



DAVIESS COUNTY FISCAL COURT

212 St. Ann Street, Room 202
Owensboro, KY 42303
(270)-685-8424

www.daviessky.org County Government > Current Bid Documents

ISSUED: 01-29-2024

Invitation for Bid: 2324-34: ONE (1) NEW CLASS A FIRE ENGINE (FIRE RESCUE-ST JOSEPH)

BIDS SHALL BE ACCEPTED UNTIL: **THURSDAY, FEBRUARY 15, 2024**, @ 2:00 P.M. LOCAL TIME, AT WHICH POINT THEY WILL BE OPENED AND PUBLICLY READ AT THE DAVIESS COUNTY COURTHOUSE.

SPECIFICATION CONTACT

Jeremy Smith
Daviness County Fire Department
270-685-8440
jsmith@daviessky.org

CONTRACT CONTACT

Kandace Sturgeon
Daviness County Fiscal Court
270-685-8424
ksturgeon@daviessky.org

[SAMPLE ENVELOPE]

MAIL ONE (1) COMPLETE COPY WITH VENDOR AND BID INFORMATION AS SHOWN IN SAMPLE

Vendor Name
Vendor Address
Contact Number

Attn: Purchasing Department
Daviness County Fiscal Court
212 St. Ann Street, Room 202
Owensboro, KY 42303

SEALED BID: (Bid Name)

CONTRACT TERM AGREEMENT:
Upon Approval of Daviess County Fiscal Court

The undersigned certifies that he/she has the authority to bind this company in an agreement/ contract to supply the commodity or service in accordance with all terms, conditions, and pricing specified. By signing and submitting this bid, the Vendor acknowledges that they have read, understand and agree to all aspects of the specifications and bid requirements as presented without reservation or alteration. This Bid, if accepted, will constitute an Agreement and Contract with Daviess County, Kentucky, upon approval by Daviess County Fiscal Court. Prices are firm during this agreement term, unless agreed upon in writing by the County.

Company Name

Authorized Agent (Print)

Signature

Title

Address

City/State/Zip Code

E-Mail Address

Phone Number

_____/_____/_____
Date

Fax Number

2.0 BID FORM: ONE (1) NEW CLASS A FIRE ENGINE (FIRE RESCUE-ST. JOSEPH)

THE LUMP SUM PRICING BELOW INCLUDES ALL OVERHEAD, PROFIT, INSURANCE, TAXES, DELIVERY FEES, AND OTHER COSTS NECESSARY TO PROVIDE AND DELIVER ALL SPECIFIED UNITS.

MAKE _____

MODEL _____

YEAR _____

TOTAL BID PRICE _____

TRADE-IN (_____)

NET BID PRICE _____

ESTIMATED DELIVERY DATE ____/____/____

DIMENSIONAL INFORMATION

OVERALL LENGTH _____"

OVERALL WIDTH _____"

OVERALL HEIGHT _____"

WHEELBASE _____"

The axle and total weight ratings of the completed apparatus shall not be less than the following minimum acceptable weight ratings:

MINIMUM FRONT G.A.W.R. _____ lbs

MINIMUM REAR G.A.W.R. _____ lbs

MINIMUM TOTAL G.A.W.R. _____ lbs

Any Exceptions to the Bid?* Yes No

**IF YES, PLEASE INCLUDE DOCUMENTATION DENOTING ANY EXCEPTION AND WHAT SECTION(S) IT PERTAINS TO. FAILURE TO PROPERLY RECORD EXCEPTIONS COULD RESULT IN IMMEDIATE REJECTION OF THE BID.*

2.1 BID SPECIFICATIONS

- I. **SCOPE:** Daviess County Fiscal Court is seeking a qualified vendor to supply one (1) new class A fire engine according to the specifications presented herein.
- II. **DELIVERY:** Delivery will be made to the St. Joseph Volunteer Fire Department, 11011 St. Joseph Lane, Owensboro, KY 42301.
- III. **MANUALS:** Operator and Maintenance manuals shall be delivered with the equipment.
- IV. **MACHINE EQUIVALENCY CLAUSE:** The bid specifications are specific to a particular manufacturer and brand. This is merely to convey the target performance desired by the County. It is not the intention of the specifications within this document to eliminate any bidder; however, quoted items must equal or exceed stated specifications. Sufficient documentation is required to verify equivalent or superior performance.
- V. **TRADE-IN:** A trade-in is offered, and a value may be assessed by the Vendor and deducted from the Total Bid Price on the Bid Form (Section 2.0). This offer may or may not be accepted by Daviess County Fiscal Court, according to what is most advantageous to the County. Unit(s) offered as a trade-in may be viewed by appointment by contacting the specifications contact for this document at the delivery site denoted. The trade-in details are as follows:
 - a. 1998 American Pumper VIN#: 1HTSDADRXXWH557457

	Bidder Complies	
	Yes	No
<p><u>NFPA 2016 STANDARDS</u></p> <p>This apparatus specification includes a commercial chassis that has not been certified to meet the requirements of NFPA 1901 by the chassis manufacturer. Although this chassis may comply with certain aspects of the standard, has not received certification from this chassis manufacturer that all criteria have been met. The body as built by the manufacturer must comply with the NFPA standards effective January of 2016.</p> <p>Certification of slip resistance of all stepping, standing and walking surfaces must be supplied with delivery of the apparatus.</p> <p>All horizontal surfaces designated as a standing or walking surface that are greater than 48.00" above the ground must be defined by a 1.00" wide line along its outside perimeter. Perimeter markings and designated access paths to destination points shall be identified on the customer approval print and are shown as approximate. Actual location(s) shall be determined based on materials used and actual conditions at final build. Access paths may pass through hose storage areas and opening or removal of covers or restraints may be required. Access paths may require the operation of devices and equipment such as the aerial device or ladder rack.</p> <p>A plate that is highly visible to the driver while seated shall be provided. This plate shall show the overall height, length, and gross vehicle weight rating.</p> <p>The manufacturer shall have programs in place for training, proficiency testing and performance for any staff involved with certifications.</p> <p>An official of the company shall designate, in writing, who is qualified to witness and certify test results.</p> <p><u>NFPA COMPLIANCY</u></p> <p>Apparatus proposed by the bidder shall meet the applicable requirements of the National Fire Protection Association (NFPA) as stated in the current edition at time of contract execution. Fire Department's specifications that differ from NFPA specifications shall be indicated in the proposal as "non-NFPA."</p> <p><u>CHASSIS</u></p> <p>The chassis shall be a Freightliner, Model M2, 106MD Conventional Chassis, supplied with the following equipment:</p> <p><u>WHEELBASE</u></p> <p>The wheelbase of the vehicle shall be no greater than 202".</p> <p><u>GVW RATING</u></p> <p>The gross vehicle weight rating shall be a minimum of 36,000#.</p>		

	Bidder Complies	
	Yes	No
<p><u>FRAME</u> The frame rails shall be formed from 120,000 psi yield, heat treated alloy steel. The frame rails shall be E-coated prior to painting.</p> <p><u>FRONT AXLE</u> Front axle shall be an I beam type, made of forged steel. It shall be a Detroit brand axle with a ground rating capacity of 12,000 lb.</p> <p><u>FRONT SUSPENSION</u> Spring mounted: Taper-leaf Capacity at Ground: 12,000 lb Shock absorbers shall be provided on the front axle.</p> <p><u>FRONT BRAKES</u> The front brakes shall be S-Cam, 16.50" x 5.00". The front brakes shall be provided with automatic slack adjusters.</p> <p><u>TIRE BRAND</u> The default brand of tire for the commercial chassis manufacturer for this apparatus is Michelin. However, it is understood that the commercial chassis manufacturer reserves the right to substitute brands and models of tire as may be available at the factory on the date of manufacture. They shall provide the proper tread style and weight rating for the position in which the tire is installed.</p> <p><u>TIRES, FRONT</u> Front tires shall be 11R22.50, radial tires with a tread pattern suitable for the steering axle position. The maximum capacity of the tires shall be 13,220 lbs. and a maximum top speed per the requirements described elsewhere in this proposal, up to 75 MPH.</p> <p><u>WHEELS, FRONT</u> Wheels for the front axle shall be 22.50" x 8.25" aluminum disc.</p> <p><u>REAR AXLE</u> The single reduction rear axle shall be provided with a ground rating capacity of 24,000 lb.</p> <p><u>PARKING BRAKE</u> The parking brake shall be spring set and located on the rear axle service brake. Rear axle brakes shall be 16.50" x 7.00", S-Cam drum type brakes. Automatic slack adjusters shall be provided.</p> <p><u>REAR AXLE RATIO</u> A rear axle ratio shall be furnished to allow the vehicle to reach a top speed of 68 MPH.</p>		

	Bidder Complies	
	Yes	No
<p><u>REAR SUSPENSION</u> The rear suspension shall be spring mounted multi-leaf with a capacity at ground level of 24,000 lbs.</p> <p><u>TIRES, REAR</u> Rear tires shall be 11R22.50 radial tires with a traction tread pattern suitable for the drive axle position. The tires shall meet or exceed the weight rating of the axle and/or suspension. Tires shall be rated for a maximum top speed per the requirements described elsewhere in this proposal, up to 75 MPH</p> <p><u>WHEELS, REAR</u> The rear wheels shall be 22.50" x 8.25" disc. The outer wheel shall be polished aluminum and the inner wheel shall be steel.</p> <p><u>TIRE PRESSURE MANAGEMENT</u> There shall be a RealWheels LED AirSecure™ tire alert pressure management system provided, that shall monitor each tire's pressure. A sensor shall be provided on the valve stem of each tire for a total of six (6) tires.</p> <p>The sensor shall calibrate to the tire pressure when installed on the valve stem for pressures between 10 and 200 psi. The sensor shall activate an integral battery operated LED when the pressure of that tire drops 5 to 8 psi.</p> <p>Removing the cap from the sensor shall indicate the functionality of the sensor and battery. If the sensor and battery are in working condition, the LED shall immediately start to flash.</p> <p><u>CHROME LUG NUT COVERS</u> Chrome lug nut covers shall be supplied on front and rear wheels.</p> <p><u>FRONT HUB COVERS</u> Stainless steel hub covers shall be provided on the front axle. An oil level viewing window shall be provided.</p> <p><u>HUB COVERS (REAR)</u> A pair of stainless steel high hat hub covers shall be provided on rear axle hubs.</p> <p><u>MUD FLAPS</u> Mud flaps shall be installed behind the rear wheels of the apparatus.</p> <p><u>WHEEL CHOCKS</u> There shall be one (1) pair of Checkers Industrial Products AT3512 non-folding urethane wheel chocks provided.</p> <p>For use with tires up to 38.00" in diameter, gross vehicle weight of 80,000 lbs.</p>		

	Bidder Complies	
	Yes	No
<p><u>ANTI-LOCK BRAKE SYSTEM W/AUTOMATIC TRACTION CONTROL</u></p> <p>The vehicle shall be equipped with an anti-lock braking system. The ABS shall provide anti-lock braking control on both the front and rear wheels. It shall be a digitally controlled system that utilizes microprocessor technology to control the anti-lock braking system. Each wheel shall be monitored by the system. When any particular wheel begins to lockup, a signal shall be sent to the control unit. This control unit then shall reduce the braking of that wheel for a fraction of a second and then reapply the brake. This anti-lock brake system shall eliminate the lockup of any wheel thus helping to prevent the apparatus from skidding out of control.</p> <p>The system shall include Automatic Traction Control (ATC). The traction control system detects if any of the wheels are losing their grip on the road. Once located, it automatically corrects the problem to ensure the car's stability.</p> <p><u>AIR COMPRESSOR, BRAKE SYSTEM</u></p> <p>The air compressor shall have an output of 18.7 cubic feet per minute.</p> <p><u>AIR DRYER</u></p> <p>An air dryer with a heater shall be provided. Other features of this air dryer include:</p> <ul style="list-style-type: none"> - Desiccant style filter - In-line filtration system - Automatic purge valve <p><u>AIR INLET</u></p> <p>A single air inlet with male coupling shall be provided. It shall allow station air to be supplied to the apparatus brake system through a shoreline hose. The inlet shall be located near the pump operator's position. A check valve shall be provided to prevent reverse flow of air. The inlet shall discharge into the "wet" tank of the brake system. A mating female coupling shall also be provided with the loose equipment.</p> <p><u>ENGINE</u></p> <ul style="list-style-type: none"> • Model: Electronic Cummins L9 • Number of Cylinders: Six (6) • Bore and Stroke: 4.49" x 5.69" • Displacement: 543 cubic inches (8.9 Liter) • Rated Brake Horsepower: 360 at 2200 rpm • Peak Torque: 1150 at 1200 rpm • Governed rpm: 2200 • VGT Turbocharger • Fuel System: High pressure common rail (HPCR) <p><u>ENGINE ACCESSORIES</u></p> <ul style="list-style-type: none"> • Air Cleaner: Dry type, with restriction indicator in cab 		

	Bidder Complies	
	Yes	No
<ul style="list-style-type: none"> • Fuel Filters: Dual, with check valve • Governor: Limiting speed type • Lube Oil Cooler • Lube Oil Filter: Combination full flow/bypass • Starting Motor: 12-volt • Oil Fill and Level Gauge <p><u>RADIATOR</u></p> <ul style="list-style-type: none"> • Pressurized System, Tube and Fin • Deaeration Tank • Anti-Freeze Protection -34 Degrees Fahrenheit <p><u>HIGH IDLE</u></p> <p>A high idle switch shall be provided on the instrument panel inside the cab. Activating the switch shall cause the vehicle to automatically maintain a preset engine rpm.</p> <p>The high idle switch shall be operational only when the parking brake is on and the truck transmission is in neutral. A green indicator light shall be provided adjacent to the switch. The light shall be labeled "OK To Engage High Idle."</p> <p><u>ENGINE EXHAUST BRAKE</u></p> <p>An exhaust brake with an integral variable geometry turbo charger (VGT) shall be provided. The control shall be located on the right side steering column stalk. When the engine brake is engaged it shall activate the brake lights.</p> <p><u>FUEL/WATER SEPARATOR</u></p> <p>A Detroit fuel/water separator shall be provided on the chassis. It shall include a "water in fuel" sensor, hand primer and a 12-volt pre-heater.</p> <p><u>AIR INTAKE, W/EMBER SEPARATOR</u></p> <p>The air inlet shall be equipped with a stainless steel mesh to separate water and burning embers from the air intake system such that particulate matter larger than 0.039" (1.0 mm) in diameter cannot reach the air filter element.</p> <p>This shall comply with current NFPA standards.</p> <p><u>EXHAUST SYSTEM</u></p> <p>The exhaust system shall include a diesel particulate filter (DPF) and a selective catalytic reduction (SCR) device to meet current EPA standards. The DPF and SCR shall be mounted horizontally outside of the frame rails in the right side front step area.</p> <p><u>EXHAUST MODIFICATIONS</u></p> <p>The exhaust shall terminate with a horizontal tailpipe and diffuser ahead of the right side rear wheels.</p>		

