighters shall be carried without overloading or injuring the apparatus.

PRODUCT LIABILITY

QTY: 1

Each bidder shall supply proof of product liability and facility insurance equal to or exceeding $30,000,000.00.

This shall be provided as part of the proposal. There will be no exceptions.

PAINT CERTIFICATION

QTY: 1

The finish paint shall be certified by the apparatus manufacturer as conforming to all applicable Commercial Vehicle Paint Standards in effect at the date of contract.

This shall be attested to by the attachment of a Sikkens certification.

PARTS & SERVICE DEPOT

QTY: 1

The manufacturer shall have an authorized service center, with a staff of factory-trained mechanics, well versed in all aspects of service for all major components, of the apparatus within a 300-mile radius of the Purchaser.

In addition, the manufacturer shall maintain a separate service facility at the manufacturing site, in order to satisfy the need for possible major emergency service work.

SERVICE SHOP DETAILS

QTY: 1

The center must provide a full time staff of experienced technicians with all of the required equipment to provide modern, accurate and efficient service.

Bidders shall state the size of their shop and officer area in square feet.

They shall state the location of the facility and provide photos of both the exterior and interior of the center.

Accuracy of the description of the service center is of great importance.

KME WARRANTY, STARTING ON DELIVERY DATE

QTY: 1

Warranty coverage by KME will begin on the date of delivery to the customer.

PRICES & PAYMENTS

QTY: 1

The bid price will be F.O.B. Destination, on a delivered and accepted basis at the Fire Department.
Total price on KME's proposal sheet will include all items listed in these specifications.
KME has computed pricing less federal and state taxes. It is understood that any applicable taxes will be added to the proposed prices, unless the purchaser furnishes appropriate tax-exempt forms.

DELIVERY TIMELINE FROM CONTRACT DATE - 480 DAYS

QTY: 1

KME is proposing to complete the apparatus delivery time based on the number of calendar days, starting from the date the sales contract is signed and accepted by KME Fire Apparatus.

OVERALL APPARATUS LENGTH - 321 +/-2"

QTY: 1

OVERALL APPARATUS WIDTH - 100"

QTY: 1

OVERALL APPARATUS HEIGHT - 124" +/-2"

QTY: 1

WHEELBASE - 213"

QTY: 1

MINIMUM FRONT G.A.W.R. - 16,000 LBS

QTY: 1

MINIMUM REAR G.A.W.R. - 30,000 LBS

QTY: 1

MINIMUM TOTAL G.A.W.R. - 46,000 LBS

QTY: 1

INSTRUCTION MANUALS - TWO (2) SETS - USB

QTY: 1

In accordance with standard commercial practices, applicable to each vehicle (including body and special equipment) furnished under the contract, the following listed manuals and schematics, in the quantity specified, shall be provided at time of delivery of each vehicle.

The contractor shall supply at time of delivery, two (2) USB copies of a complete operation and service manual covering the complete apparatus as delivered and accepted.

The manual shall contain the following:

- Descriptions, specifications, and ratings of chassis, pump (if applicable), and aerial device
- Wiring diagrams
- Lubrication charts
- Operating instructions for the chassis, any major components such as a pump and any auxiliary systems
- Instructions regarding the frequency and procedures recommended for maintenance
- Parts replacement information

VEHICLE TRANSPORTATION - KME PROVIDED

QTY: 1

Transportation of the completed vehicle from the final manufacturing facility to the end user shall be provided by the manufacturer.

VEHICLE FLUID PLATE

QTY: 1

As required by NFPA-1901, the contractor shall affix a permanent plate in the driver's compartment specifying the quantity and type of the following fluids used in the vehicle:

A permanent plate in the driving compartment shall specify the quantity and type of the following fluids used in the vehicle:

- Engine oil
- Engine coolant
- Chassis transmission fluid
- Pump transmission lubrication fluid
- Pump primer fluid
- Drive axle(s) lubrication fluid
- Air-conditioning refrigerant
- Air-conditioning lubrication oil
- Power steering fluid

- Cab tilt mechanism
- Transfer case fluid
- Equipment rack fluid
- Air compressor system lubricant
- Generator system lubricant
- Diesel Exhaust Fluid (DEF)

GENERAL INFORMATION - NFPA 1901

QTY: 1

The proposed apparatus will be constructed to withstand the severe and continuous use encountered during emergency fire fighting services. The apparatus will be of the latest type, carefully designed and constructed with due consideration to the nature and distribution of the load to be sustained.

This proposal details the general design criteria of cab and chassis components, aerial device (if applicable), fire pump and related components (if applicable), water tank (if applicable), fire body, electrical components, painting, and equipment.

All items of these proposal specifications will conform to the fullest extent possible with the National Fire Protection Association Pamphlet No. 1901, latest edition, except as noted in the Statement-of-Exceptions.

KME will furnish satisfactory evidence of our ability to construct, supply service parts and technical assistance for the apparatus specified.

NFPA TREADPLATE CERTIFICATION

QTY: 1

All stepping, standing, and walking surfaces on the body shall meet NFPA #1901 anti-slip standards.

Aluminum tread plate utilized for stepping, standing, and walking surfaces shall be NFPA embossed compliant.

Upon request by the purchaser, the manufacturer shall supply proof of compliance with this requirement.

VERTICAL TREAD PLATE - NON-EMBOSSED

QTY: 1

The following vertical surfaces on the vehicle (if applicable) shall have non-embossed tread plate:

To include but not limited to:

- Rear of cab overlay
- Rear body overlay
- Front of body overlay
- Front pump house panel
- Custom cab step well
- Fender overlay
- Fender compartment doors
- Interior cab trim
- Upper body walkway walls
- Rescue body interior (walk-In/walk through)

MOBILE WATER SUPPLY APPARATUS

QTY: 1

The unit shall be designed to conform fully to the "Mobile Water Supply Fire Apparatus" requirements as stated in the NFPA 1901 Standard (2016 Revision), which shall include the following required chapters as stated in this revision:

- Chapter 1 Administration
- Chapter 2 Referenced Publications
- Chapter 3 Definitions
- Chapter 4 General Requirements
- Chapter 7 Mobile Water Supply Fire Apparatus
- Chapter 12 Chassis and Vehicle Components
- Chapter 13 Low Voltage Electrical Systems and Warning Devices
- Chapter 14 Driving and Crew Areas
- Chapter 15 Body, Compartments and Equipment Mounting
- Chapter 18 Water Tanks

NFPA "CHAPTER 16" FIRE PUMP REQUIREMENTS

QTY: 1

Chapter 16 Fire Pump and Associated Equipment

SAFETY SIGNS (NFPA REQUIRED)

QTY: 1

Safety sign(s) shall be located on the vehicle at the rear step, and at any cross walkway(s), to warn personnel that riding in or on these areas while the vehicle is in motion is prohibited.

THIRD PARTY TESTING

QTY: 1

If required by the specific chapters of NFPA-1901, the proposed unit shall be tested and certified by independent third party inspectors.

All test work for fire pumps outlined in NFPA 1901, Edition shall be conducted.

The third party inspectors shall provide the manufacturer a complete written examination and test report for each inspection performed at the manufacturer's facility.

This report specifies the points of inspection and results of such examinations and tests.

The inspectors performing the test work on the units are certified to Level II in the required NDT methods, under the requirements outlined in ASNT document CP-189.

The actual person(s) performing the inspection shall present for review proof of Level II Certification in the required NDT methods.

The apparatus manufacturer shall designate, in writing, who is qualified to witness and certify these test results.

Prior to submittal to the automotive fire apparatus manufacturer, the final Report shall be reviewed by the Supervisor of Fire Equipment Services and a Registered Professional Engineer, both of whom are directly involved with the aerial device certification program.

When the unit successfully meets all the requirements outlined in NFPA 1901, current edition, the third party inspector shall issue a Certificate of Automotive Fire Apparatus Examination and Test stating the unit's compliance with NFPA- 1901.

INTERNATIONAL HV507 4X4 CHASSIS

QTY: 1

2025 INTERNATIONAL Model HV507 SFA with 213.00 Wheelbase, 112.00 CA, and 57.00 Axle to Frame.
TOW HOOK, FRONT (2) Frame Mounted
AXLE CONFIGURATION {Navistar} 4x4
FRAME RAILS Heat Treated Alloy Steel (120,000 PSI Yield); 10.125" x 3.580" x 0.312" (257.2mm x 90.9mm x 8.0mm); 480.0" (12192) Maximum OAL
FRAME REINFORCEMENT Full Outer C-Channel, Heat Treated Alloy Steel (120,000 PSI Yield), 10.813" x 3.892" x 0.312" (274.6mm x 98.8mm x 7.9mm), 480.0" (12192mm) OAL
BUMPER, FRONT Swept Back 15-Degrees, Steel, Painted Black, with Headlight Provision, Heavy Duty
FRAME, SPECIAL EFFECTS Dimple on Left and Right Top Flange of Frame Rail to Reference Rear Axle Centerline
FRAME EXTENSION, FRONT Integral; 20" In Front of Grille, with Outer C-Channel Reinforcement
WHEELBASE RANGE 207" (525cm) Through and Including 254" (645cm)
AXLE, FRONT DRIVING {Meritor MX-16-120} Single Reduction, 16,000-lb Capacity, with Hub Piloted Wheel Mounting
AXLE, FRONT DRIVING, LUBE {EmGard FE-75W-90} Synthetic Oil; 1 thru 29.99 Pints
SUSPENSION, FRONT, SPRING Parabolic Taper Leaf, Shackle Type, 16,000-lb Capacity, with Shock Absorbers
BRAKE SYSTEM, AIR Dual System for Straight Truck Applications
Includes
: BRAKE LINES Color and Size Coded Nylon
: DRAIN VALVE Twist-Type
: GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster
: PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel
: PARKING BRAKE VALVE For Truck
: QUICK RELEASE VALVE On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4
: SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay valve for 6x4/8x6
DRAIN VALVE {Berg} with Pull Chain, for Air Tank
AIR BRAKE ABS {Bendix AntiLock Brake System} 4-Channel (4 Sensor/4 Modulator) Electronic Stability Program, with Automatic Traction Control
AIR DRYER {Wabco System Saver 1200} with Heater
BRAKE CHAMBERS, POSITION Relocated To Rear Of Rear Axle For Maximum Ground Clearance
BRAKE CHAMBERS, FRONT AXLE {MGM} 24 SqIn
BRAKE CHAMBERS, REAR AXLE {Bendix EverSure} 36/36 SqIn Spring Brake
BRAKE, PARKING Manual Push-Pull Pneumatic Parking Brake
SLACK ADJUSTERS, FRONT {Haldex} Automatic
SLACK ADJUSTERS, REAR {Haldex} Automatic
AIR COMPRESSOR {Cummins} 18.7 CFM
AIR DRYER LOCATION Mounted Inside Left Rail, Behind Transfer Case Mounting
AIR TANK LOCATION (2) Mounted Under Battery Box, Outside Left Rail, Back of Cab, Perpendicular to Rail
DUST SHIELDS, FRONT BRAKE for Air Cam Brakes
DUST SHIELDS, REAR BRAKE for Air Cam Brakes
BRAKES, REAR {Meritor 16.5X7 P} Air S-Cam Type, Cast Spider, Cast Shoe, Double Anchor Pin, Includes Greaseable and Zinc Coated Anchor Pins, Size 16.5" X 7", 38,000-lb Capacity per Axle
BRAKES, FRONT {Meritor 16.5X6 Q-PLUS CAST} Air S-Cam Type, Cast Spider, Fabricated Shoe, Double Anchor Pin, Size 16.5" X 6", 23,000-lb Capacity
STEERING COLUMN Tilting and Telescoping
STEERING WHEEL 4-Spoke; 18" Dia., Black
STEERING GEAR {Sheppard M110} Power
DRIVELINE SYSTEM {Dana Spicer} SPL170 Main Driveline, 1710 Driveline to Transfer Case, SPL140 Driveline to Front Axle, for 4x4
AFTERTREATMENT COVER Steel, Black

EXHAUST SYSTEM Horizontal Aftertreatment System, Frame Mounted Right Side Under Cab, for Single Short Horizontal Tail Pipe, Frame Mounted Right Side Back of Cab, for All-Wheel Drive
ENGINE COMPRESSION BRAKE {Jacobs} for Cummins ISL/L9 Engines; with Selector Switch and On/Off Switch
SWITCH, FOR EXHAUST 3 Position, Momentary, Lighted Momentary, ON/CANCEL, Center Stable, INHIBIT REGEN, Mounted in IP Inhibits Diesel Particulate Filter Regeneration When Switch is Moved to ON While Engine is Running, Resets When Ignition is Turned OFF
ELECTRICAL SYSTEM 12-Volt, Standard Equipment
Includes
: DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab
: HAZARD SWITCH Push On/Push Off, Located on Instrument Panel to Right of Steering Wheel
: HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever
: PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light
: STARTER SWITCH Electric, Key Operated
: STOP, TURN, TAIL B/U LIGHTS Dual, Rear, Combination with Reflector
: TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change Feature
: WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with Turn Signal Lever
: WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted
: WIRING, CHASSIS Color Coded and Continuously Numbered
CIGAR LIGHTER Includes Ash Cup
HORN, ELECTRIC (2) Disc Style
IGNITION SWITCH Keyless
POWER SOURCE Cigar Type Receptacle without Plug and Cord
ALTERNATOR {Leece-Neville BLP4006HN} Brushless, 12 Volt, 325 Amp Capacity, Pad Mount, with Remote Sense
BODY BUILDER WIRING Back of Day Cab at Left Frame or Under Sleeper, Extended or Crew Cab at Left Frame; Includes Sealed Connectors for Tail/Amber Turn/Marker/ Backup/Accessory Power/Ground and Sealed Connector for Stop/Turn
BATTERY SYSTEM {Fleetrite} Maintenance-Free, (4) 12-Volt 3800CCA Total, Top Threaded Stud
SPEAKERS (2) 6.5" Dual Cone Mounted in Both Doors, (2) 5.25" Dual Cone Mounted in Both B-Pillars
ANTENNA for Increased Roof Clearance Applications
RADIO AM/FM/WB/Clock/Bluetooth/USB Input/Auxiliary Input
BACK-UP ALARM Electric, 102 dBA
DATA RECORDER Includes Display Mounted in Overhead Console
STOP-LIGHT WIRING MODIFIED Stop-Lights Turned on When Engine Compression Brake, Exhaust Brake or Retarder is Activated
JUMP START STUD Remote Mounted
POWER SOURCE, TERMINAL TYPE 2-Post
BATTERY BOX Steel, with Fiberglass Cover, 2-4 Battery Capacity, Mounted Left Side Perpendicular to Frame Rail, 35" Back of Cab
SOLENOID, AIR for Customer Use; Provides (2) Normally Closed Pilot Air Source, Approx. 4 CFM, Includes Latched Switch in Cab; Air Available Only with Key in "Ignition" or "Accessory" Position; Air Will Exhaust with Key in "Off" Position
HORN, AIR Accommodation Package, Less Horn
CLEARANCE/MARKER LIGHTS (5) {Truck Lite} Amber LED Lights, Flush Mounted on Cab or Sunshade
SWITCH, BODY CIRCUITS, REAR with Remote Power Module Mounted at Rear on Frame, Up to 6 Outputs 6 Inputs, Max 20 amp per Channel, Max 80 amp Total, Includes 1 Switch Pack with Momentary Switches
STARTING MOTOR {Delco Remy 38MT Type 300} 12 Volt, Less Thermal Over-Crank Protection
COURTESY LIGHT (2) Mounted In Front Map Pocket Left and Right Side
INDICATOR, LOW COOLANT LEVEL with Audible Alarm
INDICATOR, BATTERY WARNING Green BATTERY ON Indicator, Mounted on Left Side of Instrument Panel, To be Used with Factory Installed or Customer Mounted Battery Disconnect Switch
CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III with Trip Indicators, Replaces All Fuses

