Township of North Kawartha
280 Burleigh Street, PO Box 550, Apsley, ON K0L 1A0
Tel: 705-656-5178 | 1-800-755-6931 Ext 238 | Fax: 705-656-4446
www.northkawartha.ca

The Corporation of the Township of north Kawartha

Bid Document

Request for Tender

One Front Line Pumper Fire Truck

Tender #: RFT-03-26

Tender Closing

Date: **Thursday, May 7, 2026**

Time: **2:00:00 p.m. (14:00:00 hours) local time**

Location: **The Corporation of the Township of North Kawartha**
P.O. Box 550
280 Burleigh Street
Apsley, ON K0L 1A0

Attn: Judy Everett, Treasurer

Envelopes Should Be Clearly Marked "RFP-03-26

Late Bids Will Not Be Accepted.

The Corporation of the Township of North Kawartha reserves the right to accept or reject all or part of any bid and also reserves the right to accept other than the lowest bid and to cancel this call for bids at any time.

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Part “A” Information to Bidders

1. Purpose and Background

The Township of North Kawartha is a small rural lower-tier Township located in the northern portion of Peterborough County, Ontario providing services to a population of approximately 2,289 year-round residents and 12,000 seasonal residents.

North Kawartha is located midway between the City of Peterborough and the Town of Bancroft which both offer all the amenities of larger urban centers. Within the Township are smaller centers such as Apsley, Big Cedar, Burleigh Falls, Glen Alda, Mount Julian, Stoney ridge and Woodview.

The Township of North Kawartha (The Municipality) wishes to acquire one pumper fire truck. The successful proponent will be expected to supply all labor, materials, tools, equipment, and supervision to complete the scope of work more particularly described in Part “B” Specifications.

The municipality intends to select a bidder to carry out the scope of work, based on the Tenders submitted and the evaluation indicated in this document. It shall be the responsibility of the bidder to schedule regular meetings with the municipality during the various stages of this project.

2. Schedule of Work

The following schedule must be strictly adhered to. Only bidders who can commit to meeting this schedule should submit Tenders for the project.

Desired Project Schedule

Description:	**Date:**
Release the Request for Tenders	Friday, April 17, 2026
Deadline for Inquiry Submissions	2:00 p.m. Friday, May 1, 2026
RFT Closing	2:00 p.m. Thursday, May 7, 2026
Tender Award	Approx Tuesday, May 19, 2026
Tender Completion	Thursday, May 20, 2027

Contract Duration:

This contract shall be in effect starting on or about Wednesday, May 20, 2026 and continue through until full project completion. Project shall be completed no later than Thursday, May 20, 2027.

3. Applicable Document Fees

None required.

4. Bid Deposit Requirements

None required.

5. Performance Surety Requirements

None required.

6. Evaluation Criteria

An evaluation committee will review the submitted Tenders and selection will be based upon the following criteria in concurrence:

%	Criteria (percentages and criteria may change % totaling 100)
15%	Completeness of Tender (Fulfilling all requirements).
25%	Demonstrated experience of bidder's project team with respect to similar works undertaken and capabilities of project team members.
30%	Demonstrated approach, understanding and methodology in fulfilling all project requirements and in defining the work plan tasking to be undertaken. For greater certainty, this must include a detailed project schedule and sequencing of construction works to meet completion deadline of date. It is imperative that work must be commenced no later than date.
30%	Lowest acceptable price.

Bidders are advised that only complete submissions will be reviewed and evaluated. Bidders are further advised that Tenders are to be a maximum of 8 pages (managers discretion) (excluding schematics, references, schedules, illustrations and Curriculum Vitae (C.V.'s) which can be attached as appendices).

7. Tender Award

After an initial review of the Tenders, bidders may be interviewed and requested to provide sample information of where the bidder has recently completed work of a similar scope and focus.

Tender award will be made based upon the highest scored compliant proponent in the evaluation process. The Corporation of the Township of North Kawartha reserves the

right to accept or reject all or part of any bid and also reserves the right to accept other than the lowest bid and to cancel this call for bids at any time.

8. Document and Site Review

Bidders shall satisfy themselves by personal examination of the site name, review of the available documentation, and by such means as they prefer, as to the actual conditions and requirements of the work.

