



THE CORPORATION OF THE CITY OF NIAGARA FALLS

**REQUEST FOR TENDER - SUPPLY**

**RFT40-2018 - SUPPLY & DELIVERY OF  
FIRE PUMPER TRUCK**

***SPECIFICATIONS***

**NAME OF COMPANY (DEALER):** \_\_\_\_\_

ITEM/CATEGORY	CITY REQUIREMENTS	BIDDER TO STATE SPECIFICATIONS
<b>Make</b>	Spartan or equivalent	
<b>Year</b>	2018	
<b>Model</b>	Metrostar 10" RR	
<b>New or Demo Unit</b>	New	
<b>Engine</b>	<p>The chassis engine shall be a Cummins ISL9 engine. The ISL9 engine shall be an in-line six (6) cylinder, four cycle diesel powered engine. The engine shall offer a rating of 380 horse power at 1900 RPM and shall be governed at 2100 RPM. The torque rating shall feature 1150 foot pounds of torque at 1400 RPM with 543 cubic inches (8.9 liters) of displacement.</p> <p>The ISL9 engine shall feature a VGT™ Turbocharger, a high pressure common rail fuel system, fully integrated electronic controls with an electronic governor, and shall be EPA certified to meet the 2013 emissions standards using cooled exhaust gas recirculation and selective catalytic reduction technology.</p> <p>The engine shall include an engine mounted combination full flow/by-pass oil filter with replaceable spin on cartridge for use with the engine lubrication system. The engine shall include Citgo brand Citgard 500, or equivalent SAE 15W40 CJ4 low ash engine oil which shall be utilized for proper engine lubrication.</p>	

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	<p>A wiring harness shall be supplied ending at the back of the cab. The harness shall include a connector which shall allow an optional harness for the pump panel. The included circuits shall be provided for a tachometer, oil pressure, engine temperature, hand throttle, high idle and a PSG system. A circuit for J1939 data link shall also be provided at the back of the cab.</p> <p>Must have High Throttle / Cruise Control Capabilities.</p>	
<p><b>Exhaust</b></p>	<p>The exhaust system shall be mounted below the frame in the outboard position with the SCR canister in line rearward of the DPF. The exhaust system shall utilize a 90-degree bend in the exhaust tubing from the turbo into a side inlet DPF canister that allows the entire system to be pulled forward. The exhaust discharge shall terminate on the right side of the vehicle ahead of the rear tires. Nederman Puck location to be consider for body mounting to line up with exhaust discharge.</p> <p><b>DIESEL EXHAUST FLUID TANK</b></p> <p>The exhaust system shall include a molded cross linked polyethylene tank for Diesel Exhaust Fluid (DEF). The tank shall have a capacity of six (6) usable gallons and shall be mounted on the left hand side of the chassis frame behind the batteries below the frame.</p> <p>The DEF tank shall be designed with capacity for expansion in case of fluid freezing. Engine coolant, which shall be thermostatically controlled, shall be run through lines in the tank to help prevent the DEF from freezing and to provide a means of thawing the fluid if it should become frozen.</p>	

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	<p>The tank fill tube shall be routed under the rear of the cab with the fill neck and splash guard accessible in the top rear step, adjacent to the air cylinder storage area.</p>	
<p><b>Transmission</b></p>	<p><b>TRANSMISSION</b>            The drive train shall include an Allison model EVS 3000 torque converting, automatic transmission which shall include electronic controls. The transmission shall feature two (2) 10-bolt PTO pads located on the converter housing.</p> <p>The transmission shall include two (2) internal oil filters and Castrol TranSynd™ synthetic TES 295 transmission fluid which shall be utilized in the lubrication of the EVS transmission. An electronic oil level sensor shall be included with the readout located in the shift selector.</p> <p>The transmission gear ratios shall be:            1st 3.49:1            2nd 1.86:1            3rd 1.41:1            4th 1.00:1            5th 0.75:1            Rev 5.03:1</p> <p><b>TRANSMISSION MODE PROGRAMMING</b>            The transmission, upon start-up, will automatically select a four (4) speed operation. The fifth speed over drive shall be available with the activation of the mode button on the shifting pad.</p> <p><b>TRANSMISSION FEATURE PROGRAMMING</b>            The Allison Gen V-E transmission EVS group package number 127 shall contain the 198 vocational package in consideration of the duty of this apparatus as a pumper. This package shall incorporate an automatic neutral with</p>	