TURN SIGNALS, FRONT Includes LED Side Turn Lights Mounted on Fender
POWER SOURCE, ADDITIONAL Auxiliary Power Outlet (APO) with USB Port, Located in the Instrument Panel
BATTERY DISCONNECT SWITCH for Cab Power Disconnect Switch, Disconnects Power to Power Distribution Center (PDC) and Body Builder Through Solenoid, Does Not Disconnect Charging Circuits, Locks with Padlock, Cab Mounted
HEADLIGHTS Halogen, with Daytime Running Lights, Automatic Twilight Controlled
USB PORT (1) Located in the Instrument Panel
FENDER EXTENSIONS Rubber
LOGOS EXTERIOR Model Badges
LOGOS EXTERIOR, ENGINE Badges
INSULATION, UNDER HOOD for Sound Abatement
GRILLE Stationary, Chrome
INSULATION, SPLASH PANELS for Sound Abatement
BUG SCREEN Mounted Behind Grille
FRONT END Tilting, Fiberglass, with Three Piece Construction, for WorkStar/HV
GRILLE EMBER SCREEN Mounted to Grille and Cowl Tray to Keep Hot Embers out of Engine and HVAC Air Intake System
PAINT SCHEMATIC, PT-1 Single Color, Design 100
Includes
: PAINT SCHEMATIC ID LETTERS "WK"
PAINT IDENTITY, PT-2 Single Color, Instruction No. 936. Frame/Running Gear, Less Fuel Tanks
Includes
: NOTE: Battery Box, Air Tanks, Fuel Tanks, Steps and Straps NOT Painted
PAINT TYPE Base Coat/Clear Coat, 1-2 Tone
PAINT CLASS Single Custom Color
COMMUNICATIONS MODULE Telematics Device with Over the Air Programming; Includes Five Year Data Plan and International 360
LABEL, DEF "DEF ONLY"
PROMOTIONAL PACKAGE Government Silver Package
KEYS - ALL ALIKE, ID I-1003 Compatible with Z-001
CLUTCH Omit Item (Clutch Control)
ANTI-FREEZE Red, Extended Life Coolant; To -40 Degrees F/ -40 Degrees C, Freeze Protection
BLOCK HEATER, ENGINE 120V/1000W, for Cummins ISB/B6.7/ISL/L9 Engines
Includes
: BLOCK HEATER SOCKET Receptacle Type; Mounted below Drivers Door
ENGINE, DIESEL {Cummins L9 400} EPA 2021, 400HP @ 2200 RPM, 1250 lb-ft Torque @ 1200 RPM, 2200 RPM Governed Speed, 400 Peak HP (Max), (RATED FOR EMERGENCY VEHICLES ONLY)
FAN DRIVE {Horton Drivemaster} Two-Speed Type, Direct Drive, with Residual Torque Device for Disengaged Fan Speed
Includes
: FAN Nylon
RADIATOR Aluminum, Cross Flow, Front to Back System, 1469 SqIn, with 1172 SqIn Charge Air Cooler
Includes
: DEAERATION SYSTEM with Surge Tank
: HOSE CLAMPS, RADIATOR HOSES Gates Shrink Band Type; Thermoplastic Coolant Hose Clamps
: RADIATOR HOSES Premium, Rubber
AIR CLEANER Dual Element
EMISSION, CALENDAR YEAR {Cummins L9} EPA, OBD and GHG Certified for Calendar Year 2022
THROTTLE, HAND CONTROL Engine Speed Control for PTO; Electronic, Stationary Pre-Set, Two Speed Settings; Mounted on Steering Wheel
ENGINE WATER COOLER {Sen-Dure} Auxiliary, For Use with Fire Trucks
CARB IDLE COMPLIANCE Engine Shutdown System Exempt Vehicles, Complies with California Clean Air Regulations
CARB EMISSION WARR COMPLIANCE for Cummins L9 Engines

ENGINE CONTROL, REMOTE MOUNTED Provision for; Includes Wiring for Body Builder Installation of PTO Controls and Starter Lockout, with Ignition Switch Control, for Cummins B6.7 and L9 Engines
TRANSMISSION, AUTOMATIC {Allison 3000 EVS} 6th Generation Controls, Close Ratio, 6-Speed with Double Overdrive, with PTO Provision, Less Retarder, Includes Oil Level Sensor
TRANSFER CASE {Meritor MTC-4210} 2-Speed, 10,000 lb-ft Torque Rating, with PTO Provision, Electric Over Air Control, with Lube Pump
OIL COOLER, AUTO TRANSMISSION {Modine} Water to Oil Type
TRANSFER CASE LUBE {EmGard 50W} Synthetic; 1 thru 14.99 Pints
SHIFT CONTROL PARAMETERS {Allison} 3000 or 4000 Series Transmissions, S1 Performance in Primary and Fixed Programming in Secondary
TRANSMISSION SHIFT CONTROL Column Mounted Stalk Shifter, Not for Use with Allison 1000 2000 Series Transmission
OIL COOLER, TRANSFER CASE with Oil Coolant Lines Routed to Oil Cooler
TRANSMISSION OIL Synthetic; 29 thru 42 Pints
ALLISON SPARE INPUT/OUTPUT for Emergency Vehicle Series (EVS), Fire/Pumper, Tank, Aerial/Ladder, Package Number 198
NEUTRAL AT STOP OMIT
PTO LOCATION Customer Intends to Install PTO at Left Side of Transmission
AXLE, REAR, SINGLE {Meritor RS-30-185} Single Reduction, 30,000-lb Capacity, Driver Controlled Locking Differential, T Wheel Ends . Gear Ratio: 5.86
SUSPENSION, REAR, SINGLE 31,000-lb Capacity, Vari-Rate Springs, with 4500-lb Capacity Auxiliary Rubber Springs
FUEL/WATER SEPARATOR {Racor 400 Series} 12 VDC Electric Heater, Includes Pre-Heater, with Primer Pump, Includes Water-in-Fuel Sensor, Mounted on Engine
FUEL TANK Top Draw, Non-Polished Aluminum, 26" Dia, 70 US Gal (265L), Mounted Left Side, Under Cab
FUEL COOLER Less Thermostat; Mounted in Front of Cooling Module
DEF TANK 7 US Gal (26L) Capacity, Frame Mounted Outside Left Rail, Under Cab
AUXILIARY FUEL DRAW TUBE Located at Auxiliary Port on Fuel Tank
SEAT, REAR BENCH; Omit Item
AIR CONDITIONER with Integral Heater and Defroster
CAB Conventional, Extended
GAUGE CLUSTER Base Level; English with English Electronic Speedometer
Includes
: GAUGE CLUSTER DISPLAY: Base Level (3" Monochromatic Display), Premium Level (5" LCD Color Display); Odometer, Voltmeter, Diagnostic Messages, Gear Indicator, Trip Odometer, Total Engine Hours, Trip Hours, MPG, Distance to Empty/Refill for
: GAUGE CLUSTER Speedometer, Tachometer, Engine Coolant Temp, Fuel Gauge, DEF Gauge, Oil Pressure Gauge, Primary and Secondary Air Pressure
: WARNING SYSTEM Low Fuel, Low DEF, Low Oil Pressure, High Engine Coolant Temp, Low Battery Voltage (Visual and Audible), Low Air Pressure (Primary and Secondary)
SEATBELT WARNING PREWIRE Includes Seat Belt Switches and Seat Sensors for all Belted Positions in the Cab and a Harness Routed to the Center of the Dash for the Aftermarket Installation of the Data Recorder and Seatbelt Indicator Systems, for 1 to 3 Seat Belts
GAUGE, OIL TEMP, AUTO TRANS for Allison Transmission
GAUGE, AIR CLEANER RESTRICTION {Filter-Minder} with Black Bezel, Mounted in Instrument Panel
IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster
SEAT, DRIVER {H.O. Bostrom Sierra Air 100} NFPA Compliant, Air Suspension, High Back, Vinyl with Covered Back and International Logo on Headrest, for Fire Truck
SEAT, PASSENGER {H.O. Bostrom Sierra Air 100} NFPA Compliant, Air Suspension, High Back, Vinyl with Covered Back, International Logo on Headrest, for Fire Truck
MIRRORS (2) C-Loop, Power Adjust, Heated, LED Clearance Lights, Bright Heads and Arms, 7" x 14.5", Includes 8" x 6" Convex Mirrors, for 96" Load Width
SEAT BELT All Red; 1 to 3
CAB MOUNTING HEIGHT EFFECTS High Cab in Lieu of Mid High Cab Mounting (Approx. 4.5")
CAB INTERIOR TRIM Classic, for Extended Cab

Includes
: CONSOLE, OVERHEAD Molded Plastic with Dual Storage Pockets, Retainer Nets and CB Radio Pocket; Located Above Driver and Passenger
: DOME LIGHT, CAB Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Overhead Console, Center Mounted
: SUN VISOR (2) Padded Vinyl; 2 Moveable (Front-to-Side) Primary Visors, Driver Side with Toll Ticket Strap
WINDOW, POWER (2) and Power Door Locks, Left and Right Doors, Includes Express Down Feature
CAB REAR SUSPENSION Air Bag Type
INSTRUMENT PANEL Flat Panel
ACCESS, CAB Steel, Driver Passenger Sides, Two Steps per Door, for use with Day Cab and Extended Cab
WHEELS, FRONT {Accuride 41730} DISC; 22.5x9.00 Rims, Extra Polish Aluminum, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs
WHEELS, REAR {Accuride 41730} DUAL DISC; 22.5x9.00 Rims, Extra Polish Aluminum, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs
WHEEL GUARDS, FRONT {Accuride} for Metric Hub Piloted Wheels with Flanged Mounting Nuts Mounted Between Hub and Wheel
BDY INTG, REMOTE POWER MODULE (2) Mounted Inside Cab Behind Driver Seat, Up to 6 Outputs & 6 Inputs Each, Max 20 amp per Channel, Max 80 amp Total; Includes 2 Switch Packs with Latched Switches
BDY INTG, I/O EXP HARNESS {for Diamond Logic Builder} In-Cab wire harness (DLB) program only, Includes a harness with five blunt cut wires routed on lower left of instrument panel. Two ground active inputs and two (.5Amp) relay drivers outputs are provided
(4) TIRE, REAR 315/80R22.5 Load Range L X WORKS Z (MICHELIN), 485 rev/mile, 68 MPH, All-Position
(2) TIRE, FRONT 315/80R22.5 Load Range L X MULTI Z (MICHELIN), 487 rev/mile, 75 MPH, All-Position
WARRANTY Standard for HV507, HV50B, HV607 Models, Effective with Vehicles Built July 1, 2017 or Later, CTS-2025A In Service

PROGRAM DOOR LOCKS. TOP SPEED 60 MPH
ADD GRAB HANDLE LEFT AND RIGHT,WILL BE NFPA RUBBER INSERT TYPE.
TELMA RETARDER INSTALLED BY K-TECH AD72-45 CONTROLLED BY ON-OFF SWITCH IN DASH
INSTALL HI VIZ LIGHTS IN HOOD AREA. REMOVE BUMPER LIGHTS AND USE EXSISTING HARNES
REMOVE LEFT LAYNARD

CENTER CONSOLE – GRAY TEXTURE PAINT

QTY: 1

A center console fabricated from 1/8" aluminum shall be provided and mounted between the driver and officer's seats. The console shall be designed with a brush pewter upper and lower panel. The upper panel shall be the mounting surface for optional switches (all emergency switches will utilize switching provided in the chassis dash), applicable indicator lights and electronic siren control boxes. The lower panel shall be used for mount of applicable radios, joysticks, pump controls, etc. all controls will be within reach of the driver or officer.

In addition, the console shall be equipped with two (2) map/notebook storage pockets at the rear of the console. The console dimensions are based on the available space in the cab.

A Blue Sea model #4363 multi-use power point with built in two (2) USB ports, and one (1) 12-volt socket shall be installed on the console.

A Blue Sea model #5032 split 12 space fuse block shall be installed in the center console. Side "A" shall be battery power and side "B" shall be battery disconnect. The fuse block shall be limited to 60 amps per load group and 30 amps per circuit with a total amperage capacity of 100 amps.

The console will be painted with gray texture paint.

VEHICLE TOP SPEED - INTERNATIONAL - 2016 NFPA STA

QTY: 1

The rear axle/s shall be geared for a vehicle top speed in accordance with NFPA sections 4.15.2 and 4.15.3.
Units with GVWR over 26,000 pounds shall be limited to 68 mph. If the combined tank capacity is over 1250 gallons of foam and water or the GVWR is over 50,000 pounds, the vehicle top speed shall be limited to 60 mph or the fire service rating of the tires, whichever is lower.

INTERNATIONAL SAE J2433 ROLLOVER TESTING

QTY: 1

The International chassis shall comply with SAE J2422 Cab Roof Strength Evaluation. The Cab to Chassis Mounting System shall remain attached to the vehicle chassis and in an orientation similar to its original position when subjected to 20g deceleration load in the forward direction. Components in the mounting system may become distorted or broken but never dislodge from the original mounting location.

INT - SIXTEEN (16) INCH FRONT BUMPER EXTENSION

QTY: 1

A 12" high, 96" wide, two (2) ribbed, bright finish stainless steel front bumper shall be provided. The front bumper shall be extended approximately sixteen (16) inches. A tread plate plate (3/16") gravel shield with end caps shall be installed.

BUMPER EXTENSION HEADLIGHT MOUNTING

QTY: 1

A pair of 7" Round LED headlights shall be provided in the chassis front bumper to meet DOT requirements. The OEM headlights on the chassis are to be provided and shall be switched independantly as auxiliary driving lights.

FRONT BUMPER LED FOG LIGHTS

QTY: 1

Two (2) Rigid Industries Dual series Flood LED Fog lights 221113 shall be provided and mounted underneath the front bumper. The lights shall be clear with a black housing.

WHEEL TRIM KITS, CHROME BABY MOONS/LUG NUT COVERS

QTY: 1

Wheel trim kits consisting of chrome baby moon hubcaps and chrome lug nut covers shall be installed on the front and rear axles of the single rear axle chassis.

COVER, DRIVER SIDE CAB STEP AREA - 2 DOOR

QTY: 1

The driver side cab step area shall be covered with a polished aluminum tread plate cover which shall include the top, front and both ends. Access covers/ports shall be provided to access any chassis components when applicable. Step areas shall be provided for access to the cab.

COVER, OFFICER SIDE CAB STEP AREA - 2 DOOR

QTY: 1

The officer side cab step area shall be covered with a polished aluminum tread plate cover which shall include the top, front and both ends. Access covers/ports shall be provided to access any chassis components when applicable. Step areas shall be provided for access to the cab.

INT - CENTER CONSOLE FOR NAVISTAR 2 DOOR - PAINTED

QTY: 1

A center console fabricated from 1/8" aluminum shall be furnished. It will be located between the driver and officer's seats. The forward area of the console shall have a mounting surface for emergency lighting switch panels and electronic siren control boxes within reach of the driver or officer. In addition, the console shall be equipped with two (2) map/notebook storage pockets at the rear of the console. The console, INCLUDING THE LID, shall be finished with a textured black paint. Console dimensions are based on current International cab models. Other specified commercial cabs may result in varied dimensions.Changes to the international cab may also result in varied dimensions.
The cab Center Console shall be equipped an area for component switching within easy reach of the driver and or officer. This switch package shall separate the emergency / auxiliary electrical functions from the regular chassis functions.

The center console cup holders need to have 3" deep inserts. They shall not be open through to the center console.

The HT radio holders in the center console shall have 3" deep square boxes below them. This is to prevent radios from falling into the center console.

SWITCHING REQUIREMENTS

QTY: 1

The cab center console shall be equipped an area for component switching within easy reach of the driver and or officer. This switch package shall separate the emergency / auxiliary electrical functions from the regular chassis functions. The electrical system will be designed using Carling Technologies fully sealed V-Series Contura switches, which provide cutting edge design, high quality, maximum performance and unmatched reliability. Switches shall provide maximum sealing protection with dual seals around lamps and rocker stem certified to IP66 IP68.

The switches shall be located in the cab center console near the driver for warning lights. A master warning switch shall be provided, which shall allow pre-setting of emergency light switches and shall have a red integral indicator light.

The carling switches will not be provided in the standard international switch pack.

STANDARD #MATM ANTENNA

QTY: 1

A antenna mounting base model #MATM with 17' of coaxial cable shall be provided and installed on the cab roof.

The attached antenna wire shall run to the center console.

The Fire Department is responsible to have the correct antenna whip and termination installed once the apparatus is delivered.

INTERNATIONAL - INSTALL MATM ANTENNA

QTY: 1

Six (6) coax antennas to be installed in the cab roof. The antennas shall be Tessco part number 78815 Antennex MB8U w/17" cable.

ANTENNA LAYOUT

QTY: 1

All antenna wires must be marked at termination point as to their respective locations on the roof. #1, #2, #3 and #6 antenna wires need to terminate at the right rear cab wall behind back seat. #4 and #5 antenna wires need to terminate in center console.
Antennas shall be mounted 18” apart from one another and 18” from the light bar.
All wires are to be 10 gauge.

Antenna(s) #1, #2, #3 shall be installed in front of the light bar going from driver to officer side. Antenna(s) #4, #5, #6 shall be installed behind the light bar going from driver to officer side.

STORAGE COMPARTMENT, UNDER REAR CAB EXT - O

QTY: 1

A weatherproof tool storage compartment shall be mounted under the officer side rear cab door. The compartment shall be constructed of 3/16" aluminum plate. This compartment shall utilize the maximum amount of space available with approximate interior dimensions of 22” wide by 15” high by 21” deep. The door opening shall be as large as possible while still maintaining NFPA step height requirements. The doors shall be flush Locking D-ring slam latch style and made from tread plate. The interior of the compartments shall remain unpainted.

INT - CAB STEP LIGHTS- TWO DOOR

QTY: 1

Tecniq E-03 step lights shall be provided. There will be one (1) placed next to each cab door to illuminate the cab stepping surfaces. The step lights shall be mounted in a convenient location to provide appropriate illumination to the cab stepping surfaces. The step lights shall automatically activate when the parking brake is applied and marker lights are activated.

INT - AUXILIARY AIR MANIFOLD - COMMERCIAL CHASSIS

QTY: 1

All auxiliary air devices on the commercial chassis shall be fed from a common manifold. The common manifold shall be installed at an accessible location near the chassis air tanks. The manifold shall be fed by a 3/8" synflex airline plumbed from the primary air tank using a pressure protection valve. Unused ports shall be closed off using an appropriately sized plug.

1/4 TURN DRAIN VALVES ON ALL AIR TANKS - SIDE OF V

QTY: 1

For ease of daily maintenance, each air system reservoir shall be equipped with a brass 1/4 turn drain valve.