9. Inquiry

Any inquiries regarding the interpretation of scope of this Request for Tender shall be directed to the office of the Township of North Kawartha in writing, Jesse Lambe, Fire Chief at j.lambe@northkawartha.ca. Phone (705-656-1224)

No questions will be accepted after Friday, May 1, 2026 at 2:00 p.m.

10. Bid Closing Time

One original and one copy of the bid document, properly signed and sealed in an envelope, clearly marked RFT-03-26, shall arrive at the office of the Treasurer, Township of North Kawartha, 280 Burleigh St., Apsley, Ontario, K0L 1A0, no later than **2:00 p.m., May 7, 2026**. Late bids shall not be accepted; however, they shall be time and date stamped and will remain unopened.

The time registered on the office wall clock will be considered the official time when determining exact time of submission.

Persons wishing to attend the RFT opening may do so in person at 2:15 p.m. on Thursday, May 7, 2026 at the Municipal Office, 280 Burleigh Street, Apsley, ON K0L 1A0.

Part "B" Specifications

1. Project Information

Below are the desired specifications required for:

One Red Pumper Fire Truck

As stated, Part 'B' below includes the requested specifications desired for the Pumper Fire Truck. Proposals from all Manufacturers or proposals that exceed specifications are welcome and will be evaluated equally. The Pumper Fire Truck will be evaluated as per evaluation criteria.

2. General Specifications: Pumper Fire Truck Red

Model	Year	Manufacturer
	2026	

Specification Specific	Yes	No	Specify
Basic Specifications			
Freightliner 4-door chassis per the attached specifications, or equivalent			
Engine	**Yes**	**No**	**Specify**
DD8 7.7L 6 CYL DUAL STAGE 350 HP @ 2200 RPM, 2600 GOV RPM, 1050 LB-FT @ 1200 RPM or equivalent			

Transmission	**Yes**	**No**	**Specify**
allison 3000 evs automatic transmission with pto provision			
allison vocational package 198			
allison vocational rating for fire truck/emergency vehicle applications			
primary mode gears, lowest gear 1, start gear 1, highest gear 6,			
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			
engine brake range preselect recommended by dtna and allison, this defined by engine and vocational usage			
engine brake range alternate preselect recommended by dtna and allison, this defined by engine and vocational usage			
fuel sense 2.0 plus - dynactive: balanced (w/dss), neutral at stop: active			
driver switch input - default - no switches			
quickfit body lighting connector at end of frame, with bluntcuts			

electronic transmission wiring to customer interface connector			
push button electronic shift control, dash mounted			
Cab Interior	**Yes**	**No**	**Specify**
Rugged trim package			
Gray &carbon vinyl interior			
Dash mounted 12v power outlet, 1 dash mounted dual USB outlet			
Seats inc 911 universal series high back air suspension driver seat with nfpa 1901-2009/2016 compliant seat sensor			
Seats inc 911 universal series scba non suspension passenger seat with underseat storage and nfpa 1901-2009/2016 compliant seat sensor			
Seats inc 911 universal series scba non suspension lh, rh and center rear passenger seats with under seat storage and nfpa 1901-2009/2016 compliant seat sensor			
Black vinyl driver seat cover			
Black vinyl passenger seat cover			
black vinyl rear passenger seat cover			
Nfpa 1901-2009 high visibility orange seat belts			
	Yes	**No**	**Specify**
Heater, defroster and air conditioner			
Configurable lower panel with integrated upper storage			
Bright argent finish gauge bezels			
Low air pressure indicator light and audible alarm			
Dual needle primary and secondary air pressure gauge			
Eectronic air restriction indicator displayed in driver display			

Ignition switch with non removable key			
Nfpa vehicle data recorder and seatbelt display			
Radio with AM/FM radio antenna			
Standard radio controls on steering wheel			
(2) overhead mounted lanyards controls (1) officer air horn and (1) driver air horn			
Display panel with backup camera			
Design	**Yes**	**No**	**Specify**
Paint color solid red			
Exterior gold striping 3M			
Standard undercoating			
Rear Left side upper Gold “FIRE RESCUE” Decal			
Rear right side upper Gold “ FIRE RESCUE” Decal			
Rear left side door Gold “Pumper #1” Decal			
Rear right side door Gold Pumper #1 Decal			
Electrical	**Yes**	**No**	**Specify**
The electrical system shall include all panels, electrical components, switches and relays, wiring harnesses and other electrical components. The electrical equipment installed by the apparatus manufacturer shall conform to current automotive electrical system standards, the latest Federal DOT standards, and the requirements of the applicable NFPA standards.			
The apparatus shall be electrically tested upon completion of the vehicle and prior to delivery. The electrical			

