



DISTRICT OF LILLOOET

REQUEST FOR PROPOSALS

One (1) – 2025 Tanker Fire Apparatus

RFP#: LFD2023-01

Issue Date: November 3, 2023
Closing Date: December 1, 2023
Closing Time: 16:00 PST

Location: District of Lillooet
615 Main Street, PO Box 610
Lillooet, BC V0K 1V0

Attention: Darren Oike
Fire Chief

**Late proposals will not be accepted.
The lowest or any proposal may not necessarily be accepted.**

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1.0 INTRODUCTION

The District of Lillooet invites proposals from qualified fire apparatus manufacturers for the supply and delivery of one (1) new 2025 Tanker Fire Apparatus.

Two complete copies of your proposal must be submitted in a sealed package labeled: “**RFP#: LFD2023-01, 2025 TANKER FIRE APPARATUS**” to the Fire Chief of District of Lillooet, by RFP closing deadline at **16:00 (4:00p.m.) local time, Friday, December 1, 2023**. The proponent’s name and return address must be clearly marked on the outside of your proposal submission package. Late proposals will not be accepted and will be returned unopened to the proponent. **Proposals received by fax will not be accepted.**

Proposals must be sent to:

District of Lillooet
PO Box 610, 615 Main Street
Lillooet, BC V0K 1V0

All questions relating to this project must be in writing, directed to the Project Manager:

Darren Oike, Fire Chief
District of Lillooet
615 Main Street, PO Box 610
Lillooet, BC V0K 1V0
Telephone: 250-256-4289
Email: afd.chief@lillooet.ca

The District of Lillooet reserves the right, in its sole discretion, to waive informalities in proposals, reject any and all proposals, or accept the proposal deemed most favorable in the interests of the District of Lillooet. The proponent will be competent and capable of performing the work. The proponent may be required to provide evidence of previous experience and financial responsibility before a contract is awarded.

The District of Lillooet will not be responsible for any costs incurred by proponents as a result of the preparation or submission of documents pertaining to this Request for Proposals (RFP). The accuracy and completeness of the Proposal is the Proponent’s responsibility. Should errors be discovered, they will be corrected by the proponent at its expense.

The lowest priced, or any proposal, will not necessarily be accepted and the District of Lillooet reserves the right to reject any or all proposals, at its sole discretion without prejudice. Furthermore, the District of Lillooet reserves the right to negotiate with any proponent or proponents at its sole discretion.

2.0 GENERAL INFORMATION AND INSTRUCTIONS TO PROPONENTS

2.1 Errors, Omissions, Clarifications and Enquires

All questions and requests for clarification relating to the RFP process, and/or identification of any errors or omissions in the RFP documents, shall be made in writing to the District of Lillooet, Attention: Darren Oike, Fire Chief, by mail, hand-delivery, or email to dfd.chief@lillooet.ca. **Questions and requests for clarifications will not be accepted over the phone.**

Deadline for questions regarding this Request for Proposal is **November 17, 2023**. Responses to enquires received by proponents will be posted at www.lillooet.ca on **November 23, 2023**.

2.2 Proposal Submissions

Two signed copies of each proposal shall be submitted. Each copy shall be complete and unabridged and shall not refer to any other copy for additional information, clarification, or details.

A complete D-sized, five (5) view, scaled drawing, illustrating the proposed apparatus including all major components is to accompany the bidder's proposal. The drawings are extremely important, as they can easily resolve any questions as to items that are unclear in the specifications. Drawings of similar apparatus are not acceptable.

2.3 Proposal Format

Proponents are asked to respond in a similar manner. Appendices "A" and "B" must be submitted on the same forms included in this RFP, no exceptions. The following format and sequence should be followed in order to provide consistency in responses and to ensure each proposal receives full and complete consideration. All pages should be consecutively numbered.

- a) Title page including RFP title and number, proponent's name and address, telephone number, fax number, email address, and contact representative.
- b) One page Letter of Introduction SIGNED by the authorized signatory of the proponent which will bind the proposed statement(s) made in the proposal.
- c) Table of Contents including page numbers.
- d) An Executive Summary of the key features of the proposal.
- e) Completed Appendix "A".
- f) Completed Appendix "B".
- g) Complete contact information for three references (see 3.6).
- h) One complete D-sized, five (5) view, scaled drawing.

3.0 PROPOSAL EVALUATION AND SELECTION PROCESS

3.1 Proposal Evaluation

All proposals will be initially evaluated by the District of Lillooet to assess the qualifications and capabilities of proponents to meet the minimum standards specified in the RFP.

The proposal evaluation through to proponent selection will be based on the following process as deemed appropriate by the District of Lillooet:

1. Initial proposal evaluation by the District of Lillooet.
2. Follow up question(s) from the District of Lillooet to proponent(s). (Optional at discretion of the District of Lillooet).
3. Further question(s) from the District of Lillooet to proponent(s). (Optional at discretion of the District of Lillooet).
4. Interview(s) of selected proponent(s) by District of Lillooet. (Optional at discretion of the District of Lillooet).
5. Follow-up interview of selected finalist(s). (Optional at discretion of the District of Lillooet).
6. Evaluate proposals by the District of Lillooet.
7. Recommendations to District of Lillooet Council.

3.2 Initial Proponent Selection Process

As a result of the initial written proposal evaluation, the District of Lillooet may, at its sole discretion, request oral presentations and enter into detailed discussions with initially selected proponents prior to preparing a short-list of qualified proponents.

The District of Lillooet may, at its sole discretion, prepare a “short-list” of proponents which initially appear to have the necessary qualifications, based solely on the information contained in the written proposals and/or additional information that may be obtained by the District of Lillooet. The District of Lillooet will be under no obligation to obtain additional clarification from any proponent(s) prior to preparing an initial “short-list” or before entering into detailed discussions, or negotiations, with any proponent.

3.3 Selected Proponent Negotiations

The District of Lillooet, at its sole discretion, reserves the right to enter into contract negotiations with a selected proponent, or proponents, based only on the evaluation of the written proposal(s), and/or an evaluation of the combination of the written proposals, oral presentations, and/or detailed discussions. The District of Lillooet reserves the right to enter into negotiations with any proponent without requiring any other proponents to make any presentations or require any other proponents to enter into detailed discussions with the District of Lillooet.

3.4 Termination of Negotiations and/or RFP Process

The District of Lillooet reserves the right to terminate contract negotiations with any proponent, and to enter into contract negotiations with any other proponent(s) if, in the opinion of the District of Lillooet at any time, the contract negotiations with the initially selected proponent(s) will not be satisfactorily completed in the best interests of the District of Lillooet.

The District of Lillooet may, at its sole discretion, reject any or all proposals at any time throughout the proposal evaluation, proponent selection, or contract negotiation process.

3.5 Non-Compliance with RFP Requirements

Unless explicitly stated in a proposal, all proposals shall be assumed by the District of Lillooet to be in full compliance with the RFP requirements without exception.

All items in the proposal that are **not** in full compliance, or that vary from the specific RFP requirements, shall be clearly identified in the proposal as non-compliant and/or variant, and shall include specific reference to the relevant section in the RFP and the precise nature of the variance or non-compliance.

Non-compliance or variances with the specific RFP requirements will not necessarily result in rejection of a proposal.

The acceptance or rejection of all non-compliant items, and/or variances to the RFP requirements, shall be at the sole discretion of the District of Lillooet, without any obligation by the District of Lillooet to either request clarifications, enter into detailed discussions, or negotiations with the proponent(s).

All bids must be submitted with completed Appendices “A” and “B” as contained within this RFP in order to be eligible for consideration.

3.6 References

Please include three references that may be contacted for purposes of confirming your company’s experience in supplying and delivering this type of vehicle.

4.0 MANUFACTURER SELECTION

4.1 Selection Criteria

The following are the criteria and the percentage of the total score for each criterion that will be used by the District of Lillooet to select a proponent. The list of criteria is not in any particular order of priority. The District of Lillooet, in its sole judgment, will base the selection of a successful proponent on a combination of the following criteria:

Evaluation criteria:

Experience	25%
Compliance with RFP Requirements	30%
Delivery date	5%
Price	35%
Service Facility	5%
Total	100%

5.0 CONTRACT SCHEDULE

5.1 Award of Contract

The Award of Contract is expected to be made not later than **January 15, 2024**. All proponents will be advised in writing of the final results of the RFP evaluation process. The District of Lillooet, in its sole judgment, may delay the Award of Contract date as deemed appropriate by the District of Lillooet.

5.2 Form of Contract

The contract to supply and deliver the finished apparatus to the District of Lillooet will be in the form of a letter of proposal acceptance, purchase order, or other format as agreed upon by the District of Lillooet and the successful proponent.

6.0 APPARATUS FAMILIARIZATION

6.1 Apparatus Drawings

Final design acceptance and contract award will be conditional on the successful proponent providing two sets of scale drawings showing left, right, front, and rear plan views of the apparatus. As-Built wiring diagrams as proposed will be required and are to be completed together with all dimensions. Dimensions are to be in imperial units.

6.2 In-Service Training

All proponents shall indicate the degree to which in-service training on the completed apparatus will be provided to the members of the District of Lillooet.

6.3 Service, Installation, Repair, and Operators Manuals

Factory service manuals, installation manuals, repair manuals, and operator's manuals shall be provided for the cab/chassis and all components comprising the completed apparatus, such as engine, transmission, front and rear axle, and engine status centre. All manuals shall accompany the apparatus when delivered to the District of Lillooet.

7.0 APPARATUS SPECIFICATIONS

7.1 Minimum Requirements

The minimum requirements for the completed apparatus are as detailed in Appendix “A” Minimum Specifications attached to and forming part of this RFP. Prospective proponents may recommend changes or adjustments to the specifications outlined where the proponent believes that such changes or adjustments will result in a better-quality product in terms of efficiency, tractability, serviceability, or general operation. In all cases, the proponent should provide reasons for the recommended changes or adjustments to the RFP specifications in the initial proposal response documents.

7.2 Thread Specifications

- Main Suction Threads – NST
- 4” Connections – Storz
- 2.5” Connections – BCT
- 1.5” Connections - NPSH

7.3 Specifications Not Outlined

In terms of any of the apparatus specifications not detailed in this RFP, proponents are free to bid on the proposal as they choose, provided that the proponent's relevant specifications are detailed in the proposal response.

7.4 Compliance with Laws and Regulations

The completed apparatus shall comply with all relevant Federal and British Columbia motor vehicle laws and regulations and WorkSafe BC Regulations prior to delivery and must be designed to be legal for the road without the need for overweight permits. British Columbia Motor Vehicle Inspection to be completed prior to apparatus delivery.

7.5 Underwriters’ Laboratories of Canada (ULC) Standards

The apparatus shall be designed so as to comply with all relevant provisions of ULC-S515 “Standards for Automobile Fire Fighting Apparatus”. The apparatus shall be fully tested and certified by a ULC Inspector to the ULC standard and have an ULC label affixed to the apparatus prior to delivery.

8.0 WARRANTIES AND INSURANCE

8.1 Chassis and Component Warranties

Proponents shall list the standard warranties applicable to the vehicle chassis and other components of the completed apparatus, which are included in the bid price, and document additional or extended warranties that are available together with any special provisions and applicable costs.

8.2 Manufacturer's Insurance

Proponents will be expected to satisfy the District of Lillooet that sufficient insurance is provided to protect the District of Lillooet's direct investment in the event the apparatus is damaged or destroyed prior to delivery.

9.0 APPARATUS DELIVERY AND PAYMENT

9.1 Apparatus Documentation

All documentation required to register ownership in the name of the District of Lillooet shall be provided prior to, or upon, delivery.

9.2 Apparatus Timetable

Proponents must indicate the anticipated schedule for the delivery of the apparatus to the District of Lillooet Fire Department at 570 Main Street, Lillooet BC. The actual delivery date of the apparatus and training date(s) of fire department personnel must be coordinated with the District of Lillooet Fire Department in advance and with sufficient notice in order to accommodate fire department members' work schedules.

9.3 Onsite inspection during construction

The successful proponent shall allow the Fire Chief and/or their representatives to examine the apparatus upon request from the Fire Chief during the construction period.

9.4 Contract Price

All prices for the completed apparatus shall be stated in Canadian dollars. Any applicable Federal or Provincial taxes or levies must be included in the proposal response but are to be listed separately from the contract price. Appendix "B" – Schedule of Prices must be completed and included in the proposal package.

9.5 Payment Schedule

Proponents will outline the proposed payment schedule with sufficient detail so as to allow evaluation by the District of Lillooet Fire Department of when progress payments, if applicable, may become due.

9.6 Holdback on Delivery

In the event it is determined that the completed apparatus does not meet the specifications outlined in the contract documents or that the completed apparatus is deficient in any way, the District of Lillooet may, at the time of delivery, hold back sufficient funds to ensure compliance. The amount of the holdback, if any and the provisions for the release of funds shall be subject to discussion between the District of Lillooet and the manufacturer. The conclusion of any discrepancies and/or deficiencies must occur within a reasonable period of time.

9.7 Late Delivery

The successful proponent will be required to notify the District of Lillooet if, during the construction process, there is any change in the delivery date provided in the contract and the reason behind the change in delivery date.



APPENDIX “A” - MINIMUM SPECIFICATIONS

**FOR A NEW 2025 – Tanker Fire Apparatus FOR THE DISTRICT OF LILLOOET.
 NEW PROPOSAL SPECIFICATIONS**

If the proponent’s proposed unit is non-compliant on any of these specifications as outlined in Appendix “A”, then the third column on this form **MUST** be completed detailing what the variation being supplied is and the reason for the variation.

