# Texas County, Oklahoma COUNTY PURCHASING OFFICE Texas County Court House

PO Box 197, 319 N. Main, Guymon, Oklahoma 73942 Phone: (580) 338-3233

# INVITATION TO BID

Issued By
<u>Texas County</u>
Adams Fire Dept.

PLEASE REVIEW TERMS AND CONDITIONS ON REVERSE SIDE RELATING TO SUBMISSION OF THIS BID.

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Notarize	d Affidavit con	npletions a	nd signa	ture required on revo	erse side.	71:			
BID NUMBER 3-25-26				BID CLOSING DATE AND HOUR REQUIRED DELIVER			IVERY D	DATE	
				9-29-2025 @	11:00 a.m.				
TERMS:								Date of delivery:	
Item	Quantity	Unit of Issue	Description			U	Jnit Price	Total	
			Туре	e 6 Wildland Fi	re Apparatus for Ad	ams, Ok.			
		See Specifications Attached							
				are an equal em on employer.	ployment opportuni	ty/affirmative			
			The Commissioners reserve the right to reject any or all bids and to accept the bid deemed most advantageous to the County.						
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# **TERMS AND CONDITIONS**

- 1. Sealed bids will be opened in the Commissioner's Conference Room, Texas County Courthouse, Guymon, Oklahoma, at the time and date shown on the invitation to bid form.
- 2. Late bids will not be considered. Bids must be received in sealed envelopes (one to an envelope) With bid number and closing date written on the outside of the envelope.
- 3. Unit prices will be guaranteed correct by the bidder.
- 4. Firm prices will be F. O. B. destination. Hooker Rural Fire Department
- 5. Purchases by Texas County, Oklahoma, are not subject to state or federal taxes.
- 6. This bid is submitted as a legal offer and any bid when accepted by the County constitutes a firm contract.
- 7. Oklahoma laws require each bidder submitting a bid to a county for goods or services to furnish a notarized sworn statement of non-collusion. A form is supplied below.
- 8. Bids will be firm until 30 days.

AFFIDAVIT: I, the undersigned, of lawful age, being first duly sworn on oath say that he (she) is the agent authorized by the bidder to submit the above bid. Affiant further states that the bidder has not been a party to any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding; of said prospective contract; or in any discussions between bidders and any state official concerning exchange of money or other thing of value for special consideration in the letting of a contract; that the bidder/contractor has not paid, given or donated or agreed to pay, give or donate to any officer or employee of the State of Oklahoma (or other entity) any money or other thing of value, either directly or indirectly in the procuring of the award of a contract pursuant to this bid.

Subscribed and sworn before this day			
of	(SEAL)		
	Firm:		_
My commission expires	Signed by	Title:	
	Address:	Phone:	
NOTARY PUBLIC (CLERK OR JUDGE)	City:	State:	_
		7in·	

# TYPE 6 WILDLAND FIRE APPARATUS

Custom Specifications for Adams, Ok.

### INTENT OF SPECIFICATION:

It shall be the intent of these specifications to cover the furnishing and delivery of a completed fire apparatus equipped as hereinafter specified.

These specifications cover only the general requirements as to the design, type of construction, and testing to which the apparatus shall conform, together with certain details as to finish, equipment, and appliances with which the manufacturer shall conform.

Minor details of construction and materials, which are not otherwise specified, are left to the discretion of the manufacturer, who shall be solely responsible for the design and construction of all features.

Loose equipment shall be provided only as stated in the following pages.

# **QUALITY AND WORKMANSHIP:**

The workmanship shall be of the highest quality in its respective field. Special consideration shall be given to the following points: accessibility of the various components which require periodic maintenance, ease of operation (including both pumping and driving), and symmetrical proportioning.

Construction shall be rugged with ample safety factors being provided to carry the loads specified and to meet both on and off road requirements and speed conditions as set forth under "Performance Tests and Requirements".