testing, certifications, and test results shall be submitted with delivery documentation per requirements of the applicable NFPA standards. The following minimum testing shall be completed by the apparatus manufacturer: reserve capacity test, alternator test at idle and full load, low voltage test An electrical console shall be constructed of .125" smooth aluminum material and mounted in the cab of the truck chassis. Console shall be designed and installed between the driver and passenger seats. The top face of the console shall be designed as the switch panel for all emergency light switches. The switch panel shall be hinged for easy access to the switch connections. All emergency light switches shall be lighted, rocker style. Switches shall be internally lit when the switch circuit is in the on position. A plug-in identification label is to be provided and installed adjacent to each rocker switch with backlighting provided behind the label			
A rocker style internally lighted switch shall be provided and wired through a heavy-duty relay to activate power to the emergency lights. The emergency lights shall be activated by a single "MASTER SWITCH" on the electrical console.			

The battery system shall be supplied with the chassis.			
A battery disconnect switch shall be located conveniently to the driver of the apparatus. The switch shall disconnect the 12 volt power supply from the battery system.			
High output battery charger shall be wired to the 12-volt battery system. The charger unit shall be mounted in a clean dry area and will be accessible for service and/or maintenance.			
The battery charger shall be located behind the driver's seat.			
There shall be a l 20-amp super auto eject with a yellow cover and integrated digital display supplied.			
The shoreline shall be located in the driver's front stepwell.			
One (1) 12 volt power and ground connection rated at 30 amps shall be provided on the apparatus for the installation of a mobile two-way radio. The power shall be located inside the cab console. The power source shall be run through the chassis master battery switch and shall be deactivated when the master switch is in the "OFF" position.			
One (1) 12 volt power and ground connection rated at 20 amps shall be provided in the center			

console in the chassis cab. The power shall be located inside the cab console. The power source shall be "constant hot" and remain active regardless of the position of the master battery switch.			
One (1) 12 volt LED light with switch shall be mounted in the engine enclosure. The control switch shall be mounted on the light head.			
(1) one 130° camera with 18 infrared illuminators and (1) one 7” digital monitor. <u>The 130° Camera shall include the following features</u>: ⅓” SONY® Color CCD Sensor, 250,000 pixels for Picture Elements and Gamma Correction with R=0.45 to 1.0. Camera shall have Mirror Image capability. shall also include (1) one 7” TFT LCD Digital Color Monitor. The specifications shall be as follows for the monitor:			
One XPR 4550 Motorola radio programmed to digital capabilities, and hooked up to antenna exact location to be determined by customer, customer to look at where it will fit on the console of the truck in regards to the exact location of the truck. Antenna shall provide 30 feet of coaxed cable approved by D.O.T and be			

secured to the electrical panel on the interior of the cab. Radio must be programmed with county channels as well as the North Kawartha roads department and be looked at having the abilities to be programmed to the digital capabilities as well as the analog channels for the county base radio shall also have an built in design that has the capabilities of securely holding and survivor flash light as well as base map of the township. And be placed at the center of the console and be looked at having a map book light in the console,			
One (1) radio antenna base shall be supplied and installed on the apparatus,			
LED marker lights shall be installed on the vehicle in conformance to the Canadian Motor Vehicle Safety Standard requirements.			
A stainless-steel license plate bracket shall be provided at the rear of the apparatus.			
One (1) pair of Whelen LED tail/brake lights shall be provided. The rectangular 4"x6" lights shall be red.			
One (1) pair of Whelen LED turn signals with populated sequential chevron arrow shall be provided.			
	Yes	**No**	**Specify**
One (1) pair of Whelen Series LED backup lights shall be			

