



Municipality of Huron Shores

REQUEST FOR TENDER

PUMPER APPARATUS FIRE TRUCK

Issue Date: April 22, 2026

Closing Date & Time: 4:00 p.m. Wednesday, May 6, 2026

All tenders shall be submitted in sealed envelopes plainly marked as to contents
labelled:

“PUMPER APPARATUS FIRE TRUCK TENDER”

**2026 REQUEST FOR TENDER -
PUMPER APPARATUS FIRE TRUCK**

1. DATE AND PLACE FOR RECEIVING TENDERS

Tenders will be received until **May 6th, 2026 at 4:00pm** at the following address:

Natashia Roberts, CAO/Clerk
Municipality of Huron Shores
7 Bridge St. Iron Bridge ON
P.O. Box 460, P0R 1H0
705-843-2033

No late tenders will be considered. The lowest or any tender not necessarily accepted.

All tenders shall be irrevocable for a period of sixty (60) days following the closing date.

Tenders will be opened at 4:10 p.m. Bids will be reviewed upon opening for making recommendation at the regular meeting of Council held May 13, 2026.

2. FORM OF TENDER

All tenders shall be submitted in sealed envelopes plainly marked as to contents labelled:

“PUMPER APPARATUS FIRE TRUCK TENDER”

3. SALES TAX

Taxes shall be itemized on the Tender Form.

4. DELIVERY

Proponents must provide a firm delivery date in their submission. The proposed delivery timeline may be considered as part of the evaluation process.

5. ERRORS OR OMISSIONS

Any apparent omission or discrepancy in specifications or other contract documents are to be reported to the CAO/Clerk immediately.

All queries regarding the specifications required under this tender must be submitted in writing and be directed to: Henk VanDelft, Fire Chief, at henk@huronshores.ca, until May 1, 2026 at 1:00 PM. Responses will be issued in the form of written addenda, and will be posted on the Municipality's website.

It is the sole responsibility of each proponent to regularly check the Municipality's website for addenda issued prior to the tender closing date. The Municipality will not be responsible for notifying proponents of addenda.

All addenda issued shall form part of this tender and must be acknowledged in the submission.

6. EVALUATION OF TENDERS

Tenders will be evaluated based on, but not limited to: compliance with specifications, today tender price, delivery timeline, warranty provisions, and availability of service and parts. The Municipality reserves the right to accept the tender that provides the best overall value.

7. INSURANCE, WSIB AND INDEMNIFICATION

The successful bidder shall, prior to delivery of the apparatus, provide proof of Commercial General Liability Insurance with a minimum coverage of \$5,000,000 per occurrence.

The successful bidder shall provide a valid WSIB clearance certification, where applicable.

The successful bidder agrees to indemnify and hold harmless the Municipality of Huron Shores from and against any and all claims, demands, losses, costs, damages, actions, suits or proceedings arising out of or attributable to the performance of the contract by the bidder, its employees, agents, or subcontractors. Proof of insurance shall be provided in the form of a certificate acceptable to the Municipality.

8. PAYMENT TERMS

Payment terms will be negotiation with the successful bidder and may be structured based on delivery and acceptance.

TENDER FORM

I/We the undersigned, do hereby agree to supply to the Corporation of the Municipality of Huron Shores, F.O.B. 7 Bridge St., Iron Bridge, Ontario, One Pumper Apparatus Fire Truck as per the specifications and at the tender price stated hereunder.

MAKE _____ MODEL _____

YEAR _____ ENGINE MODEL _____

HP _____

PRICE _____

TAX _____

TOTAL TENDER PRICE: _____

****VEHICLE REQUIREMENTS, OR EQUIVELANT, SPECIFIED BELOW**

OPTIONAL EXTENDED WARRANTY COVERAGE

OPTION #1 - Specify _____

PRICE _____ **+ Applicable Taxes**

OPTION #2 - Specify _____

PRICE _____ **+ Applicable Taxes**

****VEHICLE SPECIFICATIONS AND FINANCIAL SUMMARY MUST BE INCLUDED WITH THIS BID DOCUMENT.**

Delivery Date: _____

I/We have examined the specifications for the above noted equipment and verify that this bid meets the specifications as set out.

Lowest or any tender not necessarily accepted.

NAME OF FIRM _____

ADDRESS _____

FIRE APPARATUS SPECIFICATIONS

NAME _____
(Company Representative)

TITLE _____

DATE _____

SIGNATURE _____

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SECTION 1 TECHNICAL REQUIREMENTS

1.2 GENERAL

1.2.1 This unit will comply with the ULC S515 standard effective April 3rd, 2024 and with NFPA 1900-2024 standard, except for fire department's specifications that differ from either the ULC or NFPA specifications. These exceptions will be set forth in the Statement of Exceptions.

Certification of slip resistance of all stepping, standing, and walking surfaces will be supplied with delivery of the apparatus.

A plate that is highly visible to the driver while seated will be provided. This plate will show the overall height, length, and gross vehicle weight rating.

All safety warnings will be in French and English.

The manufacturer will have programs in place for training, proficiency testing and performance for any staff involved with certifications.

An official of the company will designate, in writing, who is qualified to witness and certify test results. The apparatus will be in service at an elevation of less than 2000'.

1.2.2 A pump test will be made at the apparatus manufacturer's plant, and all costs incurred to perform this test will be covered by the bidder.

1.2.3 The apparatus will be compliant with all regulations contained within the Canadian Motor Vehicle Safety Standards (CMVSS).

1.2.4 All components used in the manufacture of this apparatus will be brand new and of the highest quality.

The choice of all components used in the construction of this apparatus will correspond with the best recognized quality standards in the fire apparatus manufacturing industry.

Where specific makes, models, or part numbers are referenced, they are intended to establish a standard of quality and performance. Equivalent or superior alternatives will be considered, subject to approval by the Municipality.

1.2.5 Proposed dimensions:

- Overall height approx. 130"
- Overall length approx. 398"
- Wheelbase approx. 270"

1.3 DOCUMENTATION UPON DELIVERY

- 1.3.1 One (1) hard copy and two (2) digital copies of the instruction sheet to register to web portal for access to chassis driver's, maintenance, parts, wiring, troubleshooting and workshop manuals.
- 1.3.2 One (1) digital copy of wiring, for the chassis and the body. The diagram will be « As Built Wiring Diagrams».
- 1.3.3 Two (2) digital copies of the ULC or NFPA documentation (USB flash drive).
- 1.3.4 One (1) copy of warranties, instruction and/or maintenance manuals of equipment added to the vehicle.
- 1.3.5 Two (2) digital copies of operation manual of the truck, including operation of the pump, the foam system and a troubleshooting guide.
- 1.3.6 One (1) copy of FAMA of Fire Apparatus Safety Guide.

SECTION 2 COMMERCIAL CHASSIS

2.1 GENERAL

2.1.1 Freightliner M2-106 PLUS SERIES commercial chassis, 2025 or more recent.

2.1.2 The apparatus will be a pumper vehicle designed for emergency service use and will be equipped with a permanently mounted fire pump.