# **GENERAL CONSTRUCTION:**

The apparatus shall be designed with due consideration to distribution of load between the front and rear axles.

Weight balance and distribution shall be in accordance with the recommendations of the National Fire Protection Association.

# FIRE APPARATUS WARRANTY:

The manufacturer shall warranty the completed fire apparatus as follows:

Materials and Workmanship – One Year Period (1) Year

Stainless steel Plumbing – Ten Year Period (10) Years

Extruded Aluminum Fire Body – Ten Year period (10) Ten Years

Apparatus Electrical System - Five Year Period (5) Years

Water Tank - Lifetime

NOTE: See attached manufacturer warranty documents for

further information and details on above provided warranties.

Components such as, but not limited to, cab and chassis, fire pump, foam systems, valves, booster reels, hose and nozzles, and lighting shall be covered by warranties

Issued to the purchaser from the original manufacturers.

Warranties shall not apply to the following:

To normal maintenance and adjustments

To parts subject to normal service/replacement (fuses, filters, ect.)

To any apparatus which has been repaired or altered outside of the factory in any way without the prior express and written consent of a duly authorized representative of the apparatus manufacturer.

To any apparatus which has been subject to misuse, neglect, or accident.

To any apparatus which shall operate at any speed exceeding the factory rated speed, or loaded beyond the factory rated load capacity.

### **CUSTOMER IDENTIFICATION PLATE:**

There shall be a customer identification plate provided on the fire apparatus.

The customer identification plate shall have the following information:

**Customer Name** 

Apparatus Build Job Number

Apparatus Model Name

Apparatus delivery Date

COMPLETED A PPARATUS PERFORMANCE TESTS:

**ROAD TEST-**

The completed fire apparatus shall undergo a road test with the apparatus fully loaded with a continuous run of no less than ten (10) miles.

The road test shall be made under all driving conditions, during which time the apparatus shall show no loss of power or overheating.

The chassis' transmission drive shaft or shafts, and rear axles shall run quietly and be free from abnormal vibration or noise throughout the operating range of the apparatus.

### **ELECTRICAL RESERVE CPAPCITY TEST:**

The completed fire apparatus engine shall be started and ran until the engine and engine compartment temperatures are stabilized at normal operating temperatures and the battery system is fully charged.

The engine shall then be shut down, and the minimum continuous electrical load (as defined by NFPA 1906) shall be activated for ten (10) minutes.

All electrical loads shall then be turned off,.

The fire apparatus engine shall then be re-started.

This test will be reported as a "PASS" or "FAIL".

# **ALTERNATOR PERFORMANCE TEST AT IDLE:**

The minimum continuous electrical load (as defined by NFPA 1906) shall be activated with the fire apparatus engine running at idle speed.

The fire apparatus engine temperature shall be stabilized at normal operating temperature.

The fire apparatus engine battery system shall then be tested to detect the presence of battery discharge current.

The test will be reported as a "PASS" or "FAIL".

# **ALTERNATOR PERFORMANCE TEST AT FULL LOAD:**

The total continuous electrical load (as defined by NFPA 1906) shall be activated with the fire apparatus engine running.

The fire apparatus electrical system voltage shall be monitored and shall not drop below 11.8 – VDC for more than 120 continuous seconds.

This test duration shall be a minimum of two (2) hours.

This test will be reported as a "PASS" or "FAIL".

# **CAB AND CHASSIS:**

International CV Series 6500

The chassis shall have the following features:

Day Cab

4 x 4

Diesel Engine

120" CA

# **BACK UP CAMERA:**

There shall be a rear-view camera provided and installed.

# **FULL REPLACEMENT FRONT BUMPER:**

There shall be a heavy-duty, tilting, full replacement bumper provided at the front of the apparatus.

The bumper shall have a durable textured black powder coat finish.

The bumper shall have an integral siren mount with protective expanded metal cover.

The bumper shall have two (2) tow hooks secured to the bumper frame.

The bumper shall be constructed to mount a winch inside.