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	<p>selector override. This feature commands the transmission to neutral when the park brake is applied, regardless of drive range requested on the shift selector. This requires re-selecting drive range to shift out of neutral for the override.</p> <p>This package shall be coupled with the use of a split shaft PTO and incorporate pumping circuits. These circuits shall be used allowing the vehicle to operate in the fourth range lockup while operating the pump mode due to the 1 to 1 ratio through the transmission, therefore the output speed of the engine is the input speed to the pump. The pump output can be easily calculated by using this input speed and the drive ratio of the pump itself to rate the gallons of water the pump can provide.</p> <p>A transmission interface connector shall be provided in the cab. This package shall contain the following input/output circuits to the transmission control module. The Gen V-E transmission shall include prognostic diagnostic capabilities. These capabilities shall include the monitoring of the fluid life, filter change indication, and transmission clutch maintenance.</p> <p>Function ID Description Wire assignment</p> <p>Inputs</p> <p>C PTO Request 142</p> <p>J Fire Truck Pump Mode (4th Lockup) 122/ 123</p> <p>Outputs</p> <p>C Range Indicator 145 (4th)</p> <p>G PTO Enable Output 130</p> <p>Signal Return 103</p>	

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	<p><b>TRANSMISSION SHIFT SELECTOR</b> An Allison pressure sensitive range selector touch pad shall be provided and located to the right of the driver within clear view and easy reach. The shift selector shall have a graphical Vacuum Florescent Display (VFD) capable of displaying two lines of text. The shift selector shall provide mode indication and a prognostic indicator (wrench symbol) on the digital display. The prognostics monitor various operating parameters and shall alert you when a specific maintenance function is required.</p> <p><b>ELECTRONIC TRANSMISSION OIL LEVEL INDICATOR</b> The transmission fluid shall be monitored electronically and shall send a signal to activate a warning in the instrument panel when levels fall below normal.</p> <p><b>TRANSMISSION PRE-SELECT WITH AUXILIARY BRAKE</b> When the auxiliary brake is engaged, the transmission shall automatically shift to second gear to decrease the rate of speed assisting the secondary braking system and slowing the vehicle.</p> <p><b>TRANSMISSION COOLING SYSTEM</b> The transmission shall include a water to oil cooler system located in the cooling loop between the radiator and the engine. The transmission cooling system shall meet all transmission manufacturer requirements. The transmission cooling system shall feature continuous flow of engine bypass water to maintain uninterrupted transmission cooling.</p> <p><b>TRANSMISSION DRAIN PLUG</b> The transmission shall include an original equipment manufacturer installed oil drain plug.</p>	

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	<p><b>TRANSMISSION WARRANTY</b> The Allison EVS series transmission shall be warranted for a period of five (5) years with unlimited mileage. Parts and labor shall be included in the warranty.</p>	
<b>Wheel Base</b>	The chassis wheelbase shall be 202.00 inches.	
<b>Suspension</b>	<p>Single axle vehicle. Front axle and suspension minimum 21,500 lbs. Rear axle and suspension minimum 27,000 lbs. Front and Rear Axles shall mean Suspension Specs.</p> <p><b>REAR AXLE DIFFERENTIAL CONTROL</b> A driver controlled differential lock shall be installed on the rear axle. This feature shall allow the main differential to be locked and unlocked when encountering poor road or highway conditions, where maximum traction is needed, for use at speeds no greater than 25 MPH. The differential lock shall be controlled by a virtual button on the Vista display and control screen. The Vista display shall also indicate when positive engagement of the differential control has occurred.</p> <p><b>REAR SUSPENSION</b> The single rear axle shall feature a Reyco 102AR air suspension with a single air bag on each side attached to a tapered forged drop leaf spring with one adjustable and one fixed torque rod.</p> <p><b>FRONT SHOCK ABSORBERS</b> Two (2) Bilstein inert, nitrogen gas filled shock absorbers shall be provided and installed as part of the front suspension system.</p>	

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	Maximum height of 3.50 m. Polished aluminum wheels. Engine brake (Jake or equivalent). Auxiliary shore power plug auto eject drivers side. Air inlet for air brakes is required. A/C in cab. Defroster fans for windshield. Canadian thread. Winterized, pump enclosed.	
<b>GVW</b>	Weights must meet Loaded Capacity	
<b>Steering</b>	Dual Steering Gears	
<b>Tires</b>	<p><b>FRONT TIRE</b>            The front tires shall be Michelin 315/80R-22.5 20PR "L" tubeless radial XZA1 highway tread.</p> <p>The front tire stamped load capacity shall be 18,180 pounds per axle with a speed rating of 75 miles per hour when properly inflated to 130 pounds per square inch.</p> <p>The Michelin Tire Intermittent Service Rating load capacity shall be 20,000 pounds per axle with a speed rating of 75 miles per hour when properly inflated to 130 pounds per square inch. The Michelin Intermittent Service Rating limits the operation of the emergency vehicle to one (1) hour of loaded travel with a one (1) hour cool down prior to another loaded run.</p> <p><b>REAR TIRE</b>            The rear tires shall be Michelin 12R-22.5 16PR "H" tubeless radial XDN2 all-weather tread.</p> <p>The rear tire stamped load capacity shall be 27,120 pounds per axle with a speed rating of 75 miles per hour when properly inflated to 120 pounds per square inch.</p>	

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	<p>The Michelin Tire Intermittent Service Rating load capacity shall be 28,880 pounds per axle with a speed rating of 75 miles per hour when properly inflated to 120 pounds per square inch. The Michelin Intermittent Service Rating limits the operation of the emergency vehicle to one (1) hour of loaded travel with a one (1) hour cool down prior to another loaded run.</p>	
<p><b>Brakes</b></p>	<p><b>BRAKE SYSTEM</b></p> <p>A rapid build-up air brake system shall be provided. The air brakes shall include a two (2) air tank, three (3) reservoir system with a total of 4152 cubic inch of air capacity. Air tanks shall include stainless steel brackets. A floor mounted treadle valve shall be mounted inside the cab for graduated control of applying and releasing the brakes. An inversion valve shall be installed to provide a service brake application in the unlikely event of primary air supply loss. All air reservoirs provided on the chassis shall be labeled for identification. The wet tank drain valve location to be accessible for daily manual draining.</p> <p>The rear axle spring brakes shall automatically apply in any situation when the air pressure falls below 25 PSI and shall include a mechanical means for releasing the spring brakes when necessary. An audible alarm shall designate when the system air pressure is below 60 PSI.</p> <p>A four (4) sensor, four (4) modulator anti-lock braking system (ABS) shall be installed on the front and rear axles in order to prevent the brakes from locking or skidding while braking during hard stops or on icy or wet surfaces. This in turn shall allow the driver to maintain steering control under heavy braking and in most instances, shorten the braking distance. The electronic monitoring system shall</p>	



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	<p>incorporate diagonal circuitry which shall monitor wheel speed during braking through a sensor and tone ring on each wheel. A dash mounted ABS lamp shall be provided to notify the driver of a system malfunction. The ABS system shall automatically disengage the auxiliary braking system device when required. The speedometer screen shall be capable of reporting all active defaults using PID/SID and FMI standards.</p> <p>Additional safety shall be accommodated through Automatic Traction Control (ATC) which shall be installed on the single rear axle. The ATC system shall apply the ABS when the drive wheels loose traction. The system shall scale the electronic engine throttle back to prevent wheel spin while accelerating on ice or wet surfaces.</p> <p>A momentary rocker style switch shall be provided and properly labeled “mud/snow”. When the switch is pressed once, the system shall allow a momentary wheel slip to obtain traction under extreme mud and snow conditions. During this condition the ATC light and the light on the rocker switch shall blink continuously notifying the driver of activation. Pressing the switch again shall deactivate the mud/snow feature.</p> <p>The Electronic Stability Control (ESC) unit is a functional extension of the electronic braking system. It is able to detect any skidding of the vehicle about its vertical axis as well as any rollover tendency. The control unit comprises an angular-speed sensor that measures the vehicle’s motion about the vertical axis, caused, for instance, by cornering or by skidding on a slippery road surface. An acceleration sensor measures the vehicle’s lateral acceleration. The Controller Area</p>	

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	<p>Network (CAN) bus provides information on the steering angle. On the basis of lateral acceleration and steering angle, an integrated microcontroller calculates a theoretical angular speed for the stable vehicle condition</p> <p><b>FRONT BRAKES</b> The front brakes shall be Meritor EX225 Disc Plus disc brakes with 17.00 inch vented rotors.</p> <p><b>REAR BRAKES</b> The rear brakes shall be Meritor 16.50 inch X 7.00 inch S-cam drum type. The brakes shall feature a cast iron shoe Long Stroke.</p> <p><b>PARK BRAKE</b> Upon application of the push-pull valve in the cab, the rear brakes will engage via mechanical spring force. This is accomplished by dual chamber rear brakes, satisfying the FMVSS parking brake requirements.</p> <p><b>PARK BRAKE CONTROL</b> A Meritor-Wabco manual hand control push-pull style valve shall operate the parking brake system. The control shall be yellow in color.</p> <p>The parking brake actuation valve shall be mounted on the dash as close as possible for the driver.</p> <p><b>REAR BRAKE SLACK ADJUSTERS</b> The rear brakes shall include Meritor automatic slack adjusters installed on the axle.</p> <p><b>REAR BRAKE DUST SHIELDS</b> The rear brakes shall be equipped with brake dust shields.</p>	

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<p><b>Electrical System</b></p>	<p><b>ELECTRICAL SYSTEM</b> The chassis shall include a single starting electrical system which shall include a 12 volt direct current Weldon brand of multiplexing system, suppressed per SAE J551. The wiring shall be appropriate gauge cross link with 311 degree Fahrenheit insulation. All SAE wires in the chassis shall be color coded and shall include the circuit number and function where possible. The wiring shall be protected by 275 degree Fahrenheit minimum high temperature flame retardant loom. All nodes and sealed Deutsch connectors shall be waterproof.</p> <p><b>MULTIPLEX DISPLAY</b> The multiplex electrical system shall include (2) Weldon Vista IV displays which shall be located one (1) on the right side of the dash in the switch panel and one (1) on the left side of the dash in the switch panel. The Vista IV displays shall feature full color LCD display screens which include a message bar displaying the time of day and important messages requiring acknowledgement by the user which shall all be displayed on the top of the screen in the order they are received. There shall be eight (8) push button virtual controls, four (4) on each side of the display for the on-board diagnostics. The display screens shall be video ready for back-up cameras, thermal cameras, and DVD.</p> <p>The Vista IV displays shall offer varying fonts and background colors. The displays shall be fully programmable to the needs of the customer and shall offer virtually infinite flexibility for screen configuration options.</p> <p><b>DATA RECORDING SYSTEM</b> The chassis shall have a Weldon Vehicle Data Recorder (VDR) system installed. The system shall be designed to meet NFPA 1901 and shall be integrated with the Weldon Multiplex</p>	

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	<p>electrical system. The following information shall be recorded:</p> <ul style="list-style-type: none"> <li>• Vehicle Speed</li> <li>• Acceleration</li> <li>• Deceleration</li> <li>• Engine Speed</li> <li>• Engine Throttle Position</li> <li>• ABS Event</li> <li>• Seat Occupied Status</li> <li>• Seat Belt Status</li> <li>• Master Optical Warning Device Switch Position</li> <li>• Time</li> <li>• Date</li> </ul> <p>Each portion of the data shall be recorded at the specified intervals and stored for the specified length of time to meet NFPA 1901 guidelines and shall be retrievable by connecting a laptop computer to the VDR system. If Not Multiplex, please State Specs</p>	
<b>Windshield Wipers</b>	<p><b>WINDSHIELD WIPER SYSTEM</b></p> <p>The cab shall include a dual arm wiper system which shall clear the windshield of water, ice and debris. There shall be two (2) windshield wipers which shall be affixed to a radial wet arm. The system shall include a single motor which shall initiate the arm in which both the left hand and right hand windshield wipers are attached, initiating a back and forth motion for each wiper. The wiper motor shall be activated by an intermittent wiper control located within easy reach of the driver's position.</p>	

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	<p><b>ELECTRONIC WINDSHIELD FLUID LEVEL INDICATOR</b> The windshield washer fluid level shall be monitored electronically. When the washer fluid level becomes low the yellow “Check Message Center” indicator light on the instrument panel shall illuminate and the message center in the dual air pressure gauge shall display a “Check Washer Fluid Level” message.</p>	
<p><b>Windows &amp; Mirrors</b></p>	<p><b>REARVIEW MIRRORS</b> Lang Mekra West Coast style series 300 Aero mirror heads shall be provided and installed on each of the front cab doors. The mirrors shall be mounted to the cab doors with tubular stainless steel swing away arms.</p> <p>The flat mirror shall measure 15.00 inches high X 8.00 inches wide. A separate lower convex mirror which shall measure 5.50 inches high X 6.60 inches wide shall be provided below the flat mirror for a wider field of vision. The mirror glass shall be shatter proof and the mirror backs shall be molded plastic with a textured chrome finish and shall include amber colored marker lights.</p> <p>The flat mirrors shall be remotely adjustable vertically and horizontally via four way actuation switches. The control switches shall be mounted in the cab with-in easy reach of the driver.</p> <p>The mirrors shall include LED turn signals as an integral part of the separate lower convex. The mirrors shall be heated for defrosting in severe cold weather conditions.</p> <p><b>REARVIEW MIRROR HEAT SWITCH</b> The heat for the rearview mirrors shall be controlled through a virtual button on the Vista display and control screen.</p>	

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<p><b>Heater &amp; Defroster &amp; Air Conditioning</b></p>	<p><b>CLIMATE CONTROL</b> The cab shall be equipped with a ceiling mounted combination defrost / heating and air-conditioning system mounted above the engine tunnel in a central location.</p> <p>The system shall offer sixteen (16) adjustable louvers. Six (6) of the louvers shall face forward towards the windshield, offering 45,000 BTU of heat at 320 CFM for defrosting. The system shall include six (6) rearward facing louvers to direct air for the crew area and four (4) for driver and officer comfort. The HVAC system shall be designed to produce 60,000 BTU of heat and 32,000 BTU of cooling. The HVAC cover shall be made of aluminum which shall be coated with a customer specified interior paint, or protective coating.</p> <p>All defrost/heating systems shall be plumbed with one (1) seasonal shut-off valve at the front corner on the right side of the cab.</p> <p>The air conditioner lines shall be a mixture of custom bent zinc coated steel fittings and Aero-quip GH 134 flexible hose with Aero-Quip EZ-Clip fittings.</p> <p><b>CLIMATE CONTROL DRAIN</b> The climate control system shall include a gravity drain for water management. The gravity drain shall remove condensation from the air conditioning system without additional mechanical assistance.</p> <p><b>CLIMATE CONTROL ACTIVATION</b> The heating, defrosting, and air conditioning controls shall be located on the center switch panel in the lower center section, in a position easily accessible to the driver and officer. The</p>	

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	<p>climate control shall be activated by a rotary switch.</p> <p><b>HVAC OVERHEAD COVER PAINT</b> The overhead HVAC cover shall be painted with a Zolatone #20-72 silver gray texture finish.</p> <p><b>AUXILIARY CLIMATE CONTROL REAR CREW</b> Two (2) 13,500 BTU heater shall be provided and installed in the rear facing section of the crew cab under the outer rear facing seat positions. Each fan shall be controlled via a toggle switch located on the side of the heater housing.</p> <p>The auxiliary heater system hoses shall be silicone with stainless steel constant torque clamps approved for use with silicone hose. The auxiliary heater system shall include one (1) seasonal shut-off valve. The valve shall be supplied at the front of the right hand corner of the cab. The cab must be tilted to access the shut-off valve.</p> <p><b>A/C CONDENSER LOCATION</b> A roof mounted A/C condenser shall be installed centered on the cab forward of the raised roof against the slope rise.</p> <p><b>A/C COMPRESSOR</b> The air-conditioning compressor shall be a belt driven, engine mounted, open type compressor that shall be capable of producing a minimum of 32,000 BTU at 1500 engine RPMs. The compressor shall utilize R-134A refrigerant and PAG oil.</p>	

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	<p><b>CAB CIRCULATION FANS FRONT</b> The cab shall include two (2) all metal 6.00 inch air circulation fans installed overhead in the center of the cab rearward of the windshield. Each fan shall be controlled by an individual toggle switch on each fan. The fans can be used to help defog the windshield or to increase air circulation for passenger comfort.</p>	
<p><b>Cab and Chassis</b></p>	<p><b>CUSTOM CAB STYLE</b> The cab shall be a custom, fully enclosed, MFD model with a 10.00 inch raised roof over the driver, officer, and crew area, designed and built specifically for use as an emergency response vehicle by a company specializing in cab and chassis design for all emergency response applications. The cab shall be designed for heavy-duty service utilizing superior strength and capacity for the application of protecting the occupants of the vehicle. This style of cab shall offer five (5) seating positions the rear seats facing forward. The cab shall be constructed of 5052-H32 corrosion resistant aluminum plate. The cab shall incorporate tongue and groove fitted 6061-T6 0.13 &amp; 0.19 inch thick aluminum extrusions for extreme duty situations. A single formed, one (1) piece extrusion shall be used for the “A” pillar, adding strength and rigidity to the cab as well as additional roll-over protection. The cab side walls and lower roof skin shall be 0.13 inch thick; the rear wall and raised roof skins shall be 0.09 inch thick; the front cab structure shall be 0.19 inch thick.</p> <p><b>OCCUPANT PROTECTION</b> The vehicle shall include the Advanced Protection System™ (APS) which shall secure belted occupants and increase the survivable space within the cab. The APS shall selectively</p>	



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	<p>deploy integrated systems to protect against injuries in qualifying frontal impact, side impact, and rollover events. The increase in survivable space and security of the APS shall also provide ejection mitigation protection.</p> <p>All cab entry doors shall be full length in design to fully enclose the lower cab steps Grab Handle for safe exit and entry.</p> <p>The cab shall have successfully completed the preload side impact, static roof load application and frontal impact without encroachment to the occupant survival space when tested in accordance with Section 4 of SAE J2420 COE Frontal Strength Evaluation Dynamic Loading Heavy Trucks, Section 5 of SAE J2422 Cab Roof Strength Evaluation Quasi –Static Loading Heavy Trucks and ECE R29 Uniform Provisions Concerning the Approval of Vehicles with regard to the Protection of the Occupants of the Cab of a Commercial Vehicles Annex 3 Paragraph 5.</p> <p>Medical storage cabinet size to be determined to be installed behind front seats accessible for the rear occupants.</p>	
<b>Equipment</b>	<p>Hale Q-max. pump 7000 lpm mid ship.</p> <p>Pump panel drivers side, both sides to be enclosed.</p> <p>Fire research Class 1 pressure governor TGA 300.</p> <p>Water tank poly with minimum of 750 US up to 1000 US gallons.</p> <p>Foam Pro 2000.</p> <p>Foam tank with 30 gallon capability and level gauge Class 1 model #1tl, intelli-tank foam tank level gauge.</p> <p>Front bumper 24” extension with hose well to hold 60 m of 44 mm hose and swivel discharge port located on top of bumper extension with checker plate cover to match extension.</p> <p>Front bumper to have indicator lighted indicator poles at each corner.</p>	

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ITEM/CATEGORY	CITY REQUIREMENTS	BIDDER TO STATE SPECIFICATIONS
	10" raised cab.	
	<p>Officer seat and 3 crew seats to contain an SCBA bracket (smart Doc) - seats to be Bostrom Tanker 450 ABTS SCBA vinyl, not cloth or equivalent.</p> <p>Officer seat to be non-adjustable H.O. Bostrom or equivalent with storage compartment under seat.</p> <p>EMS medical equipment storage cabinet behind driver and captain seats, size to be determined.</p> <p>Top command light Knight-KL408SD-W1 6xheads LED with remote or equivalent, controls storage mounted at pump panel.</p> <p>6-8 KW smart power system hydraulic generator with house power outlets on both sides of truck or equivalent.</p> <p>Cord reel with 200 feet of 10/3 cord mounted on top of truck with access at pump panel driver's side.</p> <p>6 pullout try trays shall be minimum of 650lbs, R1, L1, R3, L3, 1 in rear lower.</p> <p>1 extra long pullout tray to be mounted in rear compartment.</p> <p>PAC tool board mounting systems L1, L3, R1, R3.</p> <p>4 adjustable shelves, R1, L1, R3, L3.</p> <p>2 pullout tilt down 500 lbs, R2/L2.</p> <p>Compartment sizes to be determined at pre-conn.</p> <p>Dri decking.</p> <p>Compartments painted with Rhino liner or equivalent.</p> <p>Rom Rollup doors with drip trays.</p> <p>4 coffin cabins on top, 19" deep, 21" wide and 69½" long each or larger.</p> <p>Driver side pump panel – Controls located</p> <ul style="list-style-type: none"> <li>- 6" steamer with hydrant valve reducing to 4" stortz</li> <li>- 2.5" intake</li> <li>- 2.5" discharge</li> </ul>	

**THE CORPORATION OF THE CITY OF NIAGARA FALLS  
REQUEST FOR TENDER – SUPPLY  
RFT40-2018 - SUPPLY & DELIVERY OF  
FIRE PUMPER TRUCK**

**SPECIFICATIONS cont'd.**

**NAME OF COMPANY (DEALER):** \_\_\_\_\_

ITEM/CATEGORY	CITY REQUIREMENTS	BIDDER TO STATE SPECIFICATIONS
	<p>Passenger side -</p> <ul style="list-style-type: none"> <li>- 6 " steamer</li> <li>- 2.5" intake</li> <li>- 2.5" discharge</li> <li>- 3" discharge with 4" stortz</li> </ul> <p>Rear side-</p> <ul style="list-style-type: none"> <li>- 2-2.5" discharge</li> </ul> <p>Hose beds covered with (4) separate checker plate compartment doors with piano hinges -</p> <ul style="list-style-type: none"> <li>- hose bed and connection front bumper 60 m of 44 mm foam capable</li> <li>- 2 cross lays 60 mm of 44 mm foam capable</li> <li>- divided storage of 240 m of 100 mm and 2-120 m of 65 mm pre connect with foam capable</li> </ul> <p>Folding steps for hose bed access with Grab Handles</p> <p>Hose to be supplied –</p> <ul style="list-style-type: none"> <li>- 12 lengths - FHS MTFS 800 1.75-50 TY</li> <li>- 16 lengths - FHS MTFS 800 2.5-50 TY</li> <li>- 8 lengths - HWH 4 x 100 Megaflow breather hose</li> </ul> <p>Ladder storage, interior storage compartment on right side -</p> <ul style="list-style-type: none"> <li>- provision for 4 pike poles to be supplied, 2 12' fiberglass handle pike poles and 1 8' fiber glass handle, 1 New York hook</li> <li>- to be supplied, ground ladders 10' folding, 2 section 24', 16' roof ladder with hooks</li> </ul>	
	<p>Sigtronics system for driver, officer, 4 crew &amp; pump panel with 6 supplied headsets -</p> <ul style="list-style-type: none"> <li>- Model #US-67S intercom system shall be supplied with single radio interface capabilities. The master shall be capable of accepting up to 6 positions (plus exterior) and utilize a 12 volt power supply.</li> <li>- The intercom shall include: <ul style="list-style-type: none"> <li>▪ 6 #SE-8 single plugs behind the head radio transmit headsets shall be furnished. The headset shall have</li> </ul> </li> </ul>	

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RFT40-2018 - SUPPLY & DELIVERY OF  
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**SPECIFICATIONS cont'd.**

**NAME OF COMPANY (DEALER):** \_\_\_\_\_

ITEM/CATEGORY	CITY REQUIREMENTS	BIDDER TO STATE SPECIFICATIONS
	<p>adjustable volume, noise cancelling electric microphone, adjustable head strap and a reversible, flex style boom which rotates for left &amp; right dress.</p> <ul style="list-style-type: none"> <li>▪ 6 #800120 headset jackets shall be provided at the required seating positions in the cab. One #800121 exterior headset jack shall be provided for remote mounting at the pump panel.</li> <li>▪ Three #800122 radio transmit switches shall be provided at the drivers, officers seats and the pump panel. Location to be determined.</li> </ul>	
	<p>E Draulic Hurst spreader, cutter and ram to be supplied and installed including battery charger, location TBD. MRA Evolution 6000 extreme Thermal Imaging Camera and charging base. 4 stream lights with individual charging systems. MSA altair 4 gas monitor with charging dock.</p>	
	<p>Class IV hitch receivers on both sides behind rear tires and front. Ziamatic Quic-chock folding wheel chocks mounted under body at L1.</p>	
<b>Striping</b>	<p>Scotch-lite striping NFPA compliant matching NF colours. A 6" high Scotch lite stripe shall be provided, stripe shall be applied on a minimum of 60% of each side of the unit, 40% on the front of the unit. The Scotch-lite stripe shall be determined by the Fire Department. Scotch-lite will be white in colour, rear chevron striping. The entire rear of the truck shall be covered with alternating strips of reflective striping which shall be 6" Scotch-lite and red and yellow in colour.</p>	
<b>Lighting</b>	<p>Emergency lighting package NFPA standard, Whelen (preferred). Perimeter lighting as per NFPA to include blue lights Scene lights –</p>	

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**SPECIFICATIONS cont'd.**

**NAME OF COMPANY (DEALER):** \_\_\_\_\_

ITEM/CATEGORY	CITY REQUIREMENTS	BIDDER TO STATE SPECIFICATIONS
	2-Whelen 900 LED per side and rear.	
<b>Add On</b>	Easy access Right and Left Tow Hooks attached to rear Frame	
<b>Mfg.'s Corrosion Warranty</b>		
<b>Paint</b>	Red The cab and chassis shall be covered by a limited manufacturer paint warranty which shall be in effect for ten (10) years from the first owner's date of purchase or in service or the first 100,000 actual miles, whichever occurs first.	
<b>Warranty</b>		
<b>Mid-Build Inspection</b>	To be determined.	
<b>Service Diagnostics</b>	Supply Lap Top Diagnostic Software	
<b>Manuals</b>	Complete Parts Manuals	
<b>Manuals</b>	Complete Service Repair Manuals	
<b>Delivery</b>	Time of delivery	
<b>License</b>	City will License	
<b>Filters</b>	Supply all Filters for First Service	