2.1.3 GVWR: 45,600 lb

2.2 CAB

2.2.1 Aluminum cab

2.2.2 4 door (Crew cab)

2.2.3 Air bag cab suspension

2.3 VEHICLE DATA RECORDER

2.3.1 The chassis will have a Vehicle Data Recorder (VDR) system installed to meet NFPA 1900 requirements.

The following data will be monitored:

- Vehicle speed;
- Acceleration;
- Deceleration;
- 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;

2.3.2 A seat belt monitoring system (SBMS) will be provided. The SBMS will be capable of monitoring up to ten (10) seat positions indicating the status of each seat position with a green or red LED indicator as follows:

- Seat Occupied and Buckled = Green
- Seat Occupied and Unbuckled = Red
- No Occupant and Buckled = Red
- No Occupant and Unbuckled = Not Illuminated

2.4 ENGINE

2.4.1 Detroit, DD8 engine will offer a rating of 375 HP at 2200 RPM. The torque rating will feature 1050 lb-ft of torque at 1200 RPM.

FIRE APPARATUS SPECIFICATIONS

2.4.2 There will be two (2) controls for the diesel particulate filter. One (1) control will be for regeneration and one (1) control will be for regeneration inhibit.

2.4.3 A high idle control will be provided, inside the cab that will automatically maintain a pre-set engine RPM.

2.4.4 A Detroit compression brake will be provided with On/Off dash switch.

2.4.5 A 750-watt, 115 V block heater with automatic thermostat will be installed. The block heater will be connected to a chromed non-auto-eject outlet located in the driver step.

2.5 COOLING

2.5.1 An electronically controlled variable speed viscous fans drive will be provided.

2.5.2 The cooling package will include Extended Life Coolant (ELC). The coolant will contain a 50/50 mix of ethylene glycol and de-ionized water to keep the coolant from freezing to a temperature of -34oF (-37 oC).

2.5.3 Gates Blue Stripe™ or equivalent hose type will be used for all engine coolant lines.

2.6 ENGINE AIR INTAKE

2.6.1 An air intake with NFPA compliant ember screen and fire-retardant air cleaner will be provided. The intake will include a black grille with chrome insert.

2.7 EXHAUST

2.7.1 The exhaust system will be mounted behind the officer side cab step. The tailpipe will terminate ahead of the right rear tires at 90 degrees and will include a temperature mitigation system.

2.8 TRANSMISSION

2.8.1 Allison 6th generation, EVS 3000 model with push button shift pad.

2.8.2 6-speed, with "Package 198".

2.8.3 The transmission fluid will be monitored electronically.

2.8.4 The transmission will include a cooler system.

2.9 PTO

2.9.1 The transmission will feature one (1) 10-bolt PTO pads located on the converter housing for future provision.

2.10 DRIVELINE

2.10.1 All drivelines will be Meritor MXL 17T heavy duty (or equivalent) metal tube and equipped with universal joints.

2.11 FUEL SYSTEM

2.11.1 Detroit engine mounted fuel/water separator with water-in-fuel sensor.

2.11.2 A 70-gallon fuel tank will be provided and mounted in the driver step.

2.11.3 A 6-gallon DEF tank will be mounted in the driver step.

2.12 FRONT AXLE

2.12.1 Front axle will be rated at 14,700 lb.

2.13 FRONT SUSPENSION

2.13.1 The taper leaf front suspension spring capacity will be rated at 14,600 lb.

2.14 STEERING

2.14.1 The steering wheel will be 18.00" in diameter, have tilting and telescoping capabilities, and a 4-spoke design.

2.14.2 The truck turning radius will be determined by the chassis manufacturer.

2.14.3 The power steering pump will be a TRW TAS-85.

2.14.4 Adjustable tilt and telescoping steering column.

2.15 REAR AXLE

2.15.1 Rear axle will have a rated capacity of 31,000 lb.

2.15.2 The top speed of the vehicle will be approximately 104 km/h +/- 2 km/h (65 mph). Vehicle top speed will be reviewed at final chassis engineering.

2.15.3 The rear differential ratio will be optimized by the chassis manufacturer for the best possible startability and attainment of vehicle top speed.

2.15.4 A driver-controlled differential lock will be installed on the rear axle.

2.16 REAR SUSPENSION

2.16.1 Flat leaf spring suspension with radius rod will be provided. The rear suspension capacity will be rated at 31,000 lb.

2.16.2 Longer suspension U-Bolts will be OEM installed for future On Spot tire chains installation if desired.

2.17 TIRES

2.17.1 Front tires will be Michelin 12R22.5 16-ply XDN 2 tread. The Rating load capacity will be 14,780 lb per axle with a speed rating of 75 MPH when properly inflated to 120 psi.

2.17.2 Rear tires will be Michelin 315/80R22.5 16-ply XDN2-GRIP tread. The Rating load capacity will be 36,360 lb per axle with a speed rating of 75 MPH when properly inflated to 130 psi.

2.17.3 A SmarTire® Tire Pressure Monitoring System (TPMS) will be provided from the chassis manufacturer. The system with an in-vehicle dash display will monitor in real time each tire's temperature and pressure from a wheel-mounted sensor.

2.17.4 All tires will be balanced.

2.18 WHEELS

2.18.1 Polished aluminum, front wheels 22.50" x 8.25" will be supplied.

2.18.2 Polished aluminum, rear wheels 22.50" x 9.00" will be supplied.

2.18.3 Wheels will be polished on the outside only.

2.18.4 Front and rear wheels will have chrome hub and lugnut covers.

FIRE APPARATUS SPECIFICATIONS

2.19 BRAKE

- 2.19.1 A Wabco 4S/4M air brake system with ABS will be installed on the truck.
- 2.19.2 Automatic traction control system (ATC) will be installed on the rear axle.
- 2.19.3 As a complement to this system, an electronic stability control system (ESC) will be installed on the braking system.
- 2.19.4 Front brakes will be drum, 16.5" x 5.00", cam operated with automatic slack adjusters.
- 2.19.5 Rear brakes will be drum, 16.5" x 7.00", cam operated with automatic slack adjusters.
- 2.19.6 The brakes will have dust shields.

2.20 AIR SYSTEM

- 2.20.1 Air compressor will be a Wabco with a capacity of 20.0 CFM.
- 2.20.2 Automatic drain valves will be installed on all tanks of the air supply system.
- 2.20.3 There will be an air dryer system with heater.
- 2.20.4 The air system on the chassis will be plumbed with color coded nylon tubing air lines.
- 2.20.5 A 1/4inch air inlet connector, with cap, will be installed in the driver step.

2.21 FRAME

- 2.21.1 Each simple rail will have yield strength of 120,000 ksi.
- 2.21.2 Frame components will be painted black.

2.22 FRONT BUMPER

- 2.22.1 Three-piece front bumper constructed from steel, chromed finished with cut-out for the siren speaker.
- 2.22.2 Two (2) painted steel tow hooks will be installed and attached to the front frame members.