### WINCH:

There shall be a Warn 16.5TI winch (or equivalent to) installed in the front bumper. This winch has a pull capacity of 16, 500 pounds and has a 90 feet wire rope. The winch comes with a remote control with 12' (3.7m) lead and thermometric LED indicator for operator feedback.

# IN CAB COMMAND CONSOLE:

None 3 person seating required

# SWITCH CONTROL MODULE:

A Whelen 295SLSA6 (or equivalent to) siren controller with 6 push button switches shall be provided.

### APPARATUS WILDLAND FIRE BODY:

The fire body shall be constructed entirely of heavy duty extruded aluminum.

The perimeter of the fire body shall be constructed of a custom heavy duty  $5.0^{\circ}$  x  $3.0^{\circ}$  6061-T6 aluminum extrusion.

The fire body cross members shall be constructed of heavy duty 3.0" 6061-T6 American Standard (or equivalent to) extruded aluminum channel.

The extruded aluminum cross members shall be located on 12" centers.

The fire body mounting sills shall be constructed of heavy duty 6.0" 6061-T6 American Standard (or equivalent to) extruded aluminum channel.

There shall be a rubber isolation barrier placed between the fire body extruded aluminum mounting sills and chassis steel frame rails.

There shall be .125" 3003-H22 aluminum diamond plate covering the entire deck of the fire body.

The .125" aluminum diamond plate deck shall be stitch welded to the bottom side of the perimeter extrusions.

The fire body dimensions shall be 170"L x 100"W.

There shall be a headache rack located at the front of the fire body.

The headache rack shall be constructed of heavy duty 3.0" x 2.0" 6063-T52 extruded aluminum tube.

The headache rack shall have .125" aluminum diamond plate covering the bottom half and expanded aluminum on the top half.

There shall be an approximate 60"W x 10"D smooth aluminum plate light bar mounting platform located on top of the fire body headache rack.

There shall be 2" railing down both sides of the body allowing for a walkway around three sides of the tank. This railing shall be 40" off the floor with the lower 24" having a diamond plate cover on the outside.

There shall be a 20" W walkway around the tank, accessible from the rear of the apparatus.

There shall be a steel step bumper with receiver hitch at the rear of the apparatus for the use of a winch and wired for towing a trailer.

A chassis' fuel fill shall be provided.

There shall be two SCBA bottle storage tubes installed on the passenger side of th body, between the underbody compartment and the headache rack. The tubes shall have sealed aluminum doors and tubes.

Mud flaps shall be located behind the chassis' rear wheels.

# **REAR LONG TOOL STORAGE COMPARTMENT:**

There shall be a 72"D x 30"W x 5.0"H long tool storage compartment provided.

The compartment shallbe located between the fire body mounting sills, with the door opening facing the rear of the apparatus.

The compartment door shall be constructed of .125" aluminum diamond plate and shall be horizontally hinged.

There shall be a roll out tray installed in the compartment.

### **UNDER BODY COMPARTMENTS:**

There shall be two (2) compartments with one (1) drop down compartment door provided one on each side of the fire body ahead of the rear wheels.

The body of the compartments shall be constructed of .125" aluminum diamond plate.

The compartment door shall be constructed of .125" aluminum diamond plate, with a .125" smooth aluminum plate interior pan stiffener.

The compartment door shall be held in the open position by two (2) heavy duty chains.

The compartment door latch shall be a D-Ring locking slam latch.

Dimensions of the compartment shall be 36L x 19"D x 18"H.

Each compartment shall be provided with two (2) vertical 12" 36-light LED compartment lights, located one (1) on each side of the compartment opening. Each compartment light shall automatically activate when the compartment door is opened and shall automatically deactivate when the compartment door is closed.

# **APPARATUS ELECTRICAL SYSTEM:**

All electrical equipment installed by the manufacturer shall conform to current automotive electrical system standards and the requirements of the applicable NFPA fire apparatus standards.

The installation shall meet SAE Standard J1128 in its latest edition for GXL or SXL temperature ratings.

The electrical system shall comprise switches, circuit boards, relays, diodes, resistors, fuses, wiring, wiring harnesses, and connectors as required to ensure consistent and uninterrupted operation of the completed apparatus.

The electrical system shall be composed of individual wiring harnesses that are integrated as a complete unit via bulkhead type Deutsch (or equivalent to) waterproof electrical connectors located between the chassis and fire body.

All GXL / SXL wiring for the apparatus shall be located within temperature resistant harnesses rated at a minimum of 280 degrees F.

All electrical wires in each harness shall be permanently color and function coded throughout.

All electrical connections made outside of the chassis shall be made utilizing hear shrink type connectors and / or Deutsch (or the equivalent of) weatherproof connectors.

All electrical circuits shall be protected with circuit breakers or fuses.

The main low voltage electrical circuit both and with associated circuit breakers and fuses shall be provided in a protective metal housing in a location inside the chassis' cab which provides easy service access.

All circuit breakers and fuses located on the main low voltage electrical circuit board shall have diagnostic indicator lights providing for ease of diagnostics.

All wiring ran outside of the body will be run along structural members and loom clamped in a secure, neat, and orderly manner.

Wiring shall be routed and / or protected to eliminate exposure to moving parts or debris.

All wiring passing through metal shall be protected from tears, abrasions, or cuts by rubber grommets.

# BATTERY MASTER SWITCH AND INDICATOR LIGHT:

The fire apparatus shall be supplied with one (1) battery disconnect switch.

The switch shall be located on the floor next to the driver's seat.

# D.O.T. LIGHTING:

All required lighting complying with Federal Government Codes for vehicles of this size and design shall be provided and installed.

These lights shall include headlamps, front turn signals with hazard switch, cab marker and clearance lights, body clearance lights, reverse lights, stop-turn-tail lights, and license plate lights.

The body clearance lights, rear stop-turn-tail lights, and reverse lights shall be LED.

### **NFPA UNDERBODY LIGHTING:**

There shall be four (4) LED underbody lights provided on the apparatus.

The underbody lights shall automatically activate when the chassis' transmission is shifted into park and shall automatically deactivate when the chassis' transmission is shifted out of par,

The underbody lights shall be mounted in the following locations:

One (1) under each chassis' cab door.

One (1) at each rear corner of the fire body.

### **APPARATUS FASTENERS:**

All fasteners utilized for construction of the fire apparatus shall be stainless steel.

# **CORROSION RESISTANCE TREATMENT:**

ECK (Electrolysis Corrosion Kontrol) shall be utilized throughout the manufacturing process of the apparatus.

ECK is a pproven and patented coating that is utilized to prevent dissimilar metal corrosion of all metals including stainless steel, aluminum, cold rolled steel, and brass.

ECK prevents corrosion by providing a barrier between dissimilar metals, sealing out moisture, and absorbing energy created by a dissimilar metal reaction. ECK is also dielectric and can be utilized on electrical connections.

As stainless steel fastners utilized in the manufacturing process shall be pre-treated with ECK prior to being utilized on the apparatus.

ECK shall be applied to ANY areas where dissimilar metals come into, or may come into contact with each other.

### POLYPROPYLENE WATER TANK:

One (1) polypropylene water tank shall be provided with the apparatus.

The color of the tank shall be black.

The water tank shall have a capacity of 1000 gallons.

The water tank shall be baffled to help prevent sudden movement of the water while the apparatus is in motion.

The water tank baffling shall meet or exceed published NFPA standards.

The water tank shall have one (1) 8.0" square fill tower with incorporated 4.0" vent / overflow pipe and removable polypropylene screen.

The fill tower shall be located at the driver side rear of the water tank.

The water tank shall have one (1) liquid level sight gauge located on the rear wall of the tank.

The water tank shall have a 3.0" FNPT tank suction located on the left lower rear wall of the tank.

The tank suction shall be provided with a recessed sump with anti-swirl plate.

The water tank shall have a 1.5" FNPT recirculation fitting.

The water tank shall have a 1.0" FNPT drain fitting located at the passenger rear of the water tank.

The tank drain shall be plumbed to the underside of the fire body with 1.0" stainless steel plumbing.

A 1.0" stainless steel full port quarter-turn industrial valve shall be provided for the tank drain.

There shall be two (2) auxiliary mounting blocks located on top of the water tank.

These mounting blocks can be utilized for mounting equipment to the top of the water tank.

The tank shall have 6" raised sides to allow for storage on top of the tank.

The water tank shall have a lifetime warranty.

# **APPARATUS FIRE PUMP:**

There shall be one (1) Hale HPZ275 pump with 35-HP Briggs and Stratton gasoline engine mounted at the rear of the apparatus on the aluminum skid pump mounting platform.

# **PERFORMANCE:**

The pump / engine shall be capable of meeting the NFPA 1906 performance rating of 50 GPM @ 150 PSI. Typical pump performance from 5 foot draft at sea level shall be: 170 GPM @ 1050 PSI, 250 GPM @ 100PSI and 290 GPM @ 60 PSI.

#### **PUMP:**

The pump body shall be made of aluminum alloy castings coupled together with a stainless steel band clamp with O-ring seal, allowing for quick pump volute removal for servicing.

The pump end shall be factory hydrostatically tested to 400 PSI for 10 minutes.

The impeller shall be bronze. The impeller shall be 4.875" in diameter and designed with a sleeve back end to prevent water from coming in contact with the engine shaft.

The impeller is directly threaded onto the engine crankshaft.

The renewable clearance rings shall be made of anodic plated bronze to inhibit galvanic corrosion.

The pump shaft seal shall be an automatically adjusting, maintenance free, mechanical type seal.

The pump body shall be provided with a petcock style drain valve.

# **PUMP PRIMER:**

The priming pump shall be an exhaust primer.

# **PUMP SUCTION:**

The pump suction inlet shall be a 4.0" connection.

### **PUMP DISCHARGE:**

The pup discharge shall be a 3.0" connection.

#### **PUMP ENGINE:**

The engine shall be a Briggs and Stratton Vanguard V-twin overhead valve (OHV) air cooled gasoline engine (OR THE EQUIVELANT OF).

Engine rating shall be 35 HP @ 3600 rpm.

Engine shall have an electric starter with manual recoil back-up.

Engine shall be equipped with a USDA approved spark arrestor.

### PUMP ENGINE FUEL SUPPLY:

The fuel supply for the fire pump engine shall be a custom fuel cell capable of holding 6 gallons of gasoline. There shall be a gas gauge installed on the rear control panel.

# STAINLESS STEEL PUMP:

All plumbing on the apparatus shall be heavy duty welded stainless steel plumbing.

All plumbing connections shall be completed by either Victaulic couplers or 4-bolt flanges.

When required, high pressure hose shall be utilized with welded stainless steel fittings.

#### **DISCHARGES:**

The discharge plumbing from the fire pump to the water distribution manifold shall be plumbed with 2.5" welded stainless steel pipe.

The discharge plumbing shall integrate into the fire pump volute discharge with a stainless steel 4-bolt flange and shall integrate into the water distribution manifold with a 2.5" Victaulic fitting.

The water distribution manifold shall be a 4.0" square 304 stainless steel tube.

All foam capable discharges shall be plumbed from the water distribution manifold.

The water distribution manifold shall be located at the rear of the fire body.

The water distribution manifold shall have the following inlets / outlets:

One (1) 2.5" Victaulic fitting for the 2.5" plumbing from the fire pump.

One (1) 2.0" NPT nipple for the front monitor.

One (1) 1.5" 4-Bolt flange for the rear 1.5" discharge.

One (1) 1.5" 4-bolt flange for the whip lines.

One (1) 1.0" 4-bolt flange for the booster reel.

One (1) 2.0" NPT nipple. Capped for future use.

There shall be one (1) 1.0" water tank refill / recirculation line provided.

The refill / recirculation line plumbing shall be high pressure hose with welded stainless steel fittings.

There shall be one (1) 1.0" discharge plumbed from the water distribution manifold to the booster ree.

The discharge shall be plumbed with 1.0" high pressure flexible hose with welded stainless steel fittings.

There shall be one (1) 1.5" discharge plumbed from the water distribution manifold to the front of the water tank. The discharge shall be plumbed with 1.5" high pressure flexible hose with welded stainless steel fittings.

This discharge shall terminate in front of the tank with a welded T and threaded swivels for use of the whip lines.

Each whip line discharge shall be provided with one (1) 1.0" x 8' lightweight booster hose whip line.

There shall be one (1) 1.5" MNST discharge provided at the rear of the apparatus.

The entire 1.5" discharge assembly (manifold to valve – valve to discharge) shall be composed entirely of welded stainless steel and shjall contain no threaded connections.

The 1.5" discharge shall terminate with MNST threads and shall be provided with a chrome 1.5" rocker lug cap and chain.

There shall be one (1) 1.5" discharge plumbed from the water distribution maninfold to the front of the truck for the monitor. The discharge shall be plumbed with 1.5" high pressure flexible hose with welded stainless steel fittings.

The complete discharge plumbing system shall be hydrostatically tested at 300 psi for two (2) minutes.

This shall be completed to test the integrity of the plumbing system and to verify the plumbing system is leak free.

#### **INTAKES:**

The tank to pump plumbing shall be 3.0" welded stainless steel.

A wire reinforced flexible connection shall be located between the water tank and tank to pump valve, providing for reduced fire pump vibration and ease of service.

The tank to pump plumbing shall connect to the fire pump intake by a Victaulic coupler.

There shall be a 2.5" gated suction intake provided at the rear of the apparatus.

The suction intake shall terminate with a chrome 2.5" FNST swivel connection with integrated suction screen.

The suction intake shall be provided with a chrome 2.5' rocker lug plug and chain.

#### LABELING:

The pump operator's panel, all discharges, and all intakes shall be labeled.

# **APPARATUS VALVES:**

All discharge and intake valves provided (unless otherwise noted in the specifications) shall be Akron fire service heavy duty, full flow, quarter-turn discharge valves with chromed TSC handles.

### **PUMP OPERATOR'S PANEL:**

There shall be a custom fabricated pump panel located at the rear of the fire body.

The panel shall be constructed of .125" smooth aluminum plate and shall be painted to match the chassis.

The pump panel shall include the following items:

Master On / Off Power Switch

Start Control

Choke Control

Throttle Control

Primer Control

One (1) Class 1 - 21/2" 0-400 psi Master Discharge Gauge

Low Oil Pressure Warning Light

One (1) 24" 72-Light LED Panel Light with Brushed Aluminum Light Shroud

# **BOOSTER REEL:**

There shall be one (1) Hannay booster reel (or the equivalent of) provided on top of the water tank, pulling from each side. One (1) Hannay Reel (or the equivalent of) shall hold 100' of 1" red rubber booster hose.

The booster reel shall be plumbed with 1.0" high pressure hose with welded stainless steel fittings.

The booster reel shall be provided with a 40-amp, automatic rese circuit breaker for added protection of the booster reel motor.

The booster reel shall be provided with dual chrome hose roller and spool assemblies.

The booster reel shall be provided with two (2) push button rewind switches, located at the booster reel location.

The booster reel shall have one (1) manual rewind crank assembly. The crank assembly shall be provided loose with the fire apparatus upon delivery.

The booster reel shall be provided with 100' x 1.0" rubber booster hose.

One Blue Evil pistol grip nozzle (or the equivalent of) included.

# ATTACK LINE:

There shall be two (2) 50 ft sections of 1.5" lay flat attack lines stored at the rear of the truck.

One Blue Devil 1.5" pistol grip nozzle (or the equivalent of) shall be included.

### WHIP LINES:

There shall be two (2) whiplines at the front of the fire body in front of the tank. Each whip line shall have 8' of 1.0" lightweight booster hose. 2.0" Blue Devil pistol grip (or the equivalent of) nozzles included for each.

# FRONT REMOTE CONTROLLED MONITOR:

There shall be an Akron Forestry monitor (or the equivalent of) provided at the front of the apparatus, mounted on the full replacement front bumper monitor mounting platform.

The monitor shall have a 2.25" hard coat anodized aluminum waterway with a durable red powder coat finish.

The monitor shall have a vertical elevation range of 90-degrees each side of center).

The monitor motor control circuits shall utilize position encoders and current limiting to protect the monitor's drive train at the ends of travel.

The monitor shall have manual override controls for horizontal movement, vertical movement, and nozzle pattern control.

The monitor water flow shall be controlled by an electrically controlled stainless steel full port ball valve.

The valve shall be located at the rear of the apparatus bolted onto the stainless steel main water distribution manifold by a 4-bolt flange.

The monitor shall have a variable pattern, manually adjustable 30-125 GPM nozzle.

The monitor shall have a joystick control module that shall control the monitor's horizontal rotation, vertical elevation, and nozzle pattern.

The joystick shall also have a trigger lever which shall serve as a momentary type control for the monitor's water flow.

The monitor's electric drives and monitor mounted control panel shall be waterproof.

### **EMERGENCY LIGHTING:**

A Whelen Justice, (or the equivalent of) NFPA LED 56" light bar shall be provided.

The light bar shall feature Super-LED linear technology with clear optic collimators and metalized reflectors for maximum light output.

The light bar shall be mounted at the front of the fire body on the light bar mounting platform.

There shall be ten (10) Whelen M7 Light heads ( or the equivalent of) with black bezels provided.

The light heads shall feature Super-Led technology with a total of six (6) Super-LED lights per light head with hard coated polycarbonate lens, clear optic collimator, and metalized reflector for maximum light output.

The M7 light heads shall be located as follows;

Two (2) at the front of the apparatus, mounted on the full replacement front bumper.

One (1) each chassis front fender.

One (1) on each side of the fire body front.

One (1) on each side of the fire body rear.

There shall be four (4) Whelen M7 light heads (or the equivalent of ) mounted facing rearward.

# **AUDIBLE WARNING:**

One (1) Whelen 295SLSA6 siren control head (or the equivalent of) with wired microphone shall be provided. The siren control head shall be located inside the chassis' cab.

One (1) Whelen SA315P 100-watt siren speaker (or the equivalent of) shall be provided.

The siren speaker shall be mounted at the front of the apparatus, within the full replacement front bumper.

One (1) Whelen @BUA97 back up alarm (or the equivalent of) shall be provided.

The back up alarm shall have a 97 DB sound output.

The back up alarm shall be mounted at the rear of the fire body in a protected location.

# **APPARATUS WORK LIGHTING:**

There shall be three (3) LED work lights provided.

The work lights shall be located as follows:

One (1) on each side of the light bar mounting platform, facing the rear of the apparatus.

One (1) at the rear of the fire body.

The work lights shall be controlled by a single switch from inside the chassis' cab from the switch module.

### **BATTERY MAINTAINER:**

There shall be one Kussmaul battery charger and auto eject installed. The charger shall be mounted behind / under the driver's seat inside the cab. The auto eject shall be mounted as directed by the department.

# **APARATUS REFLECTIVE STRIPING:**

A reflective striping package shall be provided around the perimeter of the apparatus, meeting NFPA 1906 current edition standards.

There shall be Chevron patten reflective striping on the rear vertical skirt of the fie body.

#### **APPARATUS LETTERING:**

Fire department specific lettering shall be provided on the apparatus as directed by the Fire Department.