# TOWN OF PORTUGAL COVE ST. PHILIP'S
## Invitation to Tender #: PCSP-FD-2020-12
### Purchase of one (1) New Pumper/Tanker

**Closing Date: December 18, 2020 @ 3:00 pm (NST)**
**Town Hall,**
**1119 Thorburn Road,**
**Portugal Cove St. Philip's, NL**
**A1M 1T6**

**Prepared by:** **Town of Portugal Cove St. Philips**
**1119 Thorburn Road**
**Portugal Cove-St. Philips, NL**
**A1M 1T6**
**(709) 895-8000 (T)**
**(709) 895-3780 (F)**

# 1. FIRE PROTECTION VEHICLE SPECIFICATIONS

## *Tenderer - Tendering Requirements and Instructions*

1.1. A tender bid based on the specifications hereinafter specified shall be submitted in accordance with the Tendering Instructions contained in the specifications and in the Official Tender Form, Documents and Specification Package.

1.2. Supplier should read and follow the Tendering Requirements of the specifications. Bids will not be considered unless submitted on each **Individual Official Tender Form**, copies enclosed.

1.3. Facsimile tender bids will not be accepted. Tender bid must be mailed or hand-delivered, in a sealed separate envelope marked “Purchase of one (1) New Pumper/Tanker” to the Town of Portugal Cove St. Philips, 1119 Thorburn Road, Portugal Cove St. Philips, NL. A1M 1T6 up to 3:00 pm local time, December 18th, 2020.

1.4. One bid in one envelope. An alternate or bid "A", "B", "C", will not be accepted in same envelope.

1.5. Tenders will be accepted up to the date and time specified in the tender call and publicly opened at that time vitually via Zoom Meeting:

- https://us02web.zoom.us/j/6780001119, Meeting ID: 678 000 1119
- Or call in: 1-855 703 8985 Canada Toll-free, Meeting ID: 678 000 1119

1.6. Bids on tender call shall include all applicable sales tax and be quoted F.O.B. to the town.

1.7. Equipment tendered shall conform to the applicable standard, listing and/or approved designation of the specifications hereinafter specified.

1.8. Where the specifications specify a manufacturer trade or brand name, an "equal to or greater than" provision shall apply. Tenderer shall attach to the Official Tender Form separate sheet(s) and/or equipment sales literature and engineering data indicating an approved standard of equivalence when quoting other than the specified trade or brand name.

1.9. Where this specification makes reference to a specific make, model or dimension an equal to provision shall apply.

1.10. Tenderer shall report all discrepancies, omissions or points considered to be ambiguous or conflicting to procurement@pcsp.ca in writing, a minimum of twelve (12) days prior to the bid closing date, so that the town may issue instructions, clarifications or amendments by addendum to all respondents prior to the bid closing date.

1.11 The town without liability, cost or penalty may, at any time prior to the closing time alter any details in this tender. In the event that this tender is amended via addendum the remainder of the tender that has not been modified shall remain unchanged.

Addenda may be necessary for:

- Correction of the Tender and related forms
- Extension of the submission deadline
- Clarification of parts of the Tender
- Retraction or cancellation of the Tender
- Responses to bidders questions
- Other additions to, deletions from or alterations to the requirements contained in the Tender

Request for addenda must be submitted twelve (12) calendar days prior to the tender closing date. Requests submitted thereafter will not be considered or responded to.

Each respondent shall acknowledge receipt of any addendum either by phone, fax or email to the Fire Chief, telephone (709) 895-8000, Ext 257 or 267, facsimile (709) 895-3780 or email to chief@pcsp.ca to this solicitation by signing and returning a copy of such addendum with its proposal.

Addenda will be available on the town's website, pcsp.ca, and will be directly faxed or emailed to all of the known interested parties.

1.12. Proposals which are incomplete, conditional, obscure, or contain alterations, erasures, or irregularities of any kind may be rejected. Failure to comply with the requirements expressed herein may result in disqualification of the Proposal.

1.13. Each **Individual Official Tender Form** shall be accompanied by a detailed description of the apparatus and equipment which is proposed to furnish and to which the apparatus furnished under the contract must conform. The detailed description shall contain shop drawings of the apparatus. These drawings should accompany the **Individual Official Tender Form.**

1.14. Shop drawings shall indicate the overall length, height and width of the vehicle apparatus with all equipment installed and in place.

1.15. Where a particular tender/specification requires a sample be provided, it shall be supplied to Town of PCSP for inspection and acceptance/rejection before a contract to supply will be awarded.

1.16. Delivery of vehicles shall be in accordance with the details of this section as follows:

The apparatus manufacturer shall provide the Town with the VIN (Vehicle Identification Number), as soon as possible after the chassis is manufactured or acquired from stock.

Further, the apparatus manufacturer must advise the Town immediately upon receipt of the chassis at your manufacturing location.

**Delivery of the unit;** Chassis shall be ordered within two weeks of receipt of order. The delivery of the completed unit shall be no more than **fourteen (14) months** after receipt of signed order. Specific delivery date will be identified by the town upon issuance of order.

The manufacturer shall confirm, in writing, when the order for the chassis is placed stating the expected delivery date and shall confirm, in writing, when the chassis is received by the manufacturer.

Failure to deliver the vehicle as specified shall result in the forfeiture to the Town, of liquidated damages in the amount of $200.00 per day for each and every business day in excess of the prescribed date of delivery.

In the event of a delay in the acquisition of apparatus components due to matters beyond the control of the contractor, the Town reserves the right to waive or make such adjustments as regards to the imposing of the liquidated damages prescribed herein as it deems appropriate. The Town remains the arbiter in its sole discretion of determining whether or not to impose the amounts above.

1.17. The language of choice for all activities regarding the tendering procedures and the specification requirements shall be English**.**

1.18. Tenderer shall indicate on vehicle specification yes or no or indicate exception for each specific detail and enclose same with official tender form.

1.19. **"Authority Having Jurisdiction"** regarding the interpretation of the specifications, the testing, approval and recommendation of acceptance of fire protection equipment shall be the Town of Portugal Cove St. Philips.

1.20. The Town is responsible for final acceptance and payment of this tendered vehicle. The town will provide pre-delivery inspection and recommendation for acceptance/non-acceptance of tendered vehicle.

1.21. Requests for information regarding tendering and the specifications should be directed to the Co – Fire Chiefs, Mr. R. Murphy or Mr. F. Hollett, telephone (709) 895-8000 Ext. 257 or 267, facsimile (709) 895-3780 or email chief@pcsp.ca

1.22. The Town does not bind itself to accept the lowest or any tender.

## 2. FIRE PROTECTION VEHICLE SPECIFICATIONS

### *Supplier: General Requirements and Instructions*

2.1. There shall be no advance or interim payments made. Payment in full will be made to Supplier by the Town upon receipt of the unit being received and inspected and the Town taking possession of unit.

Note: The chiefs will inspect and test the unit as soon as possible upon delivery and recommend acceptance or non-acceptance of the unit. If deficiencies are noted the supplier shall make arrangements to correct the deficiencies. If unit is found to be acceptable upon receipt, or once the deficiencies have been satisfactorily corrected The Town will make arrangements with the Supplier for payment of the unit.

2.2. The Supplier shall deliver a standard production, new, unused equipment of a modern type, carefully designed to suit the nature of the service which the equipment must perform. All materials, workmanship and finish entering into the construction of the equipment shall conform to the specifications, the character of the apparatus and the purpose for which it is intended. Minor details of construction and materials, where not otherwise specified, are left, subject to **Special Provisions**, to the discretion of the Supplier who shall be solely responsible for the design and construction of all features.

2.3. The Supplier shall not deliver the equipment tendered until all the components of the equipment contained in the specifications are ready for delivery at the same time to the town.

2.4. **"Authority Having Jurisdiction"** with regard to testing, approval, and recommendation of acceptance of fire protection equipment shall be the town. The Supplier shall provide the town with a minimum of seven days advance notice of unit arrival. Unit must be washed and cleaned upon delivery to the town.

Upon completion of inspection by the town, if deficiencies are noted they must be corrected by the supplier before the unit is received by the town.

2.5. The Supplier shall make arrangements with the equipment manufacturer, or a local representative in the consignees' area, for an agreement to perform whatever warranty services as may be required and covered. The name and address of the agency required to perform these services shall be given to the consignee at the time of delivery. In addition, the Supplier shall supply a letter with their tender package specifying their plan for their warranty service for this unit. The letter shall detail

who will be performing the warranty service, their location, if they have road and or shop service, whether or not they keep a supply of parts in stock and the amount of years in business. The letter will also detail their plan for warranty service for small or large issues if they occur.

2.6. The Supplier shall deliver with the equipment the following:

(a) All documentation as required by Section 3.15 of **CAN/ULC S515-13.**

(b) An itemized invoice of the equipment showing make, model and serial number of all the components of the equipment contained in the specifications.

2.7. Digital pictures shall be emailed to the Fire Chiefs, chief@pcsp.ca at various stages of production of each unit.

2.8. **Production Capability and Qualifications**

The Supplier shall have the following qualifications and supply the following information to be considered as a qualified builder. Certificates and additional information to be supplied with tender package.