2.23 HOOD

- 2.23.1 Fiberglass hood with chrome front grille.
- 2.23.2 One (1) NFPA compliant 32" LED strip light mounted under the hood for engine work lighting will be provided and it will be controlled by a magnetic or mechanic switch that will turn on the light when the hood is opened.
- 2.23.3 Two (2) air horns, 24", will be provided above the front wheel-well and controlled with two (2) foot switches, driver and officer. An OEM dash switch will be provided to **switch horn button** from AIR horn to electric horn, default to electric < 85 Psi.
- 2.23.4 Hood liner, added firewall and floor heat insulation.
- 2.23.5 2½" inch fender extensions.

2.24 WINDOWS

- 2.24.1 Tinted door glass LH and RH with tinted non-operating wing windows.

FIRE APPARATUS SPECIFICATIONS

2.24.2 The cab doors will be equipped with electric operated windows.

2.24.3 Omit rear window.

2.25 CLIMATE CONTROL

2.25.1 Standard chassis-OEM HVAC system for heater, defroster and air conditioner with snow shield for fresh air intake will be provided.

2.25.2 Main HVAC controls with recirculation switch.

2.25.3 Premium insulation.

2.26 INTERIOR

2.26.1 Rugged interior trim.

2.26.2 Carbon premium gunmetal accent belt line, premium gray vinyl headliner and carbon vinyl backwall.

2.26.3 Two (2) cup holders.

2.26.4 Four (4) programmable blank switches.

2.26.5 Molded plastic door panel with aluminum kickplate.

2.26.6 Forward roof mounted console, overhead console led lights.

2.26.7 Door-activated dome, door courtesy step lights and footwell lighting.

2.26.8 Two (2) additional LED Red/Clear dome lights with integrated switch will be installed in the cab.

2.26.9 A console made of 1/8" thick aluminum and painted with black Zolatone will be installed between the front seats. The console will have two (2) compartments for binders with a hinged cover, which will be maintained open by a gas cylinder.

2.26.10 AM/FM/WB World Tuner Radio with Bluetooth, USB and AUX inputs.

2.27 SEATS

2.27.1 Seats Inc 911 Universal Series high back air suspension driver seat with NFPA 1900-2024 compliant seatsensor.

2.27.2 Seats Inc 911 Universal Series SCBA non-suspension passenger seat with under seat storage and NFPA 1900-2024 compliant seat sensor.

2.27.3 Seats Inc 911 Universal Series SCBA non-suspension LH, RH and center rear passenger seat with under seat storage and NFPA 1900-2024compliant seat sensor.

2.27.4 All seats will be black vinyl.

2.27.5 Four (4) Zico Load and Lock ULLH SCBA brackets will be supplied and installed in passenger and the rear passenger seats.

2.27.6 LH and RH integral door panel armrests.

2.27.7 All seating positions will be furnished with three (3) point shoulder type orange seat belt.

2.27.8 Five (5) Zico UHH-1 helmet holders will be supplied and shipped loosed, for dealer/customer install in a compartment.

2.28 CAB EXTERIOR

2.28.1 Windshield wiper control will have high, low, and intermittent modes.

2.28.2 Composite exterior sun visor.

2.28.3 LH and RH exterior grab handles with single rubber insert.

2.28.4 Two (2), door mounted, mirrors dual west coast bright finish. The mirrors will be heated mirrors and will be LH and RH remote with control on driver side.

2.28.5 Mud flaps will be installed behind the front wheels.

2.28.6 RH down view mirror.

2.28.7 The original side steps on both sides of the cab will be removed and replaced by ULC compliant monocoque side steps, made of anti-slip aluminum checkered plate with grip strut inserts.

A compartment with maximum dimensions of approximately 30" length x 22" depth x 15" height will be built in the step under the right rear door in order to maximize space. The door will open downwards with dimensions around 28" x 10". A 20" interior Lumabar light will be provided for this compartment.

2.29 12 VOLT ELECTRIC SYSTEM

2.29.1 Two (2) DTNA genuine, 12V maintenance free 2000 CCA, 370RC threaded stud batteries will be located in an accessible area.

2.29.2 One (1) set of battery jumper studs with plastic color-coded covers will be included near the front wheelwell.

2.29.3 Delco Remy 300 amp, 12V alternator.

2.29.4 Master battery disconnect switch located close to the driver seat. NFPA compliant with a green indicator light in the dash.

2.29.5 There will be one (1) dual USB receptacle located on the central dash area.

- The positive wire will be connected to the battery master switch.
- The negative wire will be connected to ground.

2.29.6 There will be one (1) power point plug, with rubber cover, located on the central dash area.

- The positive wire will be connected to the ignition switch.
- The negative wire will be connected to ground.

2.29.7 There will be one (1) pair of wires, positive and a negative, installed on the apparatus. The above wires will have the following features:

- The positive wire will be connected to the battery master switch.
- The negative wire will be connected directly to battery ground.
- Wires will be protected to 30 amps at 12 volts DC

Power and ground will terminate officer side dash area. Termination will be a Blue Sea System, model 5025, 6 circuit with negative bus bar, straight blade fuse block.

FIRE APPARATUS SPECIFICATIONS

2.29.8 There will be one (1) pair of wires, positive and a negative, installed on the apparatus for radio system #1. The above wires will have the following features:

- The positive wire will be connected directly to the battery master switch.
- The negative wire will be connected directly to battery ground.
- Wires will be protected to 20 amps at 12 volts DC.

Power and ground will terminate butt spliced and located in center dash area.

2.29.9 An antenna wire for radio system #1 will be installed on the roof and located in center dash area.

2.30 CHARGING SYSTEM

2.30.1 One (1) 20-Amp Kussmaul Super Auto Eject waterproof electrical receptacle with a red cover will be installed in the LH cab step. It will automatically eject the electrical plug when the starter button is released.

2.30.2 A Kussmaul model 4012 Master Chief battery charger/conditioner will be provided. The charger will be connected to the vehicle batteries and it will be located in the cab, behind the driver seat and the charge indicator display will be within the auto-eject cover.

2.30.3 A Kussmaul 120V air compressor to maintain air in the brake system will be provided and installed in the pump compartment.

2.30.4 One (1) 12v protected circuit with quick connector will be installed in compartment D1 for charging portable pump battery when connected to shoreline.

2.31 LIGHTS

2.31.1 The cab will include LED marker lights.

2.31.2 The hood will include two (2) integral LED headlight/ incandescent marker assemblies with chrome bezel.

2.31.3 At least one (1) OEM LED light will be installed in each door for cab steps lighting.

2.31.4 Two (2) Whelen #PEL2C, Perimeter Enhancement Lights will be installed near the cab steps for extralighting.

2.32 OPTICAL WARNING DEVICE

2.32.1 A LED flashing red light clearly labeled "Do Not Move Apparatus". In addition to the flashing red light, an audible alarm will be included which will sound while the light is activated. The flashing red light will be located centered left to right for better visibility.

2.33 BACKUP SAFETY DEVICE

2.33.1 A solid-state electronic audible back-up alarm that actuates when the truck is shifted into reverse will be provided.

2.34 INSTRUMENTATION

2.34.1 Instrumentation and gauges will have Standard measurement.

2.34.2 Engine hour meter required.

2.34.3 Non-removable key.

SECTION 3 PUMP

3.1 PUMP MODEL

3.1.1 A brand new current year Hale Q-FLO pump NFPA rated at 1250 GPM (1050 IGPM). The pump will be supplied with mechanical type seal.

3.1.2 Pump will provide the following ratings at an altitude of less than 600 meters (2000 ft):

- 1250 GPM (1050 IGPM)- 100% of rating at 165 PSI
- 1250 GPM (1050 IGPM)- 100% of rating at 150 PSI
- 875 GPM (735 IGPM)- 70% of rating at 200 PSI
- 625 GPM (525 IGPM)- 50% of rating at 250 PSI

3.2 PUMP SHIFT

3.2.1 Pump shift will be pneumatically-controlled and activated from inside.

All indicator lights and pump engagement will be ULC S515 and NFPA 1900 compliant.

3.3 PRESSURE GOVERNOR

3.3.1 A FRC pressure governor «Pump Boss Max» will be installed on the operator control panel.

The pressure governor will be calibrated by the manufacturer in « pressure/pre-set » mode at a pressure specified by the customer.

3.4 PRIMER

3.4.1 The priming system will be a Trident AirPrime, AutoPrime, 3-barrel with push button control and automatic function.

3.5 COOLER

3.5.1 Water flow from the fire pump will be used to cool the engine coolant. The control, «¼ turn type» will be located on pump panel and equipped with a ¾" valve.

3.6 DRAIN SYSTEM

3.6.1 A manual master drain valve will be installed on the pump panel. The master pump drain assembly will consist of a Trident Emergency bronze master drain with a rubber disc seal. The master drain will have a rubber seal to prevent water from running out on the running board

The master drain will provide independent ports for low point drainage of the fire pump and auxiliary devices.

3.6.2 An Innovative Control brand ¾" bleeder valve with lift-up handle will be provided for each inlet and discharge. The drain will be located at the lowest drainage point of the fire pump.

3.7 PLUMBING

- 3.7.1 All fabricated piping will be a minimum of Schedule 10 stainless steel for superior corrosion resistance and decreased friction loss.
- 3.7.2 The pumping system will have an Akron model 59 pressure relief valve for each intake more than 3" diameter.
- 3.7.3 All the valves on the truck will be Akron 8800 series, except where otherwise specified.
- 3.7.4 When flexibility is needed, a "Victaulic" fitting will be installed.
- 3.7.5 The pump and steel accessories will be painted black. Stainless steel plumbing components are not painted.
- 3.7.6 All discharges, except the 1½" and 2" discharges will have a 30-degree chrome elbow.
- 3.7.7 All 2½" discharges will be equipped with a 2½" female chrome-plated reducer to a male 1½" with a 1½" chrome cap retained by a chrome chain.

All caps will be Pressure Relieving hose cap NFPA compliant.

- 3.7.8 The hoses threads on the vehicle will be:

- 1½ ": NPSH
- 2½ ": QST (3.031" X 7 tpi)
- 6 ": NH

- 3.7.9 All Storz fittings will be 4 inch

3.8 INTAKES AND DISCHARGES (GENERAL)

- 3.8.1 Control handles for discharges that will not be electric, will be push-pull «T» style controls, Innovative Controls brand.

The valve controller will be a chrome push-pull locking "T" handle located at the pump operator`s panel and will visibly indicate the position of the valves at all times. The control will be located directly adjacent to one another and will be mounted in line so they are in the same position when shut off. The control lever will be connected directly to its respective valve by a 0.718" OD rod to form a direct linkage control system.

- 3.8.2 All discharges and intake located at the sides and rear panels will be provided with Innovative Controls brand, chrome bezel with color identification.

These bezels will be screwed into the panel without nuts at the back.

- 3.8.3 Color coded pump panel labels will be in accordance with the NFPA standard as follows:

FIRE APPARATUS SPECIFICATIONS

DISCHARGE	COLOR
PRECONNECT NO -1- OR FRONT BUMPER	ORANGE
PRECONNECT NO -2-	RED
PRECONNECT NO -3- OR DISCHARGE NO -1-	YELLOW
PRECONNECT NO -4- OR DISCHARGE NO -2-	WHITE
DISCHARGE NO -3-	BLUE
DISCHARGE NO -4-	BLACK
DISCHARGE NO -5-	LIME GREEN
MONITOR DISCHARGE OR DECK GUN DISCHARGE	SILVER
4" DISCHARGE RIGHT	YELLOW WITH WHITE BORDER
FOAM DISCHARGE	RED WITH WHITE BORDER
REEL	GRAY
INLET	BURGUNDY
<i>As needed*</i>	MARINE BLUE
<i>As needed *</i>	PURPLE
<i>As needed *</i>	BROWN
TANK FILL	GREEN
TANK-TO-PUMP	CYAN

3.9 INTAKES

3.9.1 Two (2) 6" diameter suction ports with 6" NST male threads and removable zinc screens will be provided, one (1) each side.

3.9.2 One (1) 2½" suction intake will be installed on the left side of the pump module with a manual lever control integrated to the valve. It will be equipped with a strainer and a chrome plug with a retaining chain.

A ¾" bleeder valve assembly will be installed for this intake.

3.10 DISCHARGES

3.10.1 Two (2) 2½" discharges, with 2½" valves, will be installed on left side of the pump module.

These valves will be controlled with a push-pull type handle.

3.10.2 One (1) 2½" discharge, with 2½" valve, will be installed on right side of the pump module.

This valve will be controlled with a push-pull type handle.

3.10.3 One (1) LDH discharge, with 3" valve, will be installed on right side of the pump module.

This valve will be controlled with a push-pull type handle.

The discharge will have a 30 degrees anodized elbow ending 4" Storz with a cap.

3.10.4 One (1) 2½" discharge, with 2½" valve, will be installed at rear, on the lower left side of truck.

FIRE APPARATUS SPECIFICATIONS

This valve will be controlled with a push-pull type handle.

3.10.5 Two (2) speedlay discharges will be provided. Each speedlay section will include one (1) 2" brass swivel above each hose compartment with a 1½" hose connection to allow the use of the hose from either side of the apparatus.

These valves will be controlled with a push-pull type handle.

The speedlay piping will consist of two (2) 2" heavy duty hoses coming from the pump discharge manifold to the 2" swivel.

3.11 TANK FILL AND TANK-TO-PUMP

3.11.1 One (1) 2" valve combination tank refill and pump re-circulation line will be provided, using a quarter-turn full flow ball valve controlled from the pump operator's panel.

The adapter on the tank will be in stainless steel.

3.11.2 The tank will be connected to the pump with 4" piping and one (1) 3" valve. This pipe will have a check valve, an anti-swirl mechanism to prevent pump cavitation and will be connected to the tank.

3.12 FOAM

3.12.1 There will be no foam system. The manufacturer will provide provisions for future installation for a Foam Pro 2000 series only, including space for the controller and for the foam level on the pump panel.

4.1 CONTROL PANEL

4.1.1 Controls and gauges will be located on driver's side.

The side intake/discharge pump panels will be a 1/8" Aluminum sheet with a Black Zolatone painted finish. Each panel will be removable for easier maintenance access to plumbing components.

Pump operator control panel will be a 1/8" Aluminum sheet with a Black Zolatone painted finish. The upper panel section will be hinged on one side for easier maintenance access to electrical components.

4.1.2 Innovative Controls gauges reading will be in PSI and kPa. The 4½" pressure gauges will be filled with interlube.

There will be one (1) 4½" diameter, 30"-0-400 psi (100-0-2800 kPa) gauge connected to the pressure manifold and another one (1) connected at the pump inlet in a single assembly with chrome bezel and colored labels.

4.1.3 Innovative Controls gauges reading will be in PSI and kPa. The pressure gauges will be filled with interlube.

There will also be one (1) 2½" diameter, 0-400 psi (0-2800kPa) connected to each discharge.

4.1.4 A FRC model WLA300 water level gauge will be installed on the pump panel.

4.1.5 A vacuum and pressure port for annual pump performance testing's and checking the accuracy of pump panel gauges.

4.1.6 A minimum of three (3) rocker switches for pump heater, pump lights and hose bed light will be installed on the pump panel. The heater will have a red pilot light.

4.1.7 A push button identified "Evacuation Alert" will be installed to the pump operator panel and connected to the air horns.

4.2 COLD PACKAGE

4.2.1 A 42,000 BTU heater will be installed in the pump compartment. This heater will use the truck coolant system. The heater will have one (1) fan.

4.2.2 An aluminum heat pan will be installed below the pump house to prevent freezing and will be removable without any tools.

The heat pan will have approximately 48" wide x 72" long and cover all the pump and plumbing. The front and the back of the heat pan will be protected by an aluminum plate around the drive shaft.

The clearance between ground and the heat pan will be minimum 10"

5.1 GENERAL

5.1.1 A 1700-US gallon (1400 IMP) booster tank and a 35-US gallon (30 IMP) foam tank will be supplied. The booster tank will be completely removable without disturbing or dismounting the apparatus body structure.

5.1.2 The booster tank will be entirely in ½" thick copolymer polypropylene with 3/8" swash partitions.

The assembly will be welded utilizing thermoplastic welding technology.

The booster tank will have lifting eyelets for facilitating the removal.

5.1.3 The water/foam tank(s) design will be in accordance with ULC S515 and NFPA 1900 requirements.

The foam tank will have one (1) air intake installed on the top of the foam tank. The tank(s) will provide two (2) openings, one (1) for the injection system supply and the second one to allow tank cleaning with a 1" hose with Class 1, model BV10, 1" valve.

5.1.4 At the front, under the tank, there will be a dirt collector with a 1½" drain and a 3" plug.

The drain will be installed at the bottom of the collector to allow fully draining of the tank. This drain control will be on the operator pump panel, not in a compartment.

The valve will be enclosed in the heat pan assembly to prevent freezing.

5.1.5 One (1) manual fill tower will be located to the left forward area of the tank. The tower will be 14"x14" and a 6" vent/overflow pipe will be installed halfway-up the tower.

This pipe will empty behind rear wheels.

5.2 TANK INTAKE AND DISCHARGE

5.2.1 One (1) 4" inlet for direct tank fill will be installed at the rear, as low as possible and clearly labeled. This inlet will be equipped with a 4" valve less Fireman's Friend device with a 30-degree elbow with a Storz connection with filter, cap and retention cable. The Piping will be routed through the rear wall and include a flow deflector to prevent damage to the tank.

5.2.2 One (1) FRC model MAXVISION large remote water level gauge, with LED lights will be provided at the rear of the vehicle.

6.1 GENERAL

6.1.1 The aluminum used to build the body and pump house will be 5052-H32 marine grade and 6061-T6/6063-T5 for aluminum extrusions.

The thickness of the aluminum will be 3/16" for the bottom and the back of each compartment and for the front and back of the body. Only the wall between compartments will be 1/8" thick.

The aluminum tread plates will be 3003-H22, 1/8" thick and will meet NFPA slip resistance, when specified.

6.1.2 The fabrication of the body will be formed sheet metal and the body sub-structure will be made from square aluminum tubing extrusion 2" x 3" x 1/4" and 3" x 3".

Formed and welded components will allow the Fire Department to have the body repaired locally in the case where any object has struck the body and caused damage. The use of proprietary extrusions will prevent the Fire Department from such repair and will NOT be used.

6.1.3 All joints that may corrode or degrade by calcium and water infiltration will be sealed by a continuous welding cord outside.

Where there is a possibility of water infiltration between aluminum tread plates and painted aluminum, gray silicon sealer will be applied.

All joints and welding's will be polished and so leave no sharp edge.

6.1.4 The design of the body is such that the water tank of the truck will not be visible outside. Any type of "WET SIDE" design will be refused.

6.1.5 All compartments will be "sweep out" design, which means the floor is raised by at least 1" to avoid water infiltration.

6.1.6 The aluminum components of the body and pump house will be manufactured by using CNC (Computer Numeric Control) machine tools. Each individual assembly parts will be cut and bended for an optimum precision.

6.2 PUMPHOUSE

6.2.1 Both sides of the pumphouse will be enclosed by Amdor roll-up doors with anodized finish.

6.2.2 The top of the pump house will be made of aluminum tread plates and will meet ULC S515 and NFPA 1900 requirements.

The front of the pump house will be covered by tread plates.

Pump service access doors will be provided four (4) access to the pump. One (1) in L1, One (1) in R1, and one (1) on the top. The doors will be secured with tool-free hardware.

6.2.3 The pump module will have a total width of 48" and two (2) storage areas. The lower transverse storage areas will accommodate two preconnected handlines (speedlays 150' of 1 3/4" hose with nozzle). The bottom of the lowest compartment will be at approximately 52" from the ground.

The speedlay areas will include two storage trays. The trays will be constructed of 1/8" (.125") smooth aluminum plate with an exterior sanded finish. The walls and floor of the tray will be slotted to prevent the accumulation of water and allow for ventilation of wet hose.

FIRE APPARATUS SPECIFICATIONS

A protective strip of 3/16" (0.187") UHMW Polyethylene will be bolted to the bottom of the speedlay area. Two (2) 1" stainless steel rollers will be installed, one on each side, to facilitate the removal and insertion of the trays in this compartment.

6.2.4 A «P» shaped rubber gasket of about 1" will be installed between the pumphouse and the body to avoid friction of the modules.

6.2.5 The pumphouse will be attached to the chassis frame by utilizing rubber isolators.

6.2.6 Above the speedlay hose beds there will be an enclosed cargo compartment.

The upper storage compartment located on the top of the pumphouse will have a paddle latch checker plate opening on top and gas cylinders to hold open.

Two (2) aluminum tread plate doors will be installed, one (1) on each side of the apparatus, to facilitate easy access to the cargo compartment.

Each door will be equipped with a D-Ring handle. The doors will be hinged across the top and held in the open position by a gas cylinder.

Cargo compartment lighting will be provided by two (2) Amdor Lumabar, 12" LED lights.

6.2.7 A compartment approximately 10" wide x 15" high and 14" deep will be built in the left side pump operators panel under the preconnects. An opening downwards door with compression latch will be installed on this compartment and will be used for storage.

6.2.8 The pumphouse will be designed and constructed to be the same height as the body.

6.3 BODY ATTACHMENT

6.3.1 The main body will be attached to the chassis frame rails with six (6) U-bolts.

U-bolts will be made of two (2) 5/8" diameter steel bolts and two (2) 1/2" thick x 2" width steel plates.

There will be insulation between U-bolts and body.

The mounting will allow easy removal of the body in case of major repair.

6.3.2 There will be rubber insulation installed between the aluminum body and the steel frame rails.

6.4 BODY

6.4.1 Two (2) heavy duty tow eyes made from 2-1/2" diameter steel will be mounted below the body at the rear of the vehicle to allow towing (not lifting).

The tow eyes and subframe assembly will be painted black.

There will be a plate specifying the capacity of the assembly.

6.4.2 The top and the front of the body compartments will be covered by 1/8" thick aluminum bright finish tread plate.

6.4.3 The wheel-well outer face will be made of 3/16" thick aluminum and will be painted the same color as the body.

6.4.4 The wheel-well will have monohull composite full depth wheel-well liner.

6.4.5 A "P" shaped fenderette will be made from fiberglass with a bright black finish.

FIRE APPARATUS SPECIFICATIONS

6.4.6 Rub rails will be mounted along both sides of the body. The rub rail will be C-channel in design and constructed of 3/16" thick aluminum extrusion. The rub rails will be 2-1/2" high x 1-1/2" deep and will extend beyond the width of the body to protect compartment doors and the body sides. The depth of the rub rails will allow for the installation of marker and/or warning lights for their protection.

6.4.7 The rear tires will have a set of black mud flaps mounted behind the rear tires.

6.4.8 Four (4) compartments for SCBA cylinders will be installed in the wheelswell.

Each compartment will be able to contain one (1) cylinder.

Every cylinder compartment will be built with aluminum tubes and the bottom will be covered with rubber mat according to the ULC S515 and NFPA 1900 requirements.

Every compartment will have an aluminum CAST PRODUCTS door with a "compression type" latch. The doors will be designed to avoid water and dust infiltration.

6.5 HOSE BED

6.5.1 Two (2) adjustable hose bed divider will be provided, constructed of 3/16" brushed aluminum plate with a reinforced aluminum base welded to the bottom. The rear end of the divider will have a 3" radius corner and a handle will be integrated to the divider.

6.5.2 A black vinyl tarp will cover the main hose bed, retained by a Velcro tape affixed all around the hose bed. A hole will be made around the fill tower, to allow the cover to be opened freely. An orange strap will be installed to visually show where to open the tarp.

6.6 COMPARTMENTS

6.6.1 All compartment seams will be sealed using a permanent pliable silicone caulk. The walls of each compartment will have vents for adequate ventilation.

Each compartment will have aluminum extrusion tracks installed for use with adjustable shelves. The tracks will be vertically mounted and attached to the side and/or rear walls of the compartments.

The flooring will have drain holes to prevent the accumulation of water. The flooring will be covered by plastic interlocking tiles 5/8" thick.

6.6.2 Compartments doors will be roll-up type with anodized aluminum finish.

Roll-up doors will be Amdor brand.

Compartments light switches will be located at the top of the door and will be Amdor brand magnetic type.

6.6.3 No drip pans under doors.

6.6.4 A black elastic strap will be installed inside each roll-up door of the full-height compartments and also inside each roll-up door of the compartments that are located above the rear wheels.

6.6.5 Each shelf provided will be built as specified below, unless otherwise specified. Each shelf will be as wide and deep as possible.

- Maximum load capacity of at least 440 lbs
- Constructed of 3/16" aluminum, with a 2" lip and as deep as possible
- Bottom of the shelves are covered by rubber tiles of at least 5/8" thick.

FIRE APPARATUS SPECIFICATIONS

6.6.6 Each slide out provided will be built as specified below, unless specified otherwise. Each slide out will be as wide and deep as possible.

- Maximum load capacity of at least 440 lbs when fully extended
- Minimum exterior slide extension should be about 20".
- Constructed of 3/16" aluminum, with a 2" lip and as deep as possible
- Will be maintained in open or close position with a gas cylinder or with self locking tray slides when cylinder installation is not possible.
- Bottom of the shelves are covered by rubber tiles of at least 5/8" thick.
- All trays installed on the bottom of the compartments will have two (2) aluminum runners with nylon cover installed near the center to avoid the tray from collapsing.

6.7 LEFT SIDE COMPARTMENTS

6.7.1 (Front of rear wheels) – L1

The compartment door opening will be approximately 32" wide x 28"/14" deep x 68" high.

- Two (2) adjustable shelves will be installed in this compartment.
- One (1) slide-out tray will be installed in this compartment.

6.7.2 (Front of rear wheels) – L2

The compartment door opening will be approximately 32" wide x 28"/14" deep x 68" high.

- Two (2) adjustable shelves will be installed in this compartment.
- One (1) slide-out tray will be installed in this compartment.

6.7.3 (Above rear wheels) – L3

The compartment door opening will be approximately 58" wide x 14" deep x 33" high.

- One (1) shelf will be installed in this compartment.

6.7.4 (Rear of rear wheels) – L4

The compartment door opening will be approximately 31" wide x 28"/14" deep x 68" high.

- Two (2) shelves will be installed in this compartment.
- One (1) slide-out tray will be installed in this compartment.

6.8 RIGHT SIDE COMPARTMENTS

6.8.1 (Front of rear wheels) – R1

The compartment door opening will be approximately 32" wide x 29"/14" deep x 68" high.

- Two (2) shelves will be installed in this compartment.
- One (1) slide-out tray will be installed in this compartment.

FIRE APPARATUS SPECIFICATIONS

6.8.2 (Front of rear wheels) – R2

The compartment door opening will be approximately 32" wide x 29"/14" deep x 68" high.

- Two (2) shelves will be installed in this compartment.
- One (1) slide-out tray will be installed in this compartment.

6.8.3 (Above rear wheels) – R3

The compartment door opening will be approximately 32" wide x 14" deep x 33" high.

- One (1) shelf will be installed in this compartment.

6.8.4 (Rear of rear wheels) – R4

The compartment door opening will be approximately 31" wide x 28"/14" deep x 68" high.

- Two (2) shelves will be installed in this compartment.
- One (1) slide-out tray will be installed in this compartment.

6.9 REAR COMPARTMENT

6.9.1 (Above dump chute) – B1

The compartment door opening will be approximately 24" wide x 139" deep x 10" high.

- This compartment is for portable water tank storage for a 2100 USG tank.
Refer to section 9 for supplied loose equipment.

6.10 REAR ACCESS

6.10.1 A 10" deep recessed step will be built above the rear dump valve made of aluminum tread plate meeting ULC S515 and NFPA 1900 requirements.

6.10.2 A tailboard step will be provided at the rear of the body. The tailboard will be 11 ¾" in depth.

The tailboard step will be made with aggressive aluminum grip strut.

6.10.3 All handrails on body will be 1¼" diameter knurled extruded aluminum to provide a positive gripping surface.

Chrome plated end stanchions will support the handrails and plastic gaskets will be used between end stanchions and any painted surfaces.

Drain holes will be provided in the bottom of all vertically mounted handrails.

Handrails will be provided to meet ULC S515 and NFPA 1900 requirements

6.10.4 Six (6) Innovative Controls folding steps will be provided. At the rear, three (3) on each side, to allow access to the hose bed. Each step will incorporate two (2) LED light, chrome bezel, to illuminate the stepping surface above and below the steps. The steps can be used as a hand hold with built-in openings wide enough for a gloved hand.

The step light will be activated when the parking brake is set, or when the vehicle marker lights are activated.

6.11 HYDRAULIC LADDER RACK & STORAGE

6.11.1 One (1) Zico hydraulic 1 arm ladder rack, model HLAS will be installed on the right side of the apparatus above the wheel well.

The hydraulic arm system and side of the rack will be covered by aluminium checker plate.

The controls will be located at the right rear of the apparatus in a Cast Products aluminum box.

The rack will be built to contain:

- One (1) 2-section 24' foot ladder
- One (1) 14' foot roof ladder
- Two (2) 6" x 10' suction hoses
- Two (2) 4" x 10' suction hoses

Refer to section 9 for supplied loose equipment.

6.12 SUCTION HOSE STORAGE

6.12.1 Suction hose storage will be as described at 6.11.1

Refer to section 9 for supplied loose equipment.

6.13 PIKE POLE STORAGE

6.13.1 A storage compartment for three (3) standard pike poles (up to 10'), Two (2) "D-Handle" 6' pike poles and a 10' folding ladder will be built upper left rear side.

Refer to section 9 for supplied loose equipment.

This compartment door will be covered by chevron striping.

6.14 REAR DUMP VALVE

6.14.1 The back of the vehicle will be supplied with a stainless-steel 10" dump valve, with left side manual actuator, stainless-steel swivel chute model 6012 and stainless-steel telescopic chute model 4036, all manufactured by AH Stock Manufacturing Corp.

The dump valve and the swiveling chute will have a "NO STEP" label on the top.

SECTION 7 ELECTRICAL SYSTEM

7.1 GENERAL

7.1.1 The electrical system will meet NFPA 1900 requirements. The electrical system will also include the following:

1. The wiring in the body will be securely fastened with stainless-steel bolts attached every 8"-10".
2. Electrical terminals in weather exposed areas will have a non-conductive grease or spray applied.
3. Self adhesive device will be not acceptable.
4. Every electrical wiring will be covered by a plastic split sleeve.
5. Any electrical component that is installed in an exposed area will be mounted in a manner that will not allow moisture to accumulate in it.
6. Heat shrink material and sealed connectors will be used to protect exposed connections.
7. A coil of wire will be provided behind an electrical appliance to allow them to be pulled away from mounting area for inspection and service work.
8. All lights that have their sockets in a weather exposed area will have corrosion preventative compound added to the socket terminal area.

7.1.2 The wiring of the body will be color coded and number coded.

7.1.3 Where applicable, the wiring and permanently connected devices and equipment will be subject to a dielectric voltage withstand test of 900 volts for one minute. The testing will be performed after all body work has been completed. The electric polarity of all permanently wired equipment, cord reels, and receptacles will be tested to verify that wiring connections have been properly made.

7.1.4 Every circuit added to the chassis will be protected by internal electronic circuit breakers with transistor outputs. The system will operate in accordance with the J1939 communication protocol.

The system will have at least two (2) nodes. Each node will have at least 8 inputs and 16 outputs, each node will be protected by an individual breaker Grote model 54-852PL. They will be located to optimize the wiring, one (1) in the body and one (1) in the cab.

The vehicle will have one (1) programming plug installed near the multiplex node in the cab.

7.1.5 The switches in cab and pump panel will have an identification that meets ULC S515 and NFPA 1900.

There will be a single Emergency Master switch which controls all emergency warning lights including lightbars, cab warning lights, body warning lights and high beam flash if applicable.

7.2 WARNING AND EMERGENCY

7.2.1 Two (2) Whelen M6 Series red light heads, clear lens, will be provided and installed on the lower zone of the front grille. The lights will include chrome flanges.

7.2.2 Two (2) Whelen M4 Series red light heads, clear lens, will be provided and installed, one (1) each side, on lower zone of the front corner of the apparatus. The lights will include chrome flanges.

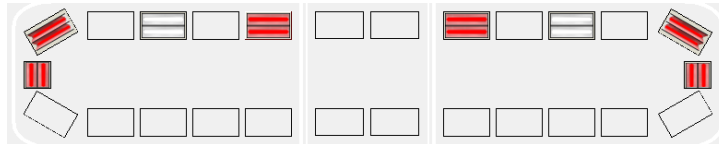
7.2.3 Two (2) Whelen 500 Series red light heads, clear lens, will be provided and installed, one (1) each side, on lower side zone of the apparatus between cab doors. The lights will include chrome flanges.

7.2.4 Two (2) Whelen M6 Series red light heads with clear lenses will be provided, one (1) each side, in the rear wheel well. The lights will include chrome flanges.

7.2.5 Two (2) Whelen M6 Series red light heads with clear lenses will be provided at rear, one (1) each side, on a 4-spaces light bezel

7.2.6 There will be one (1) Whelen Freedom IV F4N0QLED 60", LED lightbar mounted on the cab roof. This lightbar will be configured as follows:

RR_W_R_R_W_RR



The lens color will be clear.

7.2.7 Two (2) LED beacon Whelen #L31HRFN will be supplied and installed on upper of the rear body. Both beacons will be red with clear lens.

7.2.8 A Whelen 295SLSA1 electronic siren, with hard-wired microphone will be mounted in the cab, on the center ceiling console.

The electronic siren will be activated on the control head from the driver's position and a push button will be installed in the dash, on the officer side.

The siren will feature 100-watt output, with one (1) 100w speaker and have a protective stainless-steel grille.

7.2.9 The headlights will alternate on high beam position when E-Master switch is activated and park brake disengaged.

7.3 BACK-UP CAMERA

7.3.1 A Fire Research model BCA111 with night vision rear-view camera will be installed to the rear of the vehicle. The 7" color LCD monitor will be installed close to the driver. A protective cast aluminum cover will be installed above the camera.

7.4 LIGHTING

7.4.1 The clearance/marker lights on the body will be LED, GROTE model 47962 / 47963.

7.4.2 The center top rear marker lights will be a Grote model 253-4400-1 for marker light and for brake lightsignal.

7.4.3 Turn signal lights, brake lights and backup lights will be of the same brand and series as the emergency light, and will be LED lights.

There will be a total of two (2) brake lights, two (2) backup lights and two (2) turn signal lights. It will be mounted on a 4-space lights bezel with the emergency lights.

The rear part of the lights, visible from the compartment will be entirely covered with a protective aluminum cover which will protect the rear part of the light and the electrical wiring.

FIRE APPARATUS SPECIFICATIONS

Two (2) amber, Grote #47963 LED auxiliary turn lights will be installed, recessed in the rub rail, one each side toward the front of body.

7.4.4 One (1) white LED Grote #60381 licence plate light will be mounted at the rear of the body.

The plate will be mounted with four (4) stainless steel bolts.

7.5 AUXILIARY LIGHTS

7.5.1 Two (2) Amdor Lumabar LED compartment light strips will be mounted in each pump module compartment.

The length of each light is the same as the door opening height minus 5”.

7.5.2 One (1) Amdor AY9220-032 LED light will be installed in the pumphouse and it will be controlled by the “pump light” switch on the pump panel.

7.5.3 Two (2) Amdor Lumabar LED compartment light strips will be mounted in each body compartment.

The length of each light is the same as the door opening height minus 5”.

7.5.4 All perimeter lights under cab and body will be Truck Lite LED lights, as follows:

- Four (4) under cab steps
- Two (2) under pump compartment
- Two (2) under rear bumper

The ground lighting will be activated by the opening of a cab door, or when the parking brake is set and when the marker lights are turned on, or when the transmission is on reverse.

7.5.5 A LED TecNiq model E03 light will be installed under each 6" inlet on pump panel for stepslighting.

The lights will turn on when the parking brake is set and the marker lights are turned on or with the pump light switch.

7.5.6 One (1) Grote 4” LED light will be used for hose bed light. It will be installed in the front of the body.

The hose bed light will turn on when the parking brake is set and when the hose bed switch is turned on.

7.5.7 Two (2) FRC SPA900-Q70 scene lights with chrome bezel will be installed on the rear face of the vehicle. The control of these lights will be as follows:

- They will turn off when the parking brake is not set;
- Turn on when the transmission is on reverse and the E-Master is turned on;
- Turn on with a waterproof switch, located on the rear left side when the parking brake is set.

7.5.8 Two (2) FRC telescopic lights model Evolution II #FCA530-V20, 20,000 lumens will be installed on the pump module, one each side. The right side switch will be located near the light base of each light and the left side switch will be in the pump panel switchbank.

These lights will turn off when the parking brake is not set.

7.5.9 Two (2) 42” Amdor Lumabar LED compartment light strips will be mounted in the top cargo compartment.

The lights will turn on at the opening of a compartment door.

FIRE APPARATUS SPECIFICATIONS

7.5.10 Two (2) Whelen PEL2C lights will be installed on the front of the body, one each side, for cab step lighting. The lights will be activated when the parking brake is set, or when the vehicle marker lights are activated.

7.6 120V DISTRIBUTION

7.6.1 Two (2) 120 volt, 15-amp (NEMA 5-15) receptacles, will be installed, one (1) in the cab and one (1) in L3 compartment. The final location will be discussed during the pre-construction meeting.

8.1 GENERAL

- 8.1.1 All nuts and rivets installed on the apparatus will be stainless steel.
- 8.1.2 Where dissimilar metals are to be mounted together, the mounting base material will have an isolation barrier prior to assembly to prevent dissimilar metal reaction.
- 8.1.3 All Caution, Warning, Danger and other safety related signs will meet the requirements of the FAMA Standard Product Safety Signs for Automotive Fire Apparatus issued October 2015 or more recent.
- 8.1.4 A rust preventive barrier, Sinto or Tectyl, will be sprayed under the entire body and body substructure, before their installation on the chassis so that no area is left unprotected.
- 8.1.5 The rear steel sub-frame structure will be painted black.

8.2 BODY AND CHASSIS PAINT

- 8.2.1 The painting will be conducted in accordance with best practices followed in the heavy equipment industry to ensure the best protection against corrosion and abrasion.

All removable parts such as brackets, lights, doors, and steps will be removed before painting the body and will be painted separately if required.

- 8.2.2 Paint and primer used will be of good quality and type « base Coat / Clear Coat ». The painting process will be in accordance with the paint manufacturer.
- 8.2.3 The cab will be painted red, # L4664EY RED PIERCE # 90 ELITE EY.
- 8.2.4 The body will be painted as the cab primary color.
- 8.2.5 The exterior of the pump module will be painted the same color as the body color and the interior will be whitened with acid.
- 8.2.6 The interior of the compartments will have a smooth brushed finish and will be whitened with acid.
- 8.2.7 The shelves and slide-out trays will have a smooth brushed finish.

8.3 LETTERING STRIPING

- 8.3.1 A reflective stripe, 4" wide, will be installed each side according to the NFPA 1900 standard.
- 8.3.2 The maximum surface of the rear body will be covered by chevron stripes according to NFPA. The stripes will be red and yellow-lime, 3M-983 brand, (models 72 and 23).
- 8.3.3 A 3" wide chevron type stripe will be installed on each cab door. The covering surface will be at minimum 150 square inches.

9.1 GENERAL

- 9.1.1 Two (2) NH chrome caps for pump inlets.
- 9.1.2 One (1) 2.50 lb D.O.T approved fire extinguisher with BC rating.
- 9.1.3 One (1) emergency safety triangle kit.
- 9.1.4 Three (3) road flares.
- 9.1.5 Two (2) folding wheels chocks Zico, 44" diameter tires with brackets will be installed under L2 compartment.
- 9.1.6 Two (2) NFPA compliant, Kochek suction hoses, 6" x 10' length, NH threads and long handles will be provided.
- 9.1.8 One (1) 10' attic ladder will be provided with the apparatus.
- 9.1.9 One (1) 14' roof ladder will be provided with the apparatus.
- 9.1.10 One (1) 24' 2-sections ladder will be provided with the apparatus

10.1 GENERAL

10.1.1 The warranty is effective upon delivery of the vehicle.

10.1.2 One (1) Year, limited warranty, Material and Workmanship

10.1.3 One (1) Year, chassis manufacturer basic vehicle standard limited warranty will be provided.

10.1.4 A five (5) year/160,000 km limited engine warranty will be provided.

10.1.5 A five (5) year/unlimited km parts and labor warranty will be provided for transmission.

10.1.6 A two (2) years parts and labor warranty will be provided for front axle.

10.1.7 A two (2) years parts and labor warranty will be provided for rear axle.

10.1.8 A Wabco three (3) year parts and labor limited warranty on brake system ABS/ATC/RSC/ESC.

10.1.9 One (1) year pro-rated limited warranty on the cab paint.

This warranty will cover the paint and perforations due to corrosion, delaminating and cracking under normal use of the vehicle.

10.1.10 Ten (10) year limited warranty on structural integrity of the body.

This warranty will cover all the structural components of the body against defects in materials and workmanship. Excluded from this warranty is hardware, mechanical and electrical items or paint finish.

10.1.11 Ten (10) year pro-rated limited warranty on the body paint.

This warranty will cover the paint and perforations due to corrosion, delaminating and cracking under normal use of the vehicle.

10.1.12 The water/foam tank parts and labor warranty will be provided for life (25 years) against any manufacturing defects.

10.1.13 Ten (10) year pump stainless steel plumbing components limited warranty.

This warranty will cover all components of the pump except the valves against defects in materials and workmanship. Excluded from this warranty are the breakage caused by freezing.

10.1.14 A Hale, 5-year limited warranty. The warranty will cover parts and labor for the first two (2) years and parts only (no labor) for the remaining three (3) years of the warranty.

This warranty will cover all components of the pump except the valves against defects in materials and workmanship. Excluded from this warranty are the breakages caused by freezing.