	Bidder Complies	
	Yes	No
<p>A heat deflector shield shall be provided where the tail pipe is routed under any side compartmentation.</p> <p>All modifications shall be approved by the chassis engine manufacturer and/or the chassis OEM. Exhaust treatment devices shall not be altered.</p> <p><u>COOLANT LINES</u></p> <p>Gates Blue Stripe rubber hose shall be used for all engine coolant lines installed by the chassis manufacturer.</p> <p>Hose clamps shall be of a design commonly called constant torque type to prevent coolant leakage. They shall react to temperature changes in the cooling system and expand or contract accordingly while maintaining a constant clamping pressure on the hose.</p> <p><u>FUEL TANK</u></p> <p>A 50 gallon fuel tank shall be provided and mounted at the left-hand cab step. The tank shall be constructed of aluminum.</p> <p><u>DIESEL EXHAUST FLUID TANK</u></p> <p>A diesel exhaust fluid (DEF) tank shall be provided and mounted on the left side, below the cab.</p> <p>The tank shall be sized by the chassis manufacturer based on the engine provided. It shall include an integrated heater unit that utilizes engine coolant to thaw the DEF in the event of freezing.</p> <p><u>FUEL PRIMING PUMP</u></p> <p>A Cummins automatic electronic fuel priming pump shall be integrated as part of the engine.</p> <p><u>AUXILIARY FUEL COOLING SYSTEM</u></p> <p>A supplementary fuel cooling system shall be provided to allow the use of water from the discharge side of the pump for cooling the chassis engine fuel. The heat exchanger shall be a cylindrical type and shall be a separate unit. The cooler shall operate any time the pump is discharging water and shall be plumbed to the master drain valve.</p> <p><u>TRANSMISSION</u></p> <p>An Allison, model 3000 EVS, electronic torque converting automatic transmission shall be provided. To qualify for the EVS rating, the transmission shall be filled with synthetic transmission fluid.</p> <p>Two (2) PTO openings shall be located on left and right side of the converter housing (positions 8 o'clock and 4 o'clock).</p> <p>A transmission temperature gauge or warning light shall be installed on cab instrument panel.</p>		

	Bidder Complies	
	Yes	No
<p><u>TRANSMISSION SHIFT CONTROL</u> A push button shift module shall be mounted to right of driver. Shift position indicator shall be indirectly lit for after dark operation.</p> <p>The transmission shall be a five (5)-speed.</p> <p><u>TRANSMISSION COOLER</u> A transmission oil cooler shall be provided in a tank of the radiator.</p> <p><u>DRIVELINE</u> Drivelines shall be a heavy duty metal tube equipped with universal joints properly sized for the application. A splined slip joint shall be provided in each driveshaft.</p> <p>The driveline shall be prepped by the chassis manufacturer for the installation of a mid-ship split shaft pump.</p> <p><u>STEERING</u> The steering system shall be hydraulically driven.</p> <p>The steering column shall have an adjustable tilt and telescope feature and a left side stalk with controls for headlamp dimmer/flash functions, self-cancelling turn signals and wipers/washer, and a right side stalk for transmission shift functions and auxiliary brake controls. The steering wheel shall have switches for the electric horn, cruise control, driver display screen navigation controls, and radio controls (if optioned). The cruise control shall also provide engine RPM ramp functions when equipped with a PTO driven water pump.</p> <p><u>BUMPER</u> A one (1)-piece, 10.00" high, stainless steel bumper shall be attached to the front of the frame.</p> <p>A 9.00" channel shall be mounted directly behind the bumper for additional strength.</p> <p>The bumper shall be extended 19.00" from the front face of the cab.</p> <p><u>GRAVEL PAN</u> A gravel pan, constructed of bright aluminum treadplate, shall be furnished between the bumper and cab face. The gravel pan shall be properly supported from the underside to prevent flexing and vibration of the aluminum treadplate.</p> <p><u>TOW HOOKS</u> Two (2) chromed steel tow hooks shall be installed under the bumper and attached to the front frame members. The tow hooks shall be designed and positioned to allow up to a 6,000 lb straight horizontal pull in line with the centerline of the vehicle. The tow hooks shall not be used for lifting of the apparatus.</p> <p><u>HOSE TRAY</u> A hose tray, constructed of aluminum, shall be placed in the center of the bumper extension.</p>		

	Bidder Complies	
	Yes	No
<p>The tray shall have a capacity of 100' of 1.50" double jacket cotton-polyester hose.</p> <p>Black rubber grating shall be provided at the bottom of the tray. Drain holes shall be included.</p> <p><u>COVER, HOSE TRAY</u></p> <p>A bright aluminum treadplate cover shall be provided over the one (1) hose tray.</p> <p>The cover shall be attached with a stainless steel hinge and located Center tray.</p> <p>One (1) "D" ring latch shall secure the cover in the closed position and a pneumatic stay arm on each side shall hold the cover in the open position.</p> <p><u>CAB</u></p> <p>A 2-door flat-roof cab shall be provided. The cab and doors shall be of an aluminum construction.</p> <p>Exterior Styling</p> <p>Aerodynamic hood and windshield</p> <p>Tinted Glass in all Windows</p> <p>Fiberglass hood with mounted plastic grille</p> <p>Single 63"x14" rear window</p> <p>Interior</p> <p>Leaf spring rear cab suspension</p> <p>Black Vinyl mats</p> <p>Forward roof mounted console</p> <p>Two (2) dash-mounted cup holders, right-hand and left-hand</p> <p>Dual Sun visors</p> <p>Fresh Air Heater and Defroster</p> <p><u>CAB INTERIOR - PROFESSIONAL TRIM</u></p> <p>The cab upholstery shall be a mix of gray and black vinyl and cloth.</p> <p>The cab interior shall include black driver and center instrument panels, two (2) lower dash cup holders, gray molded plastic door panels with brushed aluminum lower door kick plates.</p>		

	Bidder Complies	
	Yes	No
<p><u>HOOD, HEADLIGHTS, AND AIR INTAKE GRILLES - CHROMED</u> The hood grille shall be a chromed high impact plastic with a horizontal rib design. The headlight bezels and air intake grilles shall also have a chromed accent finish. The grille shall tilt with the hood.</p> <p><u>MIRRORS</u> West Coast style heated, remote operated mirrors constructed from a molded composite material with a bright finish shall be provided. A heated 8.00" convex mirror shall be included below the primary mirrors.</p> <p><u>CAB ACCESS STEPS</u> The cab access steps shall be provided by the apparatus manufacturer. The steps shall be a two (2) step design fabricated from bright aluminum treadplate.</p> <p>The step assembly shall enclose the area under the cab, including the DEF tank. The fuel and DEF tank fill caps shall be exposed for refueling if located under the cab. Access shall be provided to inspect the chassis batteries when located under the cab.</p> <p><u>STEP LIGHTS</u> There shall white LED step lights provided to meet NFPA step lighting requirements. Lights shall be installed at each cab door step.</p> <p>The lights shall be activated when the adjacent door is opened.</p> <p><u>ELECTRIC WINDOWS AND DOOR LOCKS</u> The cab doors shall have electrically powered windows and locks. Controls for locks and widows shall be located on each respective door panel, with driver door panel control for all locks and windows. The cab door windows and door locks shall be electrically powered and controlled. All door lock and window switches shall be located on the forward console in close proximity to the driver.</p> <p><u>DAYTIME RUNNING LIGHTS</u> The chassis shall be provided with daytime running lights.</p> <p><u>AIR CONDITIONING</u> An air conditioner shall be provided that is integral with heater and defroster system.</p> <p><u>ENGINE COMPARTMENT LIGHTS</u> Two (2) engine compartment lights shall be installed under the engine hood, of which the switches are an integral part.</p> <p><u>STORAGE CONSOLE</u> There shall be a console located between the front seats. There shall be four (4) sections for map storage to the rear of the console. Each map storage section shall be approximately 4.00"</p>		

	Bidder Complies	
	Yes	No
<p>wide x 13.00" long x 12.25" deep. The console shall be constructed of smooth aluminum and painted black.</p> <p><u>SEATING CAPACITY</u> The seating capacity in the cab shall be two (2).</p> <p><u>SEATING</u> Seating inside the cab shall consist of an air-ride driver seat and a fixed companion seat.</p> <p><u>SEAT BELT WEB LENGTH</u> NFPA 14.1.3.2 and 14.1.3.3 requires effective seat belt web length for a Type 1 lap belt for pelvic restraint to be a minimum of 60 in., and a Type 2 pelvic and upper torso restraint-style seat belt assembly to be a minimum of 110 in.</p> <p>Per Fire Department specification of a commercial chassis, this apparatus shall have seat belts of the required length. These belts shall provide sufficient length for large firefighters in bunker gear. This apparatus shall be compliant to NFPA standards effective at time of contract execution.</p> <p><u>SEAT BELTS</u> All seating positions in the cab and crew cab shall have highly visible (orange) seat belts.</p> <p><u>HELMET STORAGE PROVIDED BY FIRE DEPARTMENT</u> NFPA 1901, 2016 edition, section 14.1.7.4.1 requires a location for helmet storage be provided.</p> <p>There is no helmet storage on the apparatus as manufactured. The fire department shall provide a location for storage of helmets.</p> <p><u>PORTABLE HAND LIGHTS, PROVIDED BY FIRE DEPARTMENT</u> NFPA 1901, 2016 edition, section 5.9.4 requires two portable hand lights mounted in brackets fastened to the apparatus.</p> <p>The hand lights are not on the apparatus as manufactured. The fire department shall provide and mount these hand lights.</p> <p><u>CAB INSTRUMENTS</u></p> <ul style="list-style-type: none"> - Premium Instrument Cluster with 5" TFT Color Display Shows Trip Information, Fault Codes, Safety Information and Warnings - Engine Temperature Gauge and Warning Buzzer - Engine Oil Pressure Gauge and Warning Buzzer - Speedometer with Odometer - Engine Tachometer 		

	Bidder Complies	
	Yes	No
<p>- Virtual Engine and Trip Hour meters</p> <p>- Fuel Level Gauge</p> <p>- DEF Level Gauge and Warning Lamp</p> <p>- Virtual Voltmeter: Low Voltage Red Warning Light and Audible Alarm</p> <p>- Air Brake Dual Needle Pressure Gauge</p> <p>- Virtual Air Restriction Indicator</p> <p>- Dash Switch for Exhaust Regeneration Inhibit</p> <p>- Virtual Control for Regeneration Request in Cluster</p> <p>- Dash Switches to the right of the driver for:</p> <ul style="list-style-type: none"> • Hazard Flasher • Dome Light(s) • Footwell Lights <p>- Headlamp/Marker Light Dash Rotary Switch</p> <p>- Digital Alarm Clock</p> <p>- Virtual Panel Lamp Dimmer Control</p> <p>- Outside Temperature Display</p> <p>- Circuit Breakers: For Overload Protection of Electric Circuits</p> <p>- Ignition Switch: Non-Removable Key</p> <p>- Transfer Case Activation, HI/LO, and PTO (when applicable) Switches Shall Be Located in the Dash Panel to the Right of the Driver.</p> <p>- Automatic Traction Control (ATC) with On/Off switch on the Dash to the Right of the Driver (except on AWD trucks). ATC Shall Be Inactive on All-Wheel Drive Apparatus When the Front Drive Axle is Engaged</p> <p><u>EMERGENCY SWITCH PANEL</u></p> <p>An emergency switch panel shall be provided in the cab. The switch panel shall be located within reach of the driver.</p> <p>References within this proposal to a "switch in the cab" for zone specific options may be combined with other lighting controls.</p>		

	Bidder Complies	
	Yes	No
<p><u>"DO NOT MOVE APPARATUS" INDICATOR</u></p> <p>A flashing red indicator light (located in the driving compartment) shall be illuminated automatically per the current edition of NFPA. The light shall be labeled "Do Not Move Apparatus If Light Is On".</p> <p>The same circuit that activates the Do Not Move Apparatus indicator shall not activate any alarm when the parking brake is released.</p> <p><u>DO NOT MOVE TRUCK MESSAGES</u></p> <p>A message shall be displayed on the VMUX display in view of the driver whenever any of the following conditions exist:</p> <ul style="list-style-type: none"> • CAB DOOR OPEN (Any Cab Door Open with ignition on) • LH COMPARTMENT OPEN (Any Left Hand Compartment Door Open) • RH COMPARTMENT OPEN (Any Right Hand Compartment Door Open) • REAR DOOR OPEN (Any Rear Compartment Door Open) • TANK RACK DOWN (Tank Rack Not Stowed) • LH LIGHT POLE RAISED (Left Hand Pole Light Raised) • RH LIGHT POLE RAISED (Right Hand Pole Light Raised) <p>A warning message shall also be displayed for any other device that is opened, extended or deployed that creates a hazard or is likely to cause major damage to the apparatus if the apparatus is moved.</p> <p><u>WIPER CONTROL</u></p> <p>Wiper control shall include an intermittent feature and windshield washer controls.</p> <p><u>POWER RECEPTACLES</u></p> <p>There shall be two (2) power receptacles located in the dash provided by the chassis manufacturer.</p> <p>The circuit(s) may be load managed when the parking brake is set.</p> <p><u>VEHICLE DATA RECORDER</u></p> <p>There shall be a vehicle data recorder (VDR) capable of reading and storing vehicle information provided.</p> <p>The information stored on the VDR can be downloaded through a USB port mounted in a convenient location determined by cab model. A USB cable can be used to connect the VDR to a laptop to retrieve required information. The program to download the information from the VDR will be available to download on-line.</p> <p>The vehicle data recorder shall be capable of recording the following data via hardwired and/or CAN inputs:</p>		

	Bidder Complies	
	Yes	No
<ul style="list-style-type: none"> • Vehicle Speed - MPH • Acceleration - MPH/sec • Deceleration - MPH/sec • Engine Speed - RPM • Engine Throttle Position - % of Full Throttle • ABS Event - On/Off • Seat Occupied Status - Yes/No by Position • Seat Belt Buckled Status - Yes/No by Position • Master Optical Warning Device Switch - On/Off • Time - 24 Hour Time • Date - Year/Month/Day <p><u>Seat Belt Monitoring System</u></p> <p>A seat belt monitoring system (SBMS) shall be provided. The SBMS shall be capable of monitoring up to six (6) seating positions indicating the status of each seat position per the following:</p> <ul style="list-style-type: none"> • Seat Occupied & Buckled = Green LED indicator illuminated • Seat Occupied & Unbuckled = Red LED indicator with audible alarm • No Occupant & Buckled = Red LED indicator with audible alarm • No Occupant & Unbuckled = No indicator and no alarm <p>The SBMS shall include an audible alarm that shall warn that an unbuckled occupant condition exists and the parking brake is released, or the transmission is not in park.</p> <p><u>TWO-WAY RADIO ACCOMMODATION PACKAGE</u></p> <p>One set of 12 volt wire leads shall be provided for the future installation of a two-way radio. These leads shall consist of one (1) 30-amp battery direct circuit, one (1) 10-amp battery switched circuit and one (1) ground circuit. These leads shall be 6' long and terminate behind the cab dash with heat shrink caps.</p> <p>One (1) NMO mobile radio antenna mount with RG-58A/U stranded coaxial cable shall be provided. The antenna mount shall be installed through the cab roof, and the coaxial cable shall be routed behind the cab dash. All wiring shall be neatly coiled and clearly marked.</p> <p>A weatherproof cap for the antenna mount shall also be installed.</p> <p><u>VEHICLE CAMERA SYSTEM</u></p> <p>There shall be a color vehicle camera system provided with the following:</p> <ul style="list-style-type: none"> • One (1) Analog High Definition (AHD) white camera located at the rear of the apparatus, pointing rearward, displayed automatically with the vehicle in reverse. 		