- Supplier to be certified to CWB (Canadian Welding Bureau) – Certificate Required
- Supplier to have a Certified Engineer on Staff – Certificate Required
- Supplier to be certified with Canadian Motor Vehicle Safety Standards – Certificate and ID number to be supplied
- Supplier shall, upon request, provide a listing of three (3) references for orders which contained similar units delivered within the last 18 months. The list shall include name of buying authority, contact person name, email, and phone number, date of purchase, type of apparatus, and quantity of apparatus. If list is not provided upon request, the town reserves the right to move on to the next qualified bidder.

## 3. ADDITIONAL NOTES

### *COVID – 19*

Due to COVID – 19 the Town has changed some of the operating practices to ensure safety of staff and public. During this time hardcopy submissions only will be accepted for this process, and the town will holod a virtual opening. Upon awarding of the contract, the proponent will have to ensure *that the public health guidelines on COVID-19 are meet for work completion.*

We know this is a challenging time and we thank you for your co-operation and understanding.

### *Provincial Supplier Allowance*

In the evaluation of submissions, the Town must apply a ten per cent (10%) reduction to the bid price of provincial supplier prior to the evaluation based on the thresholds for the Canadian Free Trade Agreement (CFTA). The 10% reduction only needs to be applied when the evaluation includes suppliers that are not provincial suppliers.

The submission with the lowest price, following the application of the provincial supplier reduction allowance if required, and that meets all the requirements will ultimately be determined to be the preferred supplier and be awarded a contract if an award is made.

### *ATIPPA*

The financial value of a contract resulting from this procurement process will be publicly released as part of the award notification process. This procurement process is subject to the Access to Information and Protection of Privacy Act, 2015. The bidder agrees that any specific information in its bid that may qualify for an exemption from disclosure under subsection 39(1) of the Access to Information and Protection of Privacy Act, 2015 has been identified. If no specific information has been identified it is assumed that, in the opinion of the bidder, there is no specific information that qualifies for an exemption under subsection 39(1) of the Access to Information and Protection of Privacy Act, 2015.

## Town of Portugal Cove St. Philips

### INDIVIDUAL OFFICIAL TENDER FORM

A tender bid shall be submitted on this **Individual Official Tender Form.** The form must be completed in its entirety.

**SUPPLIER** _____

Mailing Address _____

_____

_____

Telephone Number (Area Code) _____ Fax Number (Area Code) _____

**BIDDING ON**

Municipality _____

Equipment _____

Specification Number _____

**TENDER BID**

Supplier's Bid $_____

Harmonized Sales Tax (H.S.T.) Sub-Total _____

Total Bid _____

All above Taxes are applicable to all Fire Protection Equipment.

**PAYMENT-TERMS AND CONDITIONS** - FULL PAYMENT ON DELIVERY

This is to certify that the fire protection equipment supplied under this tender shall be in accordance with that specified in the Specification.

_____

*SIGNATURE

Dated at _____

Province of _____

This _____ day of _____20___ _____

Type/Print Name and Title

*To be signed by person authorized to sign tender bids on behalf of the Supplier.

# General Specifications

**Portugal Cove - St. Philip's Volunteer Fire Department**
COMMERCIAL PUMPER / TANKER

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| **1.1** | **TECHNICAL REQUIREMENTS** | | | |
| 1.1.1 | This fire apparatus shall conform to this specification, and to the most recent CAN/ULC-S515 standard.<br>The vehicle shall meet the NFPA 1901-2016 standard. | | | |
| 1.1.2 | The fire apparatus shall be ULC listed and labeled.<br>A pump test shall be made by ULC at the apparatus manufacturer plant, and all costs incurred to perform this test shall be covered by the bidder.<br>A ULC certificate shall be provided prior to delivery.<br>All general requirements, materials and equipment not expressly specified but required in CAN/ULC-S515, for satisfactory operation and performance shall be provided and installed by the manufacturer. | | | |
| 1. 1.3 | The vehicle shall meet the Canadian Motor Vehicles Safety Standards (CMVSS). | | | |
| 1. 1.4 | All components used to manufacture the vehicle shall be brand new and of high quality.<br>The choice of all elements or all parts shall correspond to the best-recognized quality standards in the fire apparatus vehicle manufacturing industry.<br>When a part number is specified, no substitute shall be accepted. | | | |
| 1. 1.5 | The vehicle should have no more than 420" in overall length and 130" in overall height. approximately | | | |
| **1.2** | **DOCUMENTATION UPON DELIVERY** | | | |
| 1.2.1 | Two (2) digital copies of chassis operation manuals. | | | |
| 1.2.2 | Two (2) digital copies of wiring, for the chassis and the body. The diagram shall be « As Built Wiring Diagrams ». | | | |
| 1.2.3 | Two (2) digital copies of engine and transmission operation manuals. | | | |
| 1.2.4 | Two (2) digital copies of ULC documentation (CD or USB flash drive). | | | |
| 1..2.5 | One (1) copy of warranties, instruction and/or maintenance manuals of equipment added to the vehicle. | | | |
| 1.2.6 | Two (2) operation manuals of the truck, including operation of the pump, the foam system and a troubleshooting guide. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| **2.1** | **COMMERCIAL CHASSIS** | | | |
| 2.1.1 | **Freightliner M2-112 commercial chassis**<br>**YEAR**: 2021 or more recent<br>**TYPE**: Crew cab<br>**Note**: Chassis **MUST** be equipped with electronic stability control | | | |
| 2.1.2 | The chassis shall be designed for Canada. The apparatus shall be a pumper vehicle designed for emergency service use which shall be equipped with a permanently mounted fire pump.<br>**If practical**, the chassis supplier may be local within the province and be able to provide service of the chassis within an area of 50 kilometers to the town. If acquired through a local supplier, the chassis must have the PDI (pre-delivery inspection) completed at the factory prior to shipment to the fire apparatus manufacturer. The town will not incur any additional costs related to the provision of the chassis through a local supplier. The chassis must not incur additional kilometers or hours if acquired through a local chassis supplier. | | | |
| **2.2** | **CAB** | | | |
| 2.2.1 | Aluminum cab, 4 doors | | | |
| 2.2.2 | GVWR MINIMUM: 51,500 lb | | | |
| **2.3** | **VEHICLE DATA RECORDER** | | | |
| 2.3.1 | The chassis shall have a Vehicle Data Recorder (VDR) system installed to meet NFPA 1901 requirements.<br>The following data shall be monitored:<br>-Vehicle speed;<br>-Acceleration;<br>-Deceleration;<br>-Engine speed: RPM;<br>-Engine throttle position: % of full throttle;<br>-ABS Event: On/Off;<br>-Seat occupied status: Yes/No by position;<br>-Seat belt buckled status: Yes/No by position;<br>-Master Optical Warning Device Switch: On/Off;<br>-Time: 24-hour time;<br>-Date: Year/Month/Day; | | | |
| **2.4** | **ENGINE** | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| 2.4.1 | Detroit DD13 engine, or equal. Shall offer a minimum rating of 500 HP @ 1625RPM, governed to 1900 RPM. The torque rating shall feature minimum of 1850 lb-ft of torque @ 975 RPM. | | | |
| 2.4.2 | There shall be two (2) controls for the diesel particulate filter. One (1) control shall be for regeneration and one (1) control shall be for regeneration inhibit. | | | |
| 2.4.3 | A high idle switch shall be provided, inside the cab that shall automatically maintain a pre-set engine RPM. | | | |
| 2.4.4 | A Jacob compression brake shall be provided controlled by 2 switches: ON/OFF and LOW/MED/HIGH | | | |
| 2.4.5 | 1500W/115V Block heater shall be provided, connected to a non-auto-eject plug in the driver's side step. | | | |
| **2.5** | **COOLING** | | | |
| 2.5.1 | A fan clutch shall be provided with a switch in dash | | | |
| 2.5.2 | The cooling package shall include Heavy-Duty Extended Life Coolant (ELC). The coolant shall contain a mix of ethylene glycol and de-ionized water optimized to keep the coolant from freezing to a temperature of -60$^{o}$F (-50 $^{o}$C). | | | |
| 2.5.3 | A single bundle type coolant to water heat exchanger shall be installed between the engine and the radiator.<br>This shall allow the use of water from the discharge side of the pump to assist in cooling the engine. | | | |
| 2.5.4 | Gate blue stripe hose type shall be used for all engine coolant lines. | | | |
| **2.6** | **AIR INLET** | | | |
| 2.6.1 | Air intake with NFPA compliant ember screen and fire-retardant air cleaner.<br>Chrome mounted air intake grille. | | | |
| **2.7** | **EXHAUST** | | | |
| 2.7.1 | Chassis shall be equipped with a single horizontal exhaust system terminating on the right side of vehicle ahead of the rear wheels. | | | |
| **2.8** | **TRANSMISSION** | | | |
| 2.8.1 | Allison 5th generation, model EVS 4000. | | | |
| 2.8.2 | 6-speed, with "Package 198". | | | |
| 2.8.3 | The transmission fluid shall be monitored electronically. | | | |
| 2.8.4 | The transmission shall include a cooler system. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| **2.9** | **N/A** | | | |
| 2.9.1 | N/A | | | |
| **2.10** | **DRIVELINE** | | | |
| 2.10.1 | All drivelines shall be heavy duty metal tube and equipped with Spicer 1810 universal joints. | | | |
| 2.10.2 | The driveline must not be modified by the fire truck manufacturer to accommodate the split shaft pump. | | | |
| **2.11** | **FUEL SYSTEM** | | | |
| 2.11.1 | Spin-on Cummins primary filter with water separator and water-in-fuel sensor. | | | |
| 2.11.2 | A 50-gallon fuel tank, minimum, shall be provided and mounted in the driver step | | | |
| 2.11.3 | Alliance fuel filter/water separator with Primer pump | | | |
| **2.12** | **FRONT AXLE** | | | |
| 2.12.1 | Meritor FL-943 front axle shall be rated at 18,000 lb. | | | |
| **2.13** | **FRONT SUSPENSION** | | | |
| 2.13.1 | The front axle shall be furnished with shock absorbers. | | | |
| 2.13.2 | The taper leaf or flat leaf front suspension spring capacity shall be rated at 18,000 lb. | | | |
| **2.14** | **STEERING** | | | |
| 2.14.1 | The steering wheel shall be 18.00" in diameter, **have tilting and telescoping capabilities**, and a 4-spoke design. | | | |
| 2.14.2 | The chassis shall have a front axle cramp angle of 48-degrees to the left and right. | | | |
| 2.14.3 | The power steering pump shall be TRW TAS-85 | | | |
| **2.15** | **REAR AXLE** | | | |
| 2.15.1 | Meritor RS-35-185 rear axle shall have a rated capacity of 33,500 lb. | | | |
| 2.15.2 | The top speed of the vehicle shall be approximately 110 km/h (68 MPH) +/-3 Km/h. | | | |
| 2.15.3 | The rear differential ratio shall be configured by the OEM to optimize apparatus startability. | | | |
| 2.15.4 | A driver-controlled differential lock shall be provided. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| 2.15.5 | ONSPOT automatic tire chain shall be installed on the vehicle. There shall be one driver's side and one passenger's side chain unit.<br>A 12V dashboard switch shall be provided so that the operator may engage the chains from the driver's seat. The switch must be lighted to indicate when the chains are engaged. The switch must come complete with a switch guard to avoid accidental engagement of the automatic chains. The switch guard must be properly labeled.<br>A dashboard sticker with operating instructions must be provided. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| **2.16** | **REAR SUSPENSION** | | | |
| 2.16.1 | Taperleaf or flatleaf spring suspension shall be provided. The rear suspension capacity shall be rated at 33,500 lb. | | | |
| **2.17** | **TIRES** | | | |
| 2.17.1 | Front tires shall be MICHELIN XZU-S2 315/80R22.5 20 PLY radials. Or equal | | | |
| 2.17.2 | Rear tires shall be MICHELIN XDN2 GRIP 315/80R22.5 20 ply XDN2GRIP tread. The tire stamped load capacity shall be 33,080 lb per axle with a speed rating of 112 km/h when properly inflated to 130 psi. Or equal | | | |
| 2.17.3 | A RealWheels LED AirSecure™ tire alert pressure management system shall be provided. That system 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. | | | |
| 2.17.4 | All tires shall be balanced | | | |
| **2.18** | **WHEELS** | | | |
| 2.18.1 | Front ALCOA ULTRA-ONE Hub Pilot wheel 22.50" x 12" or equal | | | |
| 2.18.2 | Rear ALCOA ULTRA-ONE Hub Pilot wheel 22.50" x 12" or equal | | | |
| 2.18.3 | Front and rear wheels shall have chrome wheel covers and wheel liners c/w nut covers on each nut. Rear wheels shall have a “high hat” style center chrome cover. | | | |
| **2.19** | **BRAKE** | | | |
| 2.19.1 | Meritor WABCO 4S4M, anti-lock braking system and Traction Control ATC shall be supplied. | | | |
| 2.19.2 | Meritor front brakes shall be drum, cam operated with automatic slack adjusters. | | | |
| 2.19.3 | Meritor rear brakes shall be drum, cam operated with automatic slack adjusters. | | | |
| **2.20** | **AIR SYSTEM** | | | |
| 2.20.1 | Air compressor shall be a Cummins/WABCO with a capacity of 18.7 CFM. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| 2.20.2 | Bendix DV-2 automatic heated drain valves shall be installed on all tanks of the air supply system. | | | |
| 2.20.3 | The air dryer shall be a BENDIX AD-9SI, with heater. | | | |
| 2.20.4 | The air system on the chassis shall be plumbed with color coded nylon tubing air lines. | | | |
| **2.21** | **FRAME** | | | |
| 2.21.1 | Each single rail yield strength shall be 110,000 psi minimum | | | |
| 2.21.2 | Frame components shall 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. Illuminated bumper guides shall be installed on on both ends of the front bumper, with an approximate height of 32 inches above bumper. | | | |
| 2.22.2 | Two (2) painted steel tow hooks shall be installed, under the bumper and attached to the front frame members. | | | |
| | | | | |
| **2.23** | **HOOD** | | | |
| 2.23.1 | Fiber glass hood with chrome front grille.<br>A GoLight Stryker ST shall be mounted on the officer's side of the vehicle hood. Unit shall LED, white in color, permanently mounted c/w wireless handheld remote. There shall be a provision on the officer's side of the cab for holding the remote control in front of the officer. | | | |
| 2.23.2 | A LED, 32" stripe NFPA compliant light mounted under the hood for area work lighting on the engine. The light shall have a switch in the cab. | | | |
| 2.23.3 | Two (2) air horns shall be installed above the front wheel wells, (one on each side) and controlled as follows:<br>- Driver side: Horn ring with selector switch<br>- Passenger side: Foot-switch | | | |
| 2.23.4 | Hood liner, added firewall and floor heat insulation | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| 2.23.5 | 2½" inch fender extensions shall be installed | | | |
| **2.24** | **WINDOWS** | | | |
| 2.24.1 | Tinted door glass LH and RH with tinted operating wing windows. | | | |
| 2.24.2 | RH and LH manual windows. | | | |
| 2.24.3 | Omit rear window. | | | |
| **2.25** | **CLIMATE CONTROL** | | | |
| 2.25.1 | Heater, defroster and air conditioner.<br>Standard HVAC ducting with snow shield for fresh air intake.<br>Denso heavy duty air conditioner compressor. | | | |
| 2.25.2 | Main HVAC controls with recirculation switch. | | | |
| 2.25.3 | Premium insulation. | | | |
| **2.26** | **INTERIOR** | | | |
| 2.26.1 | Two (2) 12V, 15-amp, power point plug. | | | |
| 2.26.2 | Three (3) Kussmaul 4.8-amp dual USB charging ports shall be provided, one located in the center cluster of the dash and two located at the rear of the center console for use by the rear crew. | | | |
| 2.26.3 | Molded plastic door panel without vinyl insert with aluminum kickplate lower door. | | | |
| 2.26.4 | Opal gray vinyl interior. | | | |
| 2.26.5 | Gray/charcoal **wrap around style 'wing dash" configuration.** | | | |
| 2.26.6 | One (1) Blue Sea #5025 6-location 12V fuse block shall be provided at the front console; or equal | | | |
| 2.26.7 | Forward roof mounted console with upper storage compartments without netting. | | | |
| 2.26.8 | A console made of 1/8" thick aluminum and painted with black Zolatone shall be made and installed between the front seats. The hinged cover shall be maintained open by a gas cylinder.<br>The console shall have four compartments for binders and 2 compartments for maps. | | | |
| 2.26.9 | A goose-neck style LED map-light shall be mounted to the officer's side of the center console. (Exact location to be confirmed at pre-construction discussion). | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| 2.26.10 | A Ram Mount (RAM-B-101-C-UN9U: Universal or equivalent) tablet holder shall be installed withing reach of the officer's position. (exact location to be confirmed at pre-construction meeting) | | | |
| 2.26.11 | Cab shall be equipped with (3) red/white LED dome lights, 1 in the center of the front section and 2 in the rear crew section. (locations to be confirmed at pre-construction meeting) | | | |
| **2.27** | **SEATS** | | | |
| 2.27.1 | A seat belt monitoring system (SBMS) shall be provided. The SBMS shall 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:<br>• Seat Occupied & Buckled = Green<br>• Seat Occupied & Unbuckled = Red<br>• No Occupant & Buckled = Red<br>• No Occupant & Unbuckled = Not Illuminated | | | |
| 2.27.2 | Air ride driver seat without SCBA rack, Seats Incorporated, 911 Series. | | | |
| 2.27.3 | Officer non-suspension seat with SCBA rack, Seats Incorporated, 911 Series.<br>3-rear seats non-suspension seat with SCBA rack, Seats Incorporated, 911 Series. | | | |
| 2.27.4 | All seating positions shall be furnished with three (3)-point shoulder type orange seat belt. | | | |
| 2.27.5 | All seats shall have a durable **black vinyl** finish covering. Cloth is not acceptable. | | | |
| 2.27.6 | N/A | | | |
| 2.27.7 | All SCBA type seats in the cab shall have an IMMI SmartDock SCBA holder bracket **or equal**. Bracket must hold MSA SCBA; model; Firehawk, 4500 psi. The SCBA holder shall not require the use of a lanyard to release the scba. | | | |
| **2.28** | **CAB EXTERIOR** | | | |
| 2.28.1 | Windshield wiper control shall 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 heated mirrors c/w left and right remote control. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| 2.28.5 | Mud flaps shall 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 shall be removed and replaced by ULC compliant monocoque side steps, made of anti-slip aluminum checkered plate with grip strut inserts.<br>**NOTE**: A compartment of adequate dimensions shall be built in the step under the right rear door in which **an electric hose reel** will be installed. Reel shall hold a minimum of 150 ft of 1 inch flexible rubber hose line, complete with a ball valve nozzle. | | | |
| **2.29** | **CHARGING SYSTEM** | | | |
| 2.29.1 | (3) Daimler DTNA, 12V maintenance free batteries shall be provided, total 3000 cca. | | | |
| 2.29.2 | One (1) set of battery jumper studs with plastic color-coded covers shall be included near the battery compartments. | | | |
| 2.29.3 | 320-amp brushless alternator. | | | |
| **2.30** | **ELECTRICAL POWER DISTRIBUTION** | | | |
| 2.30.1 | A Kussmaul AUTO CHARGE HP KIT # 51-14-1106 or equivalent shall be installed.<br>The Kussmaul battery conditioner shall be supplied with a Deluxe red bezel display, installed near the electric shoreline.<br>A Kussmaul Pump 120V air compressor shall be supplied. The air compressor shall be installed in a dry location.<br>The air compressor shall be plumbed to the air brake system to maintain air pressure. | | | |
| 2.30.2 | A Kussmaul 20-amp super auto-eject electrical receptacle shall be supplied with a red cover. It shall automatically eject the plug when the starter button is depressed.<br>The electrical inlet shall be installed on the left-hand side of cab in the step. | | | |
| 2.30.3 | (3) NEMA receptacles shall be installed at the rear of the console for charging, wired to shoreline 120V power. (final position to be confirmed at pre-construction meeting) | | | |
| **2.31** | **LIGHTS** | | | |
| 2.31.1 | Sides and front of cab shall include LED marker lights. And vehicle **Headlights shall be LED**. | | | |
| 2.31.2 | The hood shall include two (2) integral headlight/marker assemblies with chrome bezel. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| **2.32** | **OPTICAL WARNING DEVICE IN CAB** | | | |
| 2.32.1 | A LED flashing red light clearly labeled "Do Not Move Apparatus". In addition to the flashing red light, an audible alarm shall be included which shall sound while the light is activated.<br>The flashing red light shall be located centered left to right for a better visibility. | | | |
| **2.33** | **BACKUP SAFETY DEVICE** | | | |
| 2.33.1 | A Fire Research rear-view camera shall be installed at the rear of the apparatus. The 7" color LCD monitor shall be installed close to the driver. A protective aluminum cover shall be installed above the camera. | | | |
| 2.33.2 | 97DB, minimum, audible backup alarm shall be installed on rear | | | |
| **2.34** | **INSTRUMENTATION** | | | |
| 2.34.1 | Instrumentation and gauges shall have Standard/Metric Hybrid measurement. | | | |
| 2.34.2 | Engine hour meter required. | | | |
| **2.35** | **ADDITIONAL CHASSIS EQUIPMENT** | | | |
| 2.35.1 | One (1) 2.50 lb D.O.T approved fire extinguisher with BC rating shall be shipped loose with the cab. | | | |
| 2.35.2 | One (1) emergency road safety kit. | | | |
| 2.35.3 | A total of two (2) door keys for the manual door locks. | | | |