installed on the rear of the apparatus body. The dimensions shall be 4" x 6" and the lens color shall be clear. Individual chrome tail light bezels shall be supplied for mounting the rear stop, turn signal, and back-up lights located at the lower rear corners of the body on each side.			
One (1) pair of mid body LED turn signals shall be provided. The location of the turn lights shall be at mid-body near the rear wheel axle.			
Each door shall include a Whelen LED NFPA compliant ground light mounted to the underside of the cab step below each door. Each light shall include a polycarbonate lens, a housing which is vibration welded and a bulb which shall be shock mounted for extended life. The ground lighting shall be activated when the parking brake is set.			
There shall be LED cab step lights supplied below the chassis cab doors. The lights shall be mounted below the cab doors and illuminate the chassis cab steps. There shall be four (4) LED lights located on each side of the chassis cab.			
There shall be two (2), one each side, Whelen LED NFPA compliant ground light mounted			

to the underside of the rub rail of the pump house. Each light shall include a polycarbonate lens, a housing which is vibration welded and a bulb which shall be shock mounted for extended life. The ground lighting shall be activated when the parking brake is set.			
There shall be two (2) Whelen LED NFPA compliant ground light mounted to the underside of the rear step. Each light shall include a polycarbonate lens, a housing which is vibration welded and a bulb which shall be shock mounted for extended life. The ground lighting shall be activated when the parking brake is set. The ground lights shall automatically activate when the parking brake is applied. The ground lights shall automatically activate when the truck is placed in reverse.			
Two (2) LED step light(s) with clear lens shall be installed. Lights to be on rear wall left side and to be Whelen ANGLED ILLUMINATION			
Two (2) LED step lights with clear lens shall be installed to			

illuminate the step surfaces at the rear of the apparatus body. The step/walkway light switch shall be installed and wired to the parking brake.			
The following scene lighting shall be located on the left side of the body: <u>SCENE LIGHTS</u> Two (2) surface mount light shall be installed. The light shall be mounted with four (4) screws to a flat surface. It shall be 6 3/4" high by 9" wide and have a profile of less than 1 3/4" beyond the mounting surface. Wiring shall extend from a weatherproof strain relief at the rear of the light. The light shall have twenty-four (24) white LEDs that generate a rated 7000 lumens at 12 or 24 volts DC. The lens shall redirect the light along the vehicle and out onto the working area. The light housing shall be aluminum with a chrome colored bezel. The scene light shall be installed on an aluminum mounting plate, painted to match the body.			
A scene light switch with indicator shall be installed on the cab dash and on the pump panel to control the left side scene light(s). The switches shall be wired to operate in a three-way configuration to allow the light(s) to be controlled from either location regardless of switch			

position. The switches shall be labeled "LEFT SCENE".			
The following scene lighting shall be located on the right side of the body: <u>SCENE LIGHTS</u> Two (2) surface mount light shall be installed. The light shall be mounted with four (4) screws to a flat surface. It shall be 6 3/4" high by 9" wide and have a profile of less than 1 3/4" beyond the mounting surface. Wiring shall extend from a weatherproof strain relief at the rear of the light. The light shall have twenty-four (24) white LEDs that generate a rated 7000 lumens at 12 or 24 volts DC. The lens shall redirect the light along the vehicle and out onto the working area. The light housing shall be aluminum with a chrome colored bezel. The scene light shall be installed on an aluminum mounting plate, painted to match the body.			
A scene light switch with indicator shall be installed on the cab dash and on the pump panel to control the right side scene light(s). The switches shall be wired to operate in a three-way configuration to allow the light(s) to be controlled from either location regardless of switch position. The switches shall be labeled "RIGHT SCENE			

REAR BODY SCENE LIGHTING The following scene lighting shall be located on the rear of the body: SCENE LIGHTS Two (2) surface mount light shall be installed. The light shall be mounted with four (4) screws to a flat surface. It shall be 6 3/4" high by 9" wide and have a profile of less than 1 3/4" beyond the mounting surface. Wiring shall extend from a weatherproof strain relief at the rear of the light. The light shall have twenty-four (24) white LEDs that generate a rated 7000 lumens at 12 or 24 volts DC. The lens shall redirect the light along the vehicle and out onto the working area. The light housing shall be aluminum with a chrome colored bezel.			
SCENE LIGHT SWITCHING A scene light switch with indicator shall be installed on the cab dash and on the pump panel to control the rear scene light(s). The switches shall be wired to operate in a three-way configuration to allow the light(s) to be controlled from either location regardless of switch position. The switches shall be labeled "REAR SCENE".			
SCENE LIGHT SWITCHING			