The brass, quarter turn, air tank drains shall be remotely mounted to the side of the body on a labeled panel just forward of rear wheel for ease of maintenance.

HEAT RESISTANT WRAP

QTY: 1

All air, hydraulic, or harness run outside or below the frame rails shall be protected with heat resistant, aluminized wrap.
All fuel lines will be wrapped with heat resistant wrap.

COMMERCIAL CHASSIS ELECTRICAL SYSTEM DESCRIPTION

QTY: 1

The commercial chassis electrical system shall be provided as furnished by the original manufacturer. A customized interface shall be provided and designed, so as not to disturb any of the required chassis functions. The necessary interfaces shall only be provided in areas where load management is allowed or with accessory components provided on the chassis.

CHASSIS POWER MODULE COVER

QTY: 1

The remote power module located behind the driver’s cab seat shall be provided with an aluminum cover plate.

****** AKRON/WELDON VDR/SEAT BELT SYS. INCLUDED IN I**

QTY: 1

VEHICLE DATA RECORDER

QTY: 1

A Weldon model #0L40-2597-00, VDR download harness shall be supplied with the system to allow the data to be downloaded to a computer.

CENTER WELL

QTY: 1

One (1) storage well constructed of 1/8" aluminum shall be installed in the gravel shield. This storage well shall be center mounted between the chassis frame rails. The bottom of the storage well shall have a minimum of four (4) drain holes.

ONE (1) HINGED, LATCHED, TREAD PLATE COVE

QTY: 1

One (1) hinged, latched, aluminum, tread plate cover shall be installed on the storage well located in the center of the bumper extension.

TREAD PLATE COVER NOTCHED FOR PRE-CONNECT

QTY: 1

The tread plate, hose well cover shall have a notch cut out to allow pre-connection of suction/discharge hose.

DRI-DEK MATERIAL IN CENTER WELL

QTY: 1

The center storage well shall be equipped with Dri-Dek material to provide drainage and ventilation of equipment in storage well.

CENTER WELL - GENERAL STORAGE

QTY: 1

The center storage well shall be utilized for general storage of tools or equipment.

The well shall be a large as space allows.

HOSE WELL DRIVER SIDE OF BUMPER EXTENSION

QTY: 1

One (1) storage well constructed of 1/8" aluminum (will/shall) be installed in the gravel shield. This storage well (will/shall) be located on the driver side of the bumper extension. The bottom of the storage well (will/shall) have a minimum of four (4) drain holes.

ONE (1) HINGED, LATCHED TREAD PLATE COVER

QTY: 1

One (1) hinged, latched, tread plate cover shall be installed on the storage well located in the driver side of the bumper extension.

TREAD PLATE COVER NOTCHED FOR PRE-CONNECT

QTY: 1

The tread plate, hose well cover shall have a notch cut out to allow pre-connection of suction/discharge hose.

DRI-DECK MATERIAL IN DS WELL

QTY: 1

The driver side storage well (will/shall) be equipped with Dri-Dek material to provide drainage and ventilation of equipment in storage well.

DRIVER WELL- GENERAL STORAGE

QTY: 1

The driver storage well (will/shall) be utilized for general storage of tools or equipment, the well (will/shall) be as large as space allows.

TOW EYES

QTY: 1

Two (2) painted steel tow eyes shall be fastened directly to the bumper support structure that extends below the bumper.

The tow eyes shall be fastened with grade 8 bolts and nuts.

TIRE PRESSURE MONITORING

QTY: 1

Each tire shall be equipped with an LED tire alert pressure management system (Vecsafe equal) that shall monitor tire pressure. A chrome plated brass sensor shall be provided on the valve stem of each tire.

The sensor shall calibrate to the tire pressure when installed on the valve stem for pressures between 20 and 120 psi.

The sensor shall activate an integral battery operated LED when the pressure of that tire drops 8 psi.

PLYMOVENT EXHAUST EXTRACTION SYSTEM TAILPIPE ADAPT

QTY: 1

The exhaust outlet shall be a straight pipe, rearward of the rear axle. A Plymovent adapter shall be provided for the exhaust tip 90 degrees to the side of the body.

RELOCATE EXHAUST

QTY: 1

The chassis exhaust will be modified so that it terminates behind the rear axle on the right side of the unit.

RELOCATE CHASSIS AIR RESERVOIRS

QTY: 1

The chassis air reservoirs shall be relocated to inside the frame rail back of cab. The air and electric lines shall be lengthend as required. Tanks to be located in front of rear suspension between frame rails.

12 VOLT ELECTRICAL SYSTEM TESTING

QTY: 1

The apparatus low voltage electrical system shall be tested and certified by the manufacturer. The certification shall be provided with the apparatus. All tests shall be performed with the air temperature between 0°F and 100°F.

The following three (3) tests shall be performed in order. Before each test, the batteries shall be fully charged.

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

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

The total continuous electrical load shall be activated with the engine running up to the engine manufacturers governed speed. The test duration shall be a minimum of 2 hours. Activation of the load management system shall be permitted during this test. However, an alarm sounded due to excessive battery discharge, as detected by the system, or a system voltage of fewer than 11.7 volts DC for a 12-volt system, for more than 120 seconds, shall be considered a test failure.

Following completion of the preceding tests, the engine shall be shut off. The total continuous electrical load shall be activated and shall continue to be applied until the excessive battery discharge alarm is activated.

The battery voltage shall be measured at the battery terminals. With the load still applied, a reading of fewer than 11.7 volts shall be considered a test failure. The battery system shall then be able to restart the engine.

At the time of delivery, documentation shall be provided with the following information:

- Documentation of the electrical system performance test
- A written load analysis of the following;
- Nameplate rating of the alternator
- Alternator rating at idle while meeting the minimum continuous electrical load
- Each component load comprising the minimum continuous electrical load.
- Additional loads that, when added to the minimum continuous load, determine the total connected load.
- Each individual intermittent load.

DIRECT BATTERY GROUNDING STRAP

QTY: 1

Direct grounding straps shall be mounted to the following areas; frame to cab, frame to body and frame to pump enclosure.

All exposed electrical connections shall be coated with "Z-Guard 8000" to prevent corrosion.

TANKER BODY ELECTRICAL SYSTEM

QTY: 1

All electrical lines in the body shall be protected by automatic circuit breakers, conveniently located to permit ease of service. Flashers, heavy solenoids and other major electrical controls shall be located in a central area near the circuit breakers.

All lines shall be color and function coded every 3", easy to identify, oversized for the intended loads and installed in accordance with a detailed diagram. A complete wiring diagram shall be supplied with the apparatus.

Wiring shall be carefully protected from weather elements and snagging. Heavy duty loom shall be used for the entire length. Grommets shall be utilized where wiring passes through panels.

In order to minimize the risk of heat damage, wires run in the engine compartment area shall be carefully installed and suitably protected by the installation of heat resistant shielded loom.

All electrical equipment shall be installed to conform to the latest federal standards as outlined in NFPA 1901.

BATTERY DISCONNECT SWITCH

QTY: 1

The chassis batteries shall be wired in parallel to a single 12 volt electrical system, controlled through a heavy duty master disconnect switch.

The master disconnect switch shall be located within easy access of the driver upon entering or exiting the cab.

SHORELINE INLET

QTY: 1

One (1) Blue Sea Sure Eject 120 volt, 20 amp shoreline disconnect shall be provided for the on board, 110 volt battery charging systems.

The disconnect shall be equipped with a NEMA 5-20 P male receptacle, which shall automatically eject the shoreline when the vehicle starter is energized.

The mating connector shall be included with the auto eject and shall be provided as loose equipment.

A label shall be provided indicating voltage and amperage ratings.

SHORELINE RECEPTACLE

QTY: 1

The eject function will be disabled.

SHORELINE INLET COVER

QTY: 1

The Blue Sea sure eject connection shall be equipped with a red cover.

SHORELINE INLET LOCATION

QTY: 1

The shoreline receptacle shall be located in the driver's cab step well in a pre-determined location by KME.

SHORELINE INLET LABEL

QTY: 1

A shoreline power receptacle information plate shall be permanently affixed at or near the power inlet. The plate shall indicate the following:

- Type of Line Voltage
- Current Rating in Amps Power Inlet Type (DC or AC).

BATTERY CHARGER

QTY: 1

A Kussmaul model # 445-5265-0, EV-40, fully automatic, battery charger shall be provided for maintaining the vehicle battery system.

The charger shall feature Smart circuitry to provide three stages of charging: bulk, absorption, and float.

The charger shall have a battery type selector switch that regulates the proper charge/float voltage.

In addition to the main battery output, the charger shall also have auxiliary, 15 amp, output terminal with a battery saver selector switch to power accessory loads.

Output current of the charger shall be 40 amperes @ 12 volt DC.

BATTERY CHARGER STATUS CENTER

QTY: 1

A Kussmaul # 091-94-12 single bar-graph voltage indicator shall be installed to monitor the battery voltage.

The status center shall be located near the shoreline disconnect receptacle unless otherwise specified.

120 VOLT RECEPTACLE FOR ON-BOARD BATT. CHARGER

QTY: 1

The shore line plug shall provide power to a L5-20 duplex receptacle mounted near the battery charger. The block heater shall also utilize this receptacle for power.

12 VOLT POWER PORT LOCATED NEAR OFFICER

QTY: 1

A 12 volt power port accessory outlet(s) shall be installed in the cab of the truck for the fire departments accessory devices.

The port(s) shall be located in the center console near the officer's seating position for devices such as cellular phones.

ROUND USB CHARGING PORT LOCATED NEAR DRIVER

QTY: 1

One (1) Blue-Sea USB charging port(s) shall be installed in the cab of the truck for the fire departments accessory devices. Each port shall have two (2) USB connections and shall have a 5 volt, 5.0 amp max output. The port(s) shall be located in the center console near the driver's seating position for devices such as cellular phones.

ROUND USB CHARGING PORT LOCATED NEAR OFFICER

QTY: 1

Two (2) Blue Sea USB charging port(s) shall be installed in the cab of the truck for the fire departments accessory devices. Each port shall have two (2) USB connections and shall have a 5 volt, 5 amp max output. The port(s) shall be located in the center console near the officer's seating position for devices such as cellular phones.

12 VOLT POWER AND GROUND CIRCUIT, BEHIND OFFICERS

QTY: 1

One (1) dedicated circuit; 12 volt, 40 Amp, power and ground on 3/8 stud and fused at battery shall be behind the officer seat.

The circuit shall be for future installation of radios or accessories.

CONSOLE 12 VOLT POWER

QTY: 1

One (1) dedicated circuit; 12 volt, 40 Amp, power and ground on 3/8 stud and fused at battery shall be provided in the center console. The circuit shall be for future installation of radios or accessories.

COMMUNICATIONS MOUNTING PANEL

QTY: 1

A 3/16" brushed smooth aluminum backboard shall be installed to the rear wall Passenger side for the mounting on Radios and Fire Dept. Equipment.
The electrical connections shall be provided with a removable aluminum cover to prevent objects from contact them.
The mounting panel shall go from the floor to below the rear window and be 30" in width.

WHELEN #700 WHITE/RED LED INTERIOR LIGHTS

QTY: 1

Two (2) Whelen model # 700 combination red/white LED dome light(s) shall be furnished in the the cab. One (1) light shall be installed in the front of the cab and one (1) light shall be installed in the rear of the cab.

Each additional dome light(s) shall have an integral selector switch.

SUNNEX MODEL #HS762,MAP LIGHT AT OFFICER SIDE OVER

QTY: 1

Sunnex model # HS762-00, 12 volt-20 watt, halogen light designed for direct connection shall be furnished and located at the officer side overhead.

The light shall have a rectangular base with an on/off rocker switch and feature a swivel joint with 360 degree, axial rotation and 90 degree angular adjustment.
The light will be wired through the main battery switch.

ENGINE COMPARTMENT WORK LIGHTS - TECNIQ LED

QTY: 1

Two (2) Tecniq model #E18 LED lights shall be provided inside the engine enclosure that will provide 800 lumens each.

Each light shall have their own independent switch incorporated into the light head.

HOSE BED WORK LIGHT - SWITCH

QTY: 1

The hose bed work light shall have a protected 12-volt switch at the rear body panel.

The switch will be labeled "HOSE BED WORK LIGHTS."

CONTROL SWITCHES IN CAB FOR LIGHT ON FRONT GRILL -

QTY: 1

Controls shall be provided in the cab control system (or optional mechanical switch) to activate the HiViz, FireTech, LED front grill light.

CONTROL SWITCH IN CAB FOR OFFICER SIDE OF BODY LIG

QTY: 1

Controls shall be provided in the cab control system (or optional mechanical switch) to turn the officer side of body lights on and off.

CONTROL SWITCH IN CAB FOR DRIVER SIDE OF BODY LIGH

QTY: 1

Controls shall be provided in the cab control system (or optional mechanical switch) to turn the driver side of body lights on and off.

CONTROL SWITCH IN CAB FOR REAR OF BODY LIGHTS

QTY: 1

Controls shall be provided in the cab control system (or optional mechanical switch) to turn the rear of body lights on and off.

CAMERA SYSTEM

QTY: 1

The monitor for the rear vision system shall be mounted ceiling of the cab in easy view of the driver.
Note: This will be a separate screen, this will not be part of the ES-Key screen.

SAFETY VISION COLOR LED SYSTEM SV-CLCD70BA - REAR

QTY: 1

A Safety Vision # SV-CLCD70BA rear vision camera system with audio shall be provided to allow the driver to visually see and hear at the rear of the apparatus while in the cab. The system shall include a flat screen 7.0" color monitor, color camera with microphone and LED Illuminators, that shall be mounted at the rear of the vehicle under the intermediate rear step.

Camera: Color SV-625B rear vision camera with microphone. Imager, 18 LED illuminators, waterproof threaded pigtail.

Monitor: Color SV-LCD70BA rear vision monitor. 7.0 flat screen, speaker, audio and video adjustment controls, mirror/normal image switch, automatic-on in reverse, free voltage 10VCD-26 VDC. Included cabling is the improved waterproof threaded metallic connector with rubber o-ring seal. Monitor only. 65' video cable, includes waterproof threaded connector at camera end.

The rear vision camera shall be wired to automatically activate when the chassis transmission is placed in reverse.

COMMERCIAL CHASSIS MARKER LIGHTS AND REFLECTORS

QTY: 1

Cab marker lights and signaling devices shall be as provided on the commercial chassis cab from the original chassis manufacturer. FMVSS reflectors shall be also be provided as required.

CAB STEP LIGHTS, TECNIQ EON 3 LED, ALL DEVICES

QTY: 2

Polished, stainless steel, TecNiq Eon, 3-LED, horizontal surface mounted chassis step lights shall be provided and controlled with marker light actuation.

Step lights shall be located to properly illuminate all chassis access steps and walkway areas and shall include a mounting gasket to provide a watertight seal.

HIVIZ 25" LED, 12V,FRONT GRILL

QTY: 1

One (1) HiViz LEDs "FireTech" Scene light, model FT-MB-18-TR-FT-W shall be provided and mounted on the front cab grill.

The light instrument shall be low in profile with a mounting bracket, at the top edge of compartment cap or body.

The housing shall be made of a extruded 6061 aluminum; approx 23.55" wide and less than 3" tall.

The scene light shall have 18 LEDs, 1/3 of the LED's shall be "spot" pattern and the remaining 2/3 of the LED's shall be "flood" pattern.

The circuitry shall feature a PWM LED driver with an onboard electronic thermal manager.

Additionally, the bar shall meet CISPR25 EMI requirements.

The light shall operate on 12v DC, generate 9,504 lumens and draw 7.5 amps.

The light shall be adjustable vertically up to 15 degrees.

Mounting shall be possible in any direction while still meeting NFPA 1901 compliance requirements.

The housing color shall be white. The light shall feature a limited lifetime warranty.

WIRE UPGRADE FOR 12V HIGH AMP LIGHT - (1) BROW LIG

QTY: 1

NFPA COMPLIANT WARNING LIGHT PACKAGE

QTY: 1

The following warning light package shall include all of the minimum warning light and actuation requirements for the current revision of the NFPA 1901 Fire Apparatus Standard. The lighting as specified shall meet the requirements for both "Clearing Right of Way" and "Blocking Right of Way" which includes disabling all white warning lights when the apparatus is in "Blocking Right of Way" mode. The Whelen 600 series warning lights will be provided based on vendor availabilty. Clarification: If there are any changes to the warning lights due to availability the Fire Department will be notified.

WARNING LIGHT FLASH PATTERN - NFPA FLASH PATTERN

QTY: 1

All of the perimeter warning lights shall be set to a default NFPA compliant flash pattern as provided by the light manufacturer.

LIGHT PACKAGE ACTUATION/CONTROLS

QTY: 1

The entire warning light package shall be actuated with a single warning light switch located on the cab switch panel. The wiring for the warning light package shall engage all of the lights required for "Clearing Right of Way" mode when the vehicle parking brake is not engaged. An automatic control system shall be provided to switch the warning lights to the "Blocking Right of Way" mode when the vehicle parking brake is engaged.

LIGHT PACKAGE NFPA CERTIFICATION

QTY: 1

The warning light system(s) specified above shall not exceed a combined total amperage draw of 45 AMPS with all lights activated in either the "Clearing Right of Way" or the "Blocking Right of Way"

The warning light system(s) shall be certified by the light system manufacturer(s), to meet all of the requirements in the current revision of the NFPA 1901 Fire Apparatus Standard as noted in the General Requirements section of these specifications.

The NFPA required "Certificate of Compliance" shall be provided with the completed apparatus.

Any large truck as defined by NFPA shall have the lower zone warning lights mounted no higher than 62" to the optical center of the warning light from ground level. {No Exceptions}

A-UPPER, WHELEN LED F4W2VLED, FREEDOM SERIES IV 55

QTY: 1

A Whelen #F4W2VLED "Freedom Series IV" WECAN, 55" LED cab roof warning light bar shall be furnished and rigidly mounted on top of the cab roof. The back of the light bar shall be mounted even with the edge of the cab doors.

The light bar shall be equipped with the following:

- Clear Lenses
- Four Corner Red Linear LEDs
- Four Red Forward Facing Linear LEDs, one of which on the driver's side of the light bar shall be steady burn
- Two White Forward Facing Linear LEDs between the Red LED's on both the D/S and O/S
- Two (2) TIR 6 takedown lights in the center.

- Adjustable mounting brackets

The lower portion of the forward facing lights shall be utilized as forward facing scene lighting.
If equipped, the forward facing white lights shall be automatically disabled for the "Blocking Right of Way" mode.

ZONE A WARNING LIGHTS - STEADY BURN IN LIGHTBAR

QTY: 1

C-UPPER, WHELEN M9V2 SUPER LED

QTY: 1

Two (2) Whelen M9V2*, M9 super LED Combination 180° Warning and Perimeter Light. The driver side light head shall be equipped with Red LED and a Red Lens. The officer side light head shall be equipped with Amber LED and an Amber Lens.

Light heads shall be furnished and mounted one (1) each side on the upper rear face of the body, facing rear.

Each light head will be switched from the appropriate cab perimeter light switch. In addition to the cab mounted switch for the Upper Zone C lights, the Upper Zone C lights shall illuminate when the transmission is placed in reverse gear and the apparatus is operating as an emergency vehicle (Primary Warning switch on).

UPPER ZONE C WARNING LIGHT BEZEL - CHROME

QTY: 1

The upper zone C warning lights shall include a chrome bezel if available from the manufacturer. If a chrome bezel is unavailable, a black bezel shall be included.

B/D-UPPER FRONT, COVERED BY LIGHTS IN ZONE A-UPPER

QTY: 1

The lighting requirement for this area is covered by the lights noted in Zone "A" - Upper.

B/D-UPPER REAR, WHELEN 600 SUPER LEDS

QTY: 1

Two (2) Whelen, 600 super LED light heads shall be furnished and mounted one (1) on each side on the upper side face, towards the rear of the body, facing to each side of the unit.

UPPER ZONE B/D REAR WARNING LIGHT LENS - RED

QTY: 1

The upper zone B/D rear warning lights shall include red LEDs and a red lens if available from the manufacturer. If a red lens is unavailable, a clear lens shall be included.

UPPER ZONE B/D REAR WARNING LIGHT BEZEL - CHROME

QTY: 1

The upper zone B/D rear warning lights shall include a chrome bezel if available from the manufacturer. If a chrome bezel is unavailable, a black bezel shall be included.

A-LOWER FRONT MOUNTING, COMMERCIAL CHASSIS

QTY: 1

The lower zone A warning lights shall be mounted in the commercial chassis grille no higher than 62" from ground level.

A-LOWER FRONT, WHELEN 5V1R LEDS

QTY: 1

Two (2) Whelen 5V1R Grill lights 500 V series warning LT light heads shall be provided and installed one (1) each side.
Each light head shall be equipped with red LEDs and a colored lens.
The lights shall be installed with a 5LSMAC chrome plated mounting flange.

LOWER ZONE A WARNING LIGHT LENS - RED

QTY: 1

The lower zone A warning lights shall include red LEDs and a red lens if available from the manufacturer. If a red lens is unavailable, a clear lens shall be included.

LOWER ZONE A WARNING LIGHT BEZEL - CHROME

QTY: 1

The lower zone A warning lights shall include red leds and a chrome bezel if available from the manufacturer. If a chrome bezel is unavailable, a black bezel shall be included.

C-LOWER REAR, WHELEN 600 SUPER LEDS

QTY: 1

Two (2) Whelen, 600, super LED light heads shall be provided and installed one (1) each side directly below the DOT stop, tail, turn and backup lights.

LOWER ZONE C WARNING LIGHT LENS - RED

QTY: 1

The lower zone C warning lights shall include red LEDs and a red lens if available from the manufacturer. If a red lens is unavailable, a clear lens shall be included.

B/D-LOWER FRONT MOUNTING, COMMERCIAL CHASSIS

QTY: 1

The lower zone B D warning lights shall be mounted on the sides of the commercial chassis hood at or forward of the centerline of the front axle. The light shall be mounted no higher than 62" from ground level.

B/D-LOWER FRONT, WHELEN 600 SUPER LEDS

QTY: 1

Two (2) Whelen, 600 super LED light heads shall be provided and installed with one (1) on each side.

LOWER ZONE B/D FRONT WARNING LIGHT LENS - RED

QTY: 1

The lower zone B/D front warning lights shall include red LEDs and a red lens if available from the manufacturer. If a red lens is unavailable, a clear lens shall be included.

LOWER ZONE B/D FRONT WARNING LIGHT BEZEL - CHROME

QTY: 1

The lower zone B/D front warning lights shall include a chrome bezel if available from the manufacturer. If a chrome bezel is unavailable, a black bezel shall be included.

B/D-LOWER MID, WHELEN 600 SUPER LEDS

QTY: 1

Two (2) Whelen, 600 super LED light heads shall be provided and installed with one (1) on each side. The lights shall be mounted on the step overlay on each side of the cab as far rearward as possible

LOWER ZONE B/D MID WARNING LIGHT LENS - RED

QTY: 1

The lower zone B/D mid warning lights shall include red LEDs and a red lens if available from the manufacturer. If a red lens is unavailable, a clear lens shall be included.

LOWER ZONE B/D MID WARNING LIGHT BEZEL - CHROME

QTY: 1

The lower zone B/D mid warning lights shall include a chrome bezel if available from the manufacturer. If a chrome bezel is unavailable, a black bezel shall be included.

B/D-LOWER REAR, WHELEN 600 SUPER LEDS

QTY: 1

Two (2) Whelen 600 super LED light heads shall be provided and mounted centerline of the rear axle to meet NFPA, with one (1) on each side.

LOWER ZONE B/D REAR WARNING LIGHT LENS - RED

QTY: 1

The lower zone B/D rear warning lights shall include red LEDs and a red lens if available from the manufacturer. If a red lens is unavailable, a clear lens shall be included.

LOWER ZONE B/D REAR WARNING LIGHT BEZEL - CHROME

QTY: 1

The lower zone B/D rear warning lights shall include a chrome bezel if available from the manufacturer. If a chrome bezel is unavailable, a black bezel shall be included.

3M OPTICOM - MOUNTED IN CAB ROOF LIGHT BAR

QTY: 1

One (1) 3M Opticom system, which produces a flashing optical signal when in operation, shall be provided and mounted inside the cab roof light bar, replacing the center mounted clear warning light and situated so as not to interfere with the required light patterns of the NFPA Optical Warning Light System.

Controls for the system shall be provided independently of the Optical Warning Light System, with the wiring run through the Load Management System at the lowest available priority.

Additional circuitry shall be provided to automatically disable the Opticom System when the parking brake is engaged.

GROUND LIGHTS

QTY: 1

One (1) Amdor Luma Bar, H2O, LED 20" ground light shall be provided under each side cab door entrance step, two (2) total.

The ground lights shall turn on automatically with each respective door jamb switch and also by a master ground light switch in the warning light switch console.

Each light shall illuminate an area at a minimum 30" outward from the edge of the vehicle.

GROUND LIGHTS BELOW PUMP PANEL RUNNING BOARD

QTY: 1

One (1) Amdor Luma Bar, H2O, LED 20" ground light shall be provided under each side pump panel running board, two (2).

GROUND LIGHTS REAR BODY CORNERS

QTY: 1

One (1) Amdor Luma Bar, H2O, LED 20" ground light shall be provided under each rear body corner, two (2) total.

CAB AND BODY GROUND LIGHTS ACTIVATE AS PROVIDED

QTY: 1

Ground light activation shall be as provided by the chassis manufacturer and shall be wired through the load management system.

CAB AND BODY GROUND LIGHTS - SWITCH @ IN CAB

QTY: 1

The cab and body ground lights shall be equipped with an activation switch in the cab.

DIAMOND LOGIC MULTI-PLEX SYSTEM, INTERNATIONAL CHA

QTY: 1

The electrical system for the entire apparatus shall feature the International® Diamond Logic® Electrical System. This industry leading solution is built on a multiplexed architecture containing technologies in components such as solid state power switches, self-calibrating gauges and low current switch devices used for driver controls, like rocker switches and HVAC controls. The low current system and solid state switching results in maximum reliability and durability.

At the heart of International® Diamond Logic™ electrical system is the Electronic System Controller (ESC) which functions as the gatekeeper or central processor. The ESC continually monitors the vehicles electrical system and controls, including the engine, transmission, cab and customer installed truck equipment, so that they all communicate and work together.

In addition the Diamond Logic® Electrical system consists of International factory installed, Remote Power Modules (RPMs) and factory installed switches and warning lights. This combination of factory installed equipment eliminates the need to cut into the chassis wiring and central wiring to one point outside the cab.

The Diamond Logic® Electrical System allows fully customizable logic to carry out functions which up until now required hard-wired circuits and component. The use of the system shall enable the manufacturer to reduce; if not eliminate; conventional circuit interlock and power supply components for all body builder installed functions as specified by the customer. The programmable system allows for automation of tasks, custom features and safety interlocks to meet complex application requirements resulting in increasing functionality and reducing wiring the wiring used in equipment by up to 70%.

Each vehicle shall be programmed by engineering and not only stored in engineering database, but also uploaded to International which shall enable any International Dealer location to maintain, troubleshoot or repair the entire system installed on the apparatus and NOT only the chassis.

This multiplex system controls both chassis and body functions including but not limited to emergency lighting, scene lighting, compartment lighting, and door ajar circuitry. Systems that utilize a multiplexed chassis with a hard wired body, or two different multiplex systems, shall not be considered. {No Exceptions}

CHASSIS DIAGNOSTICS SYSTEM

QTY: 1

Diagnostic ports shall be accessible while standing on the ground and located inside the driver's side door left of the steering column. The diagnostic panel shall allow diagnostic tools such as computers to connect to various vehicle systems for improved troubleshooting providing a lower cost of ownership. Diagnostic switches shall allow engine and ABS systems to provide blink codes should a problem exist.

The diagnostic system shall include the following:

- A single port to monitor the engine, transmission and ABS system and diagnostics of the roll sensor (if applicable)
- Engine diagnostic switch (blink codes)
- ABS diagnostic switch (blink codes)
- Allison Transmission Codes (through touch pad shifter)

DOOR OPEN INDICATOR W/ INTEGRAL AUDIBLE ALARM

QTY: 1

An indicator light with an audible alarm, shall be functionally located in the cab to signal when an unsafe condition is present such as an open cab door or body compartment door, an extended ladder rack, a

deployed stabilizer, an extended light tower or any other device which is opened, extended or deployed which may cause damage to the apparatus if it is moved.

This light shall be activated through the parking brake switch to signal when the parking brake is released.

COMPARTMENT LIGHT ACTIVATION

QTY: 1

Compartment lighting shall be switched either from an integral switch as provided by the roll up door manufacturer or a magnetic proximity switch if it is a KME manufactured door.

COMPARTMENT LIGHTS

QTY: 9

Each individual, equipment storage compartment shall be equipped with the AMDOR, Luma Bar, LED light fixture, mounted on each side of the forward (and rear) vertical door frame.

MARKER/TURN LIGHTS @ EA SIDE OF BODY

QTY: 1

Red, LED marker lights with integral reflectors shall be provided at the lower side rear, having one (1) on each side.

Yellow, LED side marker and turn lights shall be provided on the apparatus lower side, forward of rear axle that puts one (1) on each side, if the apparatus is 30' long or longer.

DOT MARKER LIGHTS @ REAR OF BODY

QTY: 1

Red, LED clearance lights shall be provided on the apparatus rear upper having one (1) on each side at the outermost practical location.

Red, LED, 3-lamp identification bar will be provided on the apparatus rear center.

DOT AMBER REFLECTORS @ SIDE OF BODY

QTY: 1

Yellow reflectors shall be provided on the apparatus body lower side, as far forward and low as practical with one (1) on each side if the apparatus is 30' long or longer.

DOT RED REFLECTORS @ REAR OF BODY

QTY: 1

Red reflectors shall be provided on the apparatus rear with one (1) on each side at the outermost practical location.

TECNIQ #L10 LED LICENSE PLATE LIGHT

QTY: 1

One (1) Tecniq model #L10 LED license plate light shall be provided above the mounting position of the license plate. The license plate shall be located on the driver's side rear of body.

The light shall be clear in color and shall have a chrome finish.

WHELEN 600 LED BRAKE, REVERSE, TURN W/ QUAD HOUSI

QTY: 1

Two (2) Whelen 600 series, 4-1/8" x 6-1/2", LED red combination tail and stop lights, shall be mounted one each side at the rear of the body.

Two (2) Whelen 600 series, 4-1/8" x 6-1/2", LED amber arrow turn signal lights, shall be mounted one each side, on a vertical plane with the tail/stop lights.

Two (2) Whelen 600 series, 4-1/8" x 6-1/2", LED white back-up lights, shall be mounted one each side on a vertical plane with the turn/tail/stop signals.

These lights shall activate when the transmission is placed in reverse gear.

Two (2) Whelen PLAST4V mounting flanges, installed one (1) on each side, shall be provided to mount the lights described above in one common mounting flange.

The fourth opening shall be for the lower rear warning lights.

The lights shall be mounted in order, from top to bottom, as described above.

BODY STEP LIGHTS, TECNIQ EON 3 LED, ALL DEVICES

QTY: 2

Polished, stainless steel, TecNiq Eon 3-LED, horizontal surface, mounted body step lights shall be provided and controlled with marker light actuation.

Step lights shall be located to properly illuminate all body access steps and walkway areas and shall include a mounting gasket to provide a watertight seal.

PUMP ENCLOSURE WORK LIGHTS - TECNIQ LED

QTY: 1

Two (2) Tecniq, model #E18 lights shall be provided inside the pump enclosure, providing 800 lumens each.

Each light shall have their own independent switch incorporated into the light head.

WIRE UPGRADE FOR 12V HIGH AMP LIGHTS - DRIVER SIDE

QTY: 1

AMDOR LED STRIP HOSE BED LIGHT-FRONT HOSEBED WALL

QTY: 2

One (1) Amdor, LED, strip surface mounted lights shall be mounted in the hose bed on the front wall to illuminate the hose bed area.

WIRE UPGRADE FOR 12V HIGH AMP LIGHTS - OFFICER SID

QTY: 1

(1) WHELEN PIONEER SURFACE MTD LIGHT, 150W12V LED,

QTY: 1

One (1) Whelen Pioneer model # PCPSM2B surface mounted flood/spot light shall be installed, one forward on the driver side of the body, using a black flange.

The lamp head shall draw 12 amps and generate 16,000 lumens.

(1) WHELEN PIONEER SURFACE MTD LIGHT, 150W12V LED,

QTY: 1

One (1) Whelen Pioneer model # PCPSM2B surface mounted flood/spot light shall be installed, forward on the officer side of the body, each using a black flange.

The lamp head shall draw 12 amps and generate 16,000 lumens.

BACK-UP ALARM

QTY: 1

A Preco # 1040, self adjusting 87 thru 112dBA back-up alarm, shall be provided and installed at the rear of the apparatus under the tailboard.

The back-up alarm shall activate and automatically adjust to ambient noise levels when the transmission is placed in reverse gear and the ignition is "on."

SINGLE CHROME AIR HORN

QTY: 1

A single, Hadley, chrome plated air horn shall be at the front of the vehicle.

The air horn shall be mounted in full compliance with NFPA-1901.

The supply line shall be a minimum of 1/4".

SINGLE AIR HORN

QTY: 1

The air horn shall be recessed in the officer side of the front bumper.

AIR HORN CONTROL

QTY: 1

The air horn(s) shall be controlled by the steering wheel horn button for the driver.

ELECTRONIC SIREN

QTY: 1

One (1) Federal Model # PA300-MSC 100 watt electronic siren shall be provided featuring: wail, yelp and hi-lo siren tones along with public address, radio rebroadcast, TAP II and air horn with siren override.

A hardwired microphone shall provided for the public address feature.

The electronic siren and speaker shall meet the NFPA required SAE certification to ensure compatibility between the siren and speaker.

FEDERAL, #ES100C SPEAKER

QTY: 1

One (1) Federal, model # ES100C siren speaker shall be provided, recessed in the front bumper and wired to the electronic siren.

SIREN CONTROL - FLOOR SWITCH, DRIVER SIDE

QTY: 1

The siren shall be wired to be turned on/off and access siren tones without removing hands from the steering wheel when the siren is in manual mode (TAP II).
Note: Siren control shall be located in the center console.
One (1) floor mounted foot switch shall be provided on the driver side floor to control the “hands free” electronic siren when in stand-by mode.

WATEROUS CLK 500 GPM PUMP - PTO

QTY: 1

- **WATEROUS CLVK**
- **500 G.P.M.**
- **SINGLE STAGE**
- **PTO DRIVEN**

The pump shall be of single stage construction and shall comply with all applicable requirements of the latest standards for fire apparatus of the National Fire Protection Association, NFPA-1901 and shall have a rated capacity of500 gallons per minute.
The pump must deliver the percentage of rated capacity at the pressure listed below:

- 100% of rated capacity at 150 P.S.I. net pump pressure
- 100% of rated capacity at 165 P.S.I. net pump pressure
- 70% of rated capacity at 200 P.S.I. net pump pressure
- 50% of rated capacity at 250 P.S.I. net pump pressure.

The pump shall be free from objectionable pulsation and vibration under all normal operating conditions. The pump body shall be close-grained gray iron and must be horizontally split in two sections for easy removal of the impeller shaft assembly, and designed for complete servicing from the bottom of the truck without disturbing setting of the pump in the chassis or apparatus piping which is connected to the pump. Pump body halves shall be bolted together on a single horizontal face to minimize chance of leakage and facilitate reassembly.
Discharge manifold shall be cast as an integral part of the pump body assembly and shall provide ultimate flexibility in providing various discharge outlets for maximum efficiency.
The pump shaft shall be rigidly supported by two ball bearings for minimum deflection. The pump shaft shall be heat-treated, electric furnace, corrosion resistant, stainless steel.
The pump shaft and drive shaft must be sealed with a double lip oil seal to retain lubrication and keep road dirt and water out of the drive unit.
The pump impeller shall be hard, fine grain bronze of the mixed flow design: accurately machined, hand ground and individually balanced. The vanes of the impeller intake eye shall be hand ground. The impeller shall be of sufficient size and design to provide ample reserve capacity utilizing minimum horsepower. The impeller shall be keyed to pump shaft and locked in place with a stainless steel lock nut and cotter pin.

"PTO" UNIT WATEROUS PTO PUMP

QTY: 1

A hot shift Power Take Off shall be provided to drive the Waterous pump.

The PTO shall be controlled by an electric "Hot-Shift" lighted rocker switch on the cab dash.

WATEROUS MECHANICAL PUMP SEAL

QTY: 1

The drive shafts shall be equipped with self-adjusting, maintenance free mechanical shaft seals.

WATEROUS PUMP IMPELLER

QTY: 1

The impeller shall be bronze, accurately balanced (mechanically and hydraulically), of mixed flow design with reverse flow labyrinth-type wear rings that resist water bypass and loss of efficiency due to wear. Wear rings shall be bronze, and shall be easily replaceable to restore original pump efficiency and eliminate the need for replacing the entire pump casing due to wear.

INTERNATIONAL PUMP SHIFT

QTY: 1

The drive unit shall be equipped with a power shift. The shifting mechanism shall be a heat treated, hard anodized aluminum power cylinder with stainless steel shaft.

The pump shift control, pump engaged light and ok to pump indicator light shall be provided utilizing the International multi-plex system. They shall be located in the lower left switch panel. Switch to be YELLOW in color to denote being for a strategic type switch function. A standard International air solenoid pack shall be utilized to lock the transfer case in road or pump.

This control shall be electronically interlocked through the International multi-plex system to prevent inadvertent activation or de-activation. This allows the control to be interlocked with engine rpm, transmission gear status and park brake state. The switch positions and indicator lights shall be clearly marked. The pump shift switch shall also serve as the manual lockup switch; in case of air pressure loss.

PTO PUMP INDICATOR LIGHTS

QTY: 1

Three (3) green warning lights shall be provided to indicate to the operator when the PTO has completed the shift for Road to Pump position. The PTO switch shall illuminate and a light located on the instrument panel. One (1) green light shall be provided on pump operator's panel adjacent to the throttle control. All lights to have appropriate identification/instruction plates.

PTO PUMP AND ROLL INDICATOR LIGHTS

QTY: 1

Three (3) indicator lights shall be provided in the cab interior. The “PUMP ENGAGED” light shall illuminate to indicate that the PTO is engaged.
The “OK TO PUMP” light shall be illuminated when;
1) the PTO is engaged.
2) the parking brake is set.
3) the transmission is in neutral.
The “OK TO PUMP AND ROLL” shall be illuminated when;
1) the PTO is engaged.
2) the parking brake is released.
3) the transmission is in any forward gear or reverse.

When the “OK TO PUMP AND ROLL” indicator is illuminated the “OK TO PUMP” indicator shall not be illuminated.
The pump and roll requirements shall be 60 GPM at 100 PSI with a speed not to exceed 3 MPH.

PUMP MOUNTS PTO PUMP

QTY: 1

Extra heavy duty pump mounting brackets shall be furnished. These shall be bolted to the frame rails in such a position to perfectly align the pump with the PTO so that the angular velocity of the driveline joints shall be the same on each end of the drive shaft. This shall assure full capacity performance with a minimum of vibration. Mounting hardware shall utilize Grade 8 bolts.

PUMP INSTALLATION - COMMERCIAL

QTY: 1

MANIFOLD - DISCHARGE & SUCTION

QTY: 1

A custom made suction and discharge manifold shall be constructed from stainless steel and/or flexible tubing. The manifold shall be designed to provide maximum efficiency for the suction inlets and the discharges. {No Exceptions}.

WATEROUS ANODE BLOCKS - 2 TOTAL

QTY: 1

Two (2) Waterous zinc anode blocks shall be provided and located on the suction side of the pump to protect the pump from corrosion.

The Anodes shall be painted Safety Yellow for identification purposes.

WATEROUS PUMP OVERHEAT/THERMAL RELIEF SYSTEM

QTY: 1

A Waterous Overheat Protection Manager (OPM) shall be provided to serve as a safety device by releasing hot water from the discharge area of the pump to the ground.

The OPM consists of a valve that opens when the water in the pump reaches 140 F (60 C) and a warning light that is triggered by a thermal switch when the water in the pump reaches 180 F (82 C).

The warning light acts as an additional protection device if the temperature inside the pump keeps rising although the valve is open.

The OPM valve and switch are both mounted on two 1/2” tapped holes located near the center discharge area of the pump.

AUXILIARY ENGINE COOLER

QTY: 1

An auxiliary cooler or heat exchanger shall be installed in the engine compartment between the engine and the chassis radiator.

The cooler shall permit the use of water from the pump for cooling the engine.

The cooling shall be done without mixing engine and pump water.

FIRE RESEARCH "PUMP BOSS" PBA00 PRESSURE GOVERNOR

QTY: 1

Fire Research PumpBoss Max series PBA500-A00 pressure governor and control module kit shall be installed. The kit shall include a control module, intake pressure sensor, discharge pressure sensor, and cables. The control module housing shall be waterproof and have dimensions not to exceed 7 1/2" high by 3 5/8" wide. The control knob shall be 2" in diameter with no mechanical stops, have a serrated grip, and a red idle push button in the center. It shall not extend more than 2" from the front of the control module. The control LCD shall be 3.5” in size with a minimum brightness of 1000 nits and optically bonded to 3mm Borofloat Glass. Inputs for monitored engine information shall be from a J1939 data bus or independent sensors. Outputs for engine control shall be on the J1939 data bus or engine specific signal wiring. Inputs from the pump discharge and intake pressure sensors shall be electrical.

The following continuous displays shall be provided:

- Engine RPM; shown on LCD screen
- Check engine and stop engine warning; shown on LCD screen
- Engine oil pressure; shown on LCD screen
- Engine coolant temperature; shown on LCD screen
- Transmission Temperature; shown on LCD screen
- Battery voltage; shown on LCD screen
- Pressure and RPM operating mode LEDs
- Pressure / RPM setting; shown on LCD screen
- Throttle ready / Ok to Pump LEDs.

On screen (LCD) message display shall show diagnostic and warning messages as they occur. It shall show monitored apparatus information, stored data, and program options when selected by the operator. LCD Screen and LED’s intensity shall be automatically adjusted for day and nighttime operation.

The program shall store the accumulated operating hours for the pump and engine to be displayed with the push of a button. It shall monitor inputs and support audible and visual warning alarms for the following conditions:

- High Battery Voltage
- Low Battery Voltage (Engine Off)
- Low Battery Voltage (Engine Running)
- High Transmission Temperature
- Low Engine Oil Pressure
- High Engine Coolant Temperature
- Out of Water (visual alarm only)
- No Engine Response (visual alarm only).

The program features shall be accessed via push buttons located on the front of the control module. There shall be a USB port located at the rear of the control module to upload future firmware enhancements.

The pressure governor shall operate in two control modes, pressure and RPM. No discharge pressure or engine RPM variation shall occur when switching between modes. A throttle ready and Ok to Pump LED shall light when the interlock signal is recognized. The pressure governor shall start in pressure mode and set the engine RPM to idle. In pressure mode the pressure governor shall automatically regulate the discharge pressure at the level set by the operator. In RPM mode the governor shall maintain the engine RPM at the level set by the operator except in the event of a discharge pressure increase. The pressure governor shall limit a discharge pressure increase in RPM mode to a maximum of 30 psi. Other safety features shall include recognition of low water and no water conditions with an automatic programmed response and a push button to return the engine to idle.

The pressure governor control module shall be programmed at installation for a specific engine.

AKRON STYLE #59 INTAKE RELIEF VALVE

QTY: 1

A 300 psi adjustable Akron Brass model 59 intake relief valve system shall be plumbed on the suction side of the pump to comply fully with NFPA-1901 requirements.

Excess pressures shall be plumbed to discharge water under the pump enclosure away from the pump operator.

SECONDARY PRIMER ACTUATION IN CAB

QTY: 1

A secondary actuator shall be provided in the cab to prime the pump during pump-and-roll.

TRIDENT "MANUAL" AIR PRIMING SYSTEM

QTY: 1

The priming pump will be a Trident air primer system.

A push in primer handle will open the priming valve and prime the pump.

ROTARY MASTER DRAIN VALVE

QTY: 1

A rotary type, 12 port, master drain valve shall be provided and controlled at the lower portion of the side pump panel.

The valve shall be located in pump compartment lower than the main body and connected in such a manner as to allow complete water drainage of the pump body and all required accessories.

Water shall be drained below the apparatus body and away from the pump operator.

DRAINS/BLEEDER "INNOVATIVE CONTROLS" LIFT UP @ ALL

QTY: 1

All lines shall drain through the master drain valve or shall be equipped with individual drain valves, easily accessible, and labeled.

One (1) individual "Innovative Control" lift up drain valve shall be furnished for each 1-1/2" or larger discharge port and each 2-1/2" gated auxiliary suction.

Drain/bleeder valves shall be located at the bottom of the side pump module panels. All drains and bleeders shall discharge below the running boards.

SYNFLEX SUCTION, DISCHARGE, PRESSURE AND CONTROL L

QTY: 1

Small lines within the pump enclosure shall be constructed from Synflex hose.

Uses include but are not limited to such lines as priming control, gauge lines, drain lines, air control valves, pump shift, supplemental cooling, foam flush, and air bleeder valves.

SUCTION INLET - 4” INLET

QTY: 1

One (1) 4" N.S.T. suction inlet shall be provided on the driver side pump panel.
A removable strainer shall be installed on the inlet.

SHORT NECK MAIN PUMP SUCTION INLETS

QTY: 1

The main pump suction inlets shall be furnished with a short suction end, terminating with only the suction threads protruding through the side panel to minimize the distance an exterior appliance protrudes beyond the pump panel.

BEHIND PANEL MOUNT

QTY: 1

All side gated inlet valves shall be recess mounted behind the side pump panels or body panels. There will be no exceptions.

4" NST INTAKE CAP - DS

QTY: 1

A 4" NST chrome plated long handle pressure vented cap shall be installed on driver side intake.

2-1/2" DS AUX PRIMARY SUCTION INLET FORWARD OF MA

QTY: 1

One (1) 2-1/2" auxiliary suction shall be provided at the driver side pump panel, to the front of the main inlet.

The 2-1/2" auxiliary suction shall terminate with a removable strainer, chrome plated 2-1/2" NST female swivel with a chrome plated plug and retaining chain.

2-1/2" AKRON #8800 S.S. BALL VALVE, DS FRONT AUX S

QTY: 1

An Akron Brass 2 1/2" Generation II Swing-Out Valve shall be provided for the driver's side front auxiliary suction.

The valve shall have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

SWING CONTROL @ VALVE, DS FRONT AUX SUCTION

QTY: 1

A 1/4 turn swing control handle shall be provided on the driver side, front auxiliary suction valve.

TANK TO PUMP

QTY: 1

One (1) 4" tank to pump line shall be piped through the front bulkhead of the tank with a 90 degree elbow down into the tank sump.

This line shall be plumbed directly into the rear of the pump suction manifold for maximum efficiency.

A check valve shall be provided to prevent accidental pressurization of the water tank through the pump connection.

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

4" AKRON #8840 VALVE, TANK TO PUMP

QTY: 1

An Akron Brass 4" Heavy Duty Swing-Out Valve shall be provided between the pump suction manifold and the water tank.

The valve shall have an all brass body with flow optimizing, flat ball and dual polymer seats.

AIR CONTROL FOR TANK TO PUMP

QTY: 1

The tank to pump valve shall be air operated with a Class One air cylinder and control switch located on the operator's panel with function plate.

A second tank to pump control shall be provided in the cab on the center console for pump and roll with the pump.

TANK FILL LINE 3" FROM PUMP - SIDE MOUNT

QTY: 1

One (1) 3" gated full flow pump to tank refill line controlled at the pump panel shall be provided. A deflector shield inside the tank shall be furnished. Tank fill plumbing shall utilize 3" high pressure hose for tank connection to accommodate flexing between components. There will be no exceptions.

3" AKRON #8800 S.S. BALL VALVE FOR TANK FILL -

QTY: 1

An Akron Brass 3" Generation II Swing-Out Valve shall be provided between the pump discharge manifold and the water tank.

The valve shall have an all brass body with flow optimizing, stainless steel ball, and dual polymer seats.

PUSH/PULL CONTROL FOR TANK FILL

QTY: 1

A push/pull control handle shall be located on the operator's panel with function plate.

DS MAIN DISCHARGE #1

QTY: 1

A discharge shall be provided and located at the driver's side pump panel.

The driver's side discharges # 1 shall terminate with NST threads, through the left panel above the main pump intake.

The main pump discharge shall be plumbed directly from the pump discharge manifold utilizing direct connect discharge valve flanges.

2-1/2" AKRON #8800 SERIES - S.S. BALL, DS #1

QTY: 1

An Akron Brass 2 1/2" Generation II Swing-Out Valve shall be provided for the driver's side #1 discharge.

The valve shall have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

DS #1 DISCH - 2-1/2" STRAIGHT NST & 30-DEGREE NST

QTY: 1

The discharge valve shall be equipped with a straight 2 1/2" NST adapter that shall be equipped with a 2 1/2" NST, 30-degree, chrome plated elbow.

2-1/2" NST PRESSURE VENTED CAP - DS DISCHARGE #1

QTY: 1

A 2 1/2 " NST, chrome plated pressure vented cap shall be installed on driver's side #1 discharge.

PUSH/PULL CONTROL FOR DS DISCHARGE #1 -SIDE MOUNT

QTY: 1

The driver's side # 1 discharge valve shall be controlled by a push/pull handle located on the operator's panel.

CLASS ONE LIQUID FILLED 2-1/2" PRESS GAUGE - DS DI

QTY: 1

The driver's side # 1 discharge shall be equipped with a Class One Sub-Z II, 2.5", interlube filled pressure gauge with pulse and vibration dampening.

To prevent internal freezing, the stem, and Bourdon tube shall be filled with low temperature oil and be sealed from the water system using an isolating diaphragm located in the stem.

A bright metal bezel shall be supplied for resistance to corrosion and to protect the lens and case from damage.

The gauge face shall be white with black numerals.

DS REAR DISCHARGE 2-1/2"

QTY: 1

A 2 1/2" NST rear discharge shall be provided at the rear of the vehicle, plumbed from the pump.

DS REAR DISCHARGE TERMINATE @ DS REAR BODY PANEL

QTY: 1

The rear discharge shall terminate on the rear body panel on the driver side of the body.

2-1/2" NST MALE THREADS ON DS REAR DISCHARGE

QTY: 1

The discharge shall be equiped with a 30 degree droop terminating in 2-1/2" NSTM threads.

The driver side rear discharge pipe shall be furnished with 2-1/2" NSTM threads.

DS REAR DISCHARGE, PLUMBING, 2-1/2" STAINLESS STEE

QTY: 1

The driver side, rear discharge shall be plumbed utilizing 2 1/2" schedule 10 stainless steel piping, 45 degree elbows, and a limited number of 90 degree sweep elbows in an assembly from the pump to the rear of the vehicle.

A minimum of one (1) grooved, pipe coupling shall be furnished in this assembly to allow for flex and serviceability.

2-1/2" AKRON #8800 SERIES - S.S. BALL, VALVE DS RE

QTY: 1

An Akron Brass, 2 1/2" Generation II, Swing-Out Valve shall be provided for the driver's side rear discharge.

The valve shall have an all brass body with flow optimizing, stainless steel ball, and dual polymer seats.

PUSH/PULL CONTROL FOR DS REAR DISCHARGE

QTY: 1

The driver side rear discharge valve shall be controlled by a push/pull handle located on the operator's panel

2-1/2" NST DS REAR DISCHARGE PRESSURE VENTED CAP

QTY: 1

A 2 1/2" NST chrome plated pressure vented cap(s) shall be installed at the driver side rear discharge.

CLASS ONE LIQUID FILLED 2-1/2" PRESS GAUGE - DS RE

QTY: 1

The driver side rear discharge shall be equipped with a Class One Sub-Z II, 2.5" interlube filled pressure gauge with pulse and vibration dampening.

To prevent internal freezing, the stem and Bourdon tube shall be filled with low temperature oil and be sealed from the water system using an isolating diaphragm located in the stem.

A bright metal bezel shall be supplied for resistance to corrosion and to protect the lens and case from damage.

The gauge face shall be white with black numerals.

OS REAR DISCHARGE 2-1/2"

QTY: 1

A 2 1/2" NST rear discharge shall be provided at the rear of the vehicle, plumbed from the pump.

OS REAR DISCHARGE TERMINATE @ OS REAR BODY PANEL

QTY: 1

The rear discharge shall terminate on the rear body panel, on the officer side of the body.

2-1/2" NST MALE THREADS ON OS REAR DISCHARGE

QTY: 1

The discharge shall be equipped with a 30 degree droop terminating in 2-1/2" NSTM threads.

The officer side rear discharge pipe shall be furnished with 2-1/2" NSTM threads.

OS REAR DISCHARGE, PLUMBING, 2-1/2" STAINLESS STEE

QTY: 1

The officer side rear discharge shall be plumbed utilizing 2 1/2" schedule 10 stainless steel piping, 45 degree elbows and a limited number of 90 degree sweep elbows in an assembly from the pump to the rear of the vehicle.

A minimum of one (1) grooved pipe coupling shall be furnished in this assembly to allow for flex and serviceability.

2-1/2" AKRON #8800 SERIES - S.S. BALL, VALVE OS RE

QTY: 1

An Akron Brass 2 1/2" Generation II Swing-Out Valve shall be provided for the officer's side rear discharge.

The valve shall have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

PUSH/PULL CONTROL FOR OS REAR DISCHARGE

QTY: 1

The officer side rear discharge valve shall be controlled by a push/pull handle located on the operator's panel.

2-1/2" NST OS REAR DISCHARGEPRESSURE VENTED CAP

QTY: 1

A 2 1/2" NST chrome plated pressure vented cap shall be installed at the officer side rear discharge.

CLASS ONE LIQUID FILLED 2-1/2" PRESS GAUGE - OS RE

QTY: 1

The officer side rear discharge shall be equipped with a Class One Sub-Z II, 2.5" interlube filled pressure gauge with pulse and vibration dampening.

To prevent internal freezing, the stem and Bourdon tube shall be filled with low temperature oil and be sealed from the water system using an isolating diaphragm located in the stem.

A bright metal bezel shall be supplied for resistance to corrosion and to protect the lens and case from damage.

The gauge face shall be white with black numerals.

#1 FRONT DISCHARGE 1-1/2"

QTY: 1

A 1 1/2" front #1 discharge shall be plumbed to the front bumper of the vehicle.

1-1/2" NST CHICKSAN SWIVEL @ TOP DS FRONT BUMPER #

QTY: 1

The front #1 discharge shall terminate on the top driver's side of the front bumper extension gravel shield with a chrome 1 1/2" NST chicksan swivel adapter.

#1 FRONT DISCHARGE, PLUMBING, 2" STAINLESS STEEL P

QTY: 1

The front #1 discharge shall be plumbed utilizing 2" schedule 10 stainless steel piping, flexible hosing, 45 degree elbows, and a limited number of 90 degree sweep elbows in an assembly from the pump to the front of the vehicle.

A minimum of one (1) grooved pipe coupling shall be furnished in this assembly to allow for flex and serviceability.

2" AKRON #8800 SERIES - S.S. BALL, VALVE FRONT#1 D

QTY: 1

An Akron Brass 2" Generation II Swing-Out Valve shall be provided for the front #1 discharge.
The valve shall have an all brass body with flow optimizing stainless steel ball and dual polymer seats.
The valve shall be located under the gravel shield of the front bumper.

SWING CONTROL FOR FRONT #1 DISCHARGE

QTY: 1

The front #1 discharge valve shall be controlled by a short swing handle located at the front bumper.

1-1/2" NST FRONT #1 DISCHARGEPRESSURE VENTED CAP

QTY: 1

A 1 1/2" NST chrome plated pressure vented cap shall be installed the front #1 discharge.

CLASS ONE, LIGHTED, 2-1/2" PRESS GAUGE - FRONT #1

QTY: 1

The front #1 discharge shall be equipped with a Class One 2 1/2" pressure gauge which shall contain a vibration dampened internal mechanism.

To prevent internal freezing, the stem and Bourdon tube shall be filled with low temperature oil and be sealed from the water system using an isolating diaphragm located in the stem.

A bright metal bezel shall be supplied for resistance to corrosion and to protect the lens and case from damage.

The pressure gauge shall be illuminated internally using light emitting diodes, which shall be wired through the pump engaged circuit.

The gauge face shall be white with black numerals.
The pressure gauge shall be installled in the center console of the cab.

FRONT BUMPER TURRET

QTY: 1

ELKHART SIDEWINDER # 8494-01 BUMPER TURRET, 125 GP

QTY: 1

An Elkhart Brass model # 8494-01, Sidewinder Wildland Monitor shall be provided and installed on the specified front bumper extension.

The turret shall be controlled in the cab only, using a remotely operated valve, interfaced to a joy stick controller, model # 81172001, mounted in the cab.

The turret shall be equipped with a remote controlled fog nozzle model # 6000-200E (set at 125 gpm.).

The completed installation shall allow full operation of the turret from the cab.

FRONT BUMPER TURRET @ OFFICER'S SIDE FRONT BUMPER

QTY: 1

The bumper turret shall mounted on the officer's side of the front bumper extension gravel shield.

AKRON ELECTRIC VALVE - POSITION INDICATOR

QTY: 1

An Akron electric valve position indicator with feedback potentiometer shallbe mounted in the cab.

BUMPER TURRET, PLUMBING, 2-1/2" STAINLESS STEEL PI

QTY: 1

The bumper turret discharge shall be plumbed utilizing 2 1/2" schedule 10 stainless steel piping and/or flexible hose, 45 degree elbows and a limited number of 90 degree sweep elbows in an assembly from the pump to the front of the vehicle.

A minimum of one (1) grooved pipe coupling shall be furnished in this assembly to allow for flex and serviceability.

Automatic discharge drains shall be provided at all low points in the plumbing.

ELKHART 2" VALVE FOR BUMPER TURRET

QTY: 1

2" Elkhart valve, shall be provided for the bumper turret discharge.

DIGITAL PRESS GAUGE - BUMPER TURRET

QTY: 1

The bumper turret discharge shall be equipped with a Class One digital pressure gauge.
The gauge will be plumbed to the inlet side of the valve so that the pump pressure will be read at all times.

GAUGE LOCATED IN CAB

QTY: 1

The front turret gauge shall be located in the cab and plumbed to the inlet of the turret valve to provide visual indication of the pump discharge pressure.

TURRET VALVE CONTROLLER

QTY: 1

The bumper turret discharge valve shall be controlled by the joystick in the cab.

1" REAR BUMPER SWEEP DISCHARGE

QTY: 1

One (1) 1" discharge shall be plumbed to the underside of the rear bumper, which shall terminate with two (2) Elkhart model NTS-C.75" wide pattern jet nozzles below the rear bumper.

Each nozzle shall be capable of flowing up to 40 GPM.

SWEEP DISCHARGE, PLUMBING, 2" STAINLESS STEEL PIPI

QTY: 1

The rear ground sweep discharge shall be plumbed utilizing 2" schedule 10 stainless steel piping 45 degree elbows and a limited number of 90 degree sweep elbows in an assembly from the pump to the rear of the vehicle.

A minimum of one (1) grooved pipe coupling shall be furnished in this assembly to allow for flex and serviceability.

Automatic discharge drains shall be provided at all low points in the plumbing.

2" AKRON #8800 SERIES - S.S. BALL, VALVE, SWEEP DI

QTY: 1

An Akron Brass 2" Generation II Swing-Out Valve shall be provided for the rear ground sweep discharge.

The valve shall have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

2" AKRON #9333 ELECTRIC VALVE CONTROL FOR SWEEP DI

QTY: 1

The rear ground sweep discharge Akron ball valve shall be equipped with an Akron Brass Style 9333 Valve Controller.

The electric controls shall be of true position feedback design, requiring no clutches in the motor or current limiting.

The unit shall be completely sealed with momentary open, close as well as an optional one touch full open feature to operate the actuator.

Two additional buttons shall be available to be used for preset selection, preset activation and menu navigation.

The controller shall have up to three preset locations that can be user set and easily recalled upon each use.

The unit shall be capable of being used in conjunction with at least two additional displays to control one valve.

The unit shall provide position indication through a full color backlit LCD display.

CLASS ONE LIQUID FILLED 2-1/2" PRESS GAUGE - SWEEP

QTY: 1

The rear ground sweep discharge shall be equipped with a Class One Sub-Z II, 2.5" interlube filled pressure gauge with pulse and vibration dampening.

To prevent internal freezing, the stem and Bourdon tube shall be filled with low temperature oil and be sealed from the water system using an isolating diaphragm located in the stem.

A bright metal bezel shall be supplied for resistance to corrosion and to protect the lens and case from damage.

The gauge face shall be white with black numerals.

INNER PUMP MODULE, TANKER ELIMINATOR

QTY: 1

The pump module shall be an integral design of the body.
The pump control panel located in the driver side forward compartment. There will not be an officer side pump panel.

RUNNING BOARD STEPS (NON-AERIALS)

QTY: 1

The driver and officer running board steps shall be fabricated of 3/16" tread plate plate.

The outside edge on each step shall be fabricated with a double break, return flange.

The steps shall be rigidly reinforced with a heavy duty support structure.

The running boards shall not form any part of the compartment design, and shall be bolted into place with a minimum 1/2" clearance gap between any panel to facilitate water runoff.

SIDE MOUNT PANELS - 14 GAUGE BRUSHED STAINLESS STE

QTY: 1

The left side operator's panel, gauge panel shall be fabricated from 14-gauge 304L stainless steel with a #4 (150/180 grit) standard brushed finish. An access panel shall be provided on the rear wall on the officer's side of the body to access the pump and plumbing.

PUMP PANEL LAYOUT APPROVAL

QTY: 1

The final pump panel layout will be approved by the customer.

HORIZONTALLY HINGED GAUGE PANEL - ELIMINATOR

QTY: 1

An angled, full width, horizontally hinged gauge access panel shall be provided at the operator's position.

Chrome plated positive locks shall be provided along with a retaining chain to limit travel.

PANEL FASTENERS

QTY: 1

Stainless steel machine screws and lock washers shall be used to hold these panels in position.

The panels shall be easily removable to provide complete access to the pump for major service.

VALVE CONTROL CLARIFICATION

QTY: 1

All push/pull controls shall have adequate clearance while open with compartment doors closed.

CAPS AND ADAPTERS SAFETY TETHER - CABLES

QTY: 1

All applicable discharge and suction caps, plugs and adapters shall be equipped with tether cables and secured to the vehicle.

PUMP PANEL DISCH./SUCTION TRIM PLATES

QTY: 1

A high polished trim plate shall be provided around each discharge port and suction inlet opening to allow accessibility to the respective valve for service and repairs.

DISCHARGE GAUGE TRIM BEZELS

QTY: 1

Each individual discharge gauge shall be installed into a decorative chrome-plated mounting bezel that incorporates valve-identifying verbiage and color labels, unless manufacturer supplied otherwise.

IDENTIFICATION PLATES

QTY: 1

Color coded identification tags shall be provided for all gauges, controls, connections, switches, inlets and outlets.

PUMP PANEL LIGHTING

QTY: 1

The pump panel shall be illuminated via the compartment lights provided in the body.

PUMP PRESSURE & VACUUM TEST PORTS @ PANEL

QTY: 1

The pump panel shall be equipped with Vacuum Pressure test plugs to allow for test equipment to monitor pump pressure and vacuum levels.

Chrome plugs and labels shall be provided for the test ports.

WATER TANK

QTY: 1

The water tank shall have a capacity of 1800 gallons, constructed from polypropylene material.

WATER TANK

QTY: 1

Water tank capacity may be reduced due to weight restrictions.

WATER TANK

QTY: 1

The fill tower shall be fitted with an integral 6" I.D. schedule 40 PVC combination overflow/vent pipe running from the fill tower through the tank to a 6" coupling flush mounted into the bottom of the tank to allow water to overflow behind the chassis rear axle.

WATER TANK

QTY: 1

A 3" drain plug shall be provided.

WATER TANK FILL

QTY: 1

The tank shall have a combination vent and manual fill tower.

The fill tower shall be constructed of 1/2" polypropylene and shall be a minimum dimension of 15" x 24" outer perimeter.

The fill tower shall be blue in color indicating that it is a water-only fill tower.

The tower shall have a 1/4" thick removable polypropylene screen and a polypropylene hinged cover.

The capacity of the tank shall be engraved on the top of the fill tower lid. Inside the fill tower there shall be a combination vent/overflow pipe.

The vent overflow shall be a minimum of schedule 40 polypropylene pipe with a minimum I.D. of that is designed to run through the tank, and shall be piped to discharge water behind the rear wheels as required in NFPA 1901 so as to not interfere with rear tire traction.

CLASS ONE ITL-40M REMOTE GAUGE REAR OF BODY

QTY: 1

The water tank shall be equipped with an additional Class 1, model # ITL-40M, water tank level gauge for indicating water level, on the rear of the vehicle. The tank level gauge shall indicate the liquid level on an easy to read LED display and show increments of 1/8 of a tank.

CLASS ONE ITL-4 MINI GAUGE IN CAB

QTY: 1

The water tank shall be equipped with an additional Class 1, model # ITL, mini Intelli-Tank water tank level gauge for indicating water level. The level gauge shall be located in the center console. The tank level gauge shall indicate the liquid level on an easy to read display and show increments of 1/20 of a tank. A set of weather resistant connectors to connect to the digital display and a remote driver module shall be provided.

WATER TANK LEVEL GAUGE

QTY: 1

A Fire Research, model #WLA300-A00, "TANKVISION" gauge that shows the actual volume of water in the tank shall be provided on the pump operator's panel. The "TANKVISION" gauge is designed for both ease of operation and installation. The "TANKVISION" gauge utilizes ultra bright multi color LEDs for sunlight readability and also uses 2 specially designed wide-viewing lens for 180° of clear viewing. The "TANKVISION" gauge utilizes a pressure sender to measure the liquid volume. The gauge shall be equipped with a self-calibration feature that allows the LEDs TANKVISION gauge to be used on tanks of different shapes and sizes.

Features:

- Flashes warning when the volume is less than 25%. Rapid down scrolling LEDs alert the operator when the tank is almost empty. Remote audio warning available.
- One size fits all’. The self-calibration feature allows for easy calibration of any shape or size tank.

- Multiple displays are possible with a single sender through the FRC data bus.
- Rugged waterproof cast aluminum housing.
- No fitting needed for poly tank.
- Special fittings available for other tank materials.
- Connector disconnects at back of display.

WATER TANK LEVEL GAUGE

QTY: 1

The gauge shall use a pressure transducer installed near the bottom of the water tank to determine the correct volume in the tank.

WATER TANK MODIFICATION FOR SINGLE DIRECT TANK FIL

QTY: 1

DIRECT TANK FILL

QTY: 1

One (1) 2-1/2" NST direct tank fill shall be provided at the rear of the body, on the officer side, as low as possible.

The direct tank fill shall be gated with a 2-1/2" Akron ball valve with a swing handle.

The fill shall be equipped with a 30 degree elbow terminating with a 2-1/2" NST female swivel connection.

A quarter turn drain valve shall be supplied to bleed off excess pressure with a drain hose routed beneath the rear step area.

TANK MODIFICATION FOR REAR SQUARE DUMP

QTY: 1

10" SQUARE NEWTON DUMP, MANUALLY OPERATED - REAR -

QTY: 1

The rear of the water tank shall be equipped with a 10" Newton Stainless Steel Dump Valve, model #1060-34 with a left side mounted manual actuation lever. The dump valve setup shall be capable of discharging the water tank contents at a rate of at least 1800 G.P.M.

REAR DUMP SS SWIVEL AND EXTENSION CHUTE

QTY: 1

The rear dump shall be supplied with a stainless steel swivel chute (Model #60125SW-34), and a stainless steel 36" manual telescoping chute (Model #4036-34). This shall provide the user with the ability to dump water to the rear or either side of the apparatus.

DELETE DUMP ELECTRICAL SYSTEM - MANUAL/PNEUMATIC D

QTY: 1

100" WIDE BODY, 26"/12" DEEP SIDE COMPARTMENTS

QTY: 1

The fire body shall be 100" wide to provide the maximum amount of usable hose bed space. It is approximately 76" wide and the body fenderettes extends outward for better tire tread coverage.

SUPER STRUCTURE FOR STEEL BODIES

QTY: 1

The body super structure shall be an all welded configuration utilizing a combination of 3” x 1-1/2” A500 Gr. B structural tubing and A36 structural channel.

The super structure shall be designed to totally support the full length and width of the body. The structure shall be welded to the body side compartments to incorporate the compartments into an integral part of the body weldment.
All crosstubes of the structure shall be capped and butt welded at their point of termination to prevent water from lying inside the super structure. The super structure shall be bolted to the sides of the chassis frame at four (4) points.

All stepping, standing, and walking surfaces on the body shall meet NFPA #1901 anti-slip standards. tread plate utilized for stepping, standing, and walking surfaces shall be ALCOA No Slip type. Upon request by the Purchaser, the manufacturer shall supply proof of compliance with this requirement.

SWEEP-OUT COMPARTMENTS (NON-AERIALS)

QTY: 1

Compartment floors shall be welded to the compartment walls and have a sweep out design for easy cleaning.

Compartments with hinged doors shall have the door opening flanges bend down to produce the sweep-out design.

Compartments with roll-up style doors shall have the external floor flange stepped down to produce a sealing surface for the roll-up doors below the compartment floor.

The sweep out design shall also permit easy cleaning.

FASTENERS

QTY: 1

FASTENERS

All exterior fasteners shall be stainless steel screws.

NOTE: The use of aluminum pop rivets or self tapping screws as a trim fastener shall not be acceptable.

COMPARTMENT LOUVERS

QTY: 1

Ventilation between compartments to atmosphere shall be provided and located to avoid water entry into compartments.

LOUVER FILTERS

QTY: 1

To minimize dust and dirt from drafting into the compartments through the compartment louver, each louver shall equipped with a filter material mounted on the exterior of the louver.

ACCESS PANELS

QTY: 1

Removable access panels shall be provided in all lower compartments (if applicable) to access spring pins, fuel tank sender, electrical junction compartment and rear body mounts.
Protective panels shall be located in the rear compartments providing access to the lights and associated wiring. The covers shall also serve as protective covers to prevent inadvertent damage to lights or wiring from tools or equipment located in the compartment.

REAR BODY PANEL DESCRIPTION

QTY: 1

The rear body panel shall extend the full width between the beavertails. This panel shall be the full height from the rear step to the hose bed floor. The panel shall be bolted on and removable, with no part of the rear panel attached to the booster tank. The rear body panel material shall be tread plate as standard. If Chevron striping is specified for the rear of the body then smooth aluminum shall be utilized.

BODY HEIGHT

QTY: 1

The body and tank will not exceed the height of the cab.

BODY 12 GAUGE GALVANNEAL STEEL; 163"

QTY: 1

The body shall be assembled in fixtures to ensure accurate body dimensions of the door openings. The parts used in the construction of the body weldment shall be fabricated from the highest Grade 12 gauge galvaneal steel (ASTM A653) with a coating weight of A-60. After proper alignment is achieved, the body panels shall be spot-welded together to ensure proper weld penetration and then stitch-welded on all exposed seams to minimize distortion of welded assemblies. A full seam weld shall not be used due to the applied heat which shall distort sheet metal and remove the protective coating from the perimeter of the welded area. All seams shall be caulked prior to finish paint to ensure proper compartment seal.

SCBA CYLINDER STORAGE

QTY: 1

A total of four (4) SCBA air bottle storage compartments shall be inserted into the body fender area.

The compartments shall be located with two (2) on the driver side and two (2) on the officer side of the rear body fender panels.

The lower portion of the compartments shall be non-abrasive to absorb shock and help secure the bottle.

Each storage compartment shall be equipped with a polished stainless steel door that shall be tied to the "Do Not Move Apparatus" warning system along with a retention strap to limit bottle travel while secured inside the compartment.

SA TANK LM-163-H, DS LOW SIDE; ND

QTY: 1

One (1) low side compartment, with a vertically hinged double door, forward most of the rear wheels. Compartment dimensions 38” High x 55” Wide, with a door opening of 37” High x 52” Wide.
NOTE: This compartment will house the pump operator controls
One (1) low side compartment, with a vertically hinged single door, just forward of the rear wheels. Compartment dimensions 38" High x 25" Wide, with a door opening of 37” High x 22” Wide.
One (1) low side compartment, with a vertically hinged single door, behind the rear wheels. Compartment dimensions 30” High x 24” Wide, with a door opening of 29” High x 21” Wide.

SA TANK LM-163-H, OS LOW SIDE/SINGLE HIGH SIDE; ND

QTY: 1

One (1) low side compartment, with a vertically hinged double door, forward most of the rear wheels. Compartment dimensions 38" High x 55" Wide with a single door opening 37" High x 52" Wide.
One (1) low side compartment, with a vertically hinged single door, just forward of the rear wheels. Compartment dimensions 38" high x 25" wide with a single door opening 37" high x 22" wide.
One (1) low side compartment, with a vertically hinged single door, behind the rear wheels. Compartment dimensions 30" high x 24" wide with a single door opening 29" high x 21" wide.
One (1) high side storage compartment, with three (3) horizontally hinged doors. Compartment dimensions 32” High x 163” Wide x 14" Deep, three (3) side door openings, each 29-1/2” High x 50”/50”/51” Wide respectively.
Note: a layout of the officer side compartment (body side and rear area) shall be provided for customer approval.

APPARATUS BODY GENERAL DESCRIPTION (ELIMINATOR)

QTY: 1

The body side and compartment assemblies shall be designed and assembled to provide maximum strength and durability under all operating conditions.

Special attention shall be taken to minimize corrosion on all fabricated parts and structural members of the body. All bolt-on components shall be provided with a dissimilar metals isolation barrier to prevent electric corrosion. The body design shall also incorporate removable panels to access spring hangers, rear body mounts, and fuel tank sending units.

The body assembly shall be an all-welded configuration. The body shall extend over the pump enclosure to provide for additional water storage as well as improved weight distribution. The pump enclosure shall be an isolated design separate from the body.

SA 163-ELIMINATOR TANKER HINGED NO SIDE DUMPS (200

QTY: 1

STEPPED REAR BODY

QTY: 1

The lower portion of the rear body shall be stepped up eight (8) inches to provide a greater angle of departure. The departure angle shall be a minimum of 20 degrees.
The drivers side upper body compartments will be raised up 4" in order to be symmetrical with the top of the officers side fold-a-tank compartment.

DELETE COMPARTMENT

QTY: 1

A rear step compartment shall not be provided.

2" THICK COMPARTMENT DOORS - FLAT RECESSED DOORS

QTY: 1

The compartment doors shall be flush type having the outer skin fabricated from 3/16" (5052 H32) aluminum. The door skin shall have a formed a mounting flange on one (1) side as a hinge. The door skin shall have reinforcing channels welded internally to accommodate the inner door pan mounting. The 2" thick compartment doors shall reduce the overall specified compartment depth by 2-1/2”. All horizontally hinged doors shall be 1" thick to provide additional compartment storage area. The 1" thick horizontal hinged doors shall reduce the overall specified compartment depth by 1-1/4".

PULL DOWN STRAPS FOR SPECIFIC LOCATION: - ALL HORIZONTALLY HINGED, FLIP-UP DOORS.

QTY: 1

DOOR HINGE FOR FLUSH HINGED DOORS

QTY: 1

Hinges shall be full length polished stainless steel piano type. The hinges shall be mounted with stainless steel hardware. The Hinges shall be welded at one end to prevent the pin from shifting after use.

BRUSHED FINISHED DOOR PANS - 2" THICK DOORS

QTY: 1

Each inner door pan shall be constructed from 1/8" aluminum material which shall be provided with a brushed finish and bolted to the internal side of the door. The inner door pan on 2” thick doors shall enclose the latch and reinforcements completely. The inner door pan shall be easily removable to access the enclosed latch mechanism.

PUMP PANEL DOOR

QTY: 1

Pump panel doors to be 1" pan instead.

DOOR SEAL FOR FLUSH HINGED DOORS

QTY: 1

Enclosed body compartment doors shall be equipped with a closed cell gasket.

The gasket material shall be EPDM to provide a gasket resistant to weather, temperature extremes, and aging.

ROTARY LATCHES WITH D-RING HANDLES

QTY: 1

Externally latched body doors shall be equipped with stainless steel D-ring handles.

Rotary door latches shall be provided for all full height body doors, which shall incorporate rotary latches at the top and bottom of all externally latched single or double doors.

Linkages shall be provided between the actuation handle and the latch mechanisms.

The blank door of a double door configuration shall have rotary latches at the top and bottom of each door with the latch release lever accessible thru the door frame, which eliminates the need to reach inside the compartment to release the door.

Linkages shall be provided between the actuation handle and the latch mechanisms.

Horizontally hinged doors shall be equipped with a single rotary door latch.

KEYED DOOR LOCKS, HINGED OR ROLL-UP DOORS

QTY: 7

A compartment door(s) shall be equipped with keyed locking door latches.

Two keys shall be furnished for each lock and shall be labeled to indicate the correct match.

KEY MODEL #1250

QTY: 7

The specified door lock cylinder shall be equipped with a #1250 key.

CLEVELAND SPRING DOOR SPRINGS

QTY: 1

Stay arms shall be "Cleveland" double acting style, to be used on all vertically hinged storage compartment doors.

All horizontally hinged compartment doors shall be furnished with two (2) Eberhard gas shock type door stay arms.

PULL STRAPS FOR HORIZONTALLY HINGED, LIFT UP DOORS

QTY: 3

Pull straps shall be provided for all horizontally hinged, flip up doors.

REAR MUD FLAPS - NO LOGO

QTY: 1

Heavy duty mud flaps with NO logo shall be provided behind the rear wheels.

DRIP MOLDING

QTY: 1

Compartment tops over all side compartments shall have a flange formed to provide protection against water runoff.

For bodies with wide hosebeds or coffin compartments a secondary extruded drop molding shall be provided above the compartments.

COMPARTMENT TOPS (TANKERS)

QTY: 1

Compartment tops shall be covered with tread plate plate on both sides.

BODY RUB RAILS, C-CHANNEL - ALUMINUM EXTRUSION

QTY: 1

Sacrificial extruded aluminum C-Channel style, rub rails shall be mounted at the base of the body, extending outward from the body. The rub rails shall extend the full length of the main body.

ALUMINUM WHEEL WELL LINERS

QTY: 1

The body wheel wells shall be provided with fully removable bolt-in aluminum fender liners. The wheel well liners shall extend from the outer wheel well body panel into the truck frame. The completely washable wheel well liners shall be designed to protect the front and rear compartments and main body supports from road salts, dirt accumulation and corrosion.

MOLDED BLACK RUBBER FENDERETTES, SINGLE AXLE BODIE

QTY: 1

The rear fenders shall be equipped with easily replaceable bolt-in molded black rubber fenderettes.

REAR STEP - RECESSED 12"D X 48"W (FB TANKER)

QTY: 1

REAR STEP
The rear step shall be twelve (12) inches deep, recessed between the rear portion of the rear side compartments. The step shall be fabricated from 3/16" tread plate plate, and shall be rigidly reinforced. The recessed design of the rear step shall not restrict the usable space of the side compartments with a 48" wide rear step.
The rear edge of the step shall be designed to accommodate the rear clearance lights, recessed for protection in the step reinforcement channel. This step shall be bolted into place with a minimum 1/2" clearance gap between it and the body panel.

INTERMEDIATE REAR STEP, 8" X 48" BOLT-ON

QTY: 1

An eight (8) inch deep, bolt on intermediate rear step, fabricated from 3/16" tread plate, shall be installed. The step shall be approximately 8" deep x 48" wide.

ZICO PULLOUT STEPS

QTY: 1

Two (2) Ziamatic model PS-8-5 pullout steps shall be provided and installed under the rear tail board.

GRAB RAILS, HANSEN KNURLED STAINLESS STEEL TYPE

QTY: 1

All hand rails shall be Hansen 1-1/4" outer diameter, knurled stainless steel, designed to meet NFPA 1901 requirements.

Molded gaskets shall be installed between the handrail stanchion castings and body surfaces to prevent electrolytic reaction between dissimilar metals and to protect paint.

Grab rails shall be provided at the following specified locations.

Additional grab rails shall be provided adjacent to any additional steps specified to comply with NFPA 1901.

TWO (2) VERTICAL RAILS ON REAR

QTY: 1

Two (2) vertical rails shall be mounted on the rear edge of the beavertails, one (1) each side.

ONE (1) HANDRAIL, BELOW HOSE BED LEVEL

QTY: 1

One (1) horizontal, full width handrail shall be installed on the rear, below the level of the hose bed.

INNOVATIVE CONTROLS LIGHTED FOLDING STEP(S), BODY

QTY: 1

Innovative Controls large lighted folding step(s), with a textured chrome plate finish, shall be provided on driver side body rear to provide NFPA compliant access (maximum 18” height between steps) to an upper horizontal walking surface (compartment cap, dunnage area, fabricated step, or upper body compartments).

INNOVATIVE CONTROLS LIGHTED FOLDING STEP(S), BODY

QTY: 1

Innovative Controls large lighted folding step(s), with a textured chrome plate finish, shall be provided on officer side body rear to provide NFPA compliant access (maximum 18” height between steps) to an upper horizontal walking surface (compartment cap, dunnage area, fabricated step, or upper body compartments).

PAINTED REAR TOW EYES, BELOW BODY

QTY: 1

Two (2) painted tow eyes shall be furnished on the rear of the vehicle. The tow eyes shall be made from plate steel and shall be bolted directly to the chassis frame rails with grade 8 bolts. The tow eyes will extend below the body. The tow eyes shall be smooth and free from sharp edges. They will have a minimum eyelet hole of 2-1/2". The tow eyes shall be painted.

HOSEBED COVER - TREADPLATE COVER WITH FIXED

QTY: 1

An tread plate hose bed cover shall be mounted on the side body flanges, utilizing a full length, stainless steel hinge on each side. The cover shall be constructed of 3/16” tread plate with an aluminum extrusion frame. The cover shall be supported by the suction box which shall be 1-1/2" higher than the side body flanges allowing for water to run off. The handles shall be provided at the rear for lifting. Both gas springs and cables shall be provided at the front to hold open the doors. The switches shall be provided on each side cover, which shall be tied to the "Do Not Move Apparatus When Light Is On" warning light inside the cab. A hinged access door shall be provided over the water tank fill tower area allowing access to the fill tower when the hose bed cover is closed. The access door shall be hinged to the front to prevent the door from opening when the apparatus is in motion.

VINYL FLAPS AT REAR EDGE OF TREADPLATE COVER

QTY: 1

Two (2) vinyl flaps at the rear of the tread plate hose bed cover. They shall be secured to the hose bed cover with quarter turn fasteners and to the rear body with bungee cords.

UPPER BODY STORAGE AREA

QTY: 1

A storage area willl be provided at the top of the body in lieu of a hose bed. The storage area will have a minimum capacity of sixty (60) cubic feet and shall be 10" deep.
The storage area shall be located directly above the booster tank.
For added strength, rigidity and appearance, the storage area side walls shall have the top edge flanged outward two (2) inches and downward one (1) inch. In a similar fashion, the top edge of the front wall shall be flanged inward two (2) inches and downward one (1) inch.
NOTE: No more then 500 pounds of equipment came be stored in this area.

ALUMINUM HOSE BED FLOORING - TANKER

QTY: 1

Flooring to be constructed from extruded aluminum and be properly spaced for ventilation. The flooring shall be smooth and free from sharp edges to avoid hose damage. The hose bed floor shall be removable to provide access to inner body framework.

ZICO 2-ARM QUIC-LIFT PORTABLE TANK SYSTEM (DRIVER

QTY: 1

A Zico PTS-HA "Quic-Lift" Hydraulic Portable Tank System shall be provided on the driver side body compartment cap. The unit shall consist of two (2) high-strength aluminum casting sets, hydraulic actuators, capable of storing a 36" high portable tank and sustain a maximum load of 500lbs. The system shall be installed to accommodate the folding tank. The system shall include NFPA compliant flashing lights when the tank rack is deployed. Switching shall be located on the driver side pump panel in an enclosed housing, with an audible and visual alarm installed on the driver side rear body panel.

TANK RACK DESIGNED FOR 2100 GALLON FOLDING TANK

QTY: 1

The specified portable tank storage system shall be designed to carry a 2100 gallon portable water tank with approximate dimensions of 135" Long x 7" Wide x 29" Tall.
Note: If customer supplied water tank exceeds these dimensions the customer must provide tank dimensions so the tank rack can be sized properly.

ENCLOSURE FOR FOLDING TANK [PAINTED]

QTY: 1

The above specified portable tank storage shall be enclosed on the front, rear, top, and outboard side. The top and outboard side shall be 1/8" painted aluminum plate. Two (2) retaining straps shall be installed on the inside of the enclosure to secure the tank inside the rack and prevent the tank from contacting the side of the body or elliptical tank.

FOLDING TANK RETENTION STRAPS

QTY: 1

Two (2) retaining straps shall be installed on the inside of the enclosure to secure the tank inside the rack and prevent the tank from contacting the side of the body or elliptical tank.

SUCTION HOSE STORAGE IN CENTER OF HOSE BED

QTY: 1

A storage module constructed of aluminum tread plate shall be provided in the body hose bed area to accommodate suction hose storage. The storage area will be located at the center of the hose bed. The hose bed covers shall be designed to rest on the suction hose storage module.

TWO (2) 10' SECTIONS OF 4" MAXI-FLEX LIGHTWEIGHT S

QTY: 1

Two (2) 10' sections of four (4) inch Maxi-Flex (PVC) suction hose with lightweight couplings shall be furnished. Couplings shall include a folding long handle with a female swivel on one end and a rocker lug male on the other. All threads shall be four (4) inch N.S.T.

1/2 DEPTH ADJUSTABLE SHELF DESCRIPTION - RESCUE

QTY: 1

Compartment shelving shall be constructed of 3/16” brush finish aluminum with a 2” upward bend at front and rear, and side supports. Shelving shall be vertically adjustable with spring nuts in aluminum strut channel.
Half depth adjustable shelves shall be located as indicated at each compartment description.

1/2 DEPTH ADJUSTABLE SHELF(S) LOCATED R-1

QTY: 1

Located in the right side compartment #1

1/2 DEPTH ADJUSTABLE SHELF(S) LOCATED R-2

QTY: 1

Located in the right side compartment #2

1/2 DEPTH ADJUSTABLE SHELF(S) LOCATED R-3

QTY: 1

Located in the right side compartment #3

ADJUSTABLE SHELF DESCRIPTION - RESCUE

QTY: 1

Compartment shelving shall be constructed of 3/16” brush finish aluminum with a 2” upward bend at front and rear, and side supports. Shelving shall be vertically adjustable with spring nuts in aluminum strut channel.

Adjustable shelves shall be located as indicated at each compartment description.

ADJUSTABLE SHELF(S) LOCATED L-1

QTY: 1

Located in the left side compartment #1

ADJUSTABLE SHELF(S) LOCATED L-2

QTY: 1

Located in the left side compartment #2

ADJUSTABLE SHELF(S) LOCATED R-1

QTY: 2

Located in the right side compartment #1

ADJUSTABLE SHELF(S) LOCATED R-2

QTY: 1

Located in the right side compartment #2

ADJUSTABLE SHELF(S) LOCATED R-4

QTY: 1

Located in the right side compartment #4

ADJUSTABLE SHELF(S) LOCATED R-5

QTY: 1

Located in the right side compartment #5

PEGBOARD MATERIAL ON REAR WALL OF SPECIFIED COMPT. - R3

QTY: 1

3/16" aluminum pegboard material shall be provided on the rear wall for mounting of loose equipment in the specified compartment. The pegboard material shall be 3/16" aluminum with 7/32" holes punched

every square inch, allowing the fire department to tap 1/4"-20 threads for mounting of loose equipment brackets.
Pegboard material shall be located in the following compartment/s:

GENERAL PAINT DESCRIPTION

QTY: 1

The apparatus body shall be painted with Sikkens paint product. The paint process shall meet or exceed current state regulations concerning paint operations. Pollution control shall include measures to protect the atmosphere, water, and soil. Contractor shall, upon demand, provide evidence that the manufacturing facility is in compliance with State EPA rules and regulations.

The exterior shall have no mounted components prior to painting to assure full coverage of metal treatments and paint to the exterior surfaces of the body. Any vertically or horizontally hinged smooth-plate compartment doors shall be painted separately to assure proper paint coverage on body, door jambs and door edges.

Paint process shall feature Sikkens high solid LV products and be performed in the following steps:

- Corrosion Prevention - all aluminum surfaces shall be pre-treated with the Alodine 5700 conversion coating to provide superior corrosion resistance and excellent adhesion of the base coat.
- Sikkens Sealer/Primer LV - acrylic urethane sealer/primer shall be applied to guarantee excellent gloss hold-out, chip resistance and a uniform base color.
- Sikkens High Solid LVBT650 (Base coat) - a lead-free, chromate-free high solid acrylic urethane base coat shall be applied, providing excellent coverage and durability. A minimum of two (2) coats shall be applied.
- Sikkens High Solid LVBT650 (Clear coat) - high solid LV clear coat shall be applied as the final step in order to ensure full gloss and color retention and durability. A minimum of two (2) coats shall be applied.

Any location where the material is penetrated after painting, for the purpose of mounting steps, hand rails, doors, lights, or other specified components shall be treated at the point of penetration with a corrosion inhibiting pre-treatment (ECK Corrosion Control). The pre-treatment shall be applied to the aluminum sheet metal or aluminum extrusions in all locations where the aluminum has been penetrated. All hardware used in mounting steps, hand rails, doors, lights, or other specified components shall be individually treated with the corrosion inhibiting pre-treatment.

After the paint process is complete, the gloss rating of the unit shall be tested with a 20 degree gloss meter. Coating thickness shall be measured with a digital MIL gauge and the orange peel with a digital wave scan device.

GENERAL PRIMER & PREP DESCRIPTION

QTY: 1

All exposed welds shall be ground smooth for final finishing of areas to be painted. The compartments and doors are totally degreased and phosphatized. After final body work is completed, grinding (36 and 80 grit), and finish sanding shall be used in preparation for priming.

GENERAL FINISH PAINT DESCRIPTION

QTY: 1

The body shall be finish sanded and prepared for final paint. Upon completion of final preparation, the body shall be painted utilizing the highest quality, state of the art, low V.O.C., polyurethane base paint. Finish paint shall be applied in multiple coats to ensure proper paint coverage with a high gloss finish.

INTL 2-DR SINGLE COLOR AS APPROVED BY CHASSIS MFG. - FLNA 32047

QTY: 1

The commercial cab exterior shall be finish painted in a single color by the chassis manufacturer with Purchaser's choice of color as listed:
PPG 71528
PPG 2185
PPG 8000
PPG 73841
PPG 71663
PPG 83841
PPG 71969
PPG 71660
PPG 75481
PPG 71698
BLACK

COMMERCIAL CAB PAINT FINISH

QTY: 1

The chassis shall be painted and detailed as provided from the chassis OEM and shall meet their quality guidelines.

WHEEL AND HUB PAINT

QTY: 1

The chassis wheels shall be painted as provided by the commercial chassis manufacturer.

BODY BUFFING & FINISH

QTY: 1

The visable and exposed areas of the body shall be buffed and detailed.

INSIDE/UNDERSIDE BODY PAINT

QTY: 1

The inside and underside of the complete body assembly shall be painted job color using a Sikkens paint system, prior to installation of the body on the chassis or torque box.

COMPARTMENT INTERIOR FINISH

QTY: 1

The interior of the body compartments shall be painted with Line-X material.

COMPARTMENT INTERIOR FINISH

QTY: 1

The Line-X coating shall be light gray in color.

FENDER COMPARTMENT INTERIOR

QTY: 1

The interior of the fender storage compartments (if fender compartments are specified) shall be finish painted job color.

PUMP PAINTED / UNPAINTED PLUMBING

QTY: 1

The pump shall be painted per the pump manufacturer’s standard. The stainless steel plumbing will remain unpainted. The pump area interior will match the body underside finish as described elsewhere in these specifications.

SINGLE COLOR BODY PAINT SCHEME - FLNA 32047

QTY: 1

The body paint finishes shall be Sikkens paint system in a single color, to match customer furnished paint codes and requirements.

PINT OF TOUCH-UP PAINT

QTY: 1

One (1) pint of each exterior color paint for touch-up purposes shall be supplied when the apparatus is delivered to the end user.

LETTERING ON FRONT CAB DOORS

QTY: 1

Gold leaf, "Real Gold" vinyl, with drop shadow lettering shall be provided on the cab driver's and officer's doors per the fire department requirements.

The design of the lettering on the cab doors shall be designed to fit in the 496 sq. inches available.

3" LETTERING ON FRONT CAB DOORS

QTY: 1

Lettering provided on the driver's and officer's cab doors shall be 3" high.

FRONT CAB DOOR TEXT LINE 1 - CORONA

QTY: 1

FRONT CAB DOOR TEXT LINE 2 - FIRE

QTY: 1

FRONT CAB DOOR LETTERING BOTTOM LINE ARCED

QTY: 1

FRONT CAB DOOR LETTERING TOP LINE ARCED

QTY: 1

LETTERING ON CAB SIDE

QTY: 1

Gold leaf, "Real Gold" vinyl, with drop shadow lettering shall be provided on the cab side panel per the fire department requirements.

The design of the lettering on the cab side panel shall be designed to fit in the 150 sq. inches available.

3" LETTERING ON CAB SIDE PANEL

QTY: 1

Lettering provided on the cab side panel shall be 3" high.

CAB SIDE PANEL TEXT LINE 1 - CORONA

QTY: 1

CAB SIDE PANEL TEXT LINE 2 - FIRE

QTY: 1

LETTERING ON REAR BODY

QTY: 1

Scotch-Lite without drop shadow lettering shall be provided on the rear body panel per the fire department requirements.

The design of the lettering on the rear of the body shall be designed to fit in the 167 sq. inches available.

3" LETTERING ON REAR BODY

QTY: 1

Lettering provided on the rear body panel shall be 3" high.

REAR BODY TEXT LINE 1 - CORONA FIRE

QTY: 1

REAR BODY TEXT LINE 2 - DATA ERROR

QTY: 1

REAR BODY TEXT LINE 3 - DATA ERROR

QTY: 1

CAB ROOF LETTERING

QTY: 1

Scotch-Lite without drop shadow lettering shall be provided on the cab roof per the fire department requirements.

The design of the lettering on the cab roof shall be designed to fit in the 2500 sq. inches available.

15" LETTERING ON CAB ROOF

QTY: 1

Lettering provided on the cab roof shall be 15" high per Fire Department and engineering design.

CAB ROOF TEXT LINE 1 - COR

QTY: 1

CAB ROOF TEXT LINE 2 - DATA ERROR

QTY: 1

BODY SIDE SHEET LETTERING

QTY: 1

Gold leaf, "Real Gold" vinyl, with drop shadow lettering shall be provided on the body side sheet per the fire department requirements.

The design of the lettering on the body side sheet shall be designed to fit in the 2500 sq. inches available.

6" LETTERING ON BODY SIDE SHEET

QTY: 1

Lettering provided on the body side sheet shall be 6" high.

SIDE OF BODY TEXT LINE 1 - CORONA

QTY: 1

SIDE OF BODY TEXT LINE 2 - DATA ERROR

QTY: 1

SIDE OF BODY TEXT LINE 3 - DATA ERROR

QTY: 1

SCOTCH-LITE STRIPE

QTY: 1

A four (4) inch high "Scotch-Lite" stripe shall be provided.

The stripe shall be applied on a minimum of 60 percent of each side of the unit, 60 percent on the rear of the unit and 40 percent on the front of the unit.

The Scotch-Lite stripe layout shall be determined by the Fire Department.

WHITE SCOTCH-LITE

QTY: 1

The Scotch-Lite shall be white in color.

4" SCOTCH-LITE "Z" IN STRIPE

QTY: 1

A four (4) inch simple "Z" effect shall be incorporated into the Scotch-Lite scheme on the body.

Final layout of this configuration shall be determined by the Fire Department.

DUAL 1/2" SIGN GOLD ACCENT STRIPE ON MAIN STRIPE

QTY: 1

A half (1/2) inch high "Real Gold" vinyl gold leaf accent stripe shall be incorporated into the Scotch-Lite scheme to border the primary Scotch-Lite stripe on the top and bottom edges.

Final layout of this configuration shall be determined by the Fire Department.

REAR CHEVRON STRIPING

QTY: 1

REAR CHEVRON STRIPING

ENTIRE REAR

QTY: 1

The entire rear of the truck shall be covered with alternating strips of reflective striping.

6" REAR SCOTCH-LITE CHEVRON STRIPING

QTY: 1

The striping shall be 6" Scotch-Lite.

RUBY RED & LEMON YELLOW SCOTCH-LITE

QTY: 1

The Scotch-Lite shall be Ruby Red and Lemon Yellow in color.

MISCELLANEOUS EQUIPMENT

QTY: 1

The following equipment shall be mounted as specified or as loose equipment provided with the completed apparatus at the time of delivery:

ROAD SAFETY KITS

QTY: 1

A road safety kit shall be furnished with the following equipment:

- 2 1/2 lb. B-C fire extinguisher
- Triangle safety reflectors.

WHEEL CHOCKS

QTY: 1

Two (2) ZICO #SAC-44 folding wheel chocks shall be mounted forward of the rear wheels on the driver side below the side running board compartments.

PORTABLE TANK

QTY: 1

A Husky brand 2100 gallon aluminum frame folding water tanks shall be provided. When opened, the tanks shall measure 29" high by 135" square and shall fold to form a storage size of 29" high by 7" wide by 135" long. The folding tanks shall be equipped with 22 ounce Exlon.

HUSKY LINER COLOR - RED EXLON

QTY: 1

The Husky Exlon liner(s) shall be red in color.

GENERAL ONE (1) YEAR WARRANTY

QTY: 1

Purchaser shall receive a General One (1) Year or 24,000 Miles limited warranty in accordance with, and subject to, warranty certificate RFW0001. The warranty certificate is incorporated by reference into this proposal, and included with this proposal or available upon request.

ELECTRICAL ONE (1) YEAR WARRANTY

QTY: 1

Purchaser shall receive a Electrical One (1) Year or 18,000 Miles limited warranty in accordance with, and subject to, warranty certificate RFW0201. The warranty certificate is incorporated by reference into this proposal, and included with this proposal or available upon request.

BODY STRUCTURE (ALUMINUM) TEN (10) YEAR WARRANTY

QTY: 1

Purchaser shall receive a Body Structure (Aluminum) Ten (10) Years or 100,000 Miles limited warranty in accordance with, and subject to, warranty certificate RFW0502. The warranty certificate is incorporated by reference into this proposal, and included with this proposal or available upon request.

PAINT AND FINISH (EXTERIOR CLEAR COATED) WARRANTY

QTY: 1

Purchaser shall receive a Paint and Finish (Exterior Clear coated) Seven (7) Years limited warranty in accordance with, and subject to, warranty certificate RFW0707. The warranty certificate is incorporated by reference into this proposal, and included with this proposal or available upon request.

PLUMBING AND PIPING (STAINLESS STEEL) WARRANTY

QTY: 1

Purchaser shall receive a Plumbing and Piping (Stainless Steel) Ten (10) Years or 100,000 Miles limited warranty in accordance with, and subject to, warranty certificate RFW0800. The warranty certificate is incorporated by reference into this proposal, and included with this proposal or available upon request.

PAINT FINISH WARRANTY, TEN (10) YEAR

QTY: 1

The proposed paint finish will be warranted for a period of ten (10) years from the date of acceptance of the unit. Details of warranty coverage, limitations and exclusions are included in the specific warranty document.

1 YEAR BRIGHTWORK WARRANTY

QTY: 1

KME Fire Apparatus (KME) warrants all bright finish components used in the construction of KME Fire Apparatus against defects and workmanship provided the apparatus is used in a normal and reasonable manner. This warranty is extended only to the original user-purchaser for a period of one (1) year from the date of delivery/acceptance to the original user-purchaser, whichever occurs first.

The expressed warranty excludes corrosion or degradation of bright finished components caused by damage to the component.

LIFETIME POLY TANK WARRANTY - ALL TANKS

QTY: 1

The proposed water tank will be warranted by the water tank manufacturer for the "Lifetime" of the unit. A copy of the manufacturer's warranty will be supplied to define additional details of the warranty provisions.

WATEROUS 7 YEAR PUMP WARRANTY PARTS ONLY

QTY: 1

Waterous warrants, to the original Buyer only, that products manufactured by Waterous shall be free from defects in material and workmanship under normal use and service for a period of seven (7) years from the date the product is first placed in service or seven and one-half (7 1/2) years from the date of shipment by Waterous, whichever period shall be the first to expire; provided the buyer notifies Waterous, in writing, of the defect in said product within the warranty period, and said product is found by Waterous to be nonconforming with the aforesaid warranty.

AKRON HEAVY DUTY VALVE - 10 YEAR WARRANTY

QTY: 1

Akron Brass warrants Heavy Duty Swing-Out Valves for a period of ten (10) years after purchase against defects in material or workmanship. Akron Brass shall repair or replace any Heavy Duty Swing Out Valve which fails to satisfy this warranty.

CLASS 1 - ELECTRICAL PRODUCT WARRANTY

QTY: 1

Class 1 warrants that any equipment of our own manufacture (or manufactured for us pursuant to our specifications) found to have defects in material or workmanship during normal use and service, will be repaired or replaced (at our option) free of charge, provided that written notice of such defect is received by us within two years (three for liquid-filled gauges) after initial shipment.

All equipment requiring repair or replacement under this warranty will be returned prepaid to Class 1. Such returned equipment will be examined by us and, if found to be defective as a result of materials failure or workmanship, will be repaired or replaced at no charge.

CORROSION TREATMENT

QTY: 1

Upon apparatus completion, underside of the apparatus, from the pump enclosure-back, shall have anti corrosion film applied to help inhibit rust and the corrosion process. The semi-firm wax film shall be applied by air spray method. The film shall be applied as a minimum to the following areas: body substructure, underside of all body compartments, running board supports and rear step supports. No film shall be applied directly to the exhaust system or wheel wells.

NOTE: The film shall remain semi-firm to promote self-sealing. The film may leave a light tinted color to those areas treated.

ADDITIONAL ITEMS SHIPPED WITH VEHICLE

QTY: 1

- 1 - Bag of assorted stainless steel nuts and bolts

VEHICLE CLASS TIER 0

QTY: 1