**Portugal Cove - St. Philip's Volunteer Fire Department**
COMMERCIAL PUMPER / TANKER

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| **3.1** | **PUMP** | | | |
| 3.1.1 | current year Waterous S100 pump rated at 1500 IGPM, at 150 PSI.Or Equal.<br>The pumping system shall have an Akron pressure relief valve, or equal. The pump shall have mechanical type seal. | | | |
| 3.1.2 | Pump shall be Class A and shall provide the following ratings at an altitude of less than 600 meters (2000 ft):<br>➢ 1750 GPM (1450 IGPM) - 100% of rating at 165 PSI.<br>➢ 1750 GPM (1450 IGPM) - 100% of rating at 150 PSI<br>➢ 1225 GPM (1015 IGPM) - 70% of rating at 200 PSI<br>➢ 875 GPM (725 IGPM) - 50% of rating at 250 PSI | | | |
| **3.2** | **PUMP SHIFT** | | | |
| 3.2.1 | Pump shift shall be pneumatically-controlled and activated from inside cab.<br>All indicators lights and pump engagement shall be NFPA 1901 compliant. | | | |
| **3.3** | **PRESSURE GOVERNOR** | | | |
| 3.3.1 | An FRC 400 INCONTROL electronic throttle knob and governor system shall be installed on the pump panel to allow setting the chassis RPM and pump pressure. **No Exception** | | | |
| **3.4** | **PRIMER** | | | |
| 3.4.1 | The priming system shall be an air primer system, Trident AirPrime, 3-barrel with push button controls, equipped with the Auto-Prime feature. Or Equal.<br>Separate priming ports shall be provided for each gated intake. | | | |
| **3.5** | **HEAT EXCHANGER** | | | |
| 3.5.1 | Water flow from the fire pump shall be used to cool the engine coolant. The control, «¼ turn type» shall be located on pump panel and equipped with a ¾" valve. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| **3.6** | **DRAIN SYSTEM** | | | |
| 3.6.1 | A manual master drain valve shall be installed on the pump panel. The master pump drain assembly shall consist of a Trident Emergency bronze master drain with a rubber disc seal. The master drain shall have a rubber seal to prevent water from running out on the running board.<br>The master drain shall 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 shall be provided for each inlet and discharge. The drain shall be located at lowest point drainage of the fire pump. | | | |
| 3.6.3 | A Thermal Relief Valve shall be included on the pump that monitors water temperature and opens to relieve water to cool the pump.<br>The thermal device shall be set to relieve water when the temperature of the pump water exceeds 120 degrees F (49 C)<br>There shall be an audible alarm and an indicator light at the operator's panel. | | | |
| **3.7** | **PLUMBING** | | | |
| 3.7.1 | All fabricated piping shall be a minimum of Schedule 10 stainless steel for superior corrosion resistance and decreased friction loss. The pump system shall utilize a stainless-steel discharge manifold system and flexible high-pressure hoses with stainless steel ends that allows a direct flow of water to discharge valves. The manifold is "foam ready" for Hale Foam Logix or FoamPro system with 3" plumbing.<br>The specified foam system shall be plumbed to 1½" first speedlay, 1½" second speedlay, 2½" rear discharge and hose reel line. | | | |
| 3.7.2 | All the valves on the truck shall be Akron 8800 series, or equal.<br>When flexibility is needed, a "Victaulic" fitting shall be installed. | | | |
| 3.7.3 | The pump and steel accessories shall be painted black. Stainless steel plumbing components are not painted. | | | |
| **3.8** | **INTAKES AND DISCHARGES (GENERAL)** | | | |
| 3.8.1 | All intake and discharge valves shall be mechanically activated from the pump operator's panel. Control handles for tank-to-pump, tank fill and all discharges shall be «push-pull» style, including a «T» handle with sufficient space to allow the valve identification. The assembly shall be Innovative Controls brand. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| 3.8.2 | All discharges and intake located at the sides and rear panels shall be provided with an Innovative Controls brand chrome bezel with color identification.<br>These bezels shall be screwed into the panel without nuts at the back. | | | |
| 3.8.3 | All discharges, except the 1½" and 2" discharges shall have a 30-degree chrome droop adapter. | | | |
| 3.8.4 | All hose thread sizing shall be confirmed at a pre-construction discussion. | | | |
| **3.9** | **INTAKES** | | | |
| 3.9.1 | Two (2) 6" diameter suction ports with 6" NH male threads and removable zinc screens shall be provided, one (1) each side of the pumphouse. | | | |
| 3.9.2 | One (1) ELECTRIC butterfly valve shall be provided on the driver's side main pump inlet.<br>The 6" inlet valve shall be provided with an Akron 59, adjustable pressure relief valve and a 3/4" bleeder valve shall be provided on the inlet side of the valve.<br>A priming valve shall be installed for independent priming the inlet. | | | |
| 3.9.3 | Two (2) 2½" suction inlets shall be installed, one on the left side and one on the right side of the pumphouse.<br>They shall be equipped with a strainer and a chrome plug with a retaining chain.<br>They shall each have a manual integrated control valve, “lift-up” type.<br>A ¾" bleeder valve assembly shall be installed for this intake. | | | |
| 3.9.4 | One (1) 6” NH inlet with 5-inch valve and 5-inch plumbing shall be installed on the rear right side of the vehicle. This inlet shall provide an Akron model 53, 2½" pressure relief valve.<br>There shall be a 5"electric valve direct to the pump with an electronic controller installed on the pump operator’s panel.<br>One (1) ¾", ¼ turn valve shall be installed on the pump operator’s panel to bleed the air from the inlet and an independent priming valve shall be added to this inlet. | | | |
| **3.10** | **DISCHARGES** | | | |
| 3.10.1 | All 2½" discharges shall be equipped with a 2½" female chrome-plated reducer to a male 1½" with a 1½" chrome plug retained by a chrome chain. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| 3.10.2 | Four (4) 2½" discharges, with 2½" valves, 30-degree chrome droop adapter shall be installed on side and rear of the apparatus.<br>These discharges shall be located as follows:<br>Two (2) discharges left side with manual controls on pump operator's panel.<br>One (1) discharge right side with manual control on pump operator's panel.<br>One (1) discharge rear, right side with manual control on pump operator's panel. | | | |
| 3.10.3 | Two (2) speedlay discharges shall be provided. Each speedlay section shall 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.<br>The speedlay piping shall consist of two (2) 2" heavy duty hoses coming from the pump discharge manifold to the 2" swivel. | | | |
| | | | | |
| 3.10.6 | One (1) preconnected discharge shall be provided on the pump compartment, above the speedlays. The preconnect shall include one (1) 2½" brass swivel with a 2½" hose connection. | | | |
| 3.10.7 | One (1) 4" valve LDH discharge shall be located on the right side with control on the pump operator's panel. The discharge shall have a 30 degrees elbow, Storz adapter with a cap. | | | |
| 3.10.8 | One (1) discharge, 3" electric valve, shall be installed on the top of the truck for a deck gun, with the electronic valve controller on the pump operator's panel.<br>Discharge shall terminate with NPT threads.<br>Bidder shall provide and install:<br>- **TFT model XFIH-E61A** Hurricane monitor with panel mount controller on the pump panel<br>- **TFT Wireless Monitor Operator Station** option, mounted with storage bracket at the pump panel compartment | | | |
| **3.11** | **TANK FILL AND TANK-TO-PUMP** | | | |
| 3.11.1 | One (1) 2" valve to fill water tank shall be provided and installed.<br>The adapter on the tank shall be in stainless steel. | | | |
| 3.11.2 | The tank shall be connected to the pump with 4" piping and one (1) 3" valve. This pipe shall have a check valve, an anti-swirl mechanism to avoid pump cavitation and shall be connected to the tank. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| **3.12** | **FOAMSYSTEM** | | | |
| 3.12.1 | A FOAMPRO 2001 12-volt electric motor drive positive displacement foam concentrate pump, rated up to 2.5 gpm (9.5 L/min) @ 150 psi with operating pressures up to 400 psi (27.6 BAR). | | | |
| 3.12.2 | A foam tank gauge shall be installed on pump panel. The foam level indicator shall be the same make and model as the water tank gauge. | | | |
| 3.12.3 | The system shall be capable of handling Class A foam. Operational tests shall be completed with PHOSCHECK WD-881 foam, or equal. | | | |
| 3.12.4 | A full flow stainless steel check valve shall be provided to prevent foam contamination of the fire pump and water tank as well as to prevent water contamination of the foam tank. | | | |
| 3.12.5 | The foam system shall be plumbed to the speedlays, the hosereel and the (2) rear 2.5” discharges. | | | |
| 3.12.6 | The system shall be installed in a suitable, accessible location. The system must be installed and calibrated by the manufacturer before delivery. | | | |
| 3.12.7 | A label shall be placed near the foam concentrate tank fill opening that reads: “DO NOT MIX BRANDS AND TYPE OF FOAM” | | | |
| 3.12.8 | A system rating panel placard shall be installed near the foam controller. | | | |
| 3.12.9 | A Power-Fill Refill system, FOAMPRO, 12V, model 3435-0134 shall be installed in compartment R1 to fill the foam tank from the ground.<br>The foam fill system shall include 3-foot pick up tube. | | | |