The rear scene lights shall activate automatically upon placing the transmission into reverse. <u>DOOR OPEN LIGHT</u> A red flashing, warning light shall be provided and installed in the driver's compartment to indicate an open passenger or apparatus compartment door. The warning light shall also be attached to folding equipment racks and light towers as specified. The light shall be a flashing Whelen OS red LED (OSROOFCR) light and shall be properly marked and identified.			
<u>ELECTRIC SIREN AND CONTROL</u> A electronic siren shall be mounted in the cab. This unit features nineteen (19) scan lock siren tones, including wail, yelp, piercer, hi/low, air horn and shall have a heavy duty plug in microphone with volume control knob.			
<u>SPEAKER</u> One (1) nylon composite speaker shall be installed. The speaker shall be wired to the electric siren located in the cab.			
<u>SPEAKER LOCATION</u> The siren speaker shall be installed in the left side of the apparatus bumper.			

LIGHTBAR One (1) light bar shall be included with the apparatus cab. The light bar shall be model JE0RRBB and shall be mounted on the roof of the cab towards the front, above the windshield. The light bar shall feature: • A 62” light bar designed for high performance • Two (2) corner red linear LED light heads and two (2) corner blue linear LED lightheads • Six (6) front CON3 style light heads, two (2) red, two (2) blue and two (2) white for optimum wide range lighting and high performance • Designed in accordance with NFPA Zone A lighting requirements			
LIGHTBAR ACTIVATION The front upper light bar shall be activated through the master warning switch.			
UPPER REAR WARNING LIGHTS One (1) light bars shall be installed, one each side on the upper rear of the apparatus body. The unit shall have dimensions of 4" high x 7-9/16" deep. The driver side warning light shall be a LED light with red LED's and a clear lens.			

The officer side warning light shall be a LED light with blue LED's and a clear lens.			
<u>REAR WARNING LIGHT MOUNTING</u> The upper rear lights shall be mounted on the upper corners of the apparatus body, one on each side.			
<u>LOWER FRONT WARNING LIGHTS</u> One (1) pair of LED warning lights shall be installed, one each side one the front of the chassis cab. The dimensions of the lights shall be 4-5/16" x 6-3/4". The driver side warning light shall be a split red/blue Super-LED™ with clear lens. The officer side warning light shall be a split red/blue Super-LED™ with clear lens. Each light shall be mounted with a chrome flange.			
<u>INTERSECTION WARNING LIGHTS</u> One (1) pair of LED warning lights shall be installed one each side of the chassis cab. The dimensions of the lights shall be 4-5/16" x 6-3/4". The driver side warning light shall be a split red/blue Super-LED™ with clear lens.			

The officer side warning light shall be a split red/blue Super-LED™ with clear lens. Each light shall be mounted with a chrome flange.			
<u>LOWER MID-BODY WARNING LIGHTS</u> One (1) pair of LED warning lights, model M2WR, shall be installed , one each side of the apparatus, mid-body in the rub rail. The dimensions of the lights shall be 4-1/4" x 2-11/16". The driver side warning light shall be a wide-angle split red/blue Super-LED™ with clear lens. The officer side warning light shall be a wide-angle split red/blue Super-LED™ with clear lens.			
<u>LOWER REAR SIDE WARNING LIGHTS</u> One (1) pair of LED warning lights shall be installed , one each side of the apparatus, towards the rear of the body, in the rub rail. The dimensions of the lights shall be 4-1/4" x 2-11/16". The driver side warning light shall be a wide-angle split red/blue Super-LED™ with clear lens. The officer side warning light shall be a wide-angle split			

red/blue Super-LED™ with clear lens.			
<u>LOWER REAR WARNING LIGHTS</u> One (1) pair of LED warning lights shall be installed, one each side on the lower rear of the apparatus body. The dimensions of the lights shall be 4-5/16" x 6-3/4". The driver side warning light shall be a split red/blue Super-LED™ with clear lens. The officer side warning light shall be a split red/blue Super-LED™ with clear lens. The two lights shall be mounted with a vertical 2-position chrome flange.			
<u>TRAFFIC ARROW LIGHT</u> One (1) Traffic Advisor shall be installed. The light shall be equipped with six (6) linear LED lights measuring 34" in length. The unit shall be mounted at the rear of the apparatus body. The Traffic Advisor control head shall be mounted inside the cab and be accessible by the driver and officer.			
<u>TRAFFIC ARROW CONTROL HEAD</u> A control head shall be supplied with the traffic arrow.			

The traffic arrow light shall be surface mounted below the rear intermediate step of the apparatus body.			
<u>FLUID DATA PLAQUE- METRIC</u> A fluid data plaque containing required information shall be provided based on the applicable components for this apparatus, compliant with NFPA Standards and stated in metric volumes: • Engine oil • Engine coolant • Chassis transmission fluid • Drive axle lubricant • Power steering fluid • Pump transmission lubrication fluid • Other NFPA applicable fluid levels or data as required Location shall be in the driver's compartment or on driver's door.			
<u>HEIGHT LENGTH & WEIGHT DATA LABELS - METRIC</u> A highly visible label indicating the overall height, length, and weight of the vehicle shall be installed in the cab dash area. The measurements shall be stated in metres and kilograms.			
	Yes	**No**	**Specify**
<u>NO RIDE LABEL</u> A "NO RIDERS" label shall be applied on the vehicle at the rear step area or other applicable areas. The label shall warn			

personnel that riding in or on these areas, while the vehicle is in motion is prohibited.			
CAB SEATING POSITION LIMITS A label shall be installed in the cab to indicate seating positions for firefighters. A weight allowance of 250 pounds for each shall be factored into the gross vehicle weight rating of the chassis.			
HELMET WARNING TAG A label shall be installed in the cab, visible from each seating position. The label shall read "CAUTION: DO NOT WEAR HELMET WHILE SEATED." Helmets must be properly stowed while the vehicle is in motion according to the current edition of NFPA 1901.			
REAR TOWING PROVISIONS There shall be two tow eyes furnished under the rear of the body and attached directly to the chassis frame rails. There shall be a reinforcement spreader bar connecting the two tow eyes. Tow eyes are to be constructed of 3/8" plate steel with a 4" I.D. hole, large enough for passing through a tow chain end hook. The tow plates shall be painted black.			
REAR MUD FLAPS			

A pair of black mud flaps shall be installed behind the rear wheels.			
<u>CAB STEPS</u> The passenger's side cab step area on the 4 door chassis shall be covered with slip resistant aluminum tread plate for compliance to applicable NFPA standards			
<u>SCBA BRACKET</u> Four (4) Zico SCBA bracket, HZ-KD-ULLH, shall be provided for installation in the cab mounted SCBA seat. An NFPA approved cylinder retention strap shall be supplied.			
<u>SUPPLEMENTAL AIR BRAKE COMPRESSOR</u> One (1) 12 volt air compressor shall be installed to maintain the pressure in the braking system connected to shore power. A pressure switch shall sense air pressure loss and engage the compressor, which shall run until adequate pressure is achieved.			
<u>DARLEY PSM SINGLE STAGE PUMP</u> A Darley model PSM single stage split-drive shaft driven fire pump shall be provided and installed. The pump shall be midship mounted and designed to operate through an integral transmission, including a means for power selectivity to the driving			

axle or to the pump. The pump shall be driven by a driveline from the chassis transmission. The engine, transmission and driveline components shall provide sufficient horsepower and RPM to enable the pump to meet and exceed its rated performance. The pump shall contain a cored heating jacket feature that, if selected, can be connected into the vehicle antifreeze system to protect the pump from freezing in cold climates, and to help reject engine heat from engine coolant, providing longer life for the engine.			
<u>PUMP SHAFT</u> The pump shaft shall be precision ground stainless-steel with long wearing Chromium Oxide hard coating under the packing glands with a hardness level of Rockwell C72. The shaft shall be splined to receive broached impeller hubs, for greater resistance to wear, torsion vibration, and torque imposed by engine, as well as ease of maintenance and repair. The bearings provided shall be heavy duty, deep groove, radial type ball bearings. Sleeve bearings on any portion of the pump or transmission shall be prohibited due to wear, deflection, and alignment concerns. The bearings shall be protected at all openings from			

road dirt and water splash with oil seals and water slingers.			
The impeller shall be a high strength bronze alloy of mixed flow design, splined to the pump shaft for precision fit, durability, and ease of maintenance. Impeller shall be vacuum cast designed for maximum lift and highest capacity. The seal rings shall be renewable, double labyrinth, wrap around bronze type.			
PUMP TRANSMISSION The transