

FORM A: BID
(See B8)

1. Contract Title SUPPLY AND DELIVERY OF WILDLAND FIRE APPARATUS TRUCKS

2. Bidder

Name of Bidder

Usual Business Name of Bidder as it appears on Invoice (if different from above)

Street

City

Province

Postal Code

Email Address of Bidder

Facsimile Number

(Mailing address if different)

Street or P.O. Box

City

Province

Postal Code

GST Registration Number (if applicable)

The Bidder is:

(Choose one)

a sole proprietor

a partnership

a corporation

carrying on business under the above name.

3. Contact Person

The Bidder hereby authorizes the following contact person to represent the Bidder for purposes of the Bid.

Contact Person

Title

Telephone Number

Facsimile Number

Email Address

4. Definitions

All capitalized terms used in the Contract shall have the meanings ascribed to them in the General Conditions and D3.

5. Offer The Bidder hereby offers to perform the Work in accordance with the Contract for the price(s), in Canadian funds, set out on Form B: Prices, appended hereto.

6. Commencement of the Work The Bidder agrees that no Work shall commence until he/she is in receipt of a notice of award from the Award Authority authorizing the commencement of the Work.

7. Contract The Bidder agrees that the Bid Opportunity in its entirety shall be deemed to be incorporated in and to form a part of this offer notwithstanding that not all parts thereof are necessarily attached to or accompany this Bid.

8. Addenda The Bidder certifies that the following addenda have been received and agrees that they shall be deemed to form a part of the Contract:

No.	Dated
_____	_____
_____	_____
_____	_____

9. Time This offer shall be open for acceptance, binding and irrevocable for a period of sixty (60) Calendar Days following the Submission Deadline.

10. Indigenous Self-Declaration The City is requesting that Bidders identify if their business is at least 51% owned by one or more Indigenous persons of Canada.

YES, 51% or more Indigenous ownership

NO, it is not

This information is being gathered for statistical purposes only and will not be used for purposes of evaluation.

11. Signatures

The Bidder or the Bidder's authorized official or officials have signed this

_____ day of _____, 20_____ .

Signature of Bidder or
Bidder's Authorized Official or Officials

(Print here name and official capacity of individual whose signature appears above)

(Print here name and official capacity of individual whose signature appears above)

FORM B: PRICES
(See B9)

SUPPLY AND DELIVERY OF WILDLAND FIRE APPARATUS TRUCKS

UNIT PRICES

ITEM NO.	DESCRIPTION	SPEC. REF.	UNIT	QUANTITY	UNIT PRICE
1.	Wildland Fire Apparatus Truck	18014	Each	2	

Name of Bidder

FORM N: DETAILED SPECIFICATIONS 18014

1.0 DESCRIPTION OF EQUIPMENT/APPLICATION

- 1.1 These specifications describe **Wildland Fire Apparatus Truck** and other equipment and features as specified herein. The Winnipeg Fire Paramedic Service (WFPS) wishes to acquire a fire fighting vehicle capable of providing a multitude of functions not restricted to the emergency response to medical incidents, the provision of compressed air foam for firefighting application, and capable of withstanding the heavy rigors involved in the fire response to wildland fires requiring off road capability. The vehicle, while similar to a mini pumper format, must be short in length and consequently capable of operations in tight areas whereby a standard fire engine cannot safely navigate. The vehicle must incorporate the highest level of safety components to effectively protect WFPS personnel when travelling in and subsequently when operating this unit.
- 1.2 The **Wildland Fire Apparatus Truck** shall be a new 2018 model year or newer.
- 1.3 The **Wildland Fire Apparatus Truck** and all other items/components shall be the manufacturer's latest model. The equipment shall be furnished complete and ready for operation. Any parts or accessories not specifically mentioned, but which are required to complete and place the equipment and associated attachments in successful operation shall be furnished as though specifically mentioned in these specifications. The equipment and associated attachments, and all parts thereof, shall conform in strength and quality of material and workmanship, to the best standards and engineering practice of the industry.
- 1.4 It will be the responsibility of the Bidder to inform the City of any errors or omissions in these specifications, for under this Contract the Contractor shall be held responsible for the satisfactory operational function of the equipment.

2.0 OTHER SPECIFICATIONS AND STANDARDS

- 2.1 All applicable SAE standards form an integral part of these specifications and shall have precedence in any conflict concerning minimum acceptable standards.
- 2.2 The **Wildland Fire Apparatus Truck** shall comply with the applicable regulations:
- (NFPA) National Fire Protection Association Standard latest revisions
- Transport Canada, National Safety Mark, NSM:
<http://www.tc.gc.ca/eng/acts-regulations/acts-road.htm>
- Manitoba Safety and Health Regulation, Parts 12, 16, 22:
<http://web2.gov.mb.ca/laws/regs/current/217.06.pdf>
- Canadian Motor Vehicle Safety Standards C.M.V.S.S.
http://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._1038/section-sched3.html
- PART B - Manitoba Highway Traffic Act regulations and requirements including, but not limited to, a Manitoba Government Inspection with Safety Sticker.
<http://web2.gov.mb.ca/laws/regs/index.php?act=h60>
- Canadian Standards Association, CSA:
<http://www.csagroup.org/>
- Under Writers of Canada, U/L:
<http://www.ulc.ca/>
- Society of Automotive Engineers, SAE:
<http://www.sae.org/>

City of Winnipeg Lighting Visibility Standard:
<http://winnipeg.ca/matmgt/pdfs/PublicWorksEquipLightingVisibility.pdf>.