<table>
<tr><th></th><th>SPECIFICATIONS</th><th>YES</th><th>NO</th><th>DETAILS</th></tr>
<tr><td>4.1</td><td>PUMP OPERATOR CONTROL PANEL</td><td></td><td></td><td></td></tr>
<tr><td>4.1.1</td><td>Controls and gauges shall be located on driver side and shall be protected behind a roll-up door.<br><br>Pump operator control panel shall be stainless steel. The top panel section of the operator’s panel shall be hinged for easier maintenance access to electrical components.<br><br>Color coded pump panel labels shall be in accordance with the recommendations of NFPA 1901as follows:<br><br>
<table>
<tr><th>Discharge</th><th>Color</th></tr>
<tr><td>Preconnect #1</td><td>Orange</td></tr>
<tr><td>Preconnect #2</td><td>Red</td></tr>
<tr><td>Preconnect #3 or discharge #1</td><td>Yellow</td></tr>
<tr><td>Preconnect #4 or discharge #2</td><td>White</td></tr>
<tr><td>Discharge #3</td><td>Blue</td></tr>
<tr><td>Discharge #4</td><td>Black</td></tr>
<tr><td>Discharge #5</td><td>Green</td></tr>
<tr><td>Deluge/deck gun</td><td>Silver</td></tr>
<tr><td>Large-diameter hose</td><td>Yellow with white border</td></tr>
<tr><td>Foam line(s)</td><td>Red with white border</td></tr>
<tr><td>Booster reel</td><td>Gray</td></tr>
<tr><td>Inlets</td><td>Burgundy</td></tr>
</table>
<br>The side intake/discharge pump panels shall be stainless steel. Each panel shall be removable for easier maintenance access to plumbing components.</td><td></td><td></td><td></td></tr>
<tr><td>4.1.2</td><td>Innovative Controls Dual-Scale gauges reading in psi and kPa. All 4½" and 2½" pressure gauges shall be filled with interlube.<br><br>There shall 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, the whole thing in a single assembly with chrome bezel and colored labels.<br><br>There shall also be one (1) 2½" diameter, 30"-0-400 psi (100-0-2800 kPa) connected to every discharge.</td><td></td><td></td><td></td></tr>
</table>