APPARATUS CHASSIS DESCRIPTION		Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
VEHICLE CONFIGURATION				
	FREIGHTLINER M2 106 PLUS CONVENTIONAL CHASSIS			
	2025 MODEL YEAR SPECIFIED			
	STRAIGHT TRUCK PROVISION, NON-TOWING			
	LEFT HAND PRIMARY STEERING LOCATION			
GENERAL SERVICE				
	TRUCK CONFIGURATION			
	DOMICILED, CANADA (OTHER THAN QUEBEC)			
	EPA EMISSIONS CERTIFICATION FOR 50 STATE REGISTRATION - CARB EXEMPT, FIRE AND EMERGENCY VEHICLES ONLY (INCLUDES 6X4 INCH LABEL SHIPPED LOOSE)			
	FIRE SERVICE			
	EMERGENCY VEHICLES BUSINESS SEGMENT			
	LIQUID BULK COMMODITY			
	TERRAIN / DUTY: 10% (SOME) OF THE TIME, IN TRANSIT, IS SPENT ON NON- PAVED ROADS			
	MAXIMUM 20% EXPECTED GRADE			
	MAINTAINED GRAVEL OR CRUSHED ROCK - MOST SEVERE IN-TRANSIT (BETWEEN SITES) ROAD SURFACE			
	MEDIUM TRUCK WARRANTY			
	EXPECTED FRONT AXLE(S) LOAD: 14,600.0 LBS			
	EXPECTED REAR DRIVE AXLE(S) LOAD: 31,000.0 LBS			
	EXPECTED GROSS VEHICLE WEIGHT CAPACITY: 45,600.0 LBS			



APPARATUS CHASSIS DESCRIPTION		Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
TRUCK SERVICE				
FIRE TANK – NO MAIN DRIVELINE DRIVEN SPLIT-SHAFT PTO/PUMP				
ENGINE				
DETROIT DD8 7.7L 6 CYL DUAL STAGE 375 HP @ 2200 RPM, 2600 GOV RPM, 1050 LB-FT @ 1200 RPM				
ELECTRONIC PARAMETERS				
65 MPH ROAD SPEED LIMIT				
CRUISE CONTROL SPEED LIMIT SAME AS ROAD SPEED LIMIT				
FLEET MANAGEMENT - DAILY ENGINE USAGE ENABLED				
PTO MODE BRAKE OVERRIDE – SERVICE BRAKE APPLIED				
PTO RPM WITH CRUISE SET SWITCH - 700 RPM				
PTO RPM WITH CRUISE RESUME SWITCH - 800 RPM				
PTO MODE CANCEL VEHICLE SPEED - 10 MPH				
PTO GOVERNOR RAMP RATE - 250 RPM PER SECOND				
FUEL DOSING OF AFTERTREATMENT ENABLED IN PTO MODE-CLEANS HYDROCARBONS AT HIGH TEMPERATURES ONLY				
THREE CLUSTER MENU PTO SPEEDS				
PTO SPEED 1 SETTING - 700 RPM				
ALTERNATE ROAD SPEED LIMIT - 10 MPH WITH PTO ENGAGED				
PTO MINIMUM RPM - 700				
REGEN INHIBIT SPEED THRESHOLD - 20 MPH				
ENABLE AUTO ENGINE RPM ELEVATE FOR EXTENDED IDLE				
PTO 1, DASH SWITCH, STATIONARY OPERATION				
ENGINE EQUIPMENT				
EPA 2010 / GHG2024 CONFIGURATION				
STANDARD OIL PAN				
ENGINE MOUNTED OIL CHECK AND FILL				
SIDE OF HOOD AIR INTAKE WITH NFPA COMPLIANT EMBER SCREEN AND FIRE RETARDANT DONALDSON AIR CLEANER				
DR 12V 275 AMP 40-SI BRUSHLESS PAD ALTERNATOR WITH REMOTE BATTERY VOLTAGE SENSE				
(2) DTNA GENUINE, FLOODED STARTING, MIN2000CCA, 370RC, THREADED STUD BATTERIES				



APPARATUS CHASSIS DESCRIPTION		Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
ENGINE EQUIPMENT (CONTINUED)				
	BATTERY BOX FRAME MOUNTED			
	STANDARD BATTERY JUMPERS			
	SINGLE BATTERY BOX FRAME MOUNTED LH SIDE UNDER CAB			
	WIRE GROUND RETURN FOR BATTERY CABLES WITH ADDITIONAL FRAME GROUND RETURN			
	NON-POLISHED BATTERY BOX COVER			
	POSITIVE LOAD DISCONNECT WITH CAB MOUNTED CONTROL SWITCH WITH LOCKING PROVISION MOUNTED OUTBOARD DRIVER SEAT			
	POSITIVE AND NEGATIVE POSTS FOR JUMPSTART LOCATED ON FRAME NEXT TO STARTER			
	PROGRESSIVE LOW VOLTAGE DISCONNECT AT 12.3 VOLTS FOR DESIGNATED CIRCUITS			
	WABCO 20.0 CFM SINGLE CYLINDER AIR COMPRESSOR			
	STANDARD MECHANICAL AIR COMPRESSOR GOVERNOR			
	AIR COMPRESSOR DISCHARGE LINE			
	GVG, FIRE AND EMERGENCY SERVICE VEHICLES ENGINE WARNING			
	DETROIT MD COMPRESSION BRAKE WITH ON/OFF SWITCH			
	RIGHT HAND OUTBOARD UNDER STEP MOUNTED HORIZONTAL AFTERTREATMENT SYSTEM ASSEMBLY WITH RIGHT HAND HORIZONTAL TAILPIPE EXITING FORWARD OF REAR TIRES			
	ENGINE AFTERTREATMENT DEVICE, AUTOMATIC OVER THE ROAD ACTIVE REGENERATION AND VIRTUAL REGENERATION REQUEST SWITCH IN CLUSTER AND DASH MOUNTED INHIBIT SWITCH			
	STANDARD EXHAUST SYSTEM LENGTH			
	RIGHT HAND HORIZONTAL TAILPIPE, EXIT FORWARD OF REAR TIRES			
	6 GALLON DIESEL EXHAUST FLUID TANK			
	100 PERCENT DIESEL EXHAUST FLUID FILL			
	LEFT HAND MEDIUM DUTY STANDARD DIESEL EXHAUST FLUID TANK LOCATION			
	STANDARD DIESEL EXHAUST FLUID PUMP MOUNTING			
	STANDARD DIESEL EXHAUST FLUID TANK CAP			
	AIR POWERED ON/OFF ENGINE FAN CLUTCH			
	AUTOMATIC FAN CONTROL WITH DASH SWITCH AND INDICATOR LIGHT, NON ENGINE MOUNTED			
	DETROIT ENGINE MOUNTED FUEL/WATER SEPARATOR WITH WATER-IN-FUEL SENSOR AND ESOC			



APPARATUS CHASSIS DESCRIPTION		Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
ENGINE EQUIPMENT (CONTINUED)				
	FULL FLOW OIL FILTER			
	900 SQUARE INCH ALUMINUM RADIATOR			
	ANTIFREEZE TO -60F, ETHYLENE GLYCOL PRE-CHARGED SCA HEAVY DUTY COOLANT			
	GATES BLUE STRIPE COOLANT HOSES OR EQUIVALENT			
	CONSTANT TENSION HOSE CLAMPS FOR COOLANT HOSES			
	RADIATOR DRAIN VALVE			
	LOWER RADIATOR GUARD			
	ALUMINUM FLYWHEEL HOUSING			
	DELCO 12V 31MT STARTER WITH INTEGRATED MAGNETIC SWITCH			
TRANSMISSION				
	ALLISON 3000 EVS AUTOMATIC TRANSMISSION WITH PTO PROVISION			
TRANSMISSION EQUIPMENT				
	ALLISON VOCATIONAL PACKAGE 227 - AVAILABLE ON 3000/4000 PRODUCT FAMILIES WITH VOCATIONAL MODEL EVS			
	ALLISON VOCATIONAL RATING FOR FIRE TRUCK/EMERGENCY VEHICLE APPLICATIONS AVAILABLE WITH ALL PRODUCT FAMILIES			
	PRIMARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY			
	SECONDARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY			
	PRIMARY SHIFT SCHEDULE RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE			
	SECONDARY SHIFT SCHEDULE RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE			
	PRIMARY SHIFT SPEED RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE			
	SECONDARY SHIFT SPEED RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE			
	ENGINE BRAKE RANGE PRESELECT RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED VOCATIONAL USAGE			
	ENGINE BRAKE RANGE ALTERNATE PRESELECT RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE			



APPARATUS CHASSIS DESCRIPTION		Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
TRANSMISSION EQUIPMENT (CONTINUED)				
	FUEL SENSE 2.0 DISABLED – PERFORMANCE – TABLE BASED			
	DRIVER SWITCH INPUT - DEFAULT - NO SWITCHES			
	DIRECTION CHANGE ENABLED WITH MULTIPLEXED SERVICE BRAKES - ALLISON 5TH GEN TRANSMISSIONS			
	QUICKFIT BODY LIGHTING CONNECTOR UNDER CAB, WITH BLUNT CUTS			
	ELECTRONIC TRANSMISSION WIRING TO CUSTOMER INTERFACE CONNECTOR			
	CHELSEA PTO - 280 SERIES			
	PTO MOUNTING, LEFT HAND SIDE OF MAIN TRANSMISSION ALLISON			
	MAGNETIC PLUGS, ENGINE DRAIN, TRANSMISSION DRAIN, AXLE FILL AND DRAIN			
	PUSH BUTTON ELECTRONIC SHIFT CONTROL, DASH MOUNTED			
	TRANSMISSION PROGNOSTICS - ENABLED 2013			
	WATER TO OIL TRANSMISSION COOLER, IN RADIATOR END TANK			
	TRANSMISSION OIL CHECK AND FILL WITH ELECTRONIC OIL LEVEL CHECK			
	SYNTHETIC TRANSMISSION FLUID (TES-295 COMPLIANT)			
FRONT AXLE AND EQUIPMENT				
	MERITOR MFS+ 14,700# FF1 71.5 INCH KPI/3.5 INCH DROP SINGLE FRONT AXLE			
	MERITOR 16.5X5 Q+ CAST SPIDER CAM FRONT BRAKES, DOUBLE ANCHOR, FABRICATED SHOES			
	FIRE AND EMERGENCY SEVERE SERVICE, NON-ASBESTOS FRONT LINING			
	CAST IRON OUTBOARD FRONT BRAKE DRUMS			
	FRONT BRAKE DUST SHIELDS			
	FRONT OIL SEALS			
	VENTED FRONT HUB CAPS WITH WINDOW AND CENTER PLUG - OIL			
	STANDARD SPINDLE NUTS FOR ALL AXLES			
	MERITOR AUTOMATIC FRONT SLACK ADJUSTERS			
	TRW TAS-85 POWER STEERING			



APPARATUS CHASSIS DESCRIPTION		Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
FRONT AXLE AND EQUIPMENT (CONTINUED)				
	POWER STEERING PUMP			
	2 QUART SEE THROUGH POWER STEERING RESERVOIR			
	CURRENT AVAILABLE SYNTHETIC 75W-90 FRONT AXLE LUBE			
FRONT SUSPENSION				
	14,600# DUAL TAPER LEAF FRONT SUSPENSION			
	MAINTENANCE FREE RUBBER BUSHINGS - FRONT SUSPENSION			
	FRONT SHOCK ABSORBERS			
REAR AXLE AND EQUIPMENT				
	RS-30-185 31,000# U-SERIES FIRE/EMERGENCY SERVICE SINGLE REAR AXLE			
	6.14 REAR AXLE RATIO			
	IRON REAR AXLE CARRIER WITH STANDARD AXLE HOUSING			
	RPL14 MERITOR SERVICE-FREE MAIN DRIVELINE WITH HALF ROUND (17T) YOKES			
	DRIVER CONTROLLED TRACTION DIFFERENTIAL – SINGLE REAR AXLE			
	DRIVER CONTROLLED DIFFERENTIAL LOCK REAR VALVE FOR SINGLE DRIVE AXLE			
	INDICATOR LIGHT FOR EACH DIFFERENTIAL LOCKOUT SWITCH, ENGAGE <5 MPH, DISENGAGE >25 MPH			
	MERITOR 16.5X7 P CAST SPIDER CAM REAR BRAKES, DOUBLE ANCHOR, CAST SHOES			
	FIRE AND EMERGENCY SEVERE SERVICE NON-ASBESTOS REAR BRAKE LINING			
	BRAKE CAMS AND CHAMBERS ON FORWARD SIDE OF DRIVE AXLE			
	WEBB CAST IRON REAR BRAKE DRUMS			
	REAR BRAKE DUST SHIELDS			
	REAR OIL SEALS			
	WABCO TRISTOP D LONGSTROKE 1-DRIVE AXLE SPRING PARKING CHAMBERS			
	HALDEX AUTOMATIC REAR SLACK ADJUSTERS			
	CURRENT AVAILABLE SYNTHETIC 75W-90 REAR AXLE LUBE			



APPARATUS CHASSIS DESCRIPTION		Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
REAR SUSPENSION				
	31,000# FLAT LEAF SPRING REAR SUSPENSION WITH HELPER AND RADIUS ROD FOR FIRE/EMERGENCY SERVICE			
	SPRING SUSPENSION - NO AXLE SPACERS			
	STANDARD U-BOLT PAD WITH U-BOLTS EXTENDED 1.00" LONGER THAN STANDARD			
	FORE/AFT CONTROL RODS			
BRAKE SYSTEM				
	AIR BRAKE PACKAGE			
	WABCO 4S/4M ABS			
	REINFORCED NYLON, FABRIC BRAID AND WIRE BRAID CHASSIS AIR LINES			
	FIBER BRAID PARKING BRAKE HOSE			
	STANDARD BRAKE SYSTEM VALVES			
	STANDARD AIR SYSTEM PRESSURE PROTECTION AND 85 PSI PRESSURE PROTECTION FOR AIR HORNS			
	STD U.S. FRONT BRAKE VALVE			
	RELAY VALVE WITH 5-8 PSI CRACK PRESSURE, NO REAR PROPORTIONING VALVE			
	WABCO SYSTEM SAVER HP WITH INTEGRAL AIR GOVERNOR AND HEATER			
	AIR DRYER MOUNTED UNDER HOOD			
	STEEL AIR TANKS MOUNTED AFT INSIDE AND/OR BELOW FRAME JUST FORWARD OF REAR SUSPENSION			
	1730 CUBIC INCH AIR HORN TANK, 85 PSI PRESSURE PROTECTED INLET WITH CHECK VALVE AND QUICK DISCONNECT FITTING			
	BW DV-2 AUTO DRAIN VALVE WITHOUT HEATER ON ALL TANKS			
WHEELBASE & FRAME				
	5275MM (208 INCH) WHEELBASE			
	11/32X3-1/2X10-15/16 INCH STEEL FRAME (8.73MM X 277.8MM / 0.344 X 10.94 INCH) 120KSI			
	1/4 INCH (6.35MM) C-CHANNEL INNER FRAME REINFORCEMENT			
	SQUARE END OF FRAME			



APPARATUS CHASSIS DESCRIPTION		Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
WHEELBASE & FRAME (CONTINUED)				
	FRONT CLOSING CROSSMEMBER			
	LIGHTWEIGHT HEAVY DUTY ALUMINUM ENGINE CROSSMEMBER			
	STANDARD CROSSMEMBER BACK OF TRANSMISSION			
	STANDARD MIDSHIP #1 CROSSMEMBER(S); FIRST MIDSHIP MOUNTED 36.0 INCHES BACK OF CAB			
	STANDARD REAR MOST CROSSMEMBER			
	STANDARD SUSPENSION CROSSMEMBER			
CHASSIS EQUIPMENT				
	THREE-PIECE 14 INCH CHROMED STEEL BUMPER WITH COLLAPSIBLE ENDS			
	FRONT TOW HOOKS - FRAME MOUNTED			
	BUMPER MOUNTING FOR SINGLE LICENSE PLATE			
	FENDER AND FRONT OF HOOD MOUNTED FRONT MUDFLAPS			
	GRADE 8 THREADED HEX HEADED FRAME FASTENERS			
	EXTERIOR HARNESSES WRAPPED IN ABRASION TAPE			
	FACTORY INSTALLED BENDIX NEXT GEN SMARTIRE TIRE PRESSURE MONITORING SYSTEM WITH WHEEL RIM MOUNTED NEXT GEN SENSORS AND INTEGRATED IN DASH			
	LEVEL FRAME RAILS (+1%, -0%) WHEN CHASSIS IS LOADED TO FRONT AND REAR SUSPENSION RATINGS			
	TANK BODY 1501 TO 3000 GALLONS			
	CLEAR FRAME RAILS FROM BACK OF CAB TO FRONT REAR SUSPENSION BRACKET, BOTH RAILS OUTBOARD			
FUEL TANKS				
	50 GALLON/189 LITER SHORT RECTANGULAR ALUMINUM FUEL TANK - LEFT HAND			
	RECTANGULAR FUEL TANK			
	PLAIN ALUMINUM/PAINTED STEEL FUEL/HYDRAULIC TANK WITH PAINTED BANDS			
	FUEL TANK FORWARD			
	PLAIN STEP FINISH			
	FUEL TANK CAP			
	DETROIT FUEL/WATER SEPARATOR WITH BYPASS			



APPARATUS CHASSIS DESCRIPTION		Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
FUEL TANKS (CONTINUED)				
	EQUIFLO INBOARD FUEL SYSTEM			
	AUXILIARY FUEL SUPPLY AND RETURN PORTS LOCATED ON LEFT HAND FUEL TANK			
	HIGH TEMPERATURE REINFORCED NYLON FUEL LINE			
TIRES				
	MICHELIN XDN2 GRIP 315/80R22.5 20 PLY RADIAL FRONT TIRES			
	MICHELIN XDN2 GRIP 315/80R22.5 20 PLY RADIAL REAR TIRES			
HUBS				
	CONMET PRESET PLUS PREMIUM IRON FRONT HUBS			
	WEBB IRON REAR HUBS			
WHEELS				
	ALCOA ULTRA ONE 89U64X 22.5X9.00 10-HUB PILOT 5.99 INSET ALUMINUM FRONT WHEELS			
	ALCOA ULTRA ONE 89U64X 22.5X9.00 10-HUB PILOT 5.99 INSET ALUMINUM REAR WHEELS			
	POLISHED FRONT WHEELS; OUTSIDE ONLY			
	POLISHED REAR WHEELS; OUTSIDE OF OUTER WHEELS ONLY			
	BENDIX SMARTIRE TIRE PRESSURE MONITORING SYSTEM WHEEL/RIM MOUNTED SENSORS, ALL AXLES			
	FRONT WHEEL MOUNTING NUTS			
	REAR WHEEL MOUNTING NUTS			
CAB EXTERIOR				
	106 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB			
	AIR CAB MOUNTING			
	CAB ROOF REINFORCEMENTS FOR ROOF MOUNTED COMPONENTS			
	LEFT HAND AND RIGHT HAND EXTERIOR GRAB HANDLES WITH SINGLE RUBBER INSERT			
	HOOD MOUNTED CHROMED PLASTIC GRILLE			
	CHROME HOOD MOUNTED AIR INTAKE GRILLE			
	FIBERGLASS HOOD			
	HOOD LINER, ADDED FIREWALL AND FLOOR HEAT INSULATION			



APPARATUS CHASSIS DESCRIPTION		Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
CAB EXTERIOR (CONTINUED)				
	DUAL 25 INCH ROUND STUTTER TONE HOOD MOUNTED AIR HORNS WITH DUAL LANYARDS			
	SINGLE ELECTRIC HORN			
	DUAL HORN SHIELDS			
	REAR LICENSE PLATE MOUNT END OF FRAME			
	INTEGRAL HEADLIGHT/MARKER ASSEMBLY WITH CHROME BEZEL			
	LED AERODYNAMIC MARKER LIGHTS			
	DAYTIME RUNNING LIGHTS			
	OMIT STOP/TAIL/BACKUP LIGHTS AND PROVIDE WIRING WITH SEPARATE STOP/TURN WIRES TO 4 FEET BEYOND END OF FRAME			
	STANDARD FRONT TURN SIGNAL LAMPS			
	AUTOMATIC ON/OFF, ENGINE COMPARTMENT, HOOD ACTIVATED WORK LIGHT WITH MANUAL OVERRIDE			
	DUAL WEST COAST BRIGHT FINISH HEATED MIRRORS WITH LEFT HAND AND RIGHT HAND REMOTE			
	DOOR MOUNTED MIRRORS			
	102 INCH EQUIPMENT WIDTH			
	LEFT HAND AND RIGHT HAND 8 INCH BRIGHT FINISH CONVEX MIRRORS MOUNTED UNDER PRIMARY MIRRORS			
	STANDARD SIDE/REAR REFLECTORS			
	DUAL LEVEL CAB ENTRY STEPS ON BOTH SIDES			
	NO REAR WINDOW			
	TINTED DOOR GLASS LEFT HAND AND RIGHT HAND WITH TINTED NON-OPERATING WING WINDOWS			
	RIGHT HAND AND LEFT HAND ELECTRIC POWERED WINDOWS			
	1-PIECE SOLAR GREEN GLASS WINDSHIELD			
	2 GALLON WINDSHIELD WASHER RESERVOIR WITHOUT FLUID LEVEL INDICATOR, FRAME MOUNTED			



APPARATUS CHASSIS DESCRIPTION		Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
	CAB INTERIOR			
	RUGGED TRIM PACKAGE			
	GRAY & CARBON VINYL INTERIOR "RUGGED"			
	CARBON WITH PREMIUM GUNMETAL ACCENT (RUGGED)			
	MOLDED PLASTIC DOOR PANEL			
	BLACK MATS WITH SINGLE INSULATION			
	FORWARD ROOF MOUNTED CONSOLE			
	LEFT AND RIGHT HAND DOOR STORAGE POCKETS INTEGRATED INTO MOLDED DOOR PANELS			
	DIGITAL ALARM CLOCK IN DRIVER DISPLAY			
	(2) CUP HOLDERS LEFT HAND AND RIGHT HAND DASH			
	M2/SD DASH			
	HEATER, DEFROSTER AND AIR CONDITIONER			
	STANDARD HVAC DUCTING WITH SNOW SHIELD FOR FRESH AIR INTAKE			
	MAIN HVAC CONTROLS WITH RECIRCULATION SWITCH			
	STANDARD HEATER PLUMBING			
	VALEO HEAVY DUTY A/C REFRIGERANT COMPRESSOR			
	BINARY CONTROL, R-134A			
	PREMIUM INSULATION			
	SOLID-STATE CIRCUIT PROTECTION AND FUSES			
	12V NEGATIVE GROUND ELECTRICAL SYSTEM			
	PREMIUM LED CAB LIGHTING			
	NO SECURITY DEVICE			
	DOOR LOCKS AND IGNITION SWITCH KEYED THE SAME			
	KEY QUANTITY OF 2			
	LEFT AND RIGHT HAND ELECTRIC DOOR LOCKS			
	SEATS INC 911 UNIVERSAL SERIES HIGH BACK AIR SUSPENSION DRIVER SEAT			
	SEATS INC 911 UNIVERSAL SERIES HIGH BACK NON-SUSPENSION PASSENGER SEAT			
	LEFT AND RIGHT HAND INTEGRAL DOOR PANEL ARMRESTS			
	BLACK CORDURA PLUS CLOTH DRIVER SEAT COVER			



APPARATUS CHASSIS DESCRIPTION		Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
CAB INTERIOR (CONTINUED)				
	BLACK CORDURA PLUS CLOTH PASSENGER SEAT COVER			
	HIGH VISIBILITY ORANGE SEAT BELTS WITH DRIVER INDICATOR LIGHT AND AUDIBLE ALARM			
	ADJUSTABLE TILT AND TELESCOPING STEERING COLUMN			
	4-SPOKE 18 INCH (450MM) BLACK STEERING WHEEL WITH SWITCHES			
	DRIVER AND PASSENGER INTERIOR SUN VISORS			
	INTERFACE CONNECTORS AND WIRING FOR CUSTOMER PROVIDED LED STEP LIGHTING			
INSTRUMENTS & CONTROLS				
	12 EXTRA PROGRAMMABLE SWITCHES/INDICATORS			
	FULLY CONFIGURABLE CENTER INSTRUMENT PANELS			
	BRIGHT ARGENT FINISH GAUGE BEZELS			
	LOW AIR PRESSURE INDICATOR LIGHT AND AUDIBLE ALARM			
	DUAL NEEDLE PRIMARY AND SECONDARY AIR PRESSURE GAUGE			
	ELECTRONIC AIR RESTRICTION INDICATOR DISPLAYED IN DRIVER DISPLAY			
	97 DB BACKUP ALARM			
	ELECTRONIC CRUISE CONTROL WITH CONTROLS ON STEERING WHEEL SPOKES			
	IGNITION SWITCH WITH NON-REMOVABLE KEY			
	PREMIUM INSTRUMENT CLUSTER WITH 5.0 INCH TFT COLOR DISPLAY			
	DIGITAL PANEL LAMP DIMMER SWITCH IN DRIVER DISPLAY			
	HEAVY DUTY ONBOARD DIAGNOSTICS INTERFACE CONNECTOR LOCATED BELOW LEFT HAND DASH			
	2 INCH ELECTRIC FUEL GAUGE			
	ENGINE REMOTE INTERFACE FOR REMOTE THROTTLE			
	QUICKFIT POWERTRAIN INTERFACE CONNECTOR UNDER CAB WITH CAPS			
	QUICKFIT PROGRAMMABLE INTERFACE CONNECTOR UNDER CAB WITH BLUNT CUTS			
	ENGINE REMOTE INTERFACE CONNECTOR AT POWERTRAIN INTERFACE CONNECTOR			
	DIGITAL SINGLE REAR AXLE TEMPERATURE IN DRIVER DISPLAY WITH SENSOR SHIELD			



INSTRUMENTS & CONTROLS (CONTINUED)			
ELECTRICAL ENGINE COOLANT TEMPERATURE GAUGE			
DIGITAL ENGINE OIL TEMPERATURE IN DRIVER DISPLAY			
2 INCH TRANSMISSION OIL TEMPERATURE GAUGE			
ELECTRONIC OUTSIDE TEMPERATURE SENSOR DISPLAY IN DRIVER MESSAGE CENTER			
ENGINE AND TRIP HOUR METERS INTEGRAL WITHIN DRIVER DISPLAY			
PTO CONTROLS FOR ENHANCED VEHICLE ELECTRIC/ELECTRONIC ARCHITECTURE			
NO OBSTACLE DETECTION SYSTEM			
NO DR ASSIST SYSTEM			
NO VEHICLE STABILITY ADVISOR OR CONTROL			
NO LANE DEPARTURE WARNING SYSTEM			
ELECTRIC ENGINE OIL PRESSURE GAUGE			
QUICKFIT PROGRAMMABLE INTERFACE MODULE			
NO RADIO			
NO AM/FM RADIO ANTENNA			
STANDARD RADIO WIRING WITH STEERING WHEEL CONTROLS			
ELECTRONIC KPH SPEEDOMETER WITH SECONDARY MPH SCALE, WITHOUT ODOMETER			
STANDARD VEHICLE SPEED SENSOR			
ELECTRONIC 3000 RPM TACHOMETER			
DETROIT CONNECT PLATFORM HARDWARE			
3 YEARS DETROIT CONNECT BASE PACKAGE (FEATURES VARY BY MODEL) DETROIT CONNECT PLATFORM			
TMC RP1226 ACCESSORY CONNECTOR LOCATED BEHIND PASSENGER SIDE REMOVEABLE DASH PANEL			
IGNITION SWITCH CONTROLLED ENGINE STOP			
PRE-TRIP INSPECTION FEATURE FOR EXTERIOR LAMPS AND SERVICE BRAKES			
(2) OVERHEAD MOUNTED LANYARD CONTROLS: (1) OFFICER AIR HORN AND (1) DRIVER AIR HORN			
NO TRAILER HAND CONTROL BRAKE VALVE			
2 INCH TURBO AIR PRESSURE GAUGE			
DIGITAL VOLTAGE DISPLAY INTEGRAL WITH DRIVER DISPLAY			



APPARATUS CHASSIS DESCRIPTION		Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
INSTRUMENTS & CONTROLS (CONTINUED)				
	SINGLE ELECTRIC WINDSHIELD WIPER MOTOR WITH DELAY			
	ROTARY HEADLAMP SWITCH, MARKER LIGHTS/HEADLIGHTS SWITCH WITH PULL OUT FOR OPTIONAL FOG/ROAD LAMPS			
	ONE VALVE PARKING BRAKE SYSTEM WITH DASH VALVE CONTROL AUTO NEUTRAL AND WARNING INDICATOR			
	SELF-CANCELING TURN SIGNAL SWITCH WITH DIMMER, HEADLAMP FLASH, WASH/WIPE/INTERMITTENT			
	INTEGRAL ELECTRONIC TURN SIGNAL FLASHER WITH 40 AMP (20 AMP PER SIDE) TRAILER LAMP CAPACITY			
DESIGN				
	PAINT: ONE SOLID COLOR			
COLOR				
	CAB COLOR A: L2225EY CANDY APPLE RED ELITE EY			
	CHASSIS PAINT: BLACK, HIGH SOLIDS POLYURETHANE			
	UNDERCOATING: STANDARD E COAT			

APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
<u>CHASSIS</u>			
<u>Chassis - Freightliner M2 – 2 Door</u> - Chassis information: Engine: Detroit DD8 7.7l 6 Cyl Dual Stage 375 Hp Transmission: Allison 3000 EVS Automatic Transmission with PTO Provision VIN: N/A			
<u>Chassis - Exhaust and Heat Shields</u> The exhaust will be extended to edge of the body near the rear wheels. Fabricated stainless steel exhaust heat shields will be provided to eliminate excessive heat to the body. The shields will be installed to where the exhaust runs beneath the body to the point where the exhaust exits below the body side.			
<u>Chassis - Exhaust Extrication Accessory - Plymovent Adapter (each)</u> A Plymovent conical adapter will be supplied and installed on the chassis exhaust tip for use with the in hall exhaust extrication system. - Pt#: 90380-1 (for 4" exhaust)			
<u>Chassis - Power Take Off (PTO) - 10 Bolt - Chelsea 280 Series</u> - Freightliner style PTO switch			
<u>Chassis - Mud Flaps - Front (pair)</u> Heavy duty front mud flaps will be supplied.			
<u>Chassis - Mud Flaps - Rear (pair)</u> A pair of heavy duty front mud flaps will be supplied and installed to the rear wheel well area.			
<u>Chassis - Automatic Tire Chains - Onspot</u> The rear axle will be supplied with Onspot automatic air activated snow chains. A guarded on/off toggle switch will be mounted on the cab dash, easily accessible by the driver.			
<u>Chassis - Cab Step Running Boards - 2 Door Cab</u> The original cab steps will be replaced with custom manufactured running board steps that will run the length of the 2-door cab. Each stepping surface will be fabricated using NFPA checker plate with appropriate support structure. The lower step will be framed with a 1/4" thick, C channel aluminum extrusion measuring 3" high by 1 1/2" deep.			
<u>Chassis - Tow Loops - Rear - Outside (pair)</u> A pair of forged steel tow loops will be installed through the rear body face and attach directly to the chassis frame. Each loop opening will measure a minimum of 2". The tow loops will be chrome plated for an aesthetically pleasing finish.			

APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
<p>CHASSIS</p>			
<p>Chassis - Console - Commercial Cab with Open Storage A console will be fabricated from 1/8" aluminum sheet and mounted to the floor of the cab interior, between the driver and officer seats. The console will extend from the dash area to the rear edge of the seats and will be enclosed on all six sides while conforming to the chassis floor shape. The width of the console will be as wide as practical to ensure the least amount of interference with seat belt receptacles while still meeting the mounting needs of the requested accessories.</p> <p>The forward portion of the top surface will be flat and will be high enough to ensure comfortable access from both front seating positions. The top surface will be completely removeable allowing service access to the interior for any specified electrical accessories.</p> <p>The rear portion of the console will be level with the forward portion and finished with a storage area open to the top. The open storage area will be as deep and as wide console can reasonably accommodate. The open storage area length will at a minimum allow for a standard 11 1/2" long binder. Two removable dividers will be supplied and installed within the open storage area. The entire exterior of the console, open storage, and dividers will be finished with a textured bed liner coating, black in colour.</p> <p>The entire exterior of the console, open storage, and dividers will be finished with a textured bed liner coating, black in colour.</p>			
<p>Chassis - Console Accessory - Shelf A shelf will be fabricated from 1/8" aluminum sheet and attached to the console to allow for equipment or electrical accessory mounting.</p> <p>The shelf coating and colour will match the console.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
PUMPHOUSE			
<p><u>Pumphouse - Mid Mount - Side Control - Enclosed in Body - Small</u> The area between the left and right body sides, at the traditional mid-ship location, will be designated as the pump compartment. The compartment area will allow the installation of a low, 'under-tank' mounted pump configuration.</p> <p>A small pump operator's control enclosure will be fabricated from 3/16" aluminum and installed in the L1 body compartment. The front face of the enclosure will be angled to provide a better viewing angle for the operator and will be removable allowing for service access of panel mounted components when necessary. The entire enclosure will have a textured black bed liner finish.</p>			
<p><u>Pumphouse - Belly/Heat Pan - Compartment Integral with Body</u> To retain heat within the pump area integral with the body structure and to protect from freezing there will be a removable heat/belly pan assembly installed below the fire pump complete with multiple removable sections. The heat pan assembly will consist of formed panels utilizing 1/8" and 3/16" 5052-H32 aluminum sheet. The design will be modular in nature to allow maximum flexibility and access for service needs while enclosing the compartment bottom as much or as little as desired to suit winter and summer pump operations. The panels will require only simple hand tools to assemble or disassemble.</p> <p>The assembly will consist of two removable vertical panels fastened to the pump compartment creating one forward and one rearward face, closing in these respective area's as much as possible up to the bottom flange of the chassis frame rails. Each panel will be provided complete with openings as needed for drive shafts, exhaust pipe, and various accessories specific to the apparatus. Each of the vertical faces will include an integrally formed flange along the length of their respective bottom edge.</p> <p>The bottom of the heat pan assembly will be closed in using two formed panels that is fully removable separate from each other and both the front and rear vertical panels. Each panel will be secured utilizing a full width tongue and groove style center support and fasteners on the opposite end. Each bottom panel will also be fastened to the bottom flange of each respective vertical panel.</p>			
<p><u>Pumphouse - Heater - Hot Water with Switch</u> One (1) 40,000 BTU heater(s) will be supplied and installed as low as practical in the pump compartment to assist with preventing the fire pump from freezing. The heater will include two 12 VDC fans capable of 334CFM with an on/off switch provided at the pump operator's panel.</p> <p>The heater system will be plumbed using rubber hoses and stainless-steel hose clamps with hoses supported to suit the application and prevent damage from abrasion or contact with external heat sources. A seasonal shut off valve will be supplied.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
PUMPHOUSE (continued)			
<p><u>Pump Panel - Pressure Governor - FRC - InControl 400</u> A Fire Research InControl TGA400 series pressure governor and monitoring display kit shall be installed on the pump operator's panel. The kit shall include a control module, intake pressure sensor, discharge pressure sensor, and cables. The control module case shall be waterproof and have dimensions not to exceed 5 1/2" high by 10 1/2" wide by 2" deep. The control knob shall be 2" in diameter with no mechanical stops, have a serrated grip, and a red idle push button in the center. It shall not extend more than 1 3/4" from the front of the control module. Inputs for monitored information shall be from a J1939 databus or independent sensors. Outputs for engine control shall be on the J1939 databus or engine specific wiring.</p> <p>The following continuous displays shall be provided:</p> <ul style="list-style-type: none"> ● Pump discharge; shown with four daylight bright LED digits more than 1/2" high ● Pump Intake; shown with four daylight bright LED digits more than 1/2" high ● Pressure / RPM setting; shown on a dot matrix message display ● Pressure and RPM operating mode LEDs ● Throttle ready LED ● Engine RPM; shown with four daylight bright LED digits more than 1/2" high ● Check engine and stop engine warning LEDs ● Oil pressure; shown on a dual color (green/red) LED bar graph display ● Engine coolant temperature; shown on a dual color (green/red) LED bar graph display ● Transmission Temperature: shown on a dual color (green/red) LED bar graph display ● Battery voltage; shown on a dual color (green/red) LED bar graph display. <p>The dot-matrix message display shall show diagnostic and warning messages as they occur. It shall show monitored apparatus information, stored data, and program options when selected by the operator. All LED intensity shall be automatically adjusted for day and nighttime operation.</p>			
<p>The program shall store the accumulated operating hours for the pump and engine to be displayed with the push of a button. It shall monitor inputs and support audible and visual warning alarms for the following conditions:</p> <ul style="list-style-type: none"> ● High Battery Voltage ● Low Battery Voltage (Engine Off) ● Low Battery Voltage (Engine Running) ● High Transmission Temperature ● Low Engine Oil Pressure ● High Engine Coolant Temperature 			



<ul style="list-style-type: none"> • Out of Water (visual alarm only) • No Engine Response (visual alarm only). <p>The program features shall be accessed via push buttons and a control knob located on the front of the control panel. There shall be a USB port located at the rear of the control module to upload future firmware enhancements.</p> <p>Inputs to the control panel from the pump discharge and intake pressure sensors shall be electrical. The discharge pressure display shall show pressures from 0 to 600 psi. The intake pressure display shall show pressures from -30 in. Hg to 600 psi.</p> <p>The governor shall operate in two control modes, pressure and RPM. No discharge pressure or engine RPM variation shall occur when switching between modes. A throttle ready LED shall light when the interlock signal is recognized. The governor shall start in pressure mode and set the engine RPM to idle. In pressure mode the governor shall automatically regulate the discharge pressure at the level set by the operator. In RPM mode the governor shall maintain the engine RPM at the level set by the operator except in the event of a discharge pressure increase. The governor shall limit a discharge pressure increase in RPM mode to a maximum of 30 psi. Other safety features shall include recognition of no water conditions with an automatic programmed response and a push button to return the engine to idle.</p>			
<p><u>Pump Panel - Water Level Gauge - Class1 - Intelli-Tank ITL</u></p> <p>A Class 1 Intelli-Tank ITL water level gauge kit will be supplied with the display installed at the pump operator's panel. Each gauge shall indicate the water level on four easy to read super bright, LED display and show increments of 1/8 of a tank. The tank level gauge will utilize an externally mounted pressure transducer and be capable of visual indication of nine accurate levels. No probe will be mounted inside the tank. The gauge will be easily identifiable with a coloured label.</p> <ul style="list-style-type: none"> - 1 at the drivers pump panel - 1 at the rear body, interlocked with the park brake 			
<p><u>Pump Panel - Water Level Gauge - Class1 - Dash Indicator</u></p> <p>A Class1 dash mounted mini water level indicator will be supplied and installed in the cab complete with four (4) indicator lights.</p>			
<p><u>Pump Panel - Engine Cooler Valve with Heat Exchanger</u></p> <p>A closed-circuit auxiliary heat exchange will be supplied and installed in the engine cooling line, with a 1/4 turn control valve located at the pump panel.</p> <p>This circuit will provide additional chassis engine cooling capacity without loss of any antifreeze.</p>			
<p><u>Pump Panel - Pump Cooler Valve</u></p> <p>A pump cooler circuit will be supplied with a 1/4 turn control valve located at the pump panel.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
PUMP			
<p><u>Pump Panel - Alarm - High Temperature/Low Oil Pressure/Low Voltage</u> An alarm system consisting of a combination red light and audible buzzer will be installed at the pump panel to indicate the following conditions:</p> <ul style="list-style-type: none"> ● Chassis engine coolant temperature is too high ● Chassis engine oil level is too low ● Chassis battery system is experiencing low voltage <p>An identification label will be provided adjacent to the light.</p>			
<p><u>Pump - Hale AP</u> A Hale AP series pump will be supplied and installed on the apparatus. The entire pump shall be cast, manufactured and tested at the pump manufacturer's factory.</p> <p>The entire pump, both suction and discharge passages, shall be hydrostatically tested to a pressure of 500 PSI. The pump shall be fully tested at the pump manufacturer's factory to the performance specs as outlined by the latest NFPA Standard 1901. Pump shall be free from objectionable pulsation and vibration.</p> <p>The pump body and related parts shall be of fine grain alloy cast iron, with a minimum tensile strength of 30,000 PSI. All moving parts in contact with water shall be of high quality bronze or stainless steel. Pump body shall be vertically split, on a single plane, for easy removable of impeller assembly, including clearance rings.</p> <p>Pump shaft to be rigidly supported by two bearings for minimum deflection. The bearings shall be heavy-duty, deep groove ball bearings in the gearbox and they shall be splash lubricated.</p> <p>Pump impeller shall be hard, fine grain bronze of the mixed flow design; accurately machined, hand-ground and individually balanced. The vanes of the impeller intake eye shall be hand-ground and polished to a sharp edge and be of sufficient size and design to provide ample reserve capacity utilizing minimum horsepower.</p> <p>Impeller clearance rings shall be bronze, easily renewable without replacing impellers or pump volute body.</p> <p>The pump shaft shall be heat-treated, electric furnace, corrosion resistant, stainless steel and sealed with double lip oil seal to keep road dirt and water out of the gearbox.</p>			
<p><u>Pump Rating - 420 IGPM</u> The pump will have a NFPA and ULC rated capacity of 420 IGPM. - Pump and roll</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
PUMP			
<p><u>Shaft Seal - Hale Mechanical</u> A mechanical seal for the pump shaft will be supplied on the suction side of the pump. The mechanical seal will be spring loaded, maintenance free and self-adjusting. The seal construction shall be a carbon sealing ring, stainless steel coil spring, Viton rubber cup, and a tungsten carbide seat.</p>			
<p><u>PTO Driven - Hale - Vertical</u> The gearbox shall be driven by a transmission mounted PTO with sufficient horsepower and RPM to enable the pump to meet and exceed its rated performance without exceeding the PTO's torque rating.</p> <p>The gearbox shall be cast, manufactured, and tested at the pump manufacturer's factory.</p> <p>The design will include ample capacity for lubrication reserve and to maintain the proper operating temperature.</p> <p>The gearbox drive shafts shall be of heat-treated chromium steel. All gears shall be of highest quality electric furnace chrome nickel steel. Bores shall be ground to size and teeth integrated, crown-shaved and hardened, to give an extremely accurate gear for long life, smooth, quiet running and higher load carrying capability. An accurately cut spur design shall be provided to eliminate all possible end thrust.</p> <p>The gear ratio shall be selected to give maximum performance with the engine, transmission, and PTO selected.</p>			
<p><u>Drivelines - PTO - Midship Pump</u> Drive shafts will be manufactured and installed between the transmission mounted PTO and the midship pump gear box. The new drive shafts will be adequately sized to suite the application.</p> <p>All new and modified drive shafts will be professionally ground and balanced to eliminate vibration.</p> <p>A driveline analysis will be performed to ensure there are no vibrations. A copy of the results included in the delivery documentation.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
PUMP			
<p><u>PTO Pump Operation - Stationary Pumping and Pump-and-Roll</u> The PTO pump will be utilized for both stationary pump operations and 'Pump and Roll' operations.</p> <p>Three lights will be provided in the cab complete with labels to indicate the following conditions:</p> <p>Pump Engaged: indicates the pump shift has been completed OK to Pump indicates the transmission is in neutral and the park brake is engaged OK to Pump and Roll indicated the transmission is in gear and the park brake is disengaged</p> <p>A 'Throttle Ready' light with label will be provided on the pump operators panel and will be active when the 'OK to Pump' light in the cab is active.</p>			
<p><u>Primer - Electric - Hale ESP</u> One (1) Hale ESP priming pump will be provided and installed for use with the specified pump. The primer will be remote mounted in an easily accessible area for service. The primer shall be positive displacement, oil-less rotary vane electric motor driven pump conforming to the requirements of NFPA 1901. The pump body shall be manufactured of heat-treated anodized aluminum for wear and corrosion resistance.</p> <p>The priming pump shall be capable of producing a minimum 24 Hg vacuum at 2,000 feet above sea level. The electric motor shall be a 12 VDC totally enclosed unit. The priming pump shall not require lubrication.</p>			
<p><u>Primer - Valve - Hale PVG</u> One (1) push/pull style, Hale PVG priming valve will be supplied and installed at the pump operator's panel. The valve will activate and deactivate the primer motor.</p>			
<p><u>Master Drain Valve - Class1</u> A Class1 manually operated master pump drain will be supplied and installed.</p>			

APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
PLUMBING			
<p><u>Plumbing - Galvanized Steel - Schedule 40</u> Plumbing to the intake manifold and from the discharge outlet manifold will consist predominantly of schedule 40 galvanized steel pipe. Victaulic connections will be utilized as needed for long stretches of plumbing to reduce stress on the plumbing system. The use of soft plumbing will be kept to a minimum but when used will consist of Class 1 high pressure hoses with a working pressure of 300 psi and burst pressure of 1,200 psi.</p> <p>The entire plumbing system will be hydrostatically tested per CAN/ULC S515-13 section 15.5.2.3.</p>			
<p><u>Plumbing - Suction Manifold - Steel - 5"</u> A steel main suction manifold will be sized and manufactured specific to the pump application requirements. The manifold will extend transversely across both chassis frame rails complete with appropriate support. The manifold will be teed into the main pump inlet and bolted to the pump with a matching flange.</p>			
<p><u>Plumbing - Discharge Manifold - Steel</u> A steel main discharge manifold will be sized and manufactured specific to the pump application requirements. The manifold will be bolted to the main pump outlet with a matching flange and appropriately supported.</p>			
<p><u>Intake Relief Valve - Elkhart</u> One (1) Elkhart 40 series intake pressure relief valve(s), preset for 125psi will be supplied and installed with the discharge side of the valve plumbed below the pump compartment. Each valve will be adjustable between 75 and 250 psi.</p> <p>No threads will be provided on the discharge end to prevent a cap from being installed.</p>			
<p><u>Plumbing - 4" Main Suction - Left</u> One (1) 4" main suction will be provided from the pump and extend through the left side pump panel complete with trim around the opening. The suction end will terminate with NH threads. A strainer type screen and cap will be supplied.</p>			
<p><u>Butterfly Valve - KVC - Manual Lever</u> One (1) 4" KVC butterfly valve(s) will be supplied. Each valve will have a cast iron body complete with nickel plated disc. The valve will be supplied with a Buna-N seat.</p> <p>A 10-position manual lever type actuator will be supplied for each valve. Each lever will include a spring-loaded release trigger that locks into one of the 10 position detents.</p>			
<p><u>Butterfly Valve - KVC - Manual Lever</u> One (1) 4" KVC butterfly valve(s) will be supplied. Each valve will have a cast iron body complete with nickel plated disc. The valve will be supplied with a Buna-N seat.</p> <p>A 10-position manual lever type actuator will be supplied for each valve. Each lever will include a spring-loaded release trigger that locks into one of the 10 position detents.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
PLUMBING			
<p><u>Bleeder Valve - Class1 - Ball Valve (Round Handle)</u> One (1) Class1 3/4" quarter turn bleeder valve(s), each complete with a round handle, will be supplied and mounted adjacent to the intake fitting. The discharge side of the bleeder will be plumbed below the body side edge.</p>			
<p><u>Storz Adapter - Northline - Swivel (SFSA440)</u> One (1) SFSA440 4" Storz to 4" female swivel straight adapter(s) and SC400 cap(s) will be installed on the main pump suction (left or right).</p>			
<p><u>Plumbing - Tank Suction - 4"</u> A 4" supply line is to be provided from the water tank to the pump. A flexible connection will be provided between the tank and the plumbing.</p>			
<p><u>Ball Valve - Akron - Remote Actuator - 3"</u> A 3" Akron Generation II series Heavy Duty Swing Out ball valve utilizing a stainless-steel ball, will be supplied. Each valve will be supplied with an actuator suitable for remote valve activation.</p>			
<p><u>Valve Control - Class 1 - Pneumatic w/toggle Switch & Lights</u> Quantity} Innovative Controls push/pull remote valve control, complete with 'T' style handle, will be supplied and mounted at the pump operator's panel. Each control will be lockable in any valve position with a 'Twist to Lock' feature.</p> <p>Each control handle will be connected to the respective remote valve actuator via a formed rod, which feature either a clevis or knuckle retainer. Angles in each rod will be gusseted to ensure positive feed back in the valves position. All rods shall have adjustment threads to compensate for wear.</p>			
<p><u>Plumbing - 3" Suction - Rear Right</u> One (1) 3" suction inlet(s) will be supplied at the rear body face, towards the right side, and will terminate in a 30° elbow fitting. The plumbing will not pass through the water tank and will be supported at either end of the body. Each fitting will be supplied with a screen and plug with plastic coated cord. A 3" Akron Generation II series Heavy Duty Swing Out ball valve utilizing a stainless-steel ball, will be supplied for each inlet. Each valve will be supplied with an actuator suitable for remote valve activation. Innovative Controls push/pull remote valve control, complete with 'T' style handle, will be supplied and mounted at the pump operator's panel. Each control will be lockable in any valve position with a 'Twist to Lock' feature.</p> <p>Each control handle will be connected to the respective remote valve actuator via a formed rod, which feature either a clevis or knuckle retainer. Angles in each rod will be gusseted to ensure positive feed back in the valves position. All rods shall have adjustment threads to compensate for wear.</p> <p>One (1) Class1 3/4" quarter turn ball valve drain(s), each complete with a round handle, will be supplied and mounted along the bottom of the pump panel. The discharge side of the drain will be plumbed below the pump compartment edge.</p>			



<p>One (1) Class1 3/4" quarter turn bleeder valve(s), each complete with a round handle, will be supplied and mounted adjacent to the intake fitting. The discharge side of the bleeder will be plumbed below the body side edge. Each piece of plumbing will terminate in a 4" Storz fitting.</p>			
<p>APPARATUS BUILDING DESCRIPTION</p>	<p>Compliant</p>	<p>Non-Compliant</p>	<p>State the variation being supplied if line item is not compliant.</p>
<p>PLUMBING (continued)</p>			
<p><u>Plumbing - Tank Fill - 2"</u> A 2" fill line is to be provided from the pump to the water tank. A flexible connection will be provided between the tank and the plumbing. A 2" Akron Generation II series Heavy Duty Swing Out ball valve utilizing a stainless-steel ball, will be supplied for each outlet. Each valve will be supplied with a direct mounted actuator complete with chrome cover. One (1) 2 1/2" pre-connect outlet(s) will be supplied from the fire pump and connect to the hose lay located on the right side of the main hose bed with a straight chrome fitting. The fitting will extend through bulkhead located at the front of the main hose bed. A 2 1/2" Akron Generation II series Heavy Duty Swing Out ball valve utilizing a stainless-steel ball, will be supplied for each outlet. Each valve will be supplied with a direct mounted actuator complete with chrome cover. A Thuemling 2½" line gauge shall be supplied and mounted adjacent to the discharge valve control complete with a removable bright metal trim ring. The face will be black with contrasting white lettering showing the gauge range of 30" of mercury through to 400 psi and -100 through to 2800 kPa.</p> <p>The gauge shall be fully filled with pulse and vibration dampening Interlube to lubricate the internal mechanisms to prevent lens condensation and to ensure proper operation to minus 40°F. To prevent internal freezing and to keep contaminants from entering the gauge, the stem and Bourdon tube shall be filled with low temperature oil and be sealed from the water system using an isolating diaphragm located in the stem. One (1) Class1 3/4" automatic drain(s) will be supplied and mounted at the low point of the plumbing. The valve will open and close at 6 psi.</p>			
<p><u>Plumbing - 1" Hose Reel Discharge - Right Front Compartment</u> One (1) 1" outlet(s) will be supplied from the pump to the forward right body compartment for connection to the hose reel. A 1 1/2" Akron Generation II series Heavy Duty Swing Out ball valve utilizing a stainless-steel ball, will be supplied for each outlet. Each valve will be supplied with a direct mounted actuator complete with chrome cover. A Thuemling 2½" line gauge shall be supplied and mounted adjacent to the discharge valve control complete with a removable bright metal trim ring. The face will be black with contrasting white lettering showing the gauge range of 30" of mercury through to 400 psi and -100 through to 2800 kPa.</p> <p>The gauge shall be fully filled with pulse and vibration dampening Interlube to lubricate the internal mechanisms to prevent lens condensation and to ensure proper operation to minus 40°F. To prevent internal freezing and to keep contaminants from entering the gauge, the stem and Bourdon tube shall be filled with low temperature oil and be sealed from the water system using an isolating diaphragm located in the stem. One (1) Class1 3/4" quarter turn ball valve drain(s), each complete with a round handle, will be supplied and mounted along the bottom of the pump panel. The discharge side of the drain will be plumbed below the pump compartment edge.</p>			



<p>The hose reel will include one (1) Class1 3/4" quarter turn ball valve plumbed from the chassis air supply system, complete with a round handle. The valve will allow the use of the chassis air system to blow out residual water in the hose reel and hose.</p> <p>The valve control will be located at a conveniently accessible location near the reel.</p>			
<p>APPARATUS BUILDING DESCRIPTION</p>	<p>Compliant</p>	<p>Non-Compliant</p>	<p>State the variation being supplied if line item is not compliant.</p>
<p>PLUMBING (continued)</p>			
<p>Hose Reel - Hannay - Electric Rewind - 1" x 100' One (1) Hannay electric rewind hose reel(s) will be supplied and installed as specified by the customer. Each hose reel will be sized to fit 100' of 1" hose (hose is extra) on the drum and still fit the mounting location. A push button will be installed in a location determined by the customer to active the electric rewind motor. Rollers will be supplied and installed as required to assist in the payout of hose from the reel.</p>			
<p>Plumbing - 2 1/2" Discharge - Left One (1) 2 1/2" discharge outlet(s) will be supplied from the pump to the left pump panel terminating with a chrome plated 30° elbow fitting. Each fitting will be supplied with a chrome plated cap with plastic coated cord. A 2 1/2" Akron Generation II series Heavy Duty Swing Out ball valve utilizing a stainless-steel ball, will be supplied for each outlet. Each valve will be supplied with a direct mounted actuator complete with chrome cover. A Thuemling 2½" line gauge shall be supplied and mounted adjacent to the discharge valve control complete with a removable bright metal trim ring. The face will be black with contrasting white lettering showing the gauge range of 30" of mercury through to 400 psi and -100 through to 2800 kPa.</p> <p>The gauge shall be fully filled with pulse and vibration dampening Interlube to lubricate the internal mechanisms to prevent lens condensation and to ensure proper operation to minus 40°F. To prevent internal freezing and to keep contaminants from entering the gauge, the stem and Bourdon tube shall be filled with low temperature oil and be sealed from the water system using an isolating diaphragm located in the stem. One (1) Class1 3/4" quarter turn ball valve drain(s), each complete with a round handle, will be supplied and mounted along the bottom of the pump panel. The discharge side of the drain will be plumbed below the pump compartment edge.</p>			
<p>Plumbing - 3" Monitor Plumbing - Above Right Body Side One (1) 3" outlet(s) will be supplied from the pump to the area above the right front body side. One (1) TFT gateable electric valve kit will be supplied complete with a 3" stainless steel valve, integral electric actuator, and electronic interface box for connection to the respective valve control. The actuator will be weatherproof and operate at 12VDC with weatherproof electrical connections.</p>			
<p>Valve Control - TFT Monitor Controller The valve will be controlled by the TFT Monitors specified controller.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
PLUMBING (continued)			
<p><u>Gauge - 2 1/2" Discharge Pressure - Thuemling (PSI/KPA)</u> A Thuemling 2½" line gauge shall be supplied and mounted adjacent to the discharge valve control complete with a removable bright metal trim ring. The face will be black with contrasting white lettering showing the gauge range of 30" of mercury through to 400 psi and -100 through to 2800 kPa.</p> <p>The gauge shall be fully filled with pulse and vibration dampening Interlube to lubricate the internal mechanisms to prevent lens condensation and to ensure proper operation to minus 40°F. To prevent internal freezing and to keep contaminants from entering the gauge, the stem and Bourdon tube shall be filled with low temperature oil and be sealed from the water system using an isolating diaphragm located in the stem. Located in cab near the joystick controller</p>			
<p><u>Plumbing - Gauge Back Light - Thuemling - Blue</u> The Thuemling gauge will include LED back lighting, blue in colour. Interlocked with pump and roll function.</p>			
<p><u>Drain Valve - Class1 - Automatic Drain</u> One (1) Class1 3/4" automatic drain(s) will be supplied and mounted at the low point of the plumbing. The valve will open and close at 6 psi.</p>			
<p><u>Monitor Extension - TFT Extend-A-Gun RC3 - 12" Electric</u> A Task Force Tips 3" electrically telescoping waterway shall be installed. The waterway shall be capable of being lowered for storage and transportation and shall be capable of being raised to an extended height of 12" using Auxiliary 1 push button and retract after the monitor has been parked by pressing the Park button on Task Force Tips RC monitor control stations. The unit shall include a 12 volt motor capable of moving the waterway to either the raised or lowered position while maintaining the ability to horizontally rotate the monitor device 360 degrees. The motor shall be weatherproof in design and have an accessible manual override control for use in the event power failure occurs. An interface box with cables and waterproof plugs shall be provided for connection of power, monitor, Extend-A-Gun RC and optional push button controls.</p> <p>A sensor shall be located on the waterway that signals a 12 volt indicator light installed in the cab to illuminate to indicate that the monitor is raised.</p> <p>The aluminum riser shall have a 3" waterway; hard coat anodized finish and be furnished with a 3" inlet coupling and a connection for a TFT remote control monitor.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
PLUMBING (continued)			
<p>Monitor - Electric - TFT Tornado RC - 500 GPM A Task Force Tips Tornado RC remote controlled monitor shall be installed on the monitor plumbing. The monitor shall be controlled by a monitor mounted membrane switch panel with functions that control rotation, elevation and nozzle patterns, oscillate, park, auxiliary 1 and auxiliary 2.</p> <p>The monitor shall have the following travel capabilities: full 450 degrees of horizontal rotation with travel 225 degrees left and right of center, full 135 degrees of vertical travel with stops at 90 degrees above and 45 degrees below horizontal, field changeable rotation stops shall be provided at 45, 90 and 135 degrees left and/or right of center.</p> <p>The electrical components for the monitor and switch enclosures shall be compatible with 12 and 24 volt DC systems, shall be weatherproof and shall utilize weatherproof components such as a membrane switch, silicone seal, hardware with O-rings and liquid tight electrical connections with strain relief fittings. The monitor shall have current limiting and position encoders to protect the drive train at the ends of travel. Monitor shall have waterproof plug for power and control cable connection for easy removal. Thirty feet of ultra flex robotic power cable shall be provided and include a unique cable guide for 450 degrees of monitor rotation. A six-pin electrical connection for a TFT remote control nozzle shall be provided. The monitor shall be equipped with manual override knobs for use in the event of power failure. The motors and knobs control stainless steel worm gears for rotation and elevation adjustment.</p> <p>For resistance to corrosion the monitor shall be constructed from hard coat anodized aluminum with a silver powder coat interior and exterior finish. A built in automatic drain designed to protect the monitor from freezing and a threaded port for an optional pressure gauge shall be provided. The unit shall have a unique serial number.</p> <p>The monitor shall be configured with a 3" inlet with and 2-1/2" male NH outlet.</p> <p>A Task Force Tips panel mounted operator station for electric remote control monitors shall be provided at the pump operator's panel complete with display for advanced system feedback. The control station shall be designed for flush panel mounting and include switches to control horizontal rotation, vertical elevation, nozzle stream pattern, oscillate, and stow functions. The switch enclosure shall be weatherproof and utilize weatherproof components such as a membrane switch, silicone seal, hardware with O-rings and liquid tight electrical connections with strain relief fittings. A 10 foot long incoming power connection cable shall be supplied and can be used as a central connection point for other wired or wireless controls or monitor position display.</p> <p>A Task Force Tips Master Stream series automatic nozzle with electrically operated pattern control shall be provided. The nozzle design shall allow for straight stream through dense wide fog patterns.</p> <p>The nozzle shall have a 2-1/2" female swivel rocker lug coupling and a flow range of 150-1250 GPM at 100 PSI. A waterproof electrical connection for use with TFT remote control monitors shall be included.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
PLUMBING (continued)			
<p>Water Tank - Standard - 1,800 Imperial Gallon CoPoly</p> <p>One (1) water supply tank with a minimum capacity of 1,700 imperial gallons will be provided between the body sides. The tank will be constructed from U.V. stabilized, stress relieved copolymer polypropylene and is manufactured to the highest of industry standards. The outer shell, the lid, and the center baffles will be fabricated using a minimum 3/4" thick material, with the cross baffles and gussets a minimum of 3/8". All baffles and gussets extend from the floor of the tank to the lid. All tanks will incorporate thermoformed edges wherever possible to ensure maximum strength. The booster tank fill tower and sump box are constructed of 1/2" thick material and located as specified or as required. The fill tower measuring a minimum of 10" by 10" is fitted with a removable screen and hinged lid, while the sump box will be fitted with a screen and 3" NPT drain fitting. A manually operated 1 1/2" drain valve will be installed and plumbed below the chassis frame.</p> <p>The booster tank will be fitted with a 4" suction outlet that draws directly from the sump box. A minimum 2" fill fitting will be supplied complete with deflect/diffuser that prevents damage to the water tank internals. All suction and fill fittings are machined with a minimum schedule 80 rating. All materials and components incorporated inside the tank are FDA approved allowing the tank to be used for potable water.</p> <p>The longitudinal and horizontal baffles will be continuously welded in an interlocking design that allows proper venting during filling and suction. The lid is completely removable via countersunk stainless-steel hardware and sits flush inside the outer wall of the tank. The lid will be fully supported by a minimum of 1 1/2" by 1" inside flange. All hardware used on the top of the lid, including the lifting lugs, will sit flush with the surface of the lid.</p> <p>A vent pipe with a minimum inside diameter of 6" will be fabricated and installed from the fill tower through the baffles and exits out the bottom at a location specified by the customer. A secondary vent of 3/4" vent pipe is installed around the top of the inside perimeter of the tank and is vented out the fill tower. This allows for maximum filling when the tank is on a slope. All welds are injection or nitrogen gas welded using state of the art welding equipment.</p> <p>All booster tanks will have a serial number, model number and date of manufacture engraved on the tank. A lifetime warranty certificate supplied with the tank.</p> <p>The tank will be supported by the body subframe and fixed in place using a minimum of five (5) flanged mounts and grade 8 fasteners. Subframe cross member spacing will be specific to the tank sizing to ensure appropriate support for the weight. A 1/2" thick rubber isolator will be provided between the subframe and the water tank.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
PLUMBING (continued)			
<p><u>Direct Tank Fill - 2 1/2" - Rear Body - Right (External)</u> One (1) 2 1/2" tank fill inlet(s) will be supplied at the right side of the rear body face and plumbed directly to the water tank. Each inlet will terminate in a chrome plated fitting complete with a screen and chrome plated plug with plastic coated cord.</p> <p>The valve will be located externally to the body face. A 2 1/2" Akron Generation II series Heavy Duty Swing Out ball valve utilizing a stainless-steel ball, will be supplied for each inlet. Each valve will be supplied with a direct mounted actuator complete with chrome cover.</p>			
<p><u>Dump Valve - Electric - Newton 10" Valve - Stainless - Top Actuator - 21" Valve</u> One (1) Newton 10" square-style, electric operated dump valve(s), each measuring 21" in length, shall be supplied. Each valve shall be fabricated from stainless steel. The valve shall be supplied with an electric actuator on the top of the valve. Switches for the actuator will be supplied on the rear face of the apparatus body.</p> <p>Each valve body will be positioned at such height as to ensure that water will discharge into a standard portable water tank but still low enough to empty the entire volume of the apparatus mounted water tank.</p>			
<p><u>Dump Valve Chute - 180° Swivel & 36" Telescopic Extension - Stainless - Newton</u> One (1) Newton 180° swiveling chute will be supplied and mounted to the specified square dump valve complete with manually telescoping chute extension will be supplied. The telescoping chute will extend 36" beyond the swivel chute and slide back to 24" when not in use.</p> <p>The chutes will be fabricated from stainless steel. The swivel chute will come complete with a retention device to keep the chute from moving during transport.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
BODY			
<p>Body - Enclosed Tank - Double High / Double Low Side</p> <p>The body is engineered to provide correct weight distribution on the chassis and is built in accordance with the current requirements published by Underwriters' Laboratory of Canada.</p> <p>The aluminum body will be separate from the cab body to allow for natural frame flex and will have the capability of being removed from the vehicle by unbolting the module from the chassis frame. The body will be fabricated from 1/8" H5052 H32 aluminum sheet and 6061-T6 extrusions utilizing long sheet forming techniques. The top and ends of the body sides will be reinforced with 2" x 2 7/8" extrusion to provide rigidity.</p> <p>Full width aluminum wheel well liners will be provided to keep water and road salt away from the body. The liners will be bolted in using stainless steel bolts and the liner will be completely removable to provide access to the rear spring shackles.</p> <p>Hi-Shine 1/8" aluminum checker plate with drip rail formed integral will be used to cap the compartment tops as standard.</p> <p>The body will be mounted to the chassis on a steel, 1/4" wall, tubular sub-frame. The sub-frame will also be attached to the chassis by four flanged mounts, using 1" diameter grade eight bolts and nuts.</p> <p>The sub-frame will consist of two longitudinal 4" x 4" tubes laid on the chassis frame and four transverse body support members. The forward body mount will be an 80" long x 4" x 2" cross member, the two center supports will measure 86" x 4" x 2" and the rear support will measure 46" x 4" x 2". Two additional 4" x 2" cross members will be provided mid-way between the longitudinal tubes. The sub-frame will be completely sealed in epoxy prior to installation on the body.</p> <p>The side compartments shall be formed from individual compartment assemblies welded together into a unitized structure. The structure shall be designed with minimal parts to reduce the amount of welding required and minimize stress concentrators. The formed forward, rearward compartments and wheel well assembly shall then be welded with a single compartment ceiling across all compartments. Each of the compartments will be sealed to prevent moisture from entering the structure.</p> <p>Stainless steel overlays with a brushed finish will be provided on the front face of each body side face. Each overlay will extend the full height of the compartment exterior face and will wrap around the corner 1" to provide a finished appearance while protecting the body and paint from damage.</p> <p>The rear face spanning between the body sides will be flush with the body side ends.</p> <p>Extrusion framed aluminum uprights will be provided the full length along the top of each body side in order to close in the sides of the water tank and maximize storage capacity in the main hose bed area. The inner face will be smooth and free from protrusions.</p> <p>Within each compartment, whether ahead of or behind the rear wheels shall be of double wall construction. This shall provide a protected mounting area for electrical</p>			



<p>nodes and other recessed components if applicable. Easily removable access panels shall be provided for maintenance purposes.</p> <p>A large sweep out leading edge will be formed integral with each compartment floor. This sweep out shall create a sealing surface at the bottom of the door and shall prevent any water at the door from running back into the compartment. Compartments without sweep outs may form water traps and are therefore not acceptable.</p> <p>Five (5) compartments will be provided, three on left side and two on the right side. For the purpose of clarity, the side facing compartments will be labeled L1, L2, and L3 for the driver side; R1 and R2 for the passenger side.</p> <p>All compartments where no permanently fixed trays or heavy equipment are located, removable plastic interlocking tiles will be supplied to allow air to circulate and to protect the compartment floor.</p> <p>The bottom of all lower compartment floors will be reinforced, to prevent "oil canning".</p> <p>Each compartment will be supplied with an air vent, recessed into the wall, to allow air to circulate and to allow moisture to escape.</p> <p>Each side and rear facing compartment will be provided with Amdor Luma Bar LED compartment lights. They will be installed in each corner adjacent to the door opening to provide lighting the full height of the compartment.</p> <p>The hose bed will be located above the water tank and will as a minimum meet with U.L.C. requirements for hose bed volume. The floor of the bed will be provided with removable, interlocking plastic Versatile grating to allow air flow to the hose.</p> <p>The complete tailboard assembly will be bolted to the body using 1/2" spacers to allow for drainage and removal if damaged. Heavy-duty aluminum 3" x 3" x 3/16" angle and 3" x 2" x 3/16" edge extrusion will form the framework and substructure to provide a very rigid and strong standing platform for firefighters. The sub frame will be covered with 1/8" high shine NFPA aluminum tread plate.</p>			
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APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
BODY (continued)			
<p>Body - Doors - Hinged - Single - Small (each) The specified compartment opening(s) will be supplied with a single hinged recessed door of double-panned 1/8" aluminum sheet construction. The outer pan of each door will be flush with the body side when completely closed. Each door will seal against an automotive closed cell, semi-circular hollow tube, lining the compartment opening to provide a weatherproof seal. Hinges will be solid 1/4" cast stainless steel, bolted to the body and door, to provide years of trouble-free service.</p> <p>The door handles will be stainless steel paddle style with a two-stop door striker. The first striker will hold the door from opening even if the door is not fully closed. The second striker will hold the door in the fully closed and sealed position.</p> <p>Each door that is vertically hinged or horizontally hinged along the top edge will be supplied with a minimum of one gas assist shock to help hold the door in the open position.</p> <p>A reader module triggered by a door mounted magnet will be provided adjacent to the compartment opening. The switch system will be used to trigger the door ajar system when the park brake is released.</p> <p>For the following compartments: - For L1, L3, L4, R1, R3, R4</p>			
<p>Body - Doors - Roll Up - Amdor - Medium (each) Amdor brand roll-up doors complete with 1" aluminum double wall slats, each with continuous ball & socket hinge joints and recessed dual durometer slat seals will be supplied for the specified compartments. Each door will have double wall reinforced bottom panels with stainless steel lift bar latching systems. The bottom panel flange will be supplied with cut-outs for ease of accessing the lift bar with gloved hands.</p> <p>Each door will have reusable slat shoes with positive snap-in securement, a smooth interior door curtain to prevent equipment hang-ups, one-piece aluminum door track/side frame, a top gutter with non-marring seal, as well as non-marring side and bottom seals. All wear component material will be type 6 nylon.</p> <p>A reader module triggered by a door slat mounted magnet will be mounted along the lower roll up door frame. The switch system will be used to trigger the door ajar system when the park brake is released.</p> <p>For the following compartments: - For L2, R2</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
BODY (continued)			
<p><u>Body - Hose Bed - Open Storage - Extended - Large</u> A formed aluminum open storage area complete with forward and rearward walls will be provided around the water tank fill tower, between the front of the hose bed and the front face of the body. The storage area rearward wall will create separation between the water tank fill tower(s) and the main hose bed area.</p> <p>The storage area will extend the width of the main hose bed, will be as deep as practical, and will be easily removable.</p>			
<p><u>Body - Hose Bed - Divider - 1/8" Aluminum</u> Two (2) hose bed divider(s) will be supplied to provide division of the hose to suit the customer's requirements. Each divider will be constructed of 1/8" aluminum sheet and will be located on three adjustable tracks. Aluminum tubing will be welded along the top and end of the divider, for extra strength and to avoid any sharp edges. A handhold shall be cut in the end of the hose bed divider. One track will be located at the rear of the bed and two will be located at the forward end of the hose bed.</p> <p>Two sets of tracking will be provided along the forward face of the main hose bed and a single track along the rear edge of the hose bed to allow the installation of the fully adjustable dividers.</p>			
<p><u>Body - Hose Bed Cover - Vinyl with Snaps - Extra Large</u> A vinyl cover will be provided over the main hose bed area. The cover will be black in colour complete with marine grade stainless steel snaps used for holding down cover along the sides of the hose bed area with Velcro straps used at the rear. Each strap will be complete with a loop large enough to grasp with a gloved hand.</p>			
<p><u>Body - SCBA Storage - 4 Brackets on Slide Out Tray</u> One (1) roll out tray(s) will be installed in the specified compartment(s). Each tray will be constructed from 3/16" aluminum and will be attached to a pair of Grant rollout sliders rated for 200lb. The tray will be able to extend 70% of the sliders length and will have a 2" return lip around the perimeter to give additional strength. A single gas shock will be installed below the tray to hold it in the stowed and extended positions. Each tray will be supplied with four (4) brackets mounted to a vertical divider, two brackets each side, for the storage of spare SCBA bottles or loaded packs.</p>			
<p><u>Body - Handrail - Knurled - Small (each)</u> Three (3) handrail(s) will be installed on the body at the specified locations. Each handrail will be extruded aluminum with an aggressive knurled finish, and not less than 1 1/4" outside diameter.</p>			
<p><u>Body - Handrail - Knurled - Medium (each)</u> One (1) handrail(s) will be installed on the body at the specified locations. Each handrail will be extruded aluminum with an aggressive knurled finish, and not less than 1 1/4" outside diameter.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
BODY (continued)			
<p><u>Body - Step - Full Width with Amdor Luma Bar H2O LED Light (each)</u> An aluminum checkerplate full width hood step will be located above the tailboard to assist with the loading of hose. This step will be in addition to any other steps provided and will have an Amdor Luma Bar H2O LED light mounted along the underside to assist with illuminating the area below.</p> <p>The lights will activate with the application of the park brake.</p>			
<p><u>Body - Step - Access Ladder - Zico Quic Ladder - 3096</u> A Zico 3096 Quic Ladder will be supplied and installed on the left rear body face of the apparatus to allow access to the main hose bed area. The Quick ladder is stored parallel to the body when in the folded position with the use of a locking handle. The Quic Ladder allows a more comfortable climbing angle by releasing the locking handle and pulling the folded section down. The ladder automatically latches and will not retract until the scissor lock is raised. The configuration will be specific to the design and requirements of the apparatus. Cast aluminum rungs with an aggressive, non-skid surface measuring 3" deep x 12 1/2" wide will be used for the length of the ladder. The handrails will be 1-1/4" heavy walled aluminum tubing finished with a textured black powder coating.</p>			
<p><u>Body - Mounting Surface - 3/16" Plate - Small (each)</u> One (1) removable 3/16" aluminum mounting plate will be provided at the locations requested in the specified compartments. Each plate will be mounted to the compartment wall using tracking to allow for ease of removal.</p>			
<p><u>Body - Rub Rail - 3" Bolt On</u> Extruded aluminum 'C' channel extruded rub rail, measuring 3" high by 1 1/2" deep will be fastened to each body side below the compartment openings to protect against minor abrasions. The rub rail will be spaced 3/4" away from the body using nylon spacers to help prevent damage to the main body side from impact and prevent dirt from building up.</p> <p>The top surface of the rub rail channel will have an aggressive knurled finish.</p>			
<p><u>Body - Fenderettes - Rubber</u> The rear body fenders will be trimmed with black rubber fenderettes.</p>			
<p><u>Body - Bracket - Wheel Chocks (each)</u> One (1) bracket(s) will be constructed and installed as specified for the storage of one (1) pair(s) of wheel chocks.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
BODY (continued)			
<p><u>Porta Tank Storage - Side - Fixed</u> Two (2) fixed storage compartment(s) will be supplied and mounted overtop of the left and right side compartments. (1 on each side) The rack will be constructed from aluminum extrusions creating a rigid frame. The frame will closed in on five sides with hi-shine checkerplate aluminum. A full height, vertically hinged door will be supplied on the rear facing opening complete with a paddle latch. The interior floor of the compartment will be lined with Teflon allowing easy storage and removal of the portable framed water tank. A stainless-steel roller will be provided near the door opening to further assist with loading and unloading the tank.</p>			
<p><u>Suction Hose Storage - Trough with Spring Ties (each)</u> Two (2) hard suction hose mounting trough(s) will be supplied. Each trough will be fabricated from 3/16" aluminum sheet and formed into a "U" shape. The trough will be mounted overtop the high side compartments and will include two spring loaded hold-downs to securely hold the hose.</p>			
ELECTRICAL			
<p><u>Electrical - Base Wiring - Tanker with Pump</u> All 12-volt electrical equipment installed by the apparatus manufacturer shall conform to modern automotive practices. Particular attention will be paid to the design of the vehicle electrical system to ensure that it will perform in high moisture and road salt environments normally encountered in Canada. All wiring shall be stranded copper or copper alloy conductors of a gauge rated to carry 125 percent of the maximum current for the protected circuit. Voltage drops in all wiring from the power source to the device shall not exceed 10 percent. The wiring, wiring harness and insulation shall be in conformance to applicable SAE and ULC standards with SXL and GXL temperature properties. Any exposed wiring shall be protected in a loom with a minimum 285°F rating. All wiring looms shall be properly supported and attached to body members. The electrical conductors shall be constructed in accordance with applicable SAE standards, except when good engineering practice requires special construction.</p> <p>The wiring connections and terminations shall use a method that provides a positive mechanical and electrical connection and shall be installed in accordance with the device manufacturer's instructions. Electrical connections shall be with mechanical type fasteners and large rubber grommets where wiring passes through metal panels. Automatic reset circuit breakers shall be provided which conform to SAE Standards. Wiring shall be color coded. Exterior exposed wire connectors shall be environmentally sealed to withstand elements such as temperature extremes, moisture and automotive fluids. There shall be no exposed electrical cabling, harnesses, or terminal connections located in compartments, unless they are enclosed in a junction box, covered with a removable electrical panel or wrapped in a protective loom. The wiring shall be secured in place and protected against heat, liquid contaminants and damage.</p> <p>Any holes made in the roof shall be caulked with silicon. Large fender washers, liberally caulked, shall be used when fastening equipment to the underside of the cab roof. When an electrical component is installed in an exposed area shall be mounted in a manner that shall not allow moisture to accumulate in it. Exposed area shall be defined as any location outside of the cab or body. Electrical components designed to be removed for maintenance shall have a coil of wire provided behind the appliance allowing them to be pulled away from mounting area for inspection and service work.</p>			



<p>Corrosion preventative compound shall be applied to all terminal plugs located outside of the cab or body. All non-waterproof connections shall require this compound in the plug to prevent corrosion and for easy separation (of the plug).</p> <p>All reflectors, directional and clearance lights required to comply with Transportation Canada Standards, shall be furnished. Rear identification lights at the tailboard level shall be recessed mounted for protection. Lights and wiring mounted in the rear bulkheads shall be protected from damage by installing a false bulkhead inside the rear compartments.</p> <p>An operational test shall be conducted to ensure that any equipment that is permanently attached to the electrical system is properly connected and in working order.</p> <p>As standard, all terminals exposed to the environment will be crimped and sealed with heat shrink tubing.</p> <p>All body electrical circuits will have a load test applied to ensure that no components/accessory will draw more than 80% of the circuit breaker rating.</p>			
ELECTRICAL (continued)			
<p>Electrical - Master Battery Switch - Chassis Supplied The chassis supplied battery switch system will be utilized. The body builder wiring will be tied into the existing switch.</p>			
<p>Electrical - Receptacle - Auto Eject - Kussmaul 20 Amp - 110V One (1) Kussmaul Super Auto Eject deluxe automatic power line disconnect(s) will be supplied and installed at the specified location complete with yellow weatherproof cover. Each receptacle will be configured for a 20 amp, 110 volt shoreline power source with a mating connector supplied loose. The Super Auto Eject will be connected to the starter circuit so that the receptacle is ejected upon engine startup.</p>			
<p>Electrical - Battery Charger - Xantrex TRUECharge2 - 40 Amp A Xantrex TRUE Charge automatic battery charger with two independent outputs will be supplied and installed. The nominal output of the charger is 40 amps and will be delivered in three stages ensuring optimum charging with minimal wear and tear. The stages are:</p> <p>Bulk Replaces 70-80% of charge at the fastest rate Absorption Replenishes the remaining 20-30% at a slow safe rate Float Voltage is reduced and held constant to prevent damage and maintain a full charge</p> <p>A TRUECharge2 remote panel will be supplied and installed as directed to allow monitoring and charger control.</p> <ul style="list-style-type: none"> - Includes display - Mount display on driver side of console 			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
ELECTRICAL (continued)			
<p><u>Electrical - Air Compressor - Kussmaul - Auto Pump - 110V</u> A Kussmaul Auto Pump 120 volt air compressor will be supplied and installed on the apparatus for maintaining the air pressure in the air brake system. The compressor will be supplied with an integral pressure switch allowing automatic activation and shall be capable of .76 CFM open flow and a maximum pressure of 100 PSI.</p>			
<p><u>Electrical - Switch Panel - 9 Switches</u> A main emergency switch panel with nine (9) switch positions will be provided at a located in the main cab that will be easily accessible by both the driver and officer seating positions. A rocker switch will be provided for each switch position with the specific switch function label laser etched into the actuator.</p> <p>The optical warning lights system will be wired through a switch labelled 'Master' located in the left most switch panel position. This switch will be provided with a red actuator.</p> <p>The warning light system will be interlocked with the chassis park brake system to provide two separate modes of operation. Mode one will call for right-of-way with clear and coloured warning lights flashing. The second mode will indicate blocking right-of way where the flashing clear lights will deactivate when the park brake is applied.</p> <p>Switches that are unused will be supplied with an actuator labelled as 'Spare'.</p> <p>Each switch actuator will have a red LED back lit label and separate red LED activation indicator.</p> <p>MASTER Red LIGHT BAR Black FRONT WARNING Black SIDE WARNING Black REAR WARNING Black LEFT SCENE Black RIGHT SCENE Black REAR SCENE Black SPARE Black</p>			
<p><u>Electrical - Light Bar - Whelen Justice NFPA 10 LED - 62"</u> One (1) Whelen Justice 10 LED NFPA roof mounted light bar will be supplied and permanently installed to the vehicle roof. The light bar will contain 8 red super LED's and two front facing clear LED's. The vehicle roof will be reinforced as needed to withstand the mounting of the bar. The light bar will be activated by a switch in the cab.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
ELECTRICAL (continued)			
<p><u>Electrical - Siren - Whelen 295SLSC1</u> One (1) Whelen 295SLSC1 Siren Amplifier will be installed in the cab, within reach of the driver and officer positions. The siren amplifier shall incorporate a 12V/200W siren installed on an aluminum alloy chassis covered by a black polycarbonate powder coated housing for maximum protection. The 295SLSC1 shall have the ability for either 100 or 200 watt output. The front overlay shall be made of velvet Lexan™ with a matte finish. The lettering and artwork on the overlay shall be illuminated with adjustable backlighting of soft LED non-glaring green. The operating controls will consist of a power switch, manual button, PA volume switch, horn button, and rotary switch. The 295SLSC1 PC board shall have input polarity protection, output short circuit protection. The siren amplifier shall include a 20A/32V fuse. The solid state siren speaker amplifier shall be vibration resistant. The 295SLSC1 shall have a removable unidirectional microphone.</p> <p>The 295SLSC1 shall have 21 Scan-Lock™ siren tones with two manual functions for additional siren tones. The siren amplifier shall have a “Siren in Use” icon driver and adjustable preset repeat radio volume. The 295SLSC1 shall have a “Park Kill” feature that disables the siren when the vehicle is in park. The PTT (push to talk) switch on the microphone shall override all siren functions. The 295SLSC1 shall have a combination On/Off and horn ring transfer switch with Bi-polarity horn/ring activation control. The 295SLSC1 shall have SI Test® capability to perform a complete diagnostic silent test of amplifier and speaker(s). The siren amplifier shall have a quick disconnect plug. The 295SLSC1 shall have the ability to activate siren tones with “Aux Enable” input either with a slide switch, power controls, or relay-to-ground connector.</p>			
<p><u>Electrical - Speaker - Whelen SA314A - FL M2 Series - Through Bumper (each)</u> One (1) Whelen SA314A 100 watt speaker(s) will be supplied and flush mounted in the Freightliner M2 front bumper with a cast aluminum bezel. The bezel will conform to the curvature of the bumper while ensuring the speaker is forward facing. Each bezel will have a polished exterior finish.</p>			
<p><u>Electrical - Mobile Radio - Customer Supplied Radio</u> The customer supplied mobile radio will be installed in the cab complete with roof mounted antenna.</p>			
<p><u>Electrical - Intercom - FireCom - 2 Position - Wireless</u> A FireCom brand 2 position wireless intercom will be supplied and installed as per request by end user.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
ELECTRICAL (continued)			
<p><u>Electrical - Spotlight - Remote - Golight LED - Pedestal (each)</u> One (1) Golight remote controlled LED spot light(s) will be supplied and installed as specified complete with a remote control mounted in the cab. Each light head will utilize automotive grade, high torque motors. The controller will have two toggle switches, one to operate the light head rotation, and the second to operate tilt.</p> <p>Each light head will contain 10 high flux LED's using P-Vex technology to create a 8° beam angle that produces a peak beam intensity of 320,000 candela. The light will operate at 12 volts DC and draw a maximum of 3 amps.</p> <p>The light will be mounted to a custom fabricated aluminum pedestal designed to conform to the mounting surface. The pedestal will be painted to match the apparatus.</p>			
<p><u>Electrical - 12V Power Point - Kussmaul - USB Dual - 4.8A (each)</u> One (1) Kussmaul 12 volt universal serial bus (USB) power point(s) will be supplied and installed in the cab as directed. Each power point will provide two USB ports with each port rated for 2.4 amps. The power points will be wired.</p>			
<p><u>Electrical - Courtesy Light - TecNiq D03 (each)</u> A TecNiq D03 surface mounted LED light will be installed on the inside of each cab door and will be activated when the respective cab door opens.</p>			
<p><u>Electrical - Front - Whelen M4 - Super LED (pair)</u> One (1) pair(s) of Whelen M4 super LED surface mounted warning lights will be installed. Each light shall be mounted to the front of the cab with a chrome flange and rubber grommet. The light shall be 3 3/8" high by 5 1/2" wide and have a profile of 1 3/8" beyond the mounting surface. Wiring shall extend from a weatherproof strain relief at the rear of the lamp head.</p> <p>Each light shall have 12 super LEDs and shall operate at 12 volts DC, drawing 2 amps.</p>			
<p><u>Electrical - Hood - Whelen M4 - Super LED (pair)</u> One (1) pair(s) of Whelen M4 super LED surface mounted warning lights will be installed. Each light shall be mounted to the side of the cab with a chrome flange and rubber grommet. The light shall be 3 3/8" high by 5 1/2" wide and have a profile of 1 3/8" beyond the mounting surface. Wiring shall extend from a weatherproof strain relief at the rear of the lamp head.</p> <p>Each light shall have 12 super LEDs and shall operate at 12 volts DC, drawing 2 amps.</p>			
<p><u>Electrical - Engine Compartment Light - TecNiq E10 (each)</u> One (1) TecNiq E10 LED light(s) will be provided and installed within the engine compartment complete with a single activation switch.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
ELECTRICAL (continued)			
<p><u>Electrical - Door Ajar Warning System - Side Body</u> An automatic door ajar system will be supplied on the apparatus that will trigger an LED warning light and buzzer mounted in the cab. The light will be in clear view of the driver and will be activated along with the buzzer whenever any main body compartment door is open and the chassis park brake is disabled. A label will be provided adjacent to the warning light.</p> <p>The system will be disabled when the parking brake is applied, or the respective door is fully closed.</p>			
<p><u>Electrical - Additional Ajar System - Integral (each)</u> The ajar switch included with the specified equipment will be wired to the existing door ajar warning system. An LED warning light in the cab will be provided for each piece of equipment specified. Each respective light will be activated when it's respective equipment is not stowed properly and the park brake is released. A label will be provided adjacent to the warning light.</p> <p>The system will be disabled when the parking brake is applied, or the respective equipment is fully closed.</p>			
<p><u>Electrical - Additional Ajar System - Custom (each)</u> An ajar switch system will be provided for the specified equipment and will be wired to the existing door ajar warning system. An LED warning light in the cab will be provided for each piece of equipment specified. Each respective light will be activated when its respective equipment is not stowed properly and the park brake is released. A label will be provided adjacent to the warning light.</p> <p>The system will be disabled when the parking brake is applied, or the respective equipment is fully closed.</p>			
<p><u>Electrical - Ground Light - Amdor Luma Bar H2O - 12" (each)</u> Four (4) Amdor Luma Bar H2O 12" LED ground lights will be installed at the specified locations. The lights under the cab doors will illuminate with the park brake being activated or by the respective door, should the park brake not be engaged. The remaining lights will be activated with the application of the park brake only.</p>			
<p><u>Electrical - Ground Light - Amdor Luma Bar H2O - 40" (each)</u> One (1) Amdor Luma Bar H2O 40" LED ground lights will be installed at the specified locations. The lights will be activated with the application of the park brake only.</p>			
<p><u>Electrical - Side Body - Whelen M6 - Super LED (pair)</u> One (1) pair(s) of Whelen M6 super LED surface mounted warning lights will be installed. Each light shall be mounted to the side of the body with a chrome flange and rubber grommet. The light shall be 4 5/16" high by 6 3/4" wide and have a profile of 1 3/8" beyond the mounting surface. Wiring shall extend from a weatherproof strain relief at the rear of the lamp head.</p> <p>Each light shall have 18 super LEDs and shall operate at 12 volts DC, drawing 2 amps.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
ELECTRICAL (continued)			
<p><u>Electrical - Side Body - Whelen M9CZ - Warning/Scene Super LED (pair)</u> Two (2) pairs of Whelen M9CZ combination warning/scene lights will be installed. Each light shall be mounted to the side of the upper body with a chrome flange and rubber grommet. Each M9CZ shall incorporate Linear Super-LED® and Smart LED® technology. The configuration of the M9CZ shall be a M9 combination red warning light and scene light with a clear non-optic polycarbonate lens. The warning light shall consist of 12 red Super-LEDs on the main PC board. The warning light shall have an optic collimator and metalized reflector for maximum illumination. The scene light shall consist of six white Super-LEDs installed on the main PC board. The scene light will be furnished with a metalized angled reflector for supreme radiance.</p> <p>The light shall be 6 1/2" high by 10 3/8" wide and have a profile of 1 1/2" beyond the mounting surface. Wiring shall extend from a weatherproof strain relief at the rear of the lamp head.</p> <p>Each light will operate at 12 volts DC with the warning and scene light each drawing 1.6 amps.</p> <p>The scene lights will be independently switched from the warning lights with the switches in the cab for their respective body side. The warning lights will be switched from within the cab.</p> <p>- Pt#: M9*CZ, M9FC Combination warning and scene light - Requires painted pedestal mounts.</p>			
<p><u>Electrical - Side Body - Whelen ION T-Series - Super LED (pair)</u> One (1) pair(s) of Whelen ION T series super LED surface mounted warning lights will be installed. Each light shall be mounted to the side of the body with a chrome flange and rubber grommet. The light shall be 1 1/2" high by 5 3/16" wide and have a profile of 1/2" beyond the mounting surface. Wiring shall extend from a weatherproof strain relief at the rear of the lamp head.</p> <p>Each light shall have 12 super LEDs with clear lens and shall operate at 12 volts DC, drawing 0.4 amps.</p>			
<p><u>Electrical - Rear Body - Whelen M6 - Super LED (pair)</u> One (1) pair(s) of Whelen M6 super LED surface mounted warning lights will be installed. Each light shall be mounted to the rear of the body with a chrome flange and rubber grommet. The light shall be 4 5/16" high by 6 3/4" wide and have a profile of 1 3/8" beyond the mounting surface. Wiring shall extend from a weatherproof strain relief at the rear of the lamp head.</p> <p>Each light shall have 18 super LEDs and shall operate at 12 volts DC, drawing 2 amps.</p>			

APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
ELECTRICAL (continued)			
<p><u>Electrical - Rear Body - Whelen M9CZ - Warning/Scene Super LED (pair)</u> One (1) pairs of Whelen M9CZ combination warning/scene lights will be installed. Each light shall be mounted to the rear of the body with a chrome flange and rubber grommet. Each M9CZ shall incorporate Linear Super-LED® and Smart LED® technology. The configuration of the M9CZ shall be a M9 combination red warning light and scene light with a clear non-optic polycarbonate lens. The warning light shall consist of 12 red Super-LEDs on the main PC board. The warning light shall have an optic collimator and metalized reflector for maximum illumination. The scene light shall consist of six white Super-LEDs installed on the main PC board. The scene light will be furnished with a metalized angled reflector for supreme radiance.</p> <p>The light shall be 6 1/2" high by 10 3/8" wide and have a profile of 1 1/2" beyond the mounting surface. Wiring shall extend from a weatherproof strain relief at the rear of the lamp head.</p> <p>Each light will operate at 12 volts DC with the warning and scene light each drawing 1.6 amps.</p> <p>The scene lights will be independently switched from the warning lights with the switches in the cab. The warning lights will be switched from within the cab.</p> <p>- Pt#: M9*CZ, M9FC Combination warning and scene light - Scene portion additionally wired to reverse</p>			
<p><u>Electrical - Tail Lights - Whelen M6 - LED (pair)</u> A pair of Whelen M6 series taillights will be supplied mounted in a chrome bezel for four (4) lights. Each assembly will include Whelen LED stop lights, LED turn lights, LED backup lights and a mounting location for an M6 series warning light.</p>			
<p><u>Electrical - Hose Bed Light - Amdor Luma Bar H2O - 40" (each)</u> One (1) Amdor Luma Bar H2O 40" LED light will be mounted to an aluminum angle along the front edge of the main hose bed in order to illuminate the length of the main hose bed.</p> <p>A switch will be provided on the rear body face.</p>			
<p><u>Electrical - Marker Lights - TecNiq S170 - LED (each)</u> TecNiq S170 LED surface mounted marker lights will be provided as required by Canadian Motor Vehicle Safety Standards.</p>			
<p><u>Electrical - Marker/Turn Lights - TecNiq S170 - LED (pair)</u> A pair of TecNiq S170 LED surface mounted combination marker and turn signal lights will be provided as required by Canadian Motor Vehicle Safety Standards. The lights will be mounted on the body sides, near the rear axle complete with a chrome plated flange.</p> <p>The lights will be activated by the marker light switch in the cab or separately by the respective left or right turn signal.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
ELECTRICAL (continued)			
<p><u>Electrical - Surface Mount Step Lights - Whelen PEL - LED (each)</u> One (1) Whelen Perimeter Enhancement series surface mounted LED light(s) will be installed complete with a 40° angled chrome bezel to illuminate the stepping/walking surfaces.</p> <p>The lights will be activated with the application of the park brake.</p>			
<p><u>Electrical - Surface Mount Step Lights - TecNiq E03 (each)</u> One (1) TecNiq E03 series surface mounted LED lights will be installed complete with a horizontal stainless steel bezel to illuminate the stepping/walking surfaces.</p> <p>The lights will be activated with the application of the park brake.</p>			
<p><u>Electrical - Back Up Warning - Buzzer - Push Button at Rear Body (each)</u> One (1) warning buzzer will be provided in the cab and activated by a push button switch located at the rear of the vehicle. This allows fire department personnel to assist the driver when starting, stopping or backing up the vehicle. An identification label will be provided by the switch.</p>			
<p><u>Electrical - Back Up Alarm - Chassis Supplied</u> The chassis supplied back up alarm will be relocated below the rear of the body.</p>			
ELECTRICAL (continued)			
<p><u>Electrical - Rear View Camera - FRC - InView - TrueSight</u> A Fire Research inView™ TrueSight™ model BCA110-A00 kit will be supplied and installed. The kit will include:</p> <ul style="list-style-type: none"> • One (1) 130° camera with 18 infrared illuminators with RCA Connections/Adapter • One (1) 7" digital monitor • Four (4) proximity sensors <p>The camera shall be mounted to the bottom of the rear body full width step and include a 1/8" SONY® Color CCD Sensor with 130° viewing angle, 250,000 pixels for Picture Elements and Gamma Correction with R=0.45 to 1.0. The camera shall have Mirror Image capability and will include a built-in high gain microphone. The Image Sensor shall provide 600 TV Lines in an NTSC format. The camera shall include an Internal Synchronization Sync System.</p> <p>The camera infrared system will use 18 infrared LED's and will have 50 feet with the usable illumination at 0 Lux (with IR ON). The IR switch control shall have a CDS Automatic Control.</p>			



<p>The camera power source shall be DC 12V (+/-10%) with a signal-to-noise ratio rated for higher than 48DB. The Electronic Iris rating shall be 1/50, 1/60-1/100,000 seconds. Video Output rating shall be 1VP.P 75 Ω.</p> <p>The waterproof rating shall be IP69K. Vibration and impact rating shall be 20G/100G. The operating and storage temperature ratings both shall be -40°F ~ +176°F with a maximum relative humidity of 95%.</p> <p>One (1) 66 foot extension cable shall be included for the camera.</p> <p>The 7" TFT LCD Digital Color Monitor will be mounted to the headliner storage pocket located above the driver's seating position and shall have the following specifications:</p> <ul style="list-style-type: none"> • Dot Resolution: 800 x 3 (RGB) x 480 • Display Format/Contrast: 16:9 / 500:1 • Display Brightness: 400 CD/m2 • Viewing Angle: U:50° D:60° L/R:70° • 3 Channel Video Input • 1 VP-P, 75Ω • Power Supply – DC 12V-24V (+/-10%) • Power Consumption – 5W • Operating Temperature: -22°F ~ +176°F • Video System: Auto NTSC/PAL • Overall Dimensions: 7" (L) x 5" (H) x 1" (D) • Weight: 400G • Vibration Rating: 5G • Dot Pitch: 0.192 (H) x 0.1805 (V) • Internal Sync System 			
<p>Electrical - Brow Light - Rigid Industries - SR40CW - 40" (each) A Rigid Industries 40" single row (spot/flood combo) light bar will be installed as per customer request. Front bumper mounted.</p>			
<p style="text-align: center;">APPARATUS BUILDING DESCRIPTION</p>	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
BODY FINISHING			
<p>Paint - Pump and Plumbing - Black The pump and plumbing system will be cleaned, prepared, and finished with a black urethane coating. The coating will be resistant to chemical and salt spray per ASTM D1308 and ASTM B117.</p>			
<p>Paint - Body Exterior - Subframe - Single Axle - Black The body subframe assembly exterior will be ground by disc to remove any surface oxidation or debris. The subframe will be washed and prepared with a wax and grease remover to ensure adequate coating adhesion. The frame will be finished with a black urethane coating that will be resistant to chemical and salt spray per ASTM D1308 and ASTM B117.</p>			

APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
BODY FINISHING (continued)			
<p><u>Paint - Body Exterior - Single Axle - Undercoating</u> The complete underside of the body will be coated using Core-Tek VPCI-368, a time proven coating that provides excellent protection. The coating will include the entire under portion of the body, the rear fender wells, and the inside of the body up to the level of the water tank. The coating meets ASTM B-117, G-85, D-1748 for salt spray, prohesion, and humidity.</p>			
<p><u>Paint - Body Exterior - Single Axle - One Tone - Enclosed Tanker</u> The body exterior shall be painted using PPG products prior to the installation of any accessories or trim pieces to ensure the appropriate paint coverage and the maximum in corrosion protection.</p> <p>All exposed metal surfaces on the body shall be ground by disc to remove any debris or oxidation. Once the surfaces are machine ground, the body will be washed and prepared with a wax and grease remover before a high quality acid etching of base primer shall be applied. Upon the application of body fillers and their preparation, the body shall be primed with a coating designed for corrosion resistance and surface paint adhesion.</p> <p>The exterior painted body surfaces will be coated with an intermediate solid or epoxy surfacing agent that is designed to fill any minor surface defects, provide an adhesive bond between the primer and the paint, and improve the colour and gloss retention of the colour.</p> <p>The body shall then be painted a single colour designated by the customer with an acrylic urethane type system designed to retain colour and resist acid rain and most atmospheric chemicals found at a fire emergency scene.</p> <p>This process will be followed by a clear topcoat to ensure a high gloss finish.</p> <p>The paint application process used will be approved by PPG with annual follow up audits to ensure continued compliance. Documentation from PPG of continued compliance will be available for inspection upon request.</p> <p>A 50mL container of touch up paint will be included with the delivered apparatus.</p>			
<p><u>Paint - Body Interior - Epoxy - Single Axle - Enclosed Tanker - Yellow</u> The main body compartment interiors including any removable walls shall be painted using a low gloss, yellow epoxy with a rough finished texture. The coating will have good impact and chemical resistance properties.</p> <p>As with the exterior, exposed metal surfaces on the body interior shall be ground by disc to remove any debris or oxidation and improve adhesion. Once the surfaces are machine ground, the body will be washed and prepared with a wax and grease remover. Body fillers will be used as needed and prepared to ensure proper adhesion of the epoxy coating.</p>			
<p><u>Decal - Department Crest - Customer Supplied (pair)</u> One (1) pair(s) of Fire Department supplied crests will be applied at the locations specified.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
BODY FINISHING (continued)			
<u>Decal - British Columbia Flag (each)</u> Two (2) pair(s) of waving British Columbia Flag decals will be supplied and applied to either the cab or body of the completed apparatus. Each decal will measure approximately 12" in width and 8" in height.			
<u>Lettering - Cab Sides</u> Lettering up to 6" in height identifying the Fire Department name, and if required truck identification, will be applied to the cab doors. Font, colours, design and placement will be discussed with the department prior to application, as the apparatus nears completion.			
<u>Striping - Reflective - Roll Up Doors - 5"</u> One (1) 5" wide reflective stripe shall be applied the full length of the body and cab sides, including the roll up doors. This stripe shall continue to the front face of the cab if and where space allows and to the rear face of the body if applicable.			
<u>Striping - Outline Stripes - 1/4"</u> Outline stripes measuring 1/4" shall be added to the top and bottom edges of the specified reflective striping.			
<u>Striping - Reflective Chevron - Rear Body - Complete</u> Chevron striping will be applied to the entire rear face of the body with the exception of items fixed to the rear of the body such as rear facing compartment door, warning lights, handrails, beavertails etc. The striping will consist of a series of 6" reflective stripes angled towards the ground on the respective side of the vehicle.			
<u>Striping - Reflective 2" Stripe - Rub Rails</u> Reflective striping measuring 2" in width will be applied to the length of the rub rails.			
<u>Striping - Special Graphics</u> - Decal to match current fleet ("Professionally Staffed by Volunteers").			
<u>Wheels - Hub Covers - 22.5" - Alcoa - Front & Rear - Single Axle - Chrome</u> One (1) Alcoa chrome HUB cover system will be supplied and installed. The system will provide an aesthetically pleasing cover to the front and rear axle ends.			

APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
BODY FINISHING (continued)			
<p><u>Label - CAN/ULC-S515-13 Testing and Label - 9.0 Mobile Water Supply with Pump</u> The apparatus will meet or exceed the minimum requirements of CAN/ULC-S515-13 Standard for Automobile Fire Fighting Apparatus and defined by chapter 9 Mobile Water Supply Fire Fighting Apparatus manufactured with a designated fire pump.</p> <p>To ensure compliance, inspection of the apparatus and witnessing of all performance tests will be done onsite at the apparatus manufacturer's facility by a representative from Underwriters Laboratories of Canada. Upon receipt of notification from ULC that the apparatus has successfully completed the required testing and is in compliance, a label bearing the ULC mark will be fixed to the apparatus. The label will include the following information obtained by the ULC representative from the inspection and testing:</p> <ul style="list-style-type: none"> ● UL Certification Number ● Vehicle Identification Number ● Test Date ● Water Tank Capacity ● Pump Capacity and RPM at 150, 200, and 250 PSI ● No-Load Governed Speed ● Apparatus Manufacturer Identification <p>The apparatus manufacturer will be audited annually to ensure continued compliance and adherence to the current ULC Standard for Automobile Fire Fighting Apparatus. Documentation from ULC will be available for inspection upon request.</p>			
<p><u>Label - Fluid Type and Capacity</u> A label identifying the fluid types and capacities specific to this apparatus will be supplied and mounted within the cab. The label will be visible from the driver's door.</p>			
<p><u>Label - Vehicle Overall Dimensions</u> A label identifying the apparatus overall length, overall height, and GVWR will be supplied and mounted within the cab. The label will be visible from the driver's seating position.</p>			
<p><u>Label - Warning, Safety, and Identification Label Package</u> The apparatus will be fitted with all safety, caution, and warning labels required in the current standards publication by Underwriters Laboratories of Canada. The text for these labels will be written in both English and French.</p> <p>Where practical and space allows, the identification labels provided on the apparatus will include Innovative Controls decorative chrome bezels. Labels provided by the chassis manufacturer, unless otherwise explicitly stated, will not include these bezels.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
BODY FINISHING (continued)			
<p><u>Documentation - Operation and Service - Hard Copy (2)</u> Two (2) printed hard copies of the manufacturers Construction Details as well as the Operations and Service documentation will be provided upon delivery of the completed apparatus.</p> <p>The construction details documentation will include as a minimum the following information as it applies the specific apparatus:</p> <ul style="list-style-type: none"> ● Owner's name and address; ● Fire fighting apparatus manufacturer, model, and serial number; ● Chassis make, model, and serial number; ● GAWR of front and rear axles; ● Front tire size and total rated capacity in kilograms (pounds); ● Rear tire size and total rated capacity in kilograms (pounds); ● Chassis weight distribution in kilograms (pounds) with water and manufacturer-mounted equipment (front and rear); ● Engine make, model, serial number, rated horsepower and related speed, and governed speed; make, model, and gear ratio of engine transmission PTO(s) if applicable; ● Fuel type and fuel tank capacity; ● Electrical system voltage and alternator output in amperes; ● Battery make, model, and capacity in cold cranking amps (CCA); ● Chassis transmission make, model, and serial number; and if so equipped, chassis transmission PTO(s) make, model, and gear ratio; ● Pump make, model, rated capacity in litres per minute (Imperial gallons/US gallons per minute where applicable), and serial number; ● Pump transmission make, model, serial number, and gear ratio; ● Auxiliary pump make, model, rated capacity in litres per minute (Imperial gallons/US gallons per minute where applicable), and serial number; ● Engine manufacturer's certified brake horsepower curve for the engine furnished, showing the maximum governed speed (if a pump is supplied, driven by the chassis); ● Water tank certified capacity in litres or Imperial gallons/US gallons; ● Paint manufacturer(s) and paint number(s); and ● Company name and signature of responsible company representative. <p>The apparatus Operation and Service documentation as a minimum shall cover the inspection, maintenance, and operations of the fire fighting apparatus and all major components. The following additional information will be supplied:</p> <ul style="list-style-type: none"> ● Manufacturer's name and address; ● Country of manufacture; 			



<ul style="list-style-type: none"> ● Source for service and technical information; ● Parts replacement information; ● Descriptions, specifications, and ratings of the chassis, pump (if applicable); ● The “as-built” wiring diagrams; ● Lubrication charts; ● Operating instructions for the chassis, any major components such as a pump or any auxiliary systems; ● Instructions regarding the frequency and procedure for recommended maintenance; ● Overall fire fighting apparatus operating instructions; ● Safety considerations; ● Limitations of use; ● Inspection procedures; ● Recommended maintenance procedures; ● Troubleshooting guide; ● Fire fighting apparatus body, chassis, and other component manufacturers warranties; ● Copies of completed manufacturer testing and certifications, independent third-party certifications of test results, and other component manufacturers certifications; and ● A material safety data sheet (MSDS) for any fluid that is specified for use on the fire fighting apparatus. <p>The operations and service manuals supplied by the chassis manufacturer will be provided in addition to the above binders.</p>			
<p><u>Vehicle Inspection</u> The vehicle will be inspected at an authorized Provincial motor vehicle inspection station prior to delivery. The safety inspection decal will be affixed to the window.</p>			
<p><u>Vehicle Clean Up and Detailing</u> Prior to the final delivery, the vehicle will be professionally cleaned and detailed.</p>			
<p><u>Quality Control Check</u> The apparatus will undergo a full quality control inspection once the apparatus is completed.</p>			



APPARATUS BUILDING DESCRIPTION	Compliant	Non-Compliant	State the variation being supplied if line item is not compliant.
EQUIPMENT			
<p><u>Transportation Safety Kit</u> Transportation safety kit will be supplied, and will include: One (1) first aid kit. One (1) 2.5 lb. ABC fire extinguisher. One (1) set of dual faced triangular warning flares. One (1) reflective safety vest</p>			
<p><u>Delivery and Orientation</u> The manufacturer will deliver the completed apparatus to the destination specified and provide at least one (1) day's orientation to the fire department on the operation of the main equipment supplied on the apparatus.</p>			
<p><u>Equipment - Hard Suction Hose - Maxi-Flex - 10' x 4" Storz</u> Two (2) 10' length(s) of Maxi-Flex lightweight hard suction hose will be supplied, each complete with 4" storz couplings.</p>			
<p><u>Equipment - Strainer – Jet Siphone - Kocheck - 6"</u> One (1) Kocheck Low level Strainer with Jet Siphone (6" NH) female threads coupling and one (1) Kocheck adaptor 6" NH male threads to 4" Storz adaptor will be supplied.</p>			
<p><u>Equipment - Porta Tank - Fol-Da-Tank - Aluminum - 2,900 Imperial Gallon</u> Two (2) Fol-Da-Tank aluminum folding framed portable water tank(s) capable of holding 3,000 imperial gallons of water will be supplied with the completed apparatus. Each folding frame will contain a [Orange], lace on, 22-ounce vinyl liner complete with dual 10" quick drain tubes.</p>			
<p><u>Equipment - Wheel Chock - Hastings Brass HB310 - Regular (pair)</u> One (1) pair(s) of Hastings Brass HB310 12" x 8" aluminum wheel chocks will be supplied.</p>			
<p><u>Equipment - Wrench Set - Kocheck - (2) Spanners & (1) Hydrant with Storz (mounted)</u> Two (2) Kocheck K49-3 wrench set kit(s) will be supplied complete with an aluminum holder complete with one (1) K08 adjustable hydrant wrench with integral storz spanner and two (2) K01 universal spanner wrenches. Each set will be mounted at the location chosen by the fire department.</p>			
<p><u>Equipment - Wrench Set - Northline SWB-2 - Storz (mounted)</u> Two (2) Northline SWB-2 wrench set(s) will be supplied and mounted in a location chosen by the fire department.</p>			
<p><u>Equipment - Wrench Set - Akron 2443 - Spanner & Hydrant (mounted)</u> Two (2) Akron 2443 wrench set(s) will be supplied complete with a nylon holder and mounted in a location chosen by the fire department.</p>			



Tanker Fire Apparatus

APPENDIX "B"

SCHEDULE OF PRICES FOR APPENDIX "A" – MINIMUM SPECIFICATIONS

Price submitted below reflects the full cost, excluding taxes, of the **NEW 2025 – Tanker Fire Apparatus** for the District of Lillooet, as specified in RFP# LFD-2023-01, "Appendix "A" - Minimum Specifications". This price sheet must accompany the bid package submitted.

Contract Price (not including taxes) \$ _____

GST \$ _____

PST \$ _____

Other (please specify)

\$ _____

TOTAL \$ _____

Delivery Date _____

Nearest Service Facility _____

Company name

Signature

Date