	Bidder Complies	
	Yes	No
<p>The camera image shall be displayed on a 7.00" High Definition (HD) display located in view of the driver on the dash. The display shall include manual camera activation capability and audio from the active camera.</p> <p>The following components shall be included:</p> <ul style="list-style-type: none"> • One (1) HD700136DC, display • One (1) 1080p AHD rear camera • All necessary cables <p><u>CAMERA SWITCHER</u></p> <p>A camera switcher is not required.</p> <p><u>VEHICLE CAMERA GUARD</u></p> <p>There shall be one (1) aluminum treadplate guard provided over the vehicle camera.</p> <p><u>ELECTRICAL</u></p> <p>All 12-volt electrical equipment installed by the apparatus manufacturer shall conform to modern automotive practices. All wiring shall be high temperature crosslink type. Wiring shall be run in loom or conduit where exposed and have grommets where wire passes through sheet metal. Automatic reset circuit breakers shall be provided which conform to SAE Standards. Wiring shall be color, function and number coded. Function and number codes shall be continuously imprinted on all wiring harness conductors at 2.00" intervals. Exterior exposed wire connectors shall be positive locking, and environmentally sealed to withstand elements such as temperature extremes, moisture and automotive fluids. Electrical wiring and equipment shall be installed utilizing the following guidelines:</p> <p>(1) All holes made in the roof shall be caulked with silicon. Rope caulk is not acceptable. Large fender washers, liberally caulked, shall be used when fastening equipment to the underside of the cab roof.</p> <p>(2) Any electrical component that is installed in an exposed area shall be mounted in a manner that shall not allow moisture to accumulate in it. Exposed area shall be defined as any location outside of the cab or body.</p> <p>(3) Electrical components designed to be removed for maintenance shall not be fastened with nuts and bolts. Metal screws shall be used in mounting these devices. Also a coil of wire shall be provided behind the appliance to allow them to be pulled away from mounting area for inspection and service work.</p> <p>(4) Corrosion preventative compound shall be applied to all terminal plugs located outside of the cab or body. All non-waterproof connections shall require this compound in the plug to prevent corrosion and for easy separation (of the plug).</p>		

	Bidder Complies	
	Yes	No
<p>(5) All lights that have their sockets in a weather exposed area shall have corrosion preventative compound added to the socket terminal area.</p> <p>(6) All electrical terminals in exposed areas shall have silicon applied completely over the metal portion of the terminal. All emergency light switches shall be mounted on a separate panel installed in the cab. A master warning light switch and individual switches to be provided to allow pre-selection of emergency lights. The light switches shall be "rocker" type with an internal indicator light to show when switch is energized. All switches shall be properly identified and mounted in a removable panel for ease in servicing. Identification of the switches shall be done by either printing or etching on the switch panel. The switches and identification shall be illuminated.</p> <p>All lights and reflectors, required to comply with Federal Motor Vehicle Safety Standard #108, shall be furnished. Rear identification lights shall be recessed mounted for protection. Lights and wiring mounted in the rear bulkheads shall be protected from damage by installing a false bulkhead inside the rear compartments.</p> <p>An operational test shall be conducted to ensure that any equipment that is permanently attached to the electrical system is properly connected and in working order.</p> <p>The results of the tests shall be recorded and provided to the purchaser at time of delivery.</p> <p><u>BATTERY SYSTEM</u></p> <p>A single starting battery system shall be provided consisting of two (2) 12 volt, maintenance-free batteries. The battery system shall have a total of 2000 CCA.</p> <p><u>BATTERY LOCATION</u></p> <p>The batteries shall be installed in the standard location as provided by the chassis manufacturer. This location is typically under the cab on the left side of the truck.</p> <p><u>MASTER BATTERY SWITCH</u></p> <p>A master battery switch, to activate the battery system, shall be provided inside the cab within easy reach of the driver.</p> <p>The master battery disconnect switch shall be wired between the starter solenoid and the remainder of the electrical loads on the apparatus. A progressive low voltage disconnect at 12.3 volts for designated chassis circuits shall be provided.</p> <p>A green "battery on" indicator light, visible from the driver's position, shall be provided.</p> <p><u>BATTERY CHARGER</u></p> <p>An IOTA, Model DLS 45, shall be provided.</p> <p>The battery charger shall be wired to the AC shoreline inlet as defined elsewhere in this specification.</p>		

	Bidder Complies	
	Yes	No
<p>The battery charger shall be located in LS3, left side body compartment, mounted on the back wall as high as practical.</p> <p><u>SHORELINE</u> There shall be one (1) shoreline inlet provided to operate the 120-volt circuits on the truck without the use of the generator.</p> <p>The shoreline receptacle (s) shall be provided with a NEMA 5-20, 120 volt, 20 amp, straight blade plug and gray cast cover.</p> <p>The shoreline shall be connected to the battery charger. A mating connector body shall also be supplied with the loose equipment.</p> <p>The shoreline receptacle shall be located on the driver side of pump panel .</p> <p><u>ALTERNATOR</u> The alternator shall be a Delco Remy 40SI, 275 amp, quadramount, with remote battery voltage sensor.</p> <p><u>ELECTRONIC LOAD MANAGEMENT</u> Included with the apparatus manufacturer's electrical system shall be a programmable load management system.</p> <p>This system shall monitor the vehicle's 12-volt electrical system, and automatically reduce the electrical load in the event of a low voltage condition and by doing so, ensures the integrity of the electrical system.</p> <p><u>EXTERIOR LIGHTING</u> Exterior lighting shall meet or exceed Federal Department of Transportation, Federal Motor Vehicle Safety Standards and National Fire Protection Association requirements in effect at time of proposal.</p> <p>Front headlights shall be halogen type and comply to all FMVSS requirements.</p> <p>Five (5) LED clearance and marker lights shall be installed across the leading edge of the cab.</p> <p><u>INTERMEDIATE LIGHT</u> There shall be two (2) Truck-Lite®, Model 60421Y, amber LED lights furnished, one (1) each side, horizontally in the rear fender panel. The light shall double as a turn signal and marker light.</p> <p>A stainless steel trim shall be included with this installation.</p> <p><u>REAR CLEARANCE/MARKER/ID LIGHTING</u> There shall be three (3) LED identification lights located at the rear installed per the following:</p> <ul style="list-style-type: none"> • As close as practical to the vertical centerline 		

	Bidder Complies	
	Yes	No
<ul style="list-style-type: none"> Centers spaced not less than 6.00" or more than 12.00" apart Red in color All at the same height <p>There shall be two (2) LED lights installed at the rear of the apparatus used as clearance lights located at the rear of the apparatus per the following:</p> <ul style="list-style-type: none"> To indicate the overall width of the vehicle One (1) each side of the vertical centerline As near the top as practical Red in color To be visible from the rear All at the same height <p>There shall be two (2) LED lights installed on the side of the apparatus used as marker lights as close to the rear as practical per the following:</p> <ul style="list-style-type: none"> To indicate the overall length of the vehicle One (1) each side of the vertical centerline As near the top as practical Red in color To be visible from the side All at the same height <p>The lights shall be mounted with no guard.</p> <p>There shall be two (2) red reflectors located on the rear of the truck facing to the rear. One (1) each side, as far to the outside as practical, at a minimum of 15.00", but no more than 60.00", above the ground.</p> <p>There shall be two (2) red reflectors located on the side of the truck facing to the side. One (1) each side, as far to the rear as practical, at a minimum of 15.00", but no more than 60.00", above the ground.</p> <p>Per FMVSS 108 and CMVSS 108 requirements.</p> <p><u>REAR FMVSS LIGHTING</u></p> <p>There shall be two (2) wrap around tri-cluster LED modules provided on the face of the rear body compartments.</p> <p>Each tri-cluster shall include the following:</p> <ul style="list-style-type: none"> One (1) LED stop/tail light One (1) LED directional light One (1) LED backup light 		

	Bidder Complies	
	Yes	No
<p><u>LICENSE PLATE BRACKET</u></p> <p>One (1) license plate bracket constructed of stainless steel shall be provided at the rear of the apparatus.</p> <p>One (1) white LED light with chrome housing shall be provided to illuminate the license plate. A stainless steel light shield shall be provided over the light that shall direct illumination downward, preventing white light to the rear.</p> <p><u>BACK-UP ALARM</u></p> <p>A PRECO, Model 1040, solid-state electronic audible back-up alarm that actuates when the truck is shifted into reverse shall be provided. The device shall sound at 60 pulses per minute and automatically adjust its volume to maintain a minimum ten (10) dBA above surrounding environmental noise levels.</p> <p><u>CAB PERIMETER SCENE LIGHTS</u></p> <p>There shall be two (2) Truck-Lite, Model 6060C, white LED lights with grommets provided, one (1) for each cab door.</p> <p>These lights shall be activated automatically when the battery switch is on and the exit doors are opened or by the same means as the body perimeter scene lights.</p> <p><u>PUMP HOUSE PERIMETER LIGHTS</u></p> <p>There shall be four (4) Truck-Lite, Model 6060C, 6.00" x 2.00" oval white LED lights with Model 60700, grommets provided.</p> <p>The lights shall be mounted in the following locations:</p> <ul style="list-style-type: none"> • One (1) light shall be provided under the driver's side top mount pump panel access step • One (1) light shall be provided under the driver's side pump panel running board • One (1) light shall be provided under the passenger's side pump panel running board • One (1) light shall be provided under the passenger's side top mount pump panel access step <p>The lights shall be controlled by the same means as the body perimeter lights.</p> <p><u>BODY PERIMETER SCENE LIGHTS</u></p> <p>There shall be two (2) Truck-Lite, Model 6060C, white LED lights with grommets provided under at the rear step area of the body, one (1) each side shining to the rear.</p> <p>The perimeter scene lights shall be activated when the parking brake is applied.</p> <p><u>STEP LIGHTS</u></p> <p>White LED, step lights shall be provided to meet the NFPA step lighting requirement. Lights shall be provided on each side, on the front compartment face and at the rear to illuminate the tailboard.</p>		

	Bidder Complies	
	Yes	No
<p>These step lights shall be actuated with the parking brake.</p> <p>All other steps on the apparatus shall be illuminated per the current edition of applicable NFPA standards.</p> <p><u>SCENE LIGHTS</u></p> <p>There shall be one (1) pair of Whelen, Model 6SC0ENZR Gradient LED scene lights provided.</p> <p>These lights shall direct light downward via internal optics. They shall be installed on the passenger's side of the apparatus body.</p> <p>A control for the lights selected above shall be the following:</p> <ul style="list-style-type: none"> • a switch at the driver's side switch panel. • a switch at the pump operator's panel. <p><u>SCENE LIGHTS</u></p> <p>There shall be one (1) pair of Whelen, Model 6SC0ENZR Gradient LED scene lights provided.</p> <p>These lights shall direct light downward via internal optics. They shall be installed on the driver's side of the apparatus body.</p> <p>A control for the lights selected above shall be the following:</p> <ul style="list-style-type: none"> • a switch at the driver's side switch panel. • a switch at the pump operator's panel. <p><u>12 VOLT LIGHTING</u></p> <p>There shall be one (1) Whelen Model PCH2, 12 volt DC LED combination spot/floodlight installed on the apparatus.</p> <p>The painted parts of this light assembly to be white.</p> <p>The light shall be installed on an extendable pole on the driver's side .</p> <p>The light(s) to be installed on a thru body/surface mount top adjust pull-up pole(s) connected to the Do Not Move Truck Indicator circuit in the cab.</p> <p>The inside pole length to be as long as practical to fit in the location selected.</p> <p>The light pole(s) to be installed without handle holder(s) and a not stowed sensor connected to the Do Not Move Truck Indicator Light in the cab.</p> <p>The light shall be controlled by the following:</p> <ul style="list-style-type: none"> • a switch at the driver's side switch panel. • a switch at the pump operator's panel. 		

	Bidder Complies	
	Yes	No
<p>This light may be load managed when the parking brake is applied.</p> <p><u>12 VOLT LIGHTING</u></p> <p>There shall be one (1) Whelen Model PCH2, 12 volt DC LED combination spot/floodlight installed on the apparatus.</p> <p>The painted parts of this light assembly to be white.</p> <p>The light shall be installed on an extendable pole on the passenger's side .</p> <p>The light(s) to be installed on a thru body/surface mount top adjust pull-up pole(s) connected to the Do Not Move Truck Indicator circuit in the cab.</p> <p>The inside pole length to be as long as practical to fit in the location selected.</p> <p>The light pole(s) to be installed without handle holder(s) and a not stowed sensor connected to the Do Not Move Truck Indicator Light in the cab.</p> <p>The light shall be controlled by the following:</p> <ul style="list-style-type: none"> • a switch at the driver's side switch panel. • a switch at the pump operator's panel. <p>This light may be load managed when the parking brake is applied.</p> <p><u>REAR SCENE LIGHTS</u></p> <p>There shall be two (2) Whelen, Model PEL*C, white 12 volt DC LED scene lights with 45 degree chrome housing installed at the rear of the apparatus, one (1) each side mid height on rear body bulkhead.</p> <p>The lights shall be controlled by a switch at the driver's side switch panel.</p> <p><u>WALKING SURFACE LIGHT</u></p> <p>There shall be Model FRP, 4" round black 12 volt DC LED floodlight(s) with bolt mount provided to illuminate the entire designated walking surface on top of the body.</p> <p>The light(s) shall be activated when the body step lights are on.</p> <p><u>WATER TANK</u></p> <p>Booster tank shall have a capacity of 1000 gallons and be constructed of polypropylene plastic.</p> <p>Tank joints and seams shall be nitrogen welded inside and out.</p> <p>Tank shall be baffled in accordance with current NFPA requirements.</p> <p>Baffles shall have vent openings at both the top and bottom to permit movement of air and water between compartments.</p>		

	Bidder Complies	
	Yes	No
<p>Tank top shall be sufficiently supported to keep it rigid during fast filling conditions.</p> <p>A sump shall be provided at the bottom of the water tank, and include a drain plug and the tank outlet.</p> <p>Tank shall be installed in a fabricated cradle assembly constructed of structural steel.</p> <p>Sufficient crossmembers shall be provided to properly support bottom of tank. Crossmembers shall be constructed of steel bar channel or rectangular tubing.</p> <p>Tank shall "float" in cradle to avoid torsional stress caused by chassis frame flexing. Rubber cushions, .50" thick x 3.00" wide, shall be placed on all horizontal surfaces that the tank rests on.</p> <p>Stops or other provision shall be provided to prevent an empty tank from bouncing excessively while moving vehicle.</p> <p>Mounting system shall be approved by the tank manufacturer.</p> <p>Fill tower shall be constructed of .50" polypropylene and shall be a minimum of 8.00" wide x 14.00" long.</p> <p>Fill tower shall be furnished with a .25" thick polypropylene screen and a hinged cover.</p> <p>An overflow pipe, constructed of 4.00" schedule 40 polypropylene, shall be installed approximately halfway down the fill tower and extend through the water tank and exit to the rear of the rear axle.</p> <p><u>HOSE BED</u></p> <p>The hose bed shall be fabricated of .125"-5052 aluminum with a nominal 38,000 psi tensile strength.</p> <p>Upper and rear edges of side panels shall have a double break for rigidity, a split tube finish shall not be acceptable.</p> <p>Flooring of the hose bed shall be removable aluminum grating with the top surface corrugated to aid in hose aeration. The grating slats shall be a minimum of 0.50" x 4.50" with spacing between slats for hose ventilation.</p> <p><u>HOSEBED ILLUMINATION</u></p> <p>The hose bed shall be illuminated with LED lighting. The lights shall have control from a switch at the rear of the truck .</p> <p>Hose bed shall accommodate 1500 feet of 2.50" and 400 feet of 1.50" hose.</p> <p><u>HOSE BED DIVIDER</u></p> <p>Two (2) hosebed dividers shall be furnished for separating hose.</p>		

	Bidder Complies	
	Yes	No
<p>Each divider shall be constructed of a .25" brushed aluminum sheet. Flat surfaces shall be sanded for uniform appearance, or constructed of brushed aluminum.</p> <p>Divider shall be fully adjustable by sliding in tracks, located at the front and rear of the hose bed.</p> <p>Divider shall be held in place by tightening bolts, at each end.</p> <p>Acorn nuts shall be installed on all bolts in the hose bed which have exposed threads.</p> <p><u>HOSEBED HOSE RESTRAINT</u></p> <p>A red hosebed cover shall be furnished with velcro with snaps fasteners at the front and velcro with jacket snaps in each corner fasteners on the sides. There shall be seat belt buckle fasteners at the bottom of the rear body sheet below the hosebed. The flap at the rear shall be weighted with lead shot weighted.</p> <p><u>RUNNING BOARDS</u></p> <p>Running boards shall be fabricated of .125" bright aluminum treadplate.</p> <p>Each running board shall be supported by a welded 2.00" square tubing and channel assembly, which shall be bolted to the pump compartment substructure.</p> <p>Running boards shall be 12.75" deep and spaced .50" away from the pump panel.</p> <p>A splash guard shall be provided above the running board treadplate.</p> <p><u>TAILBOARD</u></p> <p>The tailboard shall also be constructed of .125" bright aluminum treadplate and spaced .50" from the body, as well as supported by a structural steel assembly.</p> <p>The tailboard area shall be 12.00" deep and full width of the body.</p> <p>The exterior side shall be flanged down and in for increased rigidity of tailboard structure.</p> <p><u>REAR WALL, SMOOTH ALUMINUM/BODY MATERIAL</u></p> <p>The rear facing surfaces of the center rear wall shall be smooth aluminum.</p> <p>The bulkheads, the surface to the rear of the side body compartments, shall be smooth and the same material as the body.</p> <p>The rear wall shall be flush.</p> <p><u>TOW BAR</u></p> <p>A tow bar shall be installed under the tailboard at center of truck.</p> <p>Tow bar shall be fabricated of 1.00" CRS bar rolled into a 3.00" radius.</p> <p>Tow bar assembly shall be constructed of .38" structural angle. When force is applied to the bar, it shall be transmitted to the frame rail.</p>		

	Bidder Complies	
	Yes	No
<p>Tow bar assembly shall be designed and positioned to allow up to a 30-degree upward angled pull of 17,000 lb, or a 20,000 lb straight horizontal pull in line with the centerline of the vehicle.</p> <p>Tow bar design shall have been fully tested and evaluated using strain gauge testing and finite element analysis techniques.</p> <p><u>HOSE TRAY</u></p> <p>Two (2) hose trays shall be recessed one (1) in each side running board.</p> <p>Capacity of the tray shall be 100' of 1.50" hose.</p> <p>Rubber matting shall be installed on the floor of the tray to provide proper ventilation.</p> <p><u>COMPARTMENTATION</u></p> <p>Body and compartments shall be fabricated of .125", 5052-H32 aluminum.</p> <p>Side compartments shall be an integral assembly with the rear fenders.</p> <p>Circular fender liners shall be provided for prevention of rust pockets and ease of maintenance.</p> <p>Compartment flooring shall be of the sweep out design with the floor higher than the compartment door lip.</p> <p>Drip protection shall be provided above the doors.</p> <p>All screws and bolts which protrude into a compartment shall have acorn nuts on the ends to prevent injury.</p> <p><u>UNDERBODY SUPPORT SYSTEM</u></p> <p>Due to the severe loading requirements of this pumper a method of body and compartment support suitable for the intended load shall be provided.</p> <p>The backbone of the support system shall be the chassis frame rails which is the strongest component of the chassis and is designed for sustaining maximum loads.</p> <p><u>AGGRESSIVE WALKING SURFACE</u></p> <p>All exterior surfaces designated as stepping, standing, and walking areas shall comply with the required average slip resistance of the current NFPA standards.</p> <p><u>TESTING OF BODY DESIGN</u></p> <p>Body structural analysis shall be fully tested. Proven engineering and test techniques such as finite element analysis, stress coating and strain gauging shall be performed with special attention given to fatigue, life and structural integrity of the cab, body and substructure.</p> <p>Body shall be tested while loaded to its greatest in-service weight.</p> <p>The criteria used during the testing procedure shall include:</p>		

	Bidder Complies	
	Yes	No
<p>- Raising opposite corners of the vehicle tires 9.00" to simulate the twisting a truck may experience when driving over a curb.</p> <p>- Making a 90 degree turn, while driving at 20 mph to simulate aggressive driving conditions.</p> <p>- Driving the vehicle at 35 mph on a washboard road.</p> <p>- Driving the vehicle at 55 mph on a smooth road.</p> <p>- Accelerating the vehicle fully, until reaching the approximate speed of 45 mph on rough pavement.</p> <p>Evidence of actual testing techniques shall be made available upon request.</p> <p><u>LEFT SIDE COMPARTMENTATION</u></p> <p>A full height, roll-up door compartment ahead of the rear wheels shall be provided. The interior dimensions of this compartment shall be 29.50" wide x 60.00" high x 26.00" deep in the lower 30.50" of the compartment and 13.00" deep in the remaining upper portion. The height of the compartment shall be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment shall be calculated with the compartment door closed. The compartment interior shall be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment shall be 26.625" wide x 63.75" high.</p> <p>Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.</p> <p>A roll-up door compartment over the rear wheels shall be provided. The interior dimensions of this compartment shall be 59.00" wide x 34.25" high x 13.00" deep. The height of the compartment shall be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment shall be calculated with the compartment door closed. The clear door opening of this compartment shall be 59.00" wide x 35.25" high.</p> <p>Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.</p> <p>A full height, roll-up door compartment behind the rear wheels shall be provided. The interior dimensions of this compartment shall be 48.625" wide x 60.00" high x 26.00" deep in the lower 30.50" of height and 13.00" deep in the remaining upper section of the compartment. The height of the compartment shall be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment shall be calculated with the compartment door closed. The compartment interior shall be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment shall be 48.50" wide x 63.75" high.</p>		

	Bidder Complies	
	Yes	No
<p>Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.</p> <p><u>RIGHT SIDE COMPARTMENTATION</u></p> <p>A full height, roll-up door compartment ahead of the rear wheels shall be provided. The interior dimensions of this compartment shall be 29.50" wide x 60.00" high x 26.00" deep in the lower 30.50" of the compartment and 13.00" deep in the remaining upper portion. The height of the compartment shall be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment shall be calculated with the compartment door closed. The compartment interior shall be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment shall be 26.625" wide x 63.75" high.</p> <p>Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.</p> <p>A roll-up door compartment over the rear wheels shall be provided. The interior dimensions of this compartment shall be 59.00" wide x 34.25" high x 13.00" deep. The height of the compartment shall be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment shall be calculated with the compartment door closed. The clear door opening of this compartment shall be 59.00" wide x 35.25" high.</p> <p>Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.</p> <p>A full height, roll-up door compartment behind the rear wheels shall be provided. The interior dimensions of this compartment shall be 48.625" wide x 60.00" high x 26.00" deep in the lower 30.50" of height and 13.00" deep in the remaining upper section of the compartment. The height of the compartment shall be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment shall be calculated with the compartment door closed. The compartment interior shall be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment shall be 48.50" wide x 63.75" high.</p> <p>Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.</p> <p><u>SIDE COMPARTMENT ROLLUP DOOR(S)</u></p> <p>There shall be six (6) compartment doors installed on the side compartments. The doors shall be double faced aluminum construction, an anodized satin finish and manufactured by Gortite®.</p> <p>Lath sections shall be an interlocking rib design and shall be individually replaceable without complete disassembly of door.</p>		

	Bidder Complies	
	Yes	No
<p>Between each slat at the pivoting joint shall be a PVC inner seal to prevent metal to metal contact and prevent dirt or moisture from entering the compartments. Seals shall allow door to operate in extreme temperatures ranging from 180 to -40 degrees Fahrenheit. Side, top and bottom seals shall be provided to resist ingress of dirt and weather and be made of Santoprene.</p> <p>All hinges, barrel clips and end pieces shall be nylon 66. All nylon components shall withstand temperatures from 300 to -40 degrees Fahrenheit. Hardened plastic shall not be acceptable.</p> <p>A polished stainless steel lift bar to be provided for each roll-up door. Lift bar shall be located at the bottom of door and have latches on the outer extrusion of the doors frame. A ledge shall be supplied over lift bar for additional area to aid in closing the door.</p> <p>Doors shall be constructed from an aluminum box section. The exterior surface of each slat shall be flat. The interior surfaces shall be concave to provide strength and prevent loose equipment from jamming the door from inside.</p> <p>To conserve space in the compartments, the spring roller assembly shall not exceed 3.00" in diameter. A garage style roll door shall not be acceptable.</p> <p>The header for the rollup door assembly shall not exceed 4.00".</p> <p>A heavy-duty magnetic switch shall be used for control of open compartment door warning lights.</p> <p><u>REAR COMPARTMENTATION</u></p> <p>A roll-up door compartment above the rear tailboard shall be provided.</p> <p>Interior dimensions of this compartment shall be 42.00" wide x 56.63" high x 27.88" deep in the lower 47.75" of height and 19.75" deep in the remaining upper portion. Depth of the compartment shall be calculated with the compartment door closed.</p> <p>For a chassis with a rear mounted fuel tank, a louvered removable access panel shall be furnished on the back wall of the compartment.</p> <p>Rear compartment shall be open into the rear side compartments.</p> <p>Clear door opening of this compartment shall be 34.38" wide x 48.25" high.</p> <p>Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.</p> <p><u>ROLLUP REAR COMPARTMENT DOOR</u></p> <p>There shall be a rear rollup door. The door shall be double faced aluminum construction, an anodized satin finish and manufactured by Gortite®.</p> <p>Lath sections shall be an interlocking rib design and shall be individually replaceable without complete disassembly of door.</p>		

	Bidder Complies	
	Yes	No
<p>Between each slat at the pivoting joint shall be a PVC inner seal to prevent metal to metal contact and prevent dirt or moisture from entering the compartments. Seals shall allow door to operate in extreme temperatures ranging from 180 to -40 degrees Fahrenheit. Side, top and bottom seals shall be provided to resist ingress of dirt and weather and be made of Santoprene.</p> <p>All hinges, barrel clips and end pieces shall be nylon 66. All nylon components shall withstand temperatures from 300 to -40 degrees Fahrenheit. Hardened plastic shall not be acceptable.</p> <p>A polished stainless steel lift bar to be provided for each roll-up door. Lift bar shall be located at the bottom of door and have latches on the outer extrusion of the doors frame. A ledge shall be supplied over lift bar for additional area to aid in closing the door.</p> <p>Door shall be constructed from an aluminum box section. The exterior surface of each slat shall be flat. The interior surface shall be concave to provide strength and prevent loose equipment from jamming the door from inside.</p> <p>To conserve space in the compartments, the spring roller assembly shall not exceed 3.00" in diameter. A garage style roll door shall not be acceptable.</p> <p>The header for the rollup door assembly shall not exceed 4.00".</p> <p>A heavy-duty magnetic switch shall be used for control of open compartment door warning lights.</p> <p><u>COMPARTMENT LIGHTING</u></p> <p>There shall be seven (7) compartments with LED compartment light strip. Each light strip shall be centered vertically along the door framing. All body compartments with roll-up doors shall have these strip lights.</p> <p>Any remaining compartment without a light strip shall have a 6.00" diameter Truck-Lite, Model: 79384 light in each enclosed compartment. Each light shall have a number 1076 one filament, two wire bulb.</p> <p>Opening the compartment door shall automatically turn the compartment lighting on.</p> <p><u>MOUNTING TRACKS</u></p> <p>There shall be five (5) sets of tracks for mounting shelf(s) in LS1, LS3, RS1, RS3 and B1 . These tracks shall be installed vertically to support the adjustable shelf(s), and shall be full height of the compartment. The tracks shall be unpainted with a natural finish.</p> <p><u>ADJUSTABLE SHELVES</u></p> <p>There shall be eight (8) shelves with a capacity of 215 lb provided. The shelf construction shall consist of .18" aluminum with 2.00" sides. Each shelf shall be painted to match the compartment interior. Each shelf shall be infinitely adjustable by means of a threaded fastener, which slides in a track.</p>		