- 2.3 In Canada, Modification to new vehicles can only be done at facilities that are recognized by Transport Canada. All of these facilities must have a National Safety Mark from Transport Canada. Transport Canada National Safety Mark is a label that indicates that the modifications are compliant with all current Canadian Motor Vehicle Safety Standards (CMVSS).

STATE (NSM) # _____

- 2.4 The vehicle shall be complete with a current Manitoba Safety Sticker affixed to the driver's side window.
- 2.5 It will be the responsibility of the Bidder to inform the City of any deficiencies in these specifications, for under this Contract the Contractor shall be held responsible for the design, performance, reliability and satisfactory operational function of the units.

3.0 SERVICE FACILITY

- 3.1 For the purpose of warranty repairs, the Bidder shall have an authorized service facility located within 10 km of the boundaries of the City of Winnipeg. The facility, or a portion thereof, shall be dedicated to the service and maintenance of the type equipment being offered. Further to 9.0, Bidders shall provide a description of the service facility including, but not limited to, number of qualified service staff, years of service experience, and general service capabilities within three (3) Business Days upon request of the Contract Administrator.

4.0 REFERENCES

- 4.1 Provide five (5) references where this equipment is used in a working environment where climatic conditions are similar to the City of Winnipeg.

5.0 MAKE & MODEL

- 5.1 **State** make, year and model of the equipment bid- _____

6.0 INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS

- 6.1 Each bid will be evaluated based on adherence to all terms, conditions and requirements outlined in the Bid Opportunity package.
- 6.2 All items in these specifications must be answered indicating compliance or non-compliance. **BIDDERS SHALL STATE "YES" FOR COMPLIANCE OR STATE DEVIATION**, or give reply where requested to do so. Deviations shall be clearly stated and fully detailed. Alternatives will be considered subject to evaluation.
- 6.3 **EACH BIDDER IS REQUIRED TO FILL IN EVERY BLANK. FAILURE TO DO SO MAY BE USED AS A BASIS FOR REJECTION OF BID**

7.0 PERFORMANCE RELIABILITY

- 7.1 The responsibility for the design of the **Wildland Fire Apparatus Truck**, its performance and reliability shall rest upon the Contractor.
- 7.2 The term "repeated failures" as used herein is defined to mean that the same component, subassembly, or assembly develops repeated defects, breakdowns and/or malfunctions rendering the vehicle inoperative, or requiring repeated shop correction, service and/or replacement during the warranty period applicable for said component, subassembly, of assembly. Minor items or ordinary service adjustments are not included, or considered under the

scope of "repeated failures", as well as other factors, such as operational damage due to accidents, misuse or lack of proper maintenance, service and lubrication attention by not following the manufacturer's preventative maintenance schedule.

7.3 Where the **Wildland Fire Apparatus Truck** develops "repeated failures" in service, the Contractor shall make any necessary engineering changes, repairs, alterations or modifications in order to guarantee reliability of performance.

7.4 The equipment shall be capable of consistent top performance in City of Winnipeg Environment. Note: The City of Winnipeg has four seasons with ambient temperatures ranging from approximately 90°F (32°C) to -40°F (-40°C)

8.0 **FUEL**

8.1 Where applicable, all equipment must be fully fueled upon delivery (**no exceptions**).

9.0 **QUALIFICATIONS OF MANUFACTURER & CONTRACTOR**

9.1 The manufacturer of the **Wildland Fire Apparatus Truck** shall have five (5) years continuous experience manufacturing the equipment.

9.2 The manufacturer shall have in effect a documented quality control program ensuring that the quality of materials and workmanship, including welding, conforms to the best standards and engineering practice of the industry.

9.3 The Contractor shall have five (5) years continuous experience servicing, repairing and maintaining **Wildland Fire Apparatus Truck** of the type being offered.

10.0 **CHASSIS SPECIFICATIONS**

CHASSIS:

10.1 Weigh Scale Ticket: _____

The Contractor shall provide a certified weigh scale ticket upon delivery of the completed unit. The scale ticket shall include front and rear axle weights including four (4) operators, all attachments and full of fuel.

10.2 GVWR Approx. 19,500 lbs. _____

10.3 Chassis Ford F550, 4-door XL 4x4 (or equivalent in accordance to B6) _____

10.4 Cab to Axle As required for Wildland Fire Apparatus Body: _____
State:

10.5 Wheelbase Approx. 203" as required for Wildland Fire Apparatus Body: _____
State:

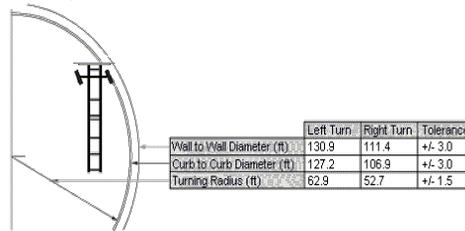
10.6 After-Frame As required for Wildland Fire Apparatus Body: _____
State:

10.7 Cab to Axle measurement Approximately 84 in. _____
State:

10.8 Turning Radius

Turning Radius
State: vehicle turning radius

Example:



- a) Wall to Wall (ft.)
- b) Curb to Curb(ft.)
- c) Turning Radius (ft.)

10.9 Engine

6.7L V8 Diesel engine. Must meet current EPA Standards. Tier IV Final -Emergency Service Vehicle) rated. Operator command regeneration.

10.10 Horsepower

Approximately 300HP gross.

10.11 Torque

Approximately 660 lb-ft.

10.12 Engine Cooling

Heavy Duty cooling package suitable for a towing package.

State:

10.13 Coolant

Extended Life Coolant, -37°C (-35°F).

10.14 Block Heater

Submersible coolant type, with cord through grille.

10.15 Alternator

Dual heavy duty alternators approx. 357 Amps.

10.16 Battery

Dual batteries, approx. 1500 CCA capacity combined.

State:

10.17 Transmission

6-speed automatic with shift select.

10.18 Four wheel drive

With electric shift-on-the-fly 4x4.

10.19 Brakes

Four (4) wheel disc, w/ anti-lock braking system.

10.20 Steering

Power.

10.21 Steering wheel

Tilt type.

10.22 Cruise Control

Electronic.

10.23 Windows

Power.

10.24 Door locks

Power.

10.25 Mirrors, interior

Rear view, windshield mounted.

10.26	Mirrors, exterior	Manual telescoping trailer tow with power heated glass and heated spotter mirror.	_____
10.27	Air conditioning	Unit to be equipped with A/C.	_____
10.28	Air bags	Front driver's and passenger.	_____
10.29	Radio	Factory installed AM/FM with Aux. "IN" and USB port.	_____
10.30	Bluetooth [®] Technology	For use with cellular phones, "hands-free" capable, voice command activated through vehicle's radio circuit.	_____
10.31	12-Volt power outputs.	Two (2) x 12 volts DC power outlets & USB.	_____
10.32	Floor covering	Factory rubber floor mat (no carpet).	_____
10.33	Seats	The driver and front passenger seats bucket style with fixed head restraints. Space between the front seats to remain open for placement of a console. Bench style Rear passenger seat. Material Vinyl.	_____
10.34	Cab console	3-piece Aluminum Console installed between the Driver and Officer seats, extending to the back of crew cab. Front of the console enclosed to house 12-volt power distribution for the Emergency Lights, Siren System, Mobile Radios, etc.. The center and rear console shall allow for storage. A shelf shall be attached to the rear console to carry the battery charger. The exterior of the console painted with a scratch-resistant speckle-coat finish.	_____
10.35	Fuel tank	Tank capacity approx. 150 Liters.	_____
10.36	Front tow hooks	Two (2) directly mounted to the frame.	_____
10.37	Towing prep package	Suitable for approximately 11,000 lbs. capacity.	_____
10.38	Trailer hitch receiver	Class 5, installed at the back of the truck.	_____
10.39	Trailer Plug Wiring	<ul style="list-style-type: none">• Wired into chassis manufacturer's OEM trailer wiring circuit.• Independently wired/fused from main truck lighting harness or circuits.• Cable shall be routed along inside of vehicle frame to rear of vehicle.• Properly secured using UV resistant "Outdoor Black" cable ties.	_____
10.40	Trailer Plug	<ul style="list-style-type: none">• 7-Way (Spade type) socket.• 4-Way pin trailer connector.• Black ABS or nylon construction. Grote 82-1058 or (or equivalent in accordance to B6). <ul style="list-style-type: none">• Wired to code.	_____

10.41	Electric Brake Controller	OEM factory installed	_____
10.42	Paint	Factory red colour with black accents.	_____
10.43	Tires	Super singles: (4) 335/80R 20 Continental MPT 81 Tires (or equivalent in accordance to B6). A 3-piece aluminum bead-locking wheel system shall be included, with a center powder-coated steel plate. The front and rear differentials with a gear set change-over to offset for the larger diameter tires.	_____
10.44	Rear axle	Limited slip or locking type	_____
10.45	Rear axle ratio	State: ratio.	_____
10.46	Lift kit	3 inch lift kit at front and rear axles to allow use of super single tires.	_____
10.47	Ground clearance	<ul style="list-style-type: none">• Ground clearance at front axle (differential) = Approx. 13" State.• Ground clearance at rear axle (sway bar) = Approx. 10.5" State.• Ground clearance at rear axle (differential) = Approx. 12.5" State.• Distance to frame rail bottom (between cab doors) = Approx. 25.5" State.• Distance to frame rail bottom (10" behind cab) = Approx. 33" State.• Front - Angle of Approach = Approx. 30° from Horizon State.• Rear - Angle of Departure = Approx. 20° from Horizon State.	_____ _____ _____ _____ _____ _____
10.48	Fenders	Front factory fenders modified with a larger wheel-well radius to fit the larger tires. Fender flares included.	_____
10.49	Running boards	Polished "Embossed Aluminum" Thread plate Running-Boards installed, on each side of the chassis cab. Full-length from front-of-cab to back-of-cab.	_____
10.50	Mud flaps	Rubber mud flaps attached to the front & back end of each of the running boards.	_____

10.51	Battery charger	A Kussmaul Auto Charge 12 Series Model #091-165-12, (or equivalent in accordance to B6) 12 amp battery charger installed. The charger shall include a front panel amp meter to indicate output and protective front panel and strain relief. Operational specifications: a) 120 volts AC input at 2.5 amps, b) 12 volts DC output at 12 amps. The battery charger shall supply a 'single battery bank' with automatic operation and with an aluminum enclosure. The system shall have a built-in sense circuit to check battery voltage 120 times a second; the system shall compensate for voltage drop in charging wires and provide quick recharging with no over-charging. The unit shall include front panel connections for a remote display. The unit shall be UL listed.	_____
10.52	120 Volt auto eject	120 volt receptacle installed for fire hall power supply (shoreline power).	_____
10.53	Inverter	1000 watt power inverter to supply three (3) 110 Volt receptacles, one located in the cab and two located in the rear compartments.	_____
10.54	Antennas and mobile radios	Two (2) mobile radio antenna cables installed on the chassis cab roof. The cables shall be routed to the cab console for hook-up to the mobile radios. Mobile Radio to be supplied by the Winnipeg Fire Paramedic Service (WFPS).	_____
10.55	Firecom Digital Intercom	Firecom (or equivalent in accordance to B6) Intercom system installed. The system to include the following components: <ul style="list-style-type: none">• One (1) Digital Intercom• One (1) Wireless Base 5-User• Four (4) Wireless Headsets DECT7 communication technology c/w Adjustable Listen-Through Ambient Noise Control• Four (4) NFPA Headset Hanger Hooks.	_____
10.56	360 degree camera package	360 degree camera package with dash mounted LCD display. With a backup camera with proximity sensors.	_____
10.57	Grille front bumper	Buck-Stop Grille Guard Front Bumper installed. Modular style grille guard with full grille guard. The grille guard bumper shall be finished with a textured gloss black powder coat finish.	_____
10.58	Winch mount front and rear	Winch mount system installed at the base of the front bumper frame. Rear winch mount installed for moving the winch location. Receiver tube with 12 Volt Quick-Connect Cables.	_____

10.59	Winch system 12 volt	A heavy-duty 10,000 lb. capacity Warn Winch model# ZEON10S (or equivalent in accordance to B6).10,000 lb. (4536 kg) single-line pulling capacity. With 100' of 3/8" WARN Spydura (or equivalent in accordance to B6) synthetic rope. Convertible control pack can be attached to the winch or remotely mounted.	_____
10.60	Pump house	An aluminum pump house fabricated and installed at the front of the wildlands body. Fully enclosed to conserve heat for cold climate use. Pump operator's panel mounted at the rear of the chassis with a cab mounted remote start option, with electric controls for the discharge valves and remote monitors.	_____
<u>BODY</u>			
10.61	Construction	An All-Aluminum Body installed behind the 4 door cab extending to the back of the apparatus. The body shall carry the fire pump module and poly water tank. A vertical skirt & tailboard shall be fabricated onto the back of the deck.	_____
10.62	Isolators	All interfaces between aluminium and steel are to be separated by $\frac{1}{16}$ in. thick rubber or neoprene sheet to prevent galvanic corrosion. Bolts used on aluminium or between aluminium and steel shall be bolted through with stainless steel bolts and non-conductive bushings.	_____
10.63	Compartment	Two (2) compartments shall be installed, one (1) on each side of the body. With Roll-up doors.	_____
10.64	Mud flaps	Heavy-duty mud flaps installed at the rear wheels, attached to the body with stainless steel hardware. Mud flaps approx. 14" high x 24" wide.	_____
10.65	Heaters: pump house	One (1) Red Dot (or equivalent in accordance to B6) 20'000btu heater installed in the pump house. Coolant routed through 5/8" thermal hose from the engine for the source of heat. Quarter-turn brass ball valves installed at the engine. Activation switch at the cab dash within convenient reach of the operator.	_____
10.66	Fire Pump	150-250gpm fire pump with adjustable pump packing. The pump/engine shall perform to the standards of NFPA 1906/1901. Must be fully pump-and-roll capable.	_____

10.67	Pump intake	Pump intake: a 3" Female NPT/4" Victaulic combination (or equivalent in accordance to B6).	_____
10.68	Pump discharges	1 ½ " Female NPT/3" Victaulic combination (or equivalent in accordance to B6).	_____
10.69	Pump Engine	4-cycle Liquid Cooled Naturally Aspirated diesel engine, meets current EPA and CARB emission standards. The electrical system of the engine 12 VDC with a 40 amp regulating alternator and be pre-wired to connect to a mating control harness via an industrial sealed connector.	_____
10.70	Pump panel	Supplied with remote control panel options which shall include:	_____
		<ul style="list-style-type: none">• Push button panel On/ Off switch (lit when the panel is on).• Push button engine start.• Red LED low oil pressure warning light.• Red high temperature coolant warning light.• LED lighting.• Primer switch• Electronic throttle control• Water tank level display• Water tank fill (1 ½" connection) foam tank level display.• Low foam indicator light.• Master drain valve.• Master vacuum gauge, master pressure gauge.• 2.5" intake outlets (2 X 1½" Connections) hose reel outlet control.• Foam Proportioner Control	_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____
10.71	Pump primer	12volt electric pump primer installed, attached to the pump module, located inside the pump-house. The primer shall be environmentally friendly oil-less version and not require lubrication oil.	_____

10.72	Foam proportioner	Electronic 12V Foam Proportioner installed.	
		Foam controls mounted on the pump panel shall provide:	
		<ul style="list-style-type: none"><li data-bbox="673 346 1234 409">• Control of foam proportioning rates from 0.1% to 1%, in infinite increments<li data-bbox="673 441 941 472">• Calibrate flow rate.<li data-bbox="673 504 1234 619">• Flashes and then displays a steady "low concentrate" warning when the foam concentrate tank runs low system shuts off after two minutes.<li data-bbox="673 651 1234 714">• Flash a "no concentrate" warning when the foam concentrate tank is empty.<li data-bbox="673 745 1234 840">• Flash an "error" warning with associated code in the event of an electronic malfunction.<li data-bbox="673 871 1234 934">• Provide a manual back-up mode, controlled by the operator Flowmeter.	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
10.73	Intake manifold	There shall be a 2.5" Intake Manifold installed. The manifold shall include the following: a) 2.5" tank-to-pump line c/w Aluminum Ball Valve. b) 2.5" auxiliary intake (Officer-Side) c/w Aluminum Ball Valve. A 2.5" F Swivel adapter and plug shall be included with the auxiliary intake. The threads shall be WCT.	<p>_____</p> <p>_____</p>
10.74	Tank fill	2.0" tank fill line installed. The valve shall be Aluminum with electronic control. High-pressure flexible rubber hose is used to plumb to tank.	<p>_____</p>
10.75	Hose Reel Supply	One (1) x 1.5" hose reel supply line installed. The hose shall be flexible high-pressure with stainless crimped ends. A hard-coat aluminum valve, stainless steel ball with manual lever.	<p>_____</p>
10.76	Monitor supply	One (1) x 2.0" monitor supply hose lines installed. The valves shall be hard-coat aluminum, stainless steel ball with manual lever. A combination of stainless piping and high-pressure flex hose shall be used. One (1) x 3/4" bleeder/drain valve shall be installed for each hose line at the pump panel base area.	<p>_____</p> <p>_____</p>

10.77	Discharges rear	Two (2) 1 1/2" discharges installed located at the rear pump panel, the valves shall be hard-coat aluminum, stainless steel ball with electronic control. A combination of stainless piping and high-pressure flex hose shall be used. Discharge threads shall be 1.5" AMA on the droop. 3/4" bleeder/drain valves shall be installed at the pump panel base area.	_____
10.78	Hose reels	One (1) Hannay (or equivalent in accordance to B6) 12-Volt Electric Rewind Hose Reel installed, The reel shall be designed to carry 200' of 1" Niedner Reeltex (or equivalent in accordance to B6) Fire Hose each. A push-button rewind switch shall be installed. The reel shall be powder-coated RED. The hose reel shall be mounted at the rear of the apparatus and able to deploy to either side.	_____
10.79	Fire hose (reel)	200' of 1" Reeltex Fire Hose Reeltex (or equivalent in accordance to B6).	_____
10.80	Nozzle TFT	Two (2) Task Force Tips model # DS1040P (or equivalent in accordance to B6) ball shut off nozzles shall be provided. Selectable, dual gallonage nozzle furnished with flow settings of 10 and 40 GPM at 100 PSI and produce fog and straight stream patterns. An integral pistol grip handle shall be positioned directly below the valve handle. This nozzle shall have a "twist off" position for positive shut off. The nozzle shall be furnished with a 1" female NPSH swivel rocker lug inlet and designed to accept the Task Force Tips FJ-MX-D Foam Jet foam aspirating attachment.	_____
10.81	Ground Nozzle, Front & Rear	Two (2) Ground Spray Nozzles shall be installed at the front beneath the front and rear bumpers and one (1) electric water valve shall be included at the pumphouse. The electric valve actuator shall be installed at the chassis cab switch panel.	_____
10.82	Monitor TFT	One (1) TFT EF1 wildland monitor (or equivalent in accordance to B6). One (1) front bumper mounted turret monitor. The monitor shall be electronically controlled from a joystick located in the cab. The monitor shall be configured with a 2" female NPT inlet with quick disconnects with locking pin and 1-1/2" male NPSH outlet.	_____

10.83 Nozzle w/ Shut-Off	Two (2) Task Force Tips model # FS2095 ball shut off nozzles (or equivalent in accordance to B6) shall be provided. The selectable, dual gallonage nozzle shall be furnished with flow settings of 20 and 95 GPM at 100 PSI and produce fog and straight stream patterns. The nozzle body shall be constructed from hardcoat anodized aluminum alloy, utilize a stainless steel ball shut off valve with a quick change polymer valve seat. This nozzle shall have a "twist off" position for positive shut off. The nozzles shall be furnished with a 1-1/2" female NPSH swivel rocker lug inlet and designed to accept the Task Force Tips FJ-MX-F FoamJet (or equivalent in accordance to B6) foam aspirating attachment.	<hr/>
10.84 Electrical Power Distribution	The apparatus shall be equipped with Upfitter Interface Module (UIM) system. The unit shall provide a programmable 12-volt power distribution system to operate all emergency, scene and area lighting.	<hr/>
10.85 Water tank level display	A Fire Research TankVision Pro model WLA300-A00 tank indicator kit (or equivalent in accordance to B6) to be installed. The kit shall include electronic indicator module, a pressure sensor, and a 10' sensor cable. The indicator shall show the volume water in the tank on nine (9) easy to see super bright RGB LEDs. A wide view lens over the LEDs shall provide a viewing angle of 180 degrees. The indicator case shall be waterproof, manufactured of Polycarbonate/Nylon material, and have a distinctive blue label.	<hr/>
	The program features shall be accessed from the front of the indicator module. The program shall have self-diagnostics capabilities, self-calibration, six (6) programmable colored light patterns to display tank volume adjustable brightness control levels and a datalink to connect remote indicators. Low water warnings shall include flashing LEDs at 1/4 tank, down chasing LEDs when the tank is almost empty, and an output for an audio alarm.	<hr/>
	The indicator shall receive an input signal from an electronic pressure sensor. The sensor shall be mounted from the outside of the water tank near the bottom. No probe shall be placed on the interior of the tank. Wiring shall weather resistant and have automotive type plug-in connectors.	<hr/>
10.86 Foam tank level display	Fire Research Tank Vision Pro model WLA360-A00 tank level indicator (or equivalent in accordance to B6).	<hr/>

10.87	Pump drain valve	Pump & Foam Manifold Drain Valves installed at the base of the pump panel.	_____
10.88	Air blowout	A 12 volt air compressor and storage tank system installed to allow the manifolds and hoses to be evacuated of water, to prevent freezing.	_____
10.89	Water/foam tank	300-400 Imp-Gal poly water tank. 20-30 Imp-Gal Foam tank. Tank fill from top Tank fill from pump panel with 1 ½" inlet Tank drain with control on Driver's Side	_____
10.90	Tool Storage Drawer(s)	Two (2) Drawer Tool Storage assembly installed on the floor of a body compartment. Fabricated from aluminum sheet. Heavy-Duty ball-bearing slides used for the drawers. Dividers are included to insert as desired for compartment sizing. All tools shall be securely mount in the compartments and properly weight distributed.	_____
10.91	Rollup doors	All Compartment doors equipped with AMDOR® brand (or equivalent in accordance to B6) roll-up doors complete with the following features: 1" aluminum double wall slats with continuous ball & socket hinge joint designed to prevent water ingress and weather tight recessed dual durometer seals. <ul style="list-style-type: none">• Double wall reinforced bottom panel with stainless steel lift bar latching system.• Bottom panel flange with cut-outs for ease of access with gloved hands.• Reusable slat shoes with positive snap-lock securement.• Smooth interior door curtain to prevent equipment hang-ups.• One-piece aluminum door track side frame.• Top gutter with non-marring seal.• Non-marring recessed side seals with UV stabilizers to prevent warping.• Dual leg bottom seal (wear component material to be Type 6 Nylon).• Door ajar switch system (magnetic) shall be provided by AMDOR.• Door striker will provide support beneath the lift bar to prevent door curtain bounce and potential false door ajar indications.	_____

LIGHTING/ELECTRICAL

10.92	Light bar	A 54" Whelen liberty II, P/N IW2RR with photocell for hi/low power, to meet NFPA standards and must fully populate light bar (or equivalent in accordance to B6).	_____
10.93	Alley lights	Whelen (or equivalent in accordance to B6) clear LED Alley lights installed on each end of the light bar.	_____
10.94	Beacons	Two (2) Whelen L31HRFN Red LED (or equivalent in accordance to B6) Beacons installed at the back upper part of the body, one each side. The beacons shall be wired into the upper level emergency warning light circuit.	_____
10.95	Warning lights (chassis grille)	Two (2) Whelen M4 Series Model # M4R Clear LED (or equivalent in accordance to B6) warning lights shall be installed at the chassis grille, one (1) on each side.	_____
10.96	Warning lights, Chassis fenders	Two (2) Whelen M4 Series Model # M4R Clear LED (or equivalent in accordance to B6) warning lights shall be installed at the chassis grille, one (1) on each side.	_____
10.97	Warning lights, body fenders	Two (2) Whelen M7 Series Model# M7R Red LED (or equivalent in accordance to B6) warning lights shall be installed, at the body fender panels, one (1) each side.	_____
10.98	Warning lights, body-rear-lower	Two (2) Whelen M7 Series Model# M7R Red LED (or equivalent in accordance to B6) warning lights shall be installed, at the body rear lower panels, one (1) each side.	_____
10.99	All lighting mentioned above	Shall meet KKK 1822F, NFPA 1901, SAE and EC65 specifications.	_____
10.100	Siren and emergency lights controller	Whelen siren and light controller p#CCSRNT5, CANCTL6 and he CC5k1 (or equivalent in accordance to B6).	_____
10.101	Siren system	Whelen CANCTL6 (or equivalent in accordance to B6) Siren System installed, flush mounted into the cab center console. A mic shall be included for the operator to speak through a public address system.	_____
10.102	Siren speaker	One (1) Whelen SA315P 100-watt Siren Speaker (or equivalent in accordance to B6) installed at the front bumper.	_____

10.103	DOT lamps	Whelen DOT lights (or equivalent in accordance to B6) shall be installed: _____
		<ul style="list-style-type: none">• Two (2) Red LED Brake/Tail Lamps, one (1) on each side at the back of the apparatus. _____• Two (2) Amber LED Turn Lamps, one (1) on each side at the back of the apparatus. _____• Two (2) Clear LED Back-Up Lamps, one (1) on each side at the back of the apparatus. _____• Five (5) x 2" round Red LED clearance lamps shall be installed on the back bumper, one (1) on each corner and three (3) on center of the bumper. _____• Four (4) Red LED clearance lamps shall be installed at the back-top of the body sides, two (2) facing sideways and two (2) facing backwards. One (1), Red LED 3-lamp ID bar shall be installed at the top center of the body. _____• There shall be two (2) Amber LED turn signal/clearance lamps installed, one (1) on each side at the body fenders. _____
10.104	License plate bracket/lamp	Stainless steel bracket installed at the back of the body for a license plate. The top of the bracket with a formed lip to protect an LED lamp. _____
10.105	Backup alarm	Pollack (or equivalent in accordance to B6) 107db Back-up Alarm installed at the back of the apparatus frame area. _____
10.106	Scene light front bumper	One (1) 32" Hi-Intensity LED Off-Road combination spot/flood light installed at the front bumper. 6000k Bright White Light with a dash mounted switch. _____
10.107	Scene lights pump house	Two (2) Fire Research Model# FCA530-Q20 LED Scene Lights (or equivalent in accordance to B6) installed at the front corners of the pump house, one each side. The lights shall be installed on tele-scopic poles to allow for horizontal & vertical rotation, raising and lowering. Switches installed at the pump operators panel, to activate the lights, one switch for each light. _____

10.108	Pump house lights	One (1) 63" LED Strip Light installed below a glare shield to illuminate the pump operator control panel. Two (2) additional LED lamps installed to illuminate the driver-side pump panel and the officer-side pump panel. The lights shall be switched at the pump control panel.	_____
10.109	Step lights chassis	Four (4) Tecniq LED step lights (or equivalent in accordance to B6) installed, two (2) each side at the chassis cab entry steps. These lights shall turn-on automatically when a cab door is opened and are also switched by a cab dash switch.	_____
10.110	Step lights back-of-body	Three (3) Tecniq LED step lights (or equivalent in accordance to B6) installed, at the back-of-body steps. These lights shall be switched by a cab dash switch.	_____
10.111	Ground lights chassis steps	Four (4) Tecniq LED ground lights (or equivalent in accordance to B6) installed, two (2) each side beneath each cab entry step to illuminate the ground. These lights shall turn-on automatically when a cab door is opened and are also switched by a cab dash switch.	_____
10.112	Ground lights pump house	Two (2) Tecniq LED ground lights (or equivalent in accordance to B6) installed, one (1) each side beneath each pump house step to illuminate the ground. These lights shall turn-on automatically when a cab door is opened and are also switched by a cab dash switch.	_____
10.113	Ground lights back-bumper	Two (2) Tecniq LED ground lights (or equivalent in accordance to B6) installed, one (1) each side beneath the back bumper to illuminate the ground. These lights shall turn-on automatically when a cab door is opened and are also switched by a cab dash switch.	_____
10.114	Interior lights pump house	Two (2) Tecniq SteelHead LED work lights (or equivalent in accordance to B6) installed, one (1) each side at the pump house compartment to illuminate the pump house. Each lamp shall be rated at 750 lumens. These lights shall be switched by a switch at the pump control panel.	_____
10.115	Voltage Testing-	The wiring and permanently connected devices and equipment shall be subject to a dielectric voltage withstand test of 900 volts for one minute. The testing shall be performed after all body work has been completed. The electric polarity of all permanently wired equipment, cord reels, and receptacles shall be tested to verify that wiring connections have been properly made.	_____

10.116	Conformance	All lighting to conform to: <ul style="list-style-type: none">• C.M.V.S.S.• Manitoba Highway Traffic Act.• City of Winnipeg Lighting Visibility Standard http://winnipeg.ca/matmgt/pdfs/PublicWorksEquipLightingVisibility.pdf.	_____
--------	-------------	---	-------

ACCESSORIES

10.117	Suction hose	Four (4) lengths of 2.5" x 5' hard suction hose provided with BAT fittings.	_____
10.118	Strainer	A 2.5" barrel strainer shall be supplied with BAT threads.	_____
10.119	Foam nozzles	Two (2) Air-Aspirating Foam Nozzle attachments supplied. One (1) 1.0" and (1) 1.5". The attachments clip onto the tip of a pistol-grip nozzle.	_____
10.120	Spanner wrench set	One (1) set of (2) aluminum spanner wrenches with bracket installed at the driver-side pump panel.	_____
10.121	Safety items	The following items shall be included with the apparatus: <ul style="list-style-type: none">• Triangular Flare Kit• First Aid Kit• 5lb Fire Extinguisher	_____

ADDITIONAL EQUIPMENT

10.122	Part 1 wildland hose	One (1) 100ft (L) x 1 ½" diameter Percolite Mercedes (or equivalent in accordance to B6).	_____
10.123	Part 2 wildland hose	One (1) 100ft (L) x 1 ½" diameter 1 ½" Percolite Mercedes (or equivalent in accordance to B6).	_____

PAINT/DECALS

10.124	Paint process body	The exterior of the apparatus body shall have a durable rock-guard coating applied, color-matched with the cab paint. The aluminum body exterior shall have no mounted components installed prior to painting to assure full coverage of metal treatments and paint to the exterior surfaces of the body.	_____
--------	--------------------	---	-------

10.125	Chevron red/yellow-green	Reflexite (or equivalent in accordance to B6) Red & Yellow-Green 6" reflective chevron striping installed on the back of the body. The design shall be such that from the centerline on the body, the striping shall be applied outwards & downwards at a 45 degree angle. The colors shall be applied alternately.	_____
10.126	Striping front bumper	4" white reflective stripe attached to the width of the front bumper.	_____
10.127	Reflective striping	"White" reflective striping installed on the sides of the apparatus per NFPA 1901. 4" stripe running mid-body full-length. A proof shall be sent to the WFPS for approval before installation.	_____
10.128	Decals	Fire Department Door Decals installed on the chassis cab doors. The design shall be provided or approved by WFPS.	_____
10.129	Logo	The reflective striping on the cab shall incorporate the Fire Department's stylized "WFD" logo. (A diagram of the logo shall be provided to the Contractor by the City).	_____
10.130	Apparatus labels	<p>The following labels shall be applied to the apparatus:</p> <ul style="list-style-type: none">• Apparatus Fluids Plate• Warning - Apparatus Seating Capacity• Warning - Occupants Must be Seated and Belted• Warning - Do Not Wear Helmets While Riding• Warning - Only Trained Operators to Operate Apparatus• Warning - Hot Exhaust• Warning - Step Fall Hazard• Warning - Do Not Ride on Step when Apparatus in Motion	_____

**TESTING &
CERTIFICATION**

10.131	Testing	The completed vehicle shall be tested and labelled to (NFPA) National Fire Protection Association Standard latest revisions by an independent third party certification organization. This apparatus must meet the current NFPA 1906/1901 requirements.	_____
10.132	Third Party Organization	The third party organization accredited for testing systems on fire vehicle in accordance with ISO/IEC 17020 or ISO/IEC Guide 65.	_____

10.133	Certification	The certification organization shall not be owned or controlled by manufacturers or vendors of the vehicle being tested. Manufacturer's certification is not acceptable. (No exceptions)	_____
10.134	Labelling	A warning label shall be provided in the cab within sight of the driver stating the seating capacity of the cab/crew cab.	_____
10.135	Safety Labelling	A warning label shall be provided in the cab within sight of the driver stating the seating capacity of the cab/crew cab.	_____
10.136	Dimension Plate	A warning label shall be provided in the cab within sight of the driver stating the following vehicle dimensions: <ul style="list-style-type: none">• Height and length in standard and metric measurements.• Gross vehicle weight rating in pounds and kilograms.	_____

11.0 **WARRANTY**

11.1	The body warranty on the complete vehicle (excluding the chassis) shall include 100% replacement parts and labour at no cost to the City and shall cover the complete equipment and all parts thereof against defects of workmanship, construction and materials for one (1) year from the date the equipment is put into service by the City of Winnipeg.	_____
11.2	All warranty information be detailed and include all exclusions. The Contractor shall provide all published warranty information upon delivery of the equipment. Contractor shall State: all warranty information	_____

BODY WARRANTY

11.3	Structural	State:	_____
11.4	Body Vehicle basic coverage	State:	_____
11.5	Body compartment latches, hinges and shelving	State:	_____
11.6	Components e.g. Pumps	State:	_____
11.7	Electrical	State:	_____
11.8	Body Lighting	State:	_____
11.9	Body Paint	State:	_____

CAB & CHASSIS WARRANTY

11.10	Basic Vehicle - Chassis	State:	_____
-------	-------------------------	---------------	-------

11.11	Electrical	State:	_____
11.12	LED Lighting	State:	_____
11.13	Batteries	State:	_____
11.14	Drivetrain	State:	_____
11.15	Cab Structure/Corrosion	State:	_____
11.16	Frame & Cross-Members	State:	_____
11.17	Cab Paint	State:	_____
11.18	Engine	State:	_____
11.19	Transmission	State:	_____
11.20	Axles - Front & Rear	State:	_____
11.21	Components	State:	_____
11.22	Warranty Administration Coordinator	The Contractor shall have a dedicated person allocated and available 24/7 to receive phone calls and determine, coordinate, schedule and have the ability to authorize all warranty related issues which arise during the warranty period.	_____
11.23	Third Party	In the case where the Contractor proposes that warranty work be performed by a third party or by the City of Winnipeg Fire Paramedic Service, the Contractor shall include a written detailed estimate. Any work performed by the Fire Paramedic Service Mechanical Services Branch will be charged to the Contractor at the Branch's shop rate in effect at the time the work is performed.	_____
11.24	Importance	The vehicle is of vital importance to the City in providing essential services and, accordingly, all warranty items brought to the attention of the Contractor by the City shall be rectified expediently. The City reserves the right to affect warranty repairs to the vehicle, at full cost to the Contractor, should the Contractor fail to perform in a timely manner.	_____

- 11.25 Warranty Literature All warranty literature and Documentation or "fine print" documentation provided within three (3) Business Days of the request from the Contract Administrator. This warranty documentation will be entered into the City of Winnipeg Fire Department's Service Data Network to expedite and administrate warranty claims and repairs. _____
- 12.0 **DELIVERY**
- 12.1 Delivery Point: The complete unit shall be serviced, ready for operation and delivered F.O.B. with the freight prepaid, including invoice and N.I.V.S. (if applicable) to the WFMA 185 Tecumseh Street, Winnipeg MB. The Contractor shall be notified by the Contractor Administrator the delivery address prior to issuance of the purchase order _____
- 12.2 Delivery Time: Equipment shall be delivered between 8:00 am and 2:00 pm on Business Days
State: Delivery Date _____
- 12.3 Delivery Contact: The Contractor shall contact the Contract Administrator prior to delivery of the equipment. _____
- 12.4 P.D.I: A pre-delivery inspection shall be performed by the Contractor on the equipment. Proof upon inspection including completed check list _____
- 13.0 **MANUALS**
- 13.1 Manuals supplied under this Contract shall cover the complete equipment including all components thereof, CD or USB flash drive is preferred where available. _____
- 13.2 The following manuals shall be supplied with the units when delivered:
- a) Operator's manual – Two (2) per unit (one operator manual shall be sent to:
The Winnipeg Fire Paramedic Service Training Academy 2546 McPhillips Street Winnipeg, Manitoba
Office- (204).986.8398
Fax- (204).986.4266 _____
 - b) Parts and service manuals – One (1) complete set including preventative maintenance schedules. CDs or USB flash drive are preferred. _____
- 14.0 **PARTS/LABOUR DISCOUNT**
- 14.1 Bidder to provide City of Winnipeg Parts Discount % Pricing from retail parts pricing. **State: percentage discount** _____%
- 14.2 Bidder to provide City of Winnipeg Labor Discount % Pricing from Retail shop labor rate. **State: percentage discount** _____%

15.0 **FIRST SERVICE PREVENTATIVE MAINTENANCE KIT**

- 15.1 In order to assure minimum downtime of the equipment in future service, the Contractor shall provide one (1) complete replacement set of new OEM filters for each unit purchased. The set of required filters shall include (if applicable to the equipment type) air, fuel, oil, cab and hydraulic, or otherwise all known necessary common replacement filters required for the first preventative maintenance servicing. _____
- 15.2 The Contractor shall provide a list of factory recommended lubricants to be used with the equipment, as well as a complete cross reference guide for all warranty approved lubricants and filters that can be used during preventative maintenance servicing. _____