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| 4.1.3 | Pump control panel shall include the following elements:<br>Instruments showing battery voltage, engine temperature, engine oil pressure and engine RPM.<br>• FRC Max Vision Water and Foam level gauges<br>• A vacuum and pressure port for pump performance testing.<br>• Four (4) rocker watertight switches in a chrome switch bank for scene lights (if option selected), hose bed light, pump heater and pump lights. The heater shall have a red pilot light.<br>• Water tank drain valve control.<br>• Auxiliary heat exchanger control. | | | |
| **4.2** | **COLD PACKAGE** | | | |
| 4.2.1 | A 42,000 BTU heater shall be installed in the pump compartment. This heater shall use the truck coolant system.<br>The heater shall have two (2) fans. | | | |
| 4.2.2 | A 2-section aluminum heat pan shall be installed below the pump house to prevent freezing and shall be removable without any tools.<br>The heat pan shall have approximately 48'' wide x 72'' long and cover all the pump and plumbing. The front and the back of the heat pan shall be protected by an aluminum plate around the drive shaft.<br>The clearance between ground and the heat pan shall be minimum 10'' | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| **5.1** | **TANK** | | | |
| 5.1.1 | A 1500 Imperial Gallon water tank; and a 25 Imperial Gallon minimum, foam tank shall be supplied.<br>The booster tank shall be completely removable without disturbing or dismounting the apparatus body structure. | | | |
| 5.1.2 | The booster tank shall be entirely in ½" thick copolymer polypropylene with 3/8" swash partitions.<br>The assembly shall be welded utilizing thermoplastic welding technology.<br>The booster tank shall have lifting eyelets for facilitating the removal. | | | |
| 5.1.3 | The water/foam tank design shall be in accordance with CAN/ULC-S515 and NFPA 1901 requirements.<br>The foam tank shall have one (1) air intake installed on the top of the foam tank. The tank shall 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 shall be a dirt collector with a 1½" drain and a 3" plug.<br>The drain shall be installed at the bottom of the collector to allow fully draining of the tank. This drain control shall be on the operator pump panel, not in a compartment.<br>The valve shall be enclosed in the heat pan assembly to prevent freezing. | | | |
| 5.1.5 | One (1) manual fill tower shall be located to the left forward area of the tank. The tower shall be 14"x14" and a 6" vent/overflow pipe shall be installed halfway-up the tower.<br>This pipe shall empty behind rear wheels. | | | |
| **5.2** | **DIRECT TANK FILL** | | | |
| 5.2.1 | One (1) 2½" inlet for direct tank fill shall be installed at the rear, as low as possible and clearly labeled. This inlet shall be equipped with a 2½" valve less FIREMAN'S FRIEND device with a 30-degree 2½" diameter elbow with a 4 inch stortz connection c/w cap. Piping for the fill shall be routed through the rear wall and include a flow deflector to avoid the breaking of the tank when it is being filled. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| **6.1** | **GENERAL (BODY AND PUMP HOUSE)** | | | |
| 6.1.1 | The aluminum used to build the body and pump house shall be 5052-H32 marine grade and 6061-T6/6063-T5 for aluminum extrusions. Or equal.<br>The thickness of the aluminum shall 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 shall be 1/8" thick.<br>The aluminum tread plates shall be 3003-H22, 1/8" thick and shall meet NFPA slip resistance, when specified. | | | |
| 6.1.2 | All joints that may corrode or degrade by calcium and water infiltration shall be sealed by a continuous welding cord outside.<br>Where there is a possibility of water infiltration between aluminum tread plates and painted aluminum, gray silicon sealer shall be applied. | | | |
| 6.1.3 | The design of the body is such that the water tank of the truck shall not be visible outside. Any type of "WET SIDE" design shall be refused. | | | |
| 6.1.4 | All joints and welding shall be polished and so leave no sharp edge. | | | |
| 6.1.5 | The aluminum components of the body and pump house shall be manufactured by using CNC (Computer Numeric Control) machine tools, or equal. Each individual assembly parts shall be cut and bended for an optimum precision. | | | |
| **6.2** | **PUMPHOUSE** | | | |
| 6.2.1 | A step shall be installed each side of the pump house, on its full width. The step shall have 11¾" in depth built from aluminum grip-strut. | | | |
| 6.2.2 | The top of the pump house shall be made of aluminum tread plates and shall meet ULC requirements.<br>The front of the pump house shall be covered by tread plates. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| 6.2.3 | The pump module shall have a total width of 26” and two upper storage areas. The lower transverse storage area shall accommodate two preconnected handlines (200’ of pre-connected 1¾” hose with a nozzle). The bottom of this compartment be no higher than approx. 66” from the ground.<br>The speedlay areas shall include two removable storage trays. The trays shall be constructed of 3/16” (.187”) smooth aluminum plate with an exterior sanded finish. The walls and floor of the tray shall be slotted to prevent the accumulation of water and allow for ventilation of wet hose.<br>A protective strip of 0.375" UHMW Polyethylene shall be bolted to the bottom of outside edge speedlay trays.<br>Two (2) 1” stainless steel rolls, one on each side, shall be provided to facilitate the removal and insertion of the trays in this compartment.<br>The speedlay side access shall have a restraint system consisting of a tearaway vinyl tarp with Velcro along the entire perimeter and orange straps for visibility at night.<br>Three (3) pump service access doors shall be provided access to the pump. One (1) in L1, One (1) in R1 and one (1) on the top in front of the body. The doors shall be secured with tool-free hardware. | | | |
| 6.2.4 | A «P» shaped rubber gasket of about 1" shall be installed between the pumphouse and the body to avoid friction of the modules. | | | |
| 6.2.5 | The pumphouse shall be attached to the chassis with rubber insulation between the pump house and the chassis. | | | |
| 6.2.6 | An enclosed compartment shall be built above the speedlays for storage of a backboard.<br>Two (2) aluminum tread plates doors shall be built to give access to this compartment, one each side. The doors shall be equipped with latches. | | | |
| 6.2.7 | A large dunnage tray, with latching aluminum diamond plate lid equipped with (2) gas-shocks, shall be installed above pump control compartment and level with top of hose bed body.<br>The dunnage tray shall contain a compartment on the passenger side, capable of holding Dryall spill absorbent product connected to a tube that is accessible on the passenger side forward compartment of the apparatus to fill pails. | | | |
| 6.2.8 | The pumphouse shall be approximately the same height as the body. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| **6.3** | **BODY ATTACHMENT** | | | |
| 6.3.1 | The main body shall be attached to the chassis frame rails with six (6) U-bolts.<br>U-bolts shall be made of two (2) 5/8" diameter steel bolts and two (2) ½" thick x 2" width steel plates. There shall be insulation between U-bolts and body.<br>The mounting shall allow easy removal of the body in case of major repair. | | | |
| 6.3.2 | There shall be rubber insulation to avoid contact between the aluminum body and the steel frame rails. | | | |
| **6.4** | **BODY** | | | |
| 6.4.1 | The wheel wells shall have monohull fiberglass or stainless steel fenders. Or equal. | | | |
| 6.4.2 | A "P" shaped fenderette shall be constructed from fiberglass or stainless steel. | | | |
| 6.4.3 | The wheel well outer side face shall be made of 3/16" thick aluminum, shall be integral to the body construction and shall be painted the same color as the body. | | | |
| 6.4.4 | The body shall have rub rails mounted along the sides and at the rear. The rub rail shall be C-channel in design and constructed of 3/16" thick aluminum extrusion. The rub rail shall be 2-¼" height x 1-¼" deep and shall extend beyond the body width to protect compartment doors and the body sides. The depth shall allow marker and/or warning lights to be recessed inside for protection. | | | |
| 6.4.5 | The body structure shall be made from aluminum extrusion 2" x 3" x ¼" and 3" x 3" x 1/8".<br>The body design shall allow the booster tank to be completely removable without disturbing or dismounting the apparatus body structure in case of repair. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| **6.5** | **HOSE BED** | | | |
| 6.5.1 | The hose bed shall be made above the water tank and shall have approximate dimensions as follows; width of at least 68", a length of at least 140" and a height of at least 12".<br>**Manufacturer shall ensure that the hose bed area is maximized to ensure all available space is utilized.**<br>The sides of the hose bed shall be made from aluminum tread plate.<br>The hose bed floor shall be made of aluminum channel or laths properly spaced for ventilation. The flooring will be smooth and free of sharp edges. Floor shall be removesble for access to water tank. | | | |
| 6.5.2 | Three (3) adjustable and removeable hose bed dividers shall be constructed of 3/16" brushed aluminum plate with a reinforced aluminum base welded to the bottom. The rear end of the divider shall have a 3" radius corner and a handle shall be integrated to the divider. | | | |
| 6.5.3 | A black vinyl tarp shall cover the hose bed, retained by a Velcro strip fixed all around the hose bed. A hole shall be made around the fill tower, allowing opening of the fill tower cover freely.<br>The tarp for the speedlays shall be made from the same black vinyl.<br>An orange strap shall be installed to visually show where to open the tarp. | | | |
| **6.6** | **COMPARTMENTS** | | | |
| 6.6.1 | Each compartment seam shall be sealed using a permanent pliable silicone caulk.<br>The walls of each compartment shall have openings for adequate ventilation.<br>Each compartment shall have aluminum extrusion tracks for use with adjustable shelves. The tracks shall be vertically mounted and attached to the side and/or rear walls of the compartments.<br>The flooring shall have drain holes to prevent the accumulation of water.<br>The flooring shall be covered by plastic interlocking tiles 5/8" thick.<br>Each L side compartment and each R side compartment shal be provided with one (1) 120 V electrical outlet, connected to shore power. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| 6.6.2 | Compartments doors shall be roll-up type with anodized aluminum finish.<br>Doors shall be AMDOR brand. Or equal.<br>Compartment lights shall be AMDOR Lumabar, and Lumbar shall be mounted using the Amdor OEM bracket system. Or equal.<br>Magnetic switches for the compartment lighting system shall be Amdor, or equal, and shall be located at the top of the door frames.<br>Doors over 72” high shall be equipped with elastic pull-straps.<br>Compartments shall be equipped with drip-tray/door guards to protect the open doors from damage. | | | |
| 6.6.3 | The top and the front of the compartments shall be covered by 1/8" thick aluminum tread plate. | | | |
| 6.6.4 | Fifteen (15) adjustable shelves shall be provided.<br>Each shelf provided shall be built as specified below, unless specified otherwise. Each shelf shall be as wide and deep as possible.<br>- Maximum load capacity of at least 400 lb when extended<br>- Constructed of 3/16" aluminum, with a 2" lip and as deep as possible<br>- Bottom of all shelves are covered by rubber tiles of at least 5/8” thick. | | | |
| 6.6.5 | Four (4) slide-out trays shall be provided.<br>Each slide out provided shall be built as specified below, unless specified otherwise. Each slide out shall be as wide and deep as possible.<br>- Maximum load capacity of at least 400 lb when fully extended<br>- Minimum exterior slide extension should be about 20".<br>- Constructed of 3/16" aluminum, with a 2" lip and as deep as possible<br>- Shall be maintained in open or close position with a gas cylinder or with self locking tray slides when cylinder installation is not possible.<br>- Bottom of the shelves are covered by rubber tiles of at least 5/8” thick.<br>All trays installed on the bottom of the compartments shall have two (2) aluminum runners with nylon cover installed near the center to avoid the tray from collapsing. | | | |
| **6.7** | **LEFT SIDE COMPARTMENTS** | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| | **(Front of rear wheels) – L1** | | | |
| 6.7.1 | The compartment door opening shall be approximately 26” wide x 13” deep x 75” height.<br>This compartment is the pump operator’s control panel. | | | |
| | **(Front of rear wheels) – L2** | | | |
| 6.7.2 | The compartment door opening shall be approximately 49” wide x 28” deep lower section/14” deep upper section x 75” height.<br>- (3) Shelves<br>- (1) Slide-out tray (full-width) | | | |
| | **(Above rear wheels) – L3** | | | |
| 6.7.3 | The compartment door opening shall be approximately 38” wide x 14” deep x 25” height. | | | |
| | **(Rear of rear wheels) – L4** | | | |
| 6.7.4 | The compartment door opening shall be approximately 49” wide x 28” deep lower section/14” deep upper section x 75” height.<br>- (3) Adjustable shelves<br>- (1) Slide-out tray (28” wide only, offset to the front of the compartment) | | | |
| **6.8** | **RIGHT SIDE COMPARTMENTS** | | | |
| | **(Front of rear wheels) – R1** | | | |
| 6.8.1 | The compartment door opening shall be approximately 26" width x 19" depth x 50" height.<br>- FoamPro Powerfill access<br>- Pump maintenance hatch<br>- Absorbent distribution tube connected to the dunnage hopper<br>- (1) adjustable shelf | | | |
| | **(Front of rear wheels) – R2** | | | |
| 6.8.2 | The compartment door opening shall be approximately 49" width x 28” deep lower section/14” deep upper section x 50” height.<br>- (3) Adjustable shelves | | | |
| | **(Above rear wheels) – R3** | | | |
| 6.8.3 | The compartment door opening shall be approximately 58" width x 14" depth x 25" height.<br>- (2) Adjustable shelves | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| | **(Rear of rear wheels) – R4** | | | |
| 6.8.4 | The compartment door opening shall be approximately depth 49" width x 28” deep lower section/14” deep upper section x 50” height.<br>- (3) Shelves<br>- (1) Slide-out tray (full-width) | | | |
| | **(Above right-side compartments) – TRF & TRR** | | | |
| 6.8.4 | TOP RIGHT-FRONT & TOP RIGHT-REAR COFFIN COMP.<br>These compartments, accessible from the hose bed, are located at the front and rear of the driver side of the body.<br>Each compartment shall be approx. 70" long x 16 " wide x 15" deep.<br>The compartment lids shall be built from aluminum treadplate and shall include a stainless-steel grab handle and shall be held in the open position by gas cylinders.<br>These compartments shall be weatherproof. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| **6.9** | **REAR COMPARTMENT: B1** | | | |
| 6.9.1 | If possible a rear compartment is desirable, subject to the requirement for the tank. If possible the compartment dimension shall be maximized c/w a roll up door. The compartment shall contain a slide out tray and acess to the dump valve/shute | | | |
| **6.10** | **REAR ACCESS** | | | |
| 6.10.1 | A full-width recessed step shall be built into the body above the rear compartment made of aluminum tread plate meeting NFPA requirement. | | | |
| 6.10.2 | The back of the vehicle shall be supplied with a stainless steel 10" dump valve, manufactured by AH Stock Manufacturing Corp. Or equal; enclosed in the B1 compartment if compartment can be provided.<br>The dump valve shall be electrically operated with switches on both sides of the rear of the apparatus.<br>A telescopic extension, AH STOCK model 4036-34, shall be installed on the valve. The telescopic extension shall have some swivel capability<br>The dump valve shall have a “NO STEP” label on the top of the extension. | | | |
| 6.10.3 | A tailboard step shall be provided at the rear of the body. The tailboard shall have approx. 10” in depth.<br>The tailboard step shall be built from aluminum tread plate and grip strut aluminum and shall be in accordance with current ULC requirements. | | | |
| 6.10.4 | All handrails on body and pump compartment shall be 1¼" diameter aluminum extrusion knurled, to provide a positive gripping surface.<br>Chrome plated end stanchions shall support the handrail. Plastic gaskets shall be used between end stanchions and any painted surfaces.<br>Drain holes shall be provided in the bottom of all vertically mounted handrails.<br>Handrails shall be provided to meet NFPA and ULC requirements. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| 6.10.5 | There shall be a ZICO swing out and down access ladder supplied and installed on the rear left side apparatus, for accessing the hose bed.<br>The ground to the first step dimension, on level ground, shall be near eighteen (18") inches. When in the deployed position the ladder shall have an angle of approximately 75-degrees to facilitate ascending and descending the ladder.<br>The ladder shall have a latch to hold it in position. This latch shall be installed outside of the ladder.<br>A sealed, magnetic sensor shall be installed connected to the “Do Not Move Apparatus” system, to alert driver if not stowed properly.<br>A 12’’ long handrail shall be installed above the pike pole compartment.<br>One (1) LED stripe Whelen Model PELCC shall be installed on the top of the ladder | | | |
| 6.10.6 | The rear tires shall have a set of black mud flaps mounted behind the rear chassis wheels. | | | |
| 6.10.7 | Two (2) heavy duty tow eyes made from steel having 2-1/2" diameter shall be mounted below the body at the rear of the vehicle to allow towing (not lifting).<br>The tow eyes shall be painted black.<br>There shall be a plate specifying the capacity of the assembly. | | | |
| **6.11** | **2500 Imperial gallon portable tank storage:** | | | |
| 6.11.1 | A Zico Quic Lift hydraulic portable tank system (PTS) lift shall be installed on the RIGHT side of the body over the compartments. This shall be adequate to hold and store a 2500 IG porta tank.<br>Switch for lift shall be located on the front of the fire body on the right side.<br>A checkerplate polished cover shall be installed on the exterior to cover the porta tank. **(See Note 1 at end of specification**) | | | |
| **6.12** | **Ladders, pike poles and 6" suction hose rack** | | | |
| 6.12.1 | The vehicle shall be equipped with a ZICO Model HPTS one (1) arm hydraulic rack.<br>The rack shall be installed on LEFT side above the rear wheel wells. The front face of the rack shall be covered with aluminum treadplate.<br>The system shall be made to hold one (1) 24’ extension ladder, one (1) 14’ roof ladder, one (1) 10’ folding attic ladder, two long handle pike poles (2) light-weight hard-suction hoses with long handles. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| | Three (3) red flashing LED lights shall be installed to indicate that the hydraulic rack is ajar. Two (2) lights shall be installed at each end of the rack and the third light in the vehicle cab.<br>An audible alarm shall also be installed on that cab light.<br>A FEDERAL SIGNAL 97-decibel alarm, model 210331shall be installed outside the vehicle and shall operate only when the rack is in motion.<br>Controls of the rack shall be placed at the rear of the vehicle. The switch shall be in a CAST PRODUCTS weatherproof aluminum box.<br>The hydraulic pump shall be powered by a high gauge wire adequately protected by a 200-amp fuse easily accessible. **(See Note 1 at end of specification)** | | | |
| **6.13** | **REAR WHEELS WELL OUTFFITING:** | | | |
| 6.13.1 | Four (4) compartments for SCBA cylinders shall be installed in the wheel wells.<br>Each compartment shall contain Three (3) cylinders for a total of twelve (12) SCBA cylinders compartments.<br>Every cylinder compartment shall be built with aluminum pipes and the bottom shall be covered with rubber mat according to the CAN/ULC-S515 section.<br>Every compartment shall an aluminum door of the same color as the vehicle with a “compression type” latch.<br>The doors shall be designed to avoid water and dust infiltration with reinforcement inside the door. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| **7.1** | **ELECTRICAL SYSTEM** | | | |
| 7.1.1 | The electrical system shall meet CAN/ULC S515 and NFPA 1901 requirements.<br>The electrical system shall include the following:<br>a) The wiring in the body shall be securely fastened with stainless steel bolts attached to all each 8"-10";<br>b) Electrical terminals in weather exposed areas shall have a non-conductive grease or spray applied;<br>c) Adhesive device shall be not acceptable;<br>d) Every electrical wiring shall be covered by a plastic split sleeve;<br>e) 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;<br>f) Heat shrink material and sealed connectors shall be used to protect exposed connections;<br>g) A coil of wire must be provided behind an electrical appliance to allow them to be pulled away from mounting area for inspection and service work;<br>h) All lights that have their sockets in a weather exposed area shall have corrosion preventative compound added to the socket terminal area. | | | |
| 7.1.2 | The wiring of the body shall be color coded and number coded at each 3". | | | |
| 7.1.3 | Every circuit added to the chassis shall be protected by internal electronic circuit breakers with transistor outputs. The system shall operate in accordance with the J1939 communication protocol.<br>The system shall comprise three (3) nodes of at least 8 inputs and 16 outputs, each node shall be protected by an individual breaker GROTE model 54-852PL. They shall be located to optimize the wiring, minimum one (1) in the cab and two (2) back into the compartments.<br>The vehicle shall have one (1) programming plug installed near the multiplex node in the cab. | | | |
| 7.1.4 | The switches in cab and pump panel shall have an identification meets ULC and NFPA. | | | |
| 7.1.5 | Programming note: A single master switch shall activate ALL emergency lights, and the siren shall NOT operate unless master switch is active. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| **7.2** | **WARNING AND EMERGENCY** | | | |
| 7.2.1 | Four (4) WHELEN M7 LED front-lower warning lights shall be installed on the front grille of the apparatus. The lights shall include chrome flanges.<br>Two (2) shall be red with red lenses and two (2) shall be white with clear lenses.<br>These lights shall be installed in an alternating "X" flash-pattern. | | | |
| 7.2.2 | Four (4) WHELEN M6 red LED lower-side warning lights with red lenses shall be provided. The lights shall include chrome flanges.<br>➢ One (1) each side in the rear wheel wells<br>➢ One (1) each side of the front bumper extension | | | |
| 7.2.3 | An LED red and clear/white lightbar WHELAN Pioneer Summit, 58" S58MW shall be installed on the front of the cab roof.<br>Any forward-facing white lights shall be cancelled when park brake is engaged. | | | |
| 7.2.4 | Two (2) Whelen Mini Freedom® IV flashing red lightbars shall be mounted on the commercial cab roof, side-facing, above the crew cab doors.<br>Any forward-facing white lights shall be cancelled when park brake is engaged. | | | |
| 7.2.5 | Four (4) Whelen M9 red LED side-upper warning lights with red lenses shall be installed in the following positions:<br>- Two (2) on the upper-rear face of the apparatus, as close to the top corners of the body as possible<br>- Two (2) on each side of the upper body, as close the flashing top corners as possible | | | |
| 7.2.6 | Two (2) Whelen M6 red LED rear-lower warning lights with red lenses shall be installed below the brake, directional and backup lights within a 4-position common bezel. | | | |
| 7.2.7 | An amber directional traffic lightbar, six (6) LED light head WHELEN model TAL65 shall be installed at the rear of the body. The control shall be located in the cab. | | | |
| 7.2.8 | Headlights shall be alternately flash on high beam position. | | | |
| 7.2.9 | A Whelen 295SLSC1 electronic siren shall be mounted in the cab. | | | |
| 7.2.10 | The siren shall feature 200-watt output, with two (2) 100w speakers mounted in the front bumper, one on each side. | | | |
| **7.3** | **LIGHTING** | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| 7.3.1 | LED, GROTE model 47962 / 47963 clearance/marker lights. | | | |
| 7.3.2 | The center top rear marker lights shall be a GROTE model 253-4400-1 for marker light AND for brake light signal. | | | |
| 7.3.3 | Turn signal-lights, brake-lights and reversing lights shall be WHELEN 600 SERIES LED lights. There shall be a total of two (2) break lights, two (2) back-up lights, two (2) turn-signal lights and two (2) emergency lights.<br>It shall have a dimension of 6" x 4" and shall be mounted on a WHELEN #PLAST4V rack.<br>The rear part of the lights, visible from the compartment shall be entirely covered with a protective aluminum cover which shall protect the rear part of the light and the electrical wiring.<br>Two (2) amber, GROTE #47963 LED auxiliary turn lights one each side front of body shall be installed recessed in the rub rail. | | | |
| 7.3.4 | One (1) white LED GROTE #60681 licence plate light mounted at the rear of the body.<br>The plate shall be mounted with four (4) stainless steel bolts. | | | |
| **7.4** | **AUXILIARY LIGHTS** | | | |
| 7.4.1 | Two (2) 20" AMDOR, LUMABAR # AY-9700-012 LED lights shall be mounted under the control panel light shield, one (1) each side.<br>These lights shall automatically turn on when the pump is engaged or when the “pump light” switch is on and when the park brake is set. | | | |
| 7.4.2 | One (1) Amdor AY9220-032 LED light shall be installed in the pumphouse and it shall be controlled by the “pump light” switch on the pump panel. | | | |
| 7.4.3 | Two (2) LED lights AMDOR LUMABAR compartment light strips shall be mounted in each body compartment.<br>Length of each light per the door opening height (+/- 5"). | | | |
| 7.4.4 | All perimeter lights under cab and body shall be Truck Lite LED lights, as follows:<br>➢ One (1) under each cab steps<br>➢ Two (2) under pumphouse steps<br>➢ Two (2) under rear bumper<br>The ground lighting shall 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. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| 7.4.5 | A LED TecNiq model E03 light shall be installed under each 6" inlet on pump panel for steps lighting.<br>The lights shall turn on when the parking brake is set and the marker lights are turned on or with the pump light switch. | | | |
| 7.4.6 | One (1) LED light GROTE # 63F61 or JETCO # 300-3161F-8 shall be used for hose bed light and for the deck gun. It shall be installed in the front of the body.<br>The hose bed light shall turn on when the parking brake is set and when the marker lights are turned on, or with the hose bed switch. | | | |
| 7.4.7 | Two (2) LED light GROTE # 63F61 or JETCO # 300-3161F-8 installed at the rear, upper body, close to the beacon warning lights.<br>The rear light lights shall turn on when the parking brake is set and the rear lights switch is “on” or when the transmission is on reverse.<br>The rear lights switch shall be waterproof and installed in a sealed aluminum box CAST PRODUCTS on the left rear side. | | | |
| 7.4.8 | Four (4) Whelen Pioneer Plus flood/scene lights shall be installed on the upper-sides of the body, to the inside of the warning lights.<br>The airtight switch shall be located on the pump operator panel. These lights shall turn on when the parking brake is set.<br>Cab and panel controls for these lights shall be provided and labelled LEFT SCENE & RIGHT SCENE | | | |
| 7.4.9 | Two (2) Whelen Pioneer Plus flood/scene lights shall be installed on the rear face of the vehicle. The control of these lights shall be as follows:<br>- They shall turn off when the parking brake is not set;<br>- Turn on when the transmission is on reverse and the E-Master is turned on;<br>- Turn on with a waterproof switch, located on the rear left side when the parking brake is set.<br>The rear lights switch shall be waterproof and installed in a sealed aluminum box CAST PRODUCTS on the left rear side. | | | |
| 7.4.10 | Two (2) FRC telescopic lights model EVOLUTION II #FCA530-V20, 20,000 lumens each, shall be installed on the front of the body, one each side.<br>The switch for each shall be located close of each light, near the light base, and shall be weatherproof. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| 7.4.11 | One FRC Crestlight™ model CLA100-A62 16,000-lumen LED visor light shall be installed on the front of the cab roof.<br>Three cab switches shall be provided to control this light, labelled FRONT SPOT, FRONT FLOOD and FRONT SCENE. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| **8.1** | **BODY FINISH DETAILS** | | | |
| 8.1.1 | All nuts and rivets installed on the apparatus shall be stainless steel | | | |
| 8.1.2 | Where dissimilar metals are to be mounted together, the mounting base material shall have an isolation barrier prior to assembly to prevent dissimilar metal reaction. | | | |
| 8.1.3 | Caution, Warning, Danger and other safety related signs shall meet the requirement of ANSI Z535.4, Product Safety Signs and Labels. | | | |
| 8.1.4 | A rust preventive barrier, Corrosion Control Coatings Waterborne, shall be sprayed under the entire body and body substructure, before their installation on the chassis so that no area is left unprotected. | | | |
| **8.2** | **BODY AND CHASSIS PAINT** | | | |
| 8.2.1 | The painting shall be conducted in accordance with best practices followed in the heavy equipment industry to ensure the best protection against corrosion and abrasion. | | | |
| 8.2.2 | Paint and primer used shall be of good quality and type « base Coat / Clear Coat ». The painting process shall be in accordance with the paint manufacturer. | | | |
| 8.2.3 | All removable parts such as brackets, lights, doors, and steps shall be removed before painting the body and shall be painted separately if required. | | | |
| 8.2.4 | The cab and body shall be painted red, except the cab roof, A, B and C posts down to the side windows and front hood which shall be painted white. (colour codes and specific breakline for the white paint to be confirmed at pre-construction meeting) | | | |
| 8.2.5 | The interior of the compartments shall be the natural aluminum finish. | | | |
| 8.2.6 | The exterior of the pump house shall have a smooth brushed finish. | | | |
| 8.2.7 | All shelves and trays shall have a smooth brushed finish on the exterior facing. | | | |
| **8.3** | **LETTERING, STRIPING** | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| 8.3.1 | A reflective stripe, 4" wide shall be installed according to the ULC standards:<br>➢ At least 50 % of the total length of the vehicle (body and cab) each side.<br>➢ At least 25 % of the width of the front of the vehicle. | | | |
| 8.3.2 | Maximum of the rear body visible surface, except the roll-up doors, shall be covered by chevron stripes according to NFPA. The stripes shall be red and fluo-lime yellow, 3M-983 brand. | | | |
| 8.3.3 | A 3'' wide chevron type stripe shall be installed on each cab door. The covering surface shall be at minimum 200 square inches. | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| **9.1** | **MISC LOOSE EQUIPMENT TO BE SUPPLIED BY BIDDER** | | | |
| 9.1.1 | Two (2) folding wheels chocks ZICO, 44" diameter tires with brackets shall be installed under L1 compartment. | | | |
| 9.1.2 | Two (2) 6" NH chrome caps for pump inlets. | | | |
| 9.1.3 | A 6" low level strainer, with jet siphon shall be supplied and attached to the suction hose and fit in the ZICO bracket under the porta tank | | | |
| 9.1.4 | Two (2) NFPA compliant, KOCHEK suction hoses, 6" x 10' long, NH threads and long handle shall be provided. | | | |
| 9.1.5 | One (1) HUSKY brand 2500 imperial-gallon portable tank with aluminum frame shall be provided. Or equal<br>The sides of the vinyl liner shall be 22 oz of resistance, red in color and the floor shall be black heavy duty 28 oz vinyl. | | | |
| 9.1.6 | One (1) DUO SAFETY, 10' attic ladder. Or equal | | | |
| 9.1.7 | One (1) DUO SAFETY, 14' roof ladder. Or equal | | | |
| 9.1.8 | One (1) DUO SAFETY, 24' 2-sections ladder. Or equal | | | |
| 9.1.9 | Bidder shall provide and mount brackets for extinguishers as follows:<br>- (3) 2 ½ gallon pressurized water extinguishers<br>- (2) 20 lb. dry chemical extinguishers<br>- (1) 20 lb. $CO_2$ extinguisher<br>(Mounting locations to be determined at pre-construction meeting)<br><br>**NOTE: With reference to CAN/ULC – S515-13, Minor Equipment. Chapter 9, reference section 9.8. Except for equipment and tools specified within the specification or as indicated here in this section, all other requirements of section 9.8 are to be supplied except for 9.8.2 fire hoses and nozzles, and 9.8.3 additional equipment (e) self-contained breathing apparatus and (f) self-contained breathing apparatus cylinder. The operating fire department will install remaining equipment upon receipt and acceptance of the fire apparatus.** | | | |

| | SPECIFICATIONS | YES | NO | DETAILS |
|---|---|---|---|---|
| **10.1** | **WARRANTY** | | | |
| 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 | The chassis manufacturer basic vehicle standard limited warranty shall be provided. | | | |
| 10.1.4 | A five (5) year/160,000 km limited engine warranty shall be provided. | | | |
| 10.1.5 | A five (5) year/unlimited km parts and labor warranty shall be provided for transmission. | | | |
| 10.1.6 | A two (2)-year parts and labor warranty shall be provided for front axle. | | | |
| 10.1.7 | A two (2)-year parts and labor warranty shall 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.<br>This warranty shall 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.<br>This warranty shall cover all the structural components of the body and cabin 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.<br>This warranty shall 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 shall be provided for life (25 years) against any manufacturing defects. | | | |
| 10.1.13 | Ten (10) year pump stainless steel pluming components limited warranty.<br>This warranty shall 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. | | | |
| | | | | |

**Note 1: With reference to section 6.11 and section 6.12. If a manufacturer has available a single electric/hydraulic system that has the capability of carrying all equipment indicated in 6.11 and 6.12, the town will deem this arrangement as acceptable. The lift and equipment shall be on the Right side of the fire body.**
**If a single lift is to be provided, all Left side compartments shall be maximized in sizing.**