	Bidder Complies	
	Yes	No
<p>The shelves shall be held in place by .12" thick stamped plated brackets and bolts.</p> <p>The location shall be determined at a later date .</p> <p><u>SLIDE-OUT FLOOR MOUNTED TRAY</u></p> <p>There shall be one (1) floor mounted slide-out tray(s) with 2.00" sides provided in the following compartments: B1 .</p> <p>Each tray shall be rated for up to 500lb in the extended position. The tray(s) shall be constructed of a minimum .13" aluminum with welded corners. The finish shall be painted to match compartment interior.</p> <p>There shall be two under-mount-roller bearing type slides rated at 250lb each provided. The pair of slides shall have a safety factor rating of 2.</p> <p>To ensure years of dependable service, the slides shall be coated with a finish that is tested to withstand a minimum of 1,000 hours of salt spray per ASTM B117.</p> <p>To ensure years of easy operation, the slides shall require no more than a 50lb force for push-in or pull-out movement when fully loaded after having been subjected to a 40 hour vibration (shaker) test under full load. The vibration drive file shall have been generated from accelerometer data collected from a heavy truck chassis driven over rough gravel roads in an unloaded condition. Proof of compliance shall be provided upon request.</p> <p>Automatic locks shall be provided for both the "in" and "out" positions. The trip mechanism for the locks shall be located at the front of the tray for ease of use with a gloved hand.</p> <p><u>MOUNTING TRACKS</u></p> <p>There shall be four (4) sets of tracks for mounting equipment. These tracks shall be installed horizontally on the back wall of the compartment(s). The tracks shall be unpainted with a natural finish.</p> <p>The compartment(s) with mounting tracks shall be LS2 and RS2 .</p> <p><u>RUB RAIL</u></p> <p>Bottom edge of the side compartments shall be trimmed with a bright aluminum extruded rub rail.</p> <p>Trim shall be 2.12" high with 1.38" flanges turned outward for rigidity.</p> <p>The rub rails shall not be an integral part of the body construction, which allows replacement in the event of damage.</p> <p><u>BODY FENDER CROWNS</u></p> <p>Stainless steel fender crowns shall be provided around the rear wheel openings.</p>		

	Bidder Complies	
	Yes	No
<p>A rubber welting shall be provided between the body and the crown to seal the seam and restrict moisture from entering.</p> <p>A dielectric barrier shall be provided between the fender crown fasteners (screws) and the fender sheet metal to prevent corrosion.</p> <p><u>HARD SUCTION HOSE</u></p> <p>Two (2) lengths of 6.00" clear corrugated PVC hard suction hose, 10' in length, shall be provided. The hose shall be equipped with a long handle female coupling on one (1) end and a rocker lug male coupling on the other end. Couplings shall be hard coated aluminum.</p> <p><u>HARD SUCTION HOSE STORAGE</u></p> <p>Storage for two (2) hard suction hoses, mounted side by side, shall be provided inside the hosebed on the left side.</p> <p>One permanent divider shall be included.</p> <p>A section of hose bed grating shall be provided above the hard suction hose storage area.</p> <p>A nylon strap shall be provided at the rear of the storage area to contain the hose.</p> <p><u>HANDRAILS</u></p> <p>The handrails shall be 1.25" diameter knurled aluminum to provide a positive gripping surface.</p> <p>Chrome plated end stanchions shall support the handrail. Plastic gaskets shall be used between end stanchions and any painted surfaces.</p> <p>Drain holes shall be provided in the bottom of all vertically mounted handrails.</p> <p>Handrails shall be provided to meet current edition of applicable NFPA standards. The handrails shall be installed as noted on the sales drawing.</p> <ul style="list-style-type: none"> • One (1) vertical handrail, with offset stanchions shall be located on each rear bulkhead. • Additionally, a handrail to aid in accessing the hose bed shall be installed on the left side rear vertical and top horizontal rearward edge of the hosebed side sheet. <p><u>AIR BOTTLE STORAGE</u></p> <p>A total of four (4) air bottle compartments shall be provided, two (2) each side of the body. The air bottle compartment shall be in the form of a PVC round tube to accommodate different size air bottles. The inside diameter of the tube shall be approximately 7.63" in diameter x 26.00" deep. Drain holes shall be provided at the bottom of the tubes to prevent water collection.</p> <p>A Cast Products door with latch shall be provided to contain the air bottle.</p> <p><u>EXTENSION LADDER</u></p> <p>There shall be a 24' two-section aluminum Duo-Safety Series 900-A extension ladder provided.</p>		

	Bidder Complies	
	Yes	No
<p><u>ROOF LADDER</u> There shall be a 14' aluminum Duo-Safety Series 775-A roof ladder provided.</p> <p><u>LADDER STORAGE</u> The ladders shall be stored inside the upper section of the right side compartments.</p> <p>The ladder rack shall reduce the depth of the upper section, in the side compartments, by approximately 12.00".</p> <p>A partition shall be installed inside the compartments to conceal the ladder rack and allow for equipment storage. The ladders shall extend through the forward wall of the compartmentation, into the pump area. The ladders shall be stored in separate storage troughs lined with Dura-Surf slides to aid in loading and unloading of the ladders. Rear of ladder storage area shall be a vertically hinged door with D-ring latch to contain the ladders.</p> <p><u>FOLDING LADDER</u> One (1) 10.00' aluminum, Series 585-A, Duo-Safety folding ladder shall be installed in a U-shaped trough inside the ladder storage compartment .</p> <p><u>PIKE POLE PROVIDED BY FIRE DEPARTMENT</u> NFPA 1901, 2016 edition, Section 5.9.4 requires one (1) 8 ft or longer pike pole mounted in a bracket fastened to the apparatus.</p> <p>The pike pole is not on the apparatus as manufactured. The fire department shall provide and mount the pike pole.</p> <p>The pike pole(s) shall be a Akron 10' pike pole.</p> <p><u>6' PIKE POLE PROVIDED BY FIRE DEPARTMENT</u> NFPA 1901, 2016 edition, Section 5.9.4 requires one (1) 6' pike pole or plaster hook mounted in a bracket fastened to the apparatus.</p> <p>The pike pole is not on the apparatus as manufactured. The fire department shall provide and mount the pike pole.</p> <p>The pike pole(s) shall be a Akron 6' pike pole.</p> <p><u>PIKE POLE STORAGE</u> Tubing shall be used for the storage of two (2) pike poles and shall be located in the ladder storage compartment . If the head of a pike pole can come in contact with a painted surface, a stainless steel scuffplate shall be provided.</p> <p><u>STEP, CARGO ACCESS</u> One (1) wedge step shall be located on the left side of the cargo area to provide a NFPA compliant step height into the cargo area. The step shall be approximately 8.00" deep to be NFPA compliant.</p>		

	Bidder Complies	
	Yes	No
<p><u>NO STEPS REQUIRED, FRONT OF BODY</u> No steps shall be required at the front of the body, as access to the cargo area and hose bed is defined elsewhere in this specification.</p> <p><u>LADDER, HOSE BED ACCESS</u> A hose bed access ladder, constructed of aluminum rungs and extruded aluminum rails, shall be provided on the left side rear of the apparatus.</p> <p><u>PUMP COMPARTMENT</u> The pump compartment shall be separate from the hose body and compartments so that each may flex independently of the other. It shall be a fabricated assembly of steel tubing, angles and channels which support both the fire pump and the side running boards.</p> <p>Compartment shall be mounted on chassis frame rails with rubber biscuits in a four point pattern to allow for chassis frame twist.</p> <p>Pump compartment, pump, plumbing and gauge panels must be removable from the chassis as a single assembly.</p> <p><u>PUMP MOUNTING</u> Pump shall be mounted to a substructure which shall be mounted to the chassis frame rail using rubber isolators. The mounting shall allow chassis frame rails to flex independently without damage to the fire pump.</p> <p><u>PUMP CONTROL PANELS (TOP MOUNT)</u> All pump controls and gauges to be properly marked and located above the pump to the rear of the walkway. Operator to face the rear of the truck when viewing the control panel from the operating position.</p> <p>The control panel shall be in two planes.</p> <p>The upper plane shall be hinged at the bottom with a full length stainless steel hinge.</p> <p>Both planes to be full width of the pump house structure.</p> <p>The side pump panels shall be 34.00" wide.</p> <p>The side pump panels shall be removable for ease of maintenance.</p> <p>Polished stainless steel trim collars to be installed around all inlets and outlets.</p> <p>Controls shall have chrome plated bezels encircling the opening securely mounted to the pump panel. Identification tags for the discharge controls shall be recessed within the same bezel. The discharge identification tags shall be color coded, with each discharge having its own unique color.</p> <p>All remaining identification tags shall be mounted on the pump panel in chrome plated bezels.</p>		

	Bidder Complies	
	Yes	No
<p><u>WALKWAY</u> A 19.00" wide walkway shall be provided for access to the top control panel. The walkway shall be constructed of bright aluminum treadplate and properly reinforced.</p> <p>There shall be six (6) six (6) white LED lights provided to illuminate the walkway. The lights shall come on with the body perimeter lights.</p> <p><u>WALKWAY TOOL COMPARTMENT</u> A tool compartment shall be provided on each side of the walkway. Each compartment shall have an aluminum treadplate door and shall be equipped with two (2) white LED lights with chrome bezels, one (1) in each compartment .</p> <p><u>PUMP</u> Pump shall be a Waterous CXPA, 1250 gpm, single (1) stage, power take off (PTO) driven, midship mounted centrifugal type.</p> <p>Pump shall be the class "A" type.</p> <p>Pump shall deliver the percentage of rated discharge at pressures indicated below:</p> <ul style="list-style-type: none"> - 100% of rated capacity at 150 psi net pump pressure. -70% of rated capacity at 200 psi net pump pressure. -50% of rated capacity at 250 psi net pump pressure. <p>Pump casting shall be a two (2) piece, vertically split design and shall be constructed of high tensile, close grain gray iron.</p> <p>Impeller shaft shall be stainless steel, heat treated, accurately ground to size, and polished under the shaft seal. It shall be supported by oil lubricated ball bearings.</p> <p>Bearings shall be protected from water and sediment by suitable stuffing boxes, flinger rings, and oil seals. No special or sleeve type bearings shall be used.</p> <p><u>MECHANICAL SEAL ON PUMP</u> Pump shall be equipped with a self-adjusting, maintenance-free, mechanical shaft seal.</p> <p>The mechanical seal shall consist of a flat, highly polished, spring fed carbon ring that rotates with the impeller shaft. The carbon ring shall press against a highly polished stainless steel stationary ring that is sealed within the pump body.</p> <p>In addition, a throttling ring shall be pressed into the steel chamber cover, providing a very small clearance around the rotating shaft in the event of a mechanical seal failure. The pump performance shall not deteriorate, nor shall the pump lose prime, while drafting if the seal fails during pump operation.</p>		

	Bidder Complies	
	Yes	No
<p>Wear rings shall be bronze and easily replaceable to restore original pump efficiency and eliminate the need to replace the entire pump casing due to wear.</p> <p><u>PUMP TRANSMISSION</u></p> <p>The pump transmission shall be made of light weight aluminum casing. Power transfer to pump shall be through a pressure lubricated, Morse HY-VO drive chain.</p> <p>Drive shafts shall be a minimum of 1.50" diameter hardened and ground alloy steel. All shafts shall be ball bearing supported. The case shall be designed as to eliminate the need for water cooling.</p> <p>The water pump shall be driven by a special heavy duty ten (10)-bolt hot shift PTO. It shall be located on the left side of the chassis transmission. This PTO shall be designed specifically for the torque required to drive a 1250 gpm or larger water pump.</p> <p><u>PUMPING MODE</u></p> <p>An interlock system shall be provided to ensure that the pump drive system components are properly engaged so that the apparatus can be safely operated. Interlock system shall be designed to allow stationary pumping only.</p> <p>If the selection is made for the truck to "pump in motion", then a digital pump pressure gauge shall be supplied in the cab.</p> <p><u>PUMP SHIFT</u></p> <p>A pump shift shall be provided within easy reach of the driver for engagement of the PTO driven pump. The shift shall include the indicator lights as mandated by NFPA. The pump shift control shall be illuminated to meet NFPA requirements.</p> <p><u>AUXILIARY COOLING SYSTEM</u></p> <p>A supplementary heat exchange cooling system shall be provided to allow the use of water from the discharge side of the pump for cooling the engine water. The heat exchanger shall be a separate unit. It shall be installed in the pump or engine compartment with the control located on the pump operator's control panel. The exchanger shall be plumbed to the master drain valve.</p> <p><u>INTAKE RELIEF VALVE</u></p> <p>An intake relief valve shall be installed on the suction side of the pump preset at 125 psig.</p> <p>Relief valve shall have a working range of 50 psig to 350 psig.</p> <p>Outlet shall terminate below the frame rails with a 2.50" National Standard hose thread adapter and shall have a "do not cap" warning tag.</p> <p><u>PRESSURE CONTROLLER</u></p> <p>A Fire Research Pump Boss Model PBA200 pressure governor shall be provided.</p>		

	Bidder Complies	
	Yes	No
<p>A pressure transducer shall be installed in the water discharge manifold on the pump.</p> <p>The display panel shall be located at the pump operator's panel.</p> <p><u>PRIMING PUMP</u></p> <p>The priming pump shall be a Trident Emergency Products compressed air powered, high efficiency, multistage venturi based AirPrime System, conforming to standards outlined in the current edition of applicable NFPA standards.</p> <p>All wetted metallic parts of the priming system are to be of brass and stainless steel construction.</p> <p>One (1) priming control shall open the priming valve and start the pump primer.</p> <p><u>PUMP MANUALS</u></p> <p>There shall be a total of two (2) pump manuals provided by the pump manufacturer and furnished with the apparatus. The manuals shall be provided by the pump manufacturer in the form of two (2) electronic copies. Each manual shall cover pump operation, maintenance, and parts.</p> <p><u>PLUMBING, STAINLESS STEEL AND HOSE</u></p> <p>All inlet and outlet lines shall be plumbed with either stainless steel pipe, flexible polypropylene tubing or synthetic rubber hose reinforced with hi-tensile polyester braid. All hose's shall be equipped with brass or stainless steel couplings. All stainless steel hard plumbing shall be a minimum of a schedule 10 wall thickness.</p> <p>Where vibration or chassis flexing may damage or loosen piping or where a coupling is required for servicing, the piping shall be equipped with victaulic or rubber couplings.</p> <p>Plumbing manifold bodies shall be ductile cast iron or stainless steel.</p> <p>All piping lines are to be drained through a master drain valve or shall be equipped with individual drain valves. All drain lines shall be extended with a hose to drain below the chassis frame.</p> <p>All water carrying gauge lines shall be of flexible polypropylene tubing.</p> <p>All piping, hose and fittings shall have a minimum of a 500 PSI hydrodynamic pressure rating.</p> <p><u>FOAM SYSTEM PLUMBING</u></p> <p>All piping that is in contact with the foam concentrate or foam/water solution shall be stainless steel. The fittings shall be stainless steel or brass. Cast iron pump manifolds will be allowed.</p>		

	Bidder Complies	
	Yes	No
<p><u>MAIN PUMP INLETS</u> A 6.00" pump manifold inlet shall be provided on each side of the vehicle. The suction inlets shall include removable die cast zinc screens that are designed to provide cathodic protection for the pump, thus reducing corrosion in the pump.</p> <p><u>MAIN PUMP INLET CAP</u> The main pump inlets shall have National Standard Threads with a long handle chrome cap.</p> <p>The cap shall incorporate a thread design to automatically relieve stored pressure in the line when disconnected (no exception).</p> <p><u>VALVES</u> All ball valves shall be Akron® Brass in-line valves. The Akron valves shall be the 8000 series heavy-duty style with a stainless steel ball and a simple two-seat design. No lubrication or regular maintenance is required on the valve.</p> <p>Valves shall have a ten (10) year warranty.</p> <p>Inlet valve location shall be behind the pump panel.</p> <p><u>INLET CONTROL</u> The side auxiliary inlet(s) shall incorporate a quarter-turn ball valve with the control located at the top mount control panel. The valve operating mechanism shall indicate the position of the valve.</p> <p>There shall be one (1) inlet.</p> <p><u>LEFT SIDE INLET</u> There shall be one (1) auxiliary inlet with a 2.50" valve at the left side pump panel, terminating with a 2.50" (F) National Standard hose thread adapter.</p> <p>The auxiliary inlet shall be provided with a strainer, chrome swivel and plug.</p> <p><u>RIGHT SIDE INLET</u> On the right side pump panel shall be one (1) - 2.50" auxiliary inlet, terminating in 2.50" National Standard Hose Thread. The auxiliary inlet shall be provided with a strainer, chrome swivel and plug. The inlet shall be controlled at the valve.</p> <p><u>INLET BLEEDER VALVE</u> A 0.75" bleeder valve shall be provided for each side gated inlet.</p> <p>The valves shall be located behind the panel with a "T" swing style handle control extended to the outside of the panel.</p>		

	Bidder Complies	
	Yes	No
<p>The handles shall be chrome plated and provide a visual indication of valve position. The swing handle shall provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage.</p> <p>The water discharged by the bleeders shall be routed below the chassis frame rails.</p> <p><u>TANK TO PUMP</u></p> <p>The booster tank shall be connected to the intake side of the pump with heavy duty 4.00" piping and a quarter turn 3.00" valve with the control remotely located at the operator's panel. A rubber coupling shall be included in this line to prevent damage from vibration or chassis flexing.</p> <p>A check valve shall be provided in the tank to pump supply line to prevent the possibility of "back filling" the water tank.</p> <p><u>TANK REFILL</u></p> <p>A 1.50" combination tank refill and pump re-circulation line shall be provided, using a quarter-turn full flow ball valve controlled from the pump operator's panel.</p> <p><u>DISCHARGE OUTLET CONTROLS</u></p> <p>The discharge outlets shall incorporate a quarter-turn ball valve with the control located at the pump operator's panel. The valve operating mechanism shall indicate the position of the valve.</p> <p>If a handwheel control valve is used, the control shall be a minimum of a 3.9" diameter stainless steel handwheel with a dial position indicator built in to the center of the handwheel.</p> <p>Any 3.00 inch or larger discharge valve shall be a slow-operating valve in accordance with NFPA 16.7.5.3.</p> <p><u>LEFT SIDE DISCHARGE OUTLETS</u></p> <p>There shall be Two (2) discharge outlets with a 2.50" valve on the left side of the apparatus, terminating with a 2.50" (M) National Standard hose thread adapter.</p> <p><u>LEFT SIDE OUTLET ELBOWS</u></p> <p>The 2.50" discharge outlets located on the left side pump panel shall be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 45 degree elbow.</p> <p>The elbow shall incorporate a thread design to automatically relieve stored pressure in the line when disconnected (no exception).</p> <p><u>RIGHT SIDE DISCHARGE OUTLETS</u></p> <p>There shall be One (1) discharge outlet 2.50" valve on the right side of the apparatus, terminating with a (M) 2.50" National Standard hose thread adapter.</p>		

	Bidder Complies	
	Yes	No
<p><u>RIGHT SIDE OUTLET ELBOWS</u></p> <p>The 2.50" discharge outlets located on the right side pump panel shall be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 45 degree elbow.</p> <p>The elbow shall incorporate a thread design to automatically relieve stored pressure in the line when disconnected (no exception).</p> <p><u>FRONT DISCHARGE OUTLET</u></p> <p>There shall be one (1) 1.50" discharge outlet piped to the front of the apparatus and located in the center bumper tray.</p> <p>Plumbing shall consist of 2.00" piping and flexible hose with a 2.00" full flow ball valve with control at the pump operator's panel. A fabricated weldment made of stainless steel pipe shall be used in the plumbing where appropriate. The piping shall terminate with a 1.50" NST with 90 degree stainless steel swivel.</p> <p>There shall be automatic drains provided at all low points of the piping.</p> <p><u>FRONT OF HOSE BED DISCHARGE OUTLET</u></p> <p>There shall be One (1) discharge outlet discharge(s) piped to the front of the hose bed and located right side . Plumbing shall consist of 2.50" piping with a 2.50" full-flow ball valve controlled at the pump operator's panel. The discharge(s) shall terminate with a 2.50" (M) National Standard hose thread adapter.</p> <p><u>DISCHARGE CAPS/ INLET PLUGS</u></p> <p>Chrome plated, rocker lug, caps with chain shall be furnished for all discharge outlets 1.00" thru 3.00" in size, besides the pre-connected hose outlets.</p> <p>Chrome plated, rocker lug, plugs with chain shall be furnished for all auxiliary inlets 1.00" thru 3.00" in size.</p> <p>The caps and plugs shall incorporate a thread design to automatically relieve stored pressure in the line when disconnected (no exception).</p> <p><u>OUTLET BLEEDER VALVE</u></p> <p>A 0.75" bleeder valve shall be provided for each outlet 1.50" or larger. Automatic drain valves are acceptable with some outlets if deemed appropriate with the application.</p> <p>The valves shall be located behind the panel with a T swing style handle control extended to the outside of the side pump panel.</p> <p>The handles shall be chrome plated and provide a visual indication of valve position.</p> <p>The T swing handle shall provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage.</p>		

	Bidder Complies	
	Yes	No
<p>Bleeders shall be located at the bottom of the pump panel. They shall be properly labeled identifying the discharge they are plumbed in to.</p> <p>The water discharged by the bleeders shall be routed below the chassis frame rails.</p> <p><u>DELUGE RISER</u> A 3.00" deluge riser shall be installed above the pump in such a manner that a monitor can be mounted and used effectively.</p> <p>The 3.00" piping shall be installed securely so there is no movement when the line is charged. A 2.50" gated valve shall be installed and directly controlled at the pump operator's position with a lever style handle.</p> <p>This deluge outlet shall flow a minimum 1000 GPM.</p> <p><u>MONITOR</u> An Akron Model 3433 Apollo Hi-Riser monitor shall be properly installed on the deluge riser.</p> <p>A position sensor shall be provided on the monitor that shall activate the "do not move apparatus" light inside the cab when the monitor is in the raised position.</p> <p>The monitor shall be painted as provided by monitor manufacturer.</p> <p><u>NOZZLE, DELUGE</u> Akron model #2499 Quad Stacked pyrolite deluge tips shall be provided.</p> <p>The tip sizes shall be 1.375", 1.50", 1.75", and 2.00".</p> <p>This shall include an Akron 3488 pyrolite stream shaper.</p> <p>The deluge riser shall have male National Pipe Threads for mounting the monitor.</p> <p><u>SPEEDLAYS WITH TRAY</u> Ahead of the pump enclosure shall be two (2) 1.75" speedlay hose beds. Each bed shall have a 2.00" preconnect line with a 2.00" quarter-turn ball valve and terminate with a 1.50" National Standard hose thread 90 degree swivel. The swivel shall be located at the top of the speedlay compartment to allow easy removal of the hose in either direction.</p> <p>Individual controls for the speedlays shall be at the pump operator's panel.</p> <p>Each compartment shall be capable of carrying 200 feet of 1.75" double jacketed hose with the one (1) compartment located above the other.</p> <p>A removable tray shall be provided for each speedlay hosebed. The speedlay trays shall be constructed with two (2) hand holes for easy removal from the compartment. The floor of the trays shall be perforated to allow for drainage and hose drying.</p>		

	Bidder Complies	
	Yes	No
<p><u>SPEEDLAY HOSE RESTRAINT</u> A black 1.00" nylon webbing design with 2.00" box pattern shall be provided across each end of two (2) speedlay(s) to secure the hose during travel. The webbing shall be permanently attached at the bottom of the speedlay opening. There shall be quarter-turn fasteners located at the opposite end of the permanently attached webbing.</p> <p><u>PLUMBING SYSTEM SET-UP</u> The apparatus main plumbing system shall be designed to accommodate the installation of a single agent, direct injection foam system.</p> <p>The plumbing shall be designed to allow the foam system to be added without unnecessary rework.</p> <p>Space shall be reserved on the pump panel for the foam system controls.</p> <p><u>FOAM TANK - PROVISIONS ONLY</u> The water tank shall be designed and constructed to accommodate an integral polypropylene foam tank.</p> <p><u>PUMP PANEL CONFIGURATION</u> The pump panel configuration shall be neat and orderly.</p> <p><u>PUMP AND GAUGE PANEL</u> The side control panels shall be constructed of aluminum with a black vinyl finish. A polished aluminum trim molding shall be provided around each panel.</p> <p>The gauge and top mount control panels shall be constructed of aluminum with a black vinyl finish. A polished aluminum trim molding shall be provided around each panel.</p> <p>The gauge panel shall be hinged at the bottom with a full length stainless steel hinge. The fasteners that hold the panel in the up right position shall be quarter-turn style. Vinyl covered chains shall be used to hold the panel in the dropped position.</p> <p><u>PUMP ACCESS</u></p> <p><u>Left Side Panel</u> The right side upper pump panel shall be removable.</p> <p><u>Right Side Panel</u> The left side upper pump panel shall be removable.</p> <p><u>Panel Fastener</u> The removable panels shall be secured using a black swell latch.</p> <p>The lower left side panel (drain bank) shall be attached with screws.</p> <p>The lower right side panel (drain bank) shall be attached with screws.</p>		

	Bidder Complies	
	Yes	No
<p><u>PUMP COMPARTMENT LIGHT</u> A compartment light shall be provided inside the pump enclosure.</p> <p><u>PUMP PANEL GAUGES AND CONTROLS</u> The following shall be provided on the pump panels in the FRC IN Control Pressure Governor system</p> <ul style="list-style-type: none"> - Engine Oil Pressure Gauge: LED bar graph display - Engine Water Temperature Gauge: LED bar graph display - Tachometer: over 1/2" high LED digits - Voltmeter: LED bar graph display <p><u>THROTTLE READY GREEN INDICATOR LIGHT</u> There shall be a green indicator light integrated with the pressure governor and/or engine throttle installed on the pump operators panel that is activated when the pump is in throttle ready mode.</p> <p><u>OK TO PUMP INDICATOR LIGHT</u> There shall be a green indicator light installed on the pump operators panel that is activated when the pump is in Ok To Pump mode.</p> <p><u>VACUUM AND PRESSURE GAUGES</u> The pump vacuum and pressure gauges shall be liquid filled and manufactured by Class 1 Incorporated ©.</p> <p>The gauges shall be a minimum of 4.00" in diameter and shall have white faces with black lettering, with a pressure range of 30.00"-0-600#.</p> <p>Gauge construction shall include a Zytel nylon case with adhesive mounting gasket and threaded retaining nut.</p> <p>The pump pressure and vacuum gauges shall be installed adjacent to each other at the pump operator's control panel.</p> <p>Test port connections shall be provided at the pump operator's panel. One (1) shall be connected to the intake side of the pump, and the other to the discharge manifold of the pump. They shall have 0.25 in. standard pipe thread connections and non-corrosive polished stainless steel or brass plugs. They shall be marked with a label.</p> <p>This gauge shall include a 10 year warranty against leakage, pointer defect, and defective bourdon tube.</p>		

	Bidder Complies	
	Yes	No
<p><u>PRESSURE GAUGES</u></p> <p>The individual "line" pressure gauges for the discharges shall be interlube filled and manufactured by Class 1©.</p> <p>They shall be a minimum of 2.00" in diameter and shall have white faces with black lettering.</p> <p>Gauge construction shall include a Zytel nylon case with adhesive mounting gasket and threaded retaining nut.</p> <p>Gauges shall have a pressure range of 30"-0-400#.</p> <p>The individual pressure gauge shall be installed as close to the outlet control as practical.</p> <p>This gauge shall include a 10 year warranty against leakage, pointer defect, and defective bourdon tube.</p> <p><u>WATER LEVEL GAUGE</u></p> <p>There shall be an electronic water level gauge provided on the operator's panel that registers water level by means of five (5) colored LED lights. The lights shall be durable, ultra-bright five (5) LED design viewable through 180 degrees. The water level indicators shall be as follows:</p> <ul style="list-style-type: none"> • 100 percent = Green • 75 percent = Yellow • 50 percent = Yellow • 25 percent = Yellow • Refill = Red <p>The light shall flash when the level drops below the given level indicator to provide an eighth of a tank indication. To further alert the pump operator, the lights shall flash sequentially when the water tank is empty.</p> <p>The level measurement shall be based on the sensing of head pressure of the fluid in the tank.</p> <p>The display shall be constructed of a solid plastic material with a chrome plated die cast bezel to reduce vibrations that can cause broken wires and loose electronic components. The encapsulated design shall provide complete protection from water and environmental elements. An industrial pressure transducer shall be mounted to the outside of the tank. The field calibratable display measures head pressure to accurately show the tank level.</p> <p><u>FUTURE FOAM LEVEL GAUGE</u></p> <p>Space on the pump panel shall be dedicated for the future addition of a foam system and foam level gauge.</p> <p><u>LIGHT SHIELDS</u></p> <p>Illumination shall be provided at each pump control panel for controls, switches, essential instructions, gauges, and instruments necessary for the operation of the apparatus and the</p>		

	Bidder Complies	
	Yes	No
<p>equipment provided on it. External illumination shall be a minimum of five (5) foot-candles on the face of the device. Internal illumination shall be a minimum of four (4) foot-lamberts.</p> <p>Lights shall be installed under a stainless steel shield. One pump panel light shall come on at the operator's panel when the pump is in "ok to pump" mode. The remaining lights to be actuated from a switch located on the pump panel.</p> <p><u>AIR HORN SYSTEM</u></p> <p>Two (2) Hadley air horns shall be provided and located, in the front bumper, recessed outside the frame rails. The horn system shall be piped to the air brake system wet tank utilizing 0.38" tubing. A pressure protection valve shall be installed in-line to prevent loss of air in the air brake system.</p> <p><u>Air Horn Location</u></p> <p>The air horns shall be located on each side of the bumper, towards the outside.</p> <p><u>AIR HORN CONTROL</u></p> <p>The air horns shall be actuated by a foot switch on the officer's side and by the horn button in the steering wheel. The driver shall have the option to control the air horns or the chassis horns from the horn button by means of a selector switch located on the instrument panel.</p> <p><u>ELECTRONIC SIREN</u></p> <p>A Whelen®, Model 295SLSA1, electronic siren with noise canceling microphone shall be provided.</p> <p>This siren to be active when the battery switch is on and that emergency master switch is on.</p> <p>Siren head shall be located in the cab within reach of the driver.</p> <p>Siren shall be actuated by the horn button in the steering wheel.</p> <p><u>SPEAKER</u></p> <p>There shall be one (1) speaker provided. Each speaker shall be a Whelen model SA315P black nylon composite, 100-watt, with mounting brackets. Each speaker shall be connected to the siren amplifier.</p> <p>The speaker(s) shall be recessed in the front bumper, toward the outside on the left.</p> <p><u>MECHANICAL SIREN, (AUXILIARY)</u></p> <p>A Federal Q2B siren shall be furnished. The control solenoid shall be powered up after the emergency master switch is activated.</p> <p>The mechanical siren shall be recessed in the front bumper on the right side. The siren shall be supported by the bumper framework.</p> <p>The mechanical siren shall be actuated by a foot switch located on the driver's side.</p>		

	Bidder Complies	
	Yes	No
<p>A momentary red switch shall be included in the cab on the switch panel to activate the siren brake.</p> <p><u>LIGHTBAR, CAB ROOF</u> One (1) 56.00" Whelen, Justice LED lightbar shall be mounted on the cab roof.</p> <p>This lightbar shall include the following:</p> <ul style="list-style-type: none"> Four (4) red flashing CON3 LED modules facing forward. Two (2) white flashing CON3 LED modules facing forward. Two (2) red flashing LIN6 LED modules one (1) in each front corner. Two (2) red flashing LIN6 LED modules, one (1) in each rear corner. <p>All lenses shall be clear.</p> <p>To meet NFPA requirements, all white warning lights shall be when the parking brake is applied.</p> <p><u>FRONT ZONE LOWER LIGHTING</u> Two (2) Whelen model M4* flashing LED warning lights with a with a flange shall be provided on the cab face or grille.</p> <p>The driver's side front warning light to be red.</p> <p>The passenger's side front warning light to be red.</p> <p>Both lights shall include a warning light lens color(s) to be clear .</p> <p>Both lights shall be controlled by a lighted switch on the cab instrument panel.</p> <p><u>SIDE ZONE LOWER LIGHTING</u> There shall be four (4) Whelen®, flashing LED warning lights with with a flange installed per the following:</p> <ul style="list-style-type: none"> • Two (2) Model M2*, 2.50" high x 4.00" wide lights one (1) each side on the engine hood under 62.00". • The driver's side, side front light to include red warning LEDs . • The passenger's side, side front light to include red warning LEDs . • Two (2) Model M6*, 4.31" high x 6.75" wide lights one (1) each side on the rear fender panel. • The driver's side, side rear light to include red warning LEDs . • The passenger's side, side rear light to include red warning LEDs . • The lenses shall be lens color(s) to be clear . 		

	Bidder Complies	
	Yes	No
<p>There shall be a switch in the cab on the switch panel to control the lights.</p> <p><u>REAR ZONE LOWER LIGHTING</u></p> <p>There shall be two (2) Whelen®, Model M6**, 4.31" high x 6.75" wide x 1.37" deep flashing LED warning lights with chrome trim located at the rear of the apparatus per the following:</p> <ul style="list-style-type: none"> • The left side rear warning light to include red LEDs • The right side rear warning light to include red LEDs • The warning light lens color(s) to be clear <p>There shall be a switch in the cab on the switch panel to control the lights.</p> <p><u>WARNING LIGHTS (REAR AND SIDE UPPER ZONES)</u></p> <p>Four (4) Whelen, model M6* LED flashing warning lights shall be provided at the rear of the apparatus with with a flange .</p> <p>The side rear upper light(s) on the driver's side to be red.</p> <p>The rear upper light(s) on the driver's side to be red.</p> <p>The rear upper light(s) on the passenger's side to be red.</p> <p>The side rear upper light(s) on the passenger's side to be red.</p> <p>These lights shall include lens color(s) to be clear .</p> <p>There shall be a switch located in the cab on the switch panel to control the lights.</p> <p><u>REAR LIGHT MOUNTING</u></p> <p>The rear warning lights shall be mounted on the rear side sheet flange and rear bulkhead of the body as high as possible with all wiring totally enclosed.</p> <p><u>120 VOLT RECEPTACLE</u></p> <p>There shall be one (1), 15/20 amp 120 volt AC three (3) wire straight blade duplex receptacle(s) with interior stainless steel wall plate(s), installed LS3. The NEMA configuration for the receptacle(s) shall be 5-20R.</p> <p>The receptacle(s) shall be powered from the shoreline inlet.</p> <p>There shall be a label installed near the receptacle(s) that state the following:</p> <ul style="list-style-type: none"> • Line Voltage • Current Rating (amps) • Phase • Frequency 		

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

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

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

	Bidder Complies	
	Yes	No
<p>7. <u>Clear Coat</u> - Two (2) coats of clear coat shall be applied over the base coat color. The clear coat is a two-component high solids urethane that provides superior gloss and durability to the exterior surfaces. Lap style doors shall be clear coated to match the body. Paint warranty for the roll-up doors shall be provided by the roll-up door manufacturer.</p> <p>Specifications are written to define cyclic corrosion testing, physical strengths, durability and minimum appearance requirements must be met in order for an exterior paint finish to be considered acceptable as a quality finish.</p> <p>Each batch of base coat color shall be checked for a proper match before painting of the cab and the body. After the cab and body are painted, the color is verified again to make sure that it matches the color standard. Electronic color measuring equipment shall be used to compare the color sample to the color standard entered into the computer. Color specifications are used to determine the color match. A Delta E reading shall be used to determine a good color match within each family color.</p> <p>All removable items such as brackets, compartment doors, door hinges, and trim shall be removed and separately if required, to ensure paint behind all mounted items. Body assemblies that cannot be finish painted after assembly shall be finish painted before assembly.</p> <p><u>Environmental Impact</u> Contractor shall meet or exceed all current State regulations concerning paint operations. Pollution control shall include measures to protect the atmosphere, water and soil. Controls shall include the following conditions:</p> <ul style="list-style-type: none"> • Topcoats and primers shall be chrome and lead free. • Metal treatment chemicals shall be chrome free. The wastewater generated in the metal treatment process shall be treated on-site to remove any other heavy metals. • Particulate emission collection from sanding operations shall have a 99.99 percent efficiency factor. • Particulate emissions from painting operations shall be collected by a dry filter or water wash process. If the dry filter is used, it shall have an efficiency rating of 98 percent. Water wash systems shall be 99.97 percent efficient. • Water from water wash booths shall be reused. Solids shall be removed on a continual basis to keep the water clean. • Paint wastes shall be disposed of in an environmentally safe manner. • Empty metal paint containers shall be recycled to recover the metal. • Solvents used in clean-up operations shall be recycled on-site or sent off-site for distillation and returned for reuse. <p>Additionally, the finished apparatus shall not be manufactured with or contain products that have ozone depleting substances. Contractor shall, upon demand, present evidence that the</p>		

	Bidder Complies	
	Yes	No
<p>manufacturing facility meets the above conditions and that it is in compliance with the state EPA rules and regulations.</p> <p><u>PAINT</u> The chassis shall be painted by the chassis manufacturer, and shall remain the commercial grade finish as provided. The body shall be painted the matching color by the apparatus manufacturer.</p> <p>To ensure a good color match between the body and chassis, the apparatus manufacturer and chassis manufacturer shall have a mutually pre-approved paint color program. The apparatus shall be painted candy apple red.</p> <p><u>COMMERCIAL CHASSIS PAINT</u> The chassis shall be painted by the chassis manufacturer. It shall remain the color and commercial quality finish as provided. The primary color shall be candy apple red.</p> <p><u>PAINT CHASSIS FRAME ASSEMBLY</u> The chassis frame assembly shall be painted black by the chassis manufacturer. It shall remain the commercial grade finish as provided.</p> <p><u>COMPARTMENT INTERIOR PAINT</u> The interior of all compartments shall be painted with a gray spatter type paint.</p> <p><u>REFLECTIVE BAND</u> A 10.00" white reflective band shall be provided across the front of the vehicle and along the sides of the body.</p> <p><u>REFLECTIVE VINYL ON FRONT BUMPER</u> There shall be a reflective vinyl band provided across the front bumper.</p> <p><u>REAR CHEVRON STRIPING</u> There shall be alternating chevron striping located on the rear-facing vertical surface of the apparatus. The rear surface, excluding the rear compartment door, shall be covered.</p> <p>The colors shall be red and L2 fluorescent yellow green .</p> <p>Each stripe shall be 6.00" in width.</p> <p>This shall meet the requirements of the current edition of NFPA 1901, which states that 50% of the rear surface shall be covered with chevron striping.</p> <p><u>REFLECTIVE STRIPE, CAB DOORS</u> white reflective striping shall be provided on the interior of each cab door.</p> <p>This striping shall total a minimum of 96.00 square inches and shall meet the NFPA 1901 requirement.</p>		

	Bidder Complies	
	Yes	No
<p><u>LETTERING</u> Twenty-one (21) to forty (40) reflective lettering, 3.00" high, with outline and shade shall be provided.</p> <p><u>LETTERING</u> There shall be reflective lettering, 6.00" high, with no outline or shade provided. There shall be six (6) letters provided.</p> <p><u>LETTERING</u> There shall be reflective lettering, 10.00" high, with outline provided. There shall be three (3) letters provided.</p> <p><u>LETTERING</u> One (1) to twenty (20) reflective lettering, 10.00" high, with outline and shade shall be provided.</p> <p><u>LETTERING</u> One (1) to twenty (20) reflective lettering, 4.00" high, with outline and shade shall be provided.</p> <p><u>MANUAL, BODY PARTS ONLY</u> A custom parts manuals for the factory installed parts only shall be provided in USB flash drive format with the completed unit.</p> <p>The manual shall contain the following:</p> <ul style="list-style-type: none"> - Job number - Part numbers with full descriptions - Table of contents - Parts section sorted in functional groups reflecting a major system, component, or assembly - Parts section sorted in Alphabetical order - Instructions on how to locate parts <p>The manual shall be specifically written for the body model being purchased. It shall not be a generic manual for a multitude of different bodies.</p> <p><u>SERVICE PARTS INTERNET SITE</u> The service parts information included in this manual are also available on the factory website. The website offers additional functions and features not contained in this manual, such as digital photographs and line drawings of select items. The website also features electronic search tools to assist in locating parts quickly.</p>		

	Bidder Complies	
	Yes	No
<p><u>MANUALS, SERVICE</u> A USB flash drive format service manual supplement containing parts and service information on factory installed components shall be provided with the completed unit.</p> <p>The manual shall be specifically written for the unit being purchased. It shall not be a generic manual for a multitude of different units.</p> <p><u>MANUAL, CHASSIS OPERATION</u> One (1) chassis operation (manufacturers standard) shall be provided with the completed unit.</p> <p><u>ONE (1) YEAR MATERIAL AND WORKMANSHIP</u> Each new piece of apparatus shall be provided with a minimum one (1) year basic apparatus material and workmanship limited warranty. The warranty shall cover such portions of the apparatus built by the manufacturer as being free from defects in material and workmanship that would arise under normal use and service.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p> <p><u>CHASSIS WARRANTY</u> The chassis manufacturer shall provide a five (5) year or 100,000 mile warranty.</p> <p><u>PAINT WARRANTY</u> The commercial chassis manufacturer's paint warranty shall apply to the paint on the chassis only.</p> <p><u>CAMERA SYSTEM WARRANTY</u> A fifty four (54) month warranty shall be provided for the camera system.</p> <p><u>COMPARTMENT LIGHT WARRANTY</u> A ten (10) year material and workmanship limited warranty shall be provided for the 12 volt DC LED strip lights. The warranty shall cover the LED strip lights to be free from defects in material and workmanship that would arise under normal use.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p> <p><u>TRANSMISSION WARRANTY</u> The transmission shall have a five (5) year/unlimited mileage warranty covering 100 percent parts and labor. The warranty to be provided by Allison Transmission and not apparatus builder.</p> <p><u>WATER TANK WARRANTY</u> The UPF poly water tank shall be provided with a lifetime material and workmanship limited warranty.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p>		

	Bidder Complies	
	Yes	No
<p><u>TEN (10) YEAR STRUCTURAL INTEGRITY</u> Each new piece of apparatus shall be provided with a ten (10) year material and workmanship limited warranty on the apparatus body. The warranty shall cover such portions of the apparatus built by the manufacturer as being free from defects in material and workmanship that would arise under normal use and service.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p> <p><u>ROLL UP DOOR MATERIAL AND WORKMANSHIP WARRANTY</u> A Gortite roll-up door limited warranty shall be provided. The mechanical components of the roll-up door shall be warranted against defects in material and workmanship for the lifetime of the vehicle. A six (6) year limited warranty shall be provided on painted and satin roll up doors.</p> <p>A copy of the warranty certificate shall be submitted with the bid package.</p> <p><u>PUMP WARRANTY</u> The Waterous pump shall be provided with a Seven (7) year material and workmanship limited warranty.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p> <p><u>TEN (10) YEAR PUMP PLUMBING WARRANTY</u> The stainless steel plumbing components and ancillary brass fittings used in the construction of the water/foam plumbing system shall be warranted for a period of ten (10) years or 100,000 miles. This covers structural failures caused by defective design or workmanship, or perforation caused by corrosion, provided the apparatus is used in a normal and reasonable manner. This warranty is extended only to the original purchaser for a period of ten years from the date of delivery.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p> <p><u>TEN (10) YEAR PRO-RATED PAINT AND CORROSION</u> Each new piece of apparatus shall be provided with a ten (10) year pro-rated paint and corrosion limited warranty on the apparatus body. The warranty shall cover painted exterior surfaces of the body to be free from blistering, peeling, corrosion, or any other adhesion defect caused by defective manufacturing methods or paint material selection that would arise under normal use and service.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p> <p><u>ONE (1) YEAR MATERIAL AND WORKMANSHIP</u> The graphic lamination shall be provided with a one (1) year material and workmanship limited warranty. The warranty shall cover the graphic lamination as being free from defects in material, workmanship, fading, and deterioration that would arise under normal use and service.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p>		

	Bidder Complies	
	Yes	No
<p><u>VEHICLE STABILITY CERTIFICATION</u></p> <p>The fire apparatus manufacturer shall provide a certification stating the apparatus complies with NFPA 1901, current edition, section 4.13, Vehicle Stability. The certification shall be provided at the time of bid.</p> <p><u>CAB INTEGRITY</u></p> <p>The cab has been tested to and passed the following standards:</p> <ul style="list-style-type: none"> - ECE Regulation No.29 - SAE J2422 Cab Roof Strength Evaluation - Quasi-Static Loading Heavy Trucks. <p><u>AMP DRAW REPORT</u></p> <p>The bidder shall provide, at the time of bid and delivery, an itemized print out of the expected amp draw of the entire vehicle's electrical system.</p> <p>The manufacturer of the apparatus shall provide the following:</p> <ul style="list-style-type: none"> • Documentation of the electrical system performance tests. • A written load analysis, which shall include the following: <ul style="list-style-type: none"> ○ The nameplate rating of the alternator. ○ The alternator rating under the conditions specified per: <ul style="list-style-type: none"> ▪ Current edition of applicable NFPA standards. ○ The minimum continuous load of each component that is specified per: <ul style="list-style-type: none"> ▪ Current edition of applicable NFPA standards. ○ Additional loads that, when added to the minimum continuous load, determine the total connected load. ○ Each individual intermittent load. <p>All of the above listed items shall be provided by the bidder per the current edition of applicable NFPA standards.</p>		

3.00 BID REQUIREMENTS: This and all other pages/sections are inclusive in the bid specifications and are agreed upon in the Contract Term Agreement as Contractual Provisions.

3.01 REQUIRED DOCUMENTS: Bidders must submit the Contract Term Agreement (Page 1) and the Bid Form (Page 2) from this document. This document is agreed to in full by completion of these two pages. All required bonds, licenses, or certificates of insurance must accompany the participant's bid on submission in addition to any and all documentation requested in the bid specifications. Failure to do so risks immediate rejection of the bid.

3.02 DEFINITIONS:

- I. The term "County" means Owner and Daviess County, Kentucky and its designated representatives.
- II. The term "Vendor" means Supplier, Contractor, Bidder, Participant and Seller and includes designated representatives.
- III. The term "Agreement/Contract" means Binding Agreement, Contract, Request for Purchase, Order.

3.03 KENTUCKY OPEN RECORDS LAW: At the time a bid or proposal is submitted to the County, the Vendor shall identify any information that is submitted as a part of the bid that is proprietary or confidential in nature and not subject to release for public inspection. The County will protect any proprietary or confidential information to the extent allowable under the Kentucky Open Records Act.

3.04 NEW GOODS, FRESH STOCK: Where applicable and unless otherwise specified, all contractors shall provide new commodities, fresh stock, latest model, design or package.

3.05 METHOD OF AWARD: This bid will be evaluated on the evaluation criteria established in the bid specification and awarded based on the best evaluated bid.

The County reserves the right to reject any and all bids or parts thereof, and to waive any irregularities in said bids. The right is reserved to award bids based on the best interest and/or what is most advantageous to the County. The County also reserves the right to consider as a part of the bid evaluation the stated warranty, stated delivery schedule and payment terms. Award will be made, according to the opinion of the Daviess County Fiscal Court, to the best evaluated bid.

3.06 CERTIFICATION OF INDEPENDENT PRICE DETERMINATION

- I. The Prices in the bid shall be independently determined, without consultation, communication, or agreement for the purpose of restricting competition as to any matter relating to price with any Bidder or other person.
- II. Unless otherwise required by law, the prices shall not have been knowingly disclosed by the Bidder prior to opening.
- III. No attempt has been made or will be made by the Bidder to induce any other person or firm to submit or not to submit a bid.

3.07 LANGUAGE: Bids and all related documents will only be accepted in the English Language.

3.08 PRICE: All prices shall be quoted exclusive of any taxes. The Daviess County Fiscal Court is exempt from Federal Excise Tax and/or Kentucky Sales Tax. Any items supplied directly to Daviess County Fiscal Court from a supplier/manufacturer are exempt from sales tax. Any items purchased by a contractor that will be used in the fulfillment of a contract are not exempt from sales and use tax.

Note 1: In case of a discrepancy in the extension of a unit price, the unit price shall govern the total price.

Note 2: Bidders must provide manufacturer's product literature (if available) and appropriate with the bid submission.

Note 3: Prices quoted shall remain firm and open to acceptance by the County for a minimum period of sixty (60) days after bid opening.

3.09 SHIPPING CHARGES: All items quoted shall be "F.O.B. Destination". No additional freight charges will be allowed.

3.10 BID SUBMISSION INFORMATION:

Separate sealed bids shall be received by the Daviess County Fiscal Court, P. O. Box 1716, Owensboro, KY 42302-1716.

SAMPLE ENVELOPE

Vendor Name	
Vendor Address	
Contact Number	Attn: Purchasing Department Daviess County Fiscal Court PO Box 1716 Owensboro, KY 42302-1716
SEALED BID: (<i>Bid Name</i>)	

Bids must be received by the date and time specified on page 1 of this document. Any bids received after that date and time will not be accepted. Specifications are on file at the Daviess County Judge Executive's Office at 212 St. Ann Street, Room 202, Owensboro, KY 42303, or by calling 270-685-8424.

- 3.11 BID OPENINGS:** Bids will be publicly opened and read aloud at the time indicated on page 1. The Bidders and the public are invited but not required to attend the formal opening of the bids. No decisions relating to the award of a contract or agreement will be made at the opening.
- 3.12 DELIVERY:** Deliveries shall be made in strict accordance with any delivery schedule or instructions contained in the bid specifications and in the exact quantity ordered. Failure to adhere to delivery schedule is reason for termination in accordance with the Contract Termination clause. If the Contract includes multiple locations for delivery, deliveries are to be made to the locations specified by the County at the time of order.
- 3.13 INSPECTION, ACCEPTANCE AND APPROVALS:** Goods at all times and places, including the period of manufacture, are subject to inspection and test by the County. The County will accept or give notice of rejection of goods delivered within a reasonable time after receipt. Acceptance shall not waive any warranty. All goods supplied are subject to final inspection and acceptance by County notwithstanding payment, prior inspections or approvals. County may require prompt replacement or correction of rejected goods at Supplier's expense, including a reduction in price for rejected goods. Supplier shall not resubmit rejected goods to County without prior written approval and instructions from the County. In addition, Supplier shall identify resubmitted goods as previously rejected. Supplier shall provide and maintain a quality assurance and control system acceptable to the County.
- 3.14 WARRANTY:** Unless otherwise agreed to in writing by the parties, the Supplier warrants that items ordered to specifications will conform thereto and to any drawings, samples or other descriptions furnished or adopted by the County. If the items were not ordered to specifications, the Supplier warrants they will be fit and sufficient for the purpose intended, and that all items will be new, merchantable, of good material and workmanship, and free from defect. Such warranties, together with Supplier's service warranties and guarantees, if any, shall survive inspection, test, acceptance of, and payment for the items and shall run to the County and its assigns. Except for latent defects, the County shall give notice of any nonconformity to the Supplier within one (1) year after acceptance. The County may return for credit or require prompt correction or replacement of the defective or non-conforming goods or have the defective good corrected or replaced at the Supplier's expense. Return to the Supplier of any defective or non-conforming goods and delivery to the County of any corrected or replaced goods shall be at the Supplier's expense. Defective or non-conforming items shall not be corrected or replaced without written authorization by the County. Goods required to be corrected or replaced shall be subject to the provisions of this clause and the clause hereof entitled "Inspection, Acceptance, and Approvals" in the same manner and to the same extent as goods originally delivered under this contract.
- 3.15 CHANGE ORDER:** The County may make changes within the general scope of this contract. If any such changes cause an increase or decrease in the cost of or the time required for the performance of any part of the work, whether changed or not changed by any such order, an equitable adjustment shall be made in the price or delivery schedule or both, and any change order shall be in writing. Any claim by a Supplier for adjustment under this clause shall be asserted within fifteen (15) days from the date of receipt of this written order directing the

change, provided, however, the County, if it decides that the facts justify such action, may receive and act upon such claim asserted at any time prior to final payment.

- 3.16 PAYMENT:** Payment will be made to the Supplier within 30 days or less after delivery of goods or services and submission of certified invoices. Price is tax-exempt. Unless further detailed in the bid specifications, or unless the Contract is for multiple purchases over a given period, a single payment will be issued in the amount of the Total Bid Price.
- 3.17 SELLER'S INVOICES:** Invoices shall contain the following information: Bid Number, Purchase Order Number (if supplied), Contract description of goods or services, sizes, quantities, unit prices and extended totals.
- 3.18 COMPLIANCE WITH APPLICABLE LAWS:** Supplier warrants it has complied with all applicable laws, rules and ordinances of the United States, Kentucky or any other Governmental authority or agency in the manufacture or sale of the goods or services.
- 3.19 CHOICE OF LAW:** This bid and Contract shall be governed and interpreted according to the laws of the State of Kentucky. Venue for any court action shall be in Daviess County, Kentucky.
- 3.20 BID DEPOSITS / BONDS:** Bid deposits / bonds are not required unless specified in the bid specifications section of this document. If required, bid deposits / bonds must be in the exact amount as stipulated.
- 3.21 PERMITS AND CODES:** Unless otherwise set out in the specifications or required by the agencies involved, the Contractor shall make application for, obtain and pay for all licenses and permits necessary for the prosecution of the Work and shall pay for all fees and charges in connection therewith. The Contractor shall be required to comply with all state or municipal ordinances, laws, and/or codes in so far as the same are binding on the Owner.
- 3.22 CONTRACT TERMINATION:**
- I. General: Performance of work may be terminated by the County in whole, or from time to time in part, whenever the County shall determine that such termination is in the best interest of the County with a thirty (30) day written notice. The Vendor may only terminate the Contract with consent of the County in writing, and must give the County a sixty (60) day written notice to request termination of the Contract. In the event of any termination of the Agreement/Contract by the Vendor, the County may purchase such supplies and/or services similar to those terminated and for the duration of the Agreement/Contract period the Vendor will be liable for all costs in excess of the established contract pricing.
 - II. Bankruptcy or Insolvency: In the event bankruptcy proceedings are commenced by or against Supplier or under any provisions of the United States Bankruptcy Act or for the appointment of a receiver or trustee or a general assignment for the benefit of creditors of either party, the County shall be entitled to terminate without further cost or liability. The County may cancel the Agreement/Contract or affirm the Contract and hold the Vendor responsible for damages.
 - III. Default: The County may terminate the whole Contract or any part in either of the following circumstances:
 - A. If Supplier fails to deliver the items required by the contract within the time specified; or
 - B. If Supplier fails to perform any of the other provisions of the Contract, or so fails to make progress as to endanger performance of the contract in accordance with its terms. In the event of termination under subparagraph B, the County shall have the right to procure, on such terms and in such manner as it may deem appropriate, items similar to those terminated, and to recover from Supplier the excess cost for such similar items provided, however, Supplier shall not be liable for such excess costs where the failure upon which the termination is based has arisen out of causes beyond the control of Supplier and without the fault or negligence of Supplier. Such causes shall be deemed to include fires, floods, earthquakes, strikes, and acts of the public enemy. The rights of the County provided in subparagraph B shall be in addition to any other rights provided by law or the Contract.
 - C. In the event of the Supplier's non-compliance with the provisions as set forth, this Contract may be cancelled, terminated or suspended in whole or in part and the Supplier may be declared ineligible for further County contracts. The rights and remedies of the County provided in this paragraph shall not be exclusive but are in addition to any remedies provided in this Contract or as provided for by law.

- 3.23 RENEWAL OPTION:** If applicable, the County reserves the right to extend the awarded contract for one (1) additional one-year term with the written consent of the awarded Vendor for up to a maximum of four (4) consecutive extensions.
- 3.24 NON-EXCLUSIVE AGREEMENT:** The Contractor shall understand and agree that the Contract shall not be construed as an exclusive agreement and further agrees that the County may secure identical and/or similar services or projects from other sources at any time in conjunction with or in replacement of the Contractor's services.
- 3.25 BUSINESS LICENSE:** Where applicable, the Contractor must have a valid City of Owensboro or Daviess County Fiscal Court business license for the prosecution of work. The Contractor must provide proof of this license to the County either by attachment to bid submission or post award (for applicable Contracts). The Contractor must pay any Occupational Tax / Net Profit Tax resulting from business activity within Daviess County.
- 3.26 INSURANCE REQUIREMENTS:** Where applicable, the Vendor/Contractor shall purchase and maintain insurance with an insurance company licensed to do business in the State of Kentucky or in the state where the Vendor is incorporated or otherwise licensed to do business and which shall remain, at all times during the term of any contract with the County, in full force and effect. Preference will be given to a Vendor/Contractor who provides insurance with an insurance company licensed to do business in the State of Kentucky, but in any event said Vendor/Contractor shall provide said insurance at its own expense. Such insurance shall be provided and will protect the Vendor/Contractor from claims which may arise out of or result from the Vendor/Contractor's execution of the work, whether such execution be by himself, his employees, agents, or by anyone for whose acts any of them may be liable. If any such work covered by the Contractor is to be performed on County owned or leased premises, the Vendor agrees to carry liability and workman's compensation insurance, satisfactory to the County, and to indemnify the County against all liability, loss, and damage arising out of any injuries to persons and property caused by the Vendor, his sub-contractors, employees or agents. The insurance coverage shall be such as to fully protect the County and the general public from any and all claims for injury and damage resulting by any actions on the part of the Vendor/Contractor or its forces as enumerated above. All policies must name the County as an additional insured. Any disputes regarding a breach, insurance amounts, liability, coverage, lapse or otherwise shall be litigated in the Circuit Court of Daviess County, Kentucky and the same shall be incorporated into any Contract agreed to by the parties.

WHERE APPLICABLE, THE COUNTY REQUIRES A CURRENT AND VALID CERTIFICATE OF INSURANCE OR BINDER SHOWING REQUIRED INSURANCE COVERAGE BE PROVIDED WITH EACH BID. DAVIESS COUNTY MUST BE ADDED AS AN ADDITIONAL INSURED AFTER AWARD OF THE BID. ANY LAPSE IN INSURANCE COVERAGE OR CANCELLATION THEREOF BY THE CONTRACTOR OR SUB-CONTRACTORS DURING THE TERMS OF THE CONTRACT SHALL IMMEDIATELY BE DEEMED A MATERIAL BREACH UNDER THE TERMS OF ANY CONTRACT.

I. Comprehensive General Liability Insurance

The Vendor/Contractor shall maintain and keep in full force and effect during the terms of this Contract such comprehensive general liability insurance as shall protect them from claims which may arise from operations under this Contract, whether such operations be by themselves or by anyone directly or indirectly employed by them. The amounts of this insurance shall not be less than:

- \$1,000,000 Each Occurrence Limit
- \$1,000,000 Personal & Advertising Injury Limit
- \$1,000,000 Products – Completed Operations Aggregate Limit
- \$1,000,000 General Aggregate Limit (Other than Products-Completed Operations)

II. Workers Compensation Insurance

The Vendor/Contractor or his sub-contractor or contractors shall maintain and keep in force of this Contract such Workers Compensation insurance limits as required by the statutes of the State of Kentucky and Employer's Liability with limits no less than the Kentucky Workers Compensation statutory limits.

III. Professional Liability Insurance

Where applicable, the Vendor/Contractor shall provide the County with proof of Professional Liability Insurance, which shall protect the County against any and all claims which might arise as a result of the operation of the Vendor/Contractor in fulfilling the terms of this Contract during the life of the Contract. The minimum amounts of such insurance will be \$1,000,000. Should any work be subcontracted, these limits will also apply.

3.27 ALTERNATE & EQUIVALENT BIDS: It is not the intention of the specifications within this document to eliminate any bidder; however, quoted items must equal or exceed stated specifications. Sufficient documentation is required to verify equivalent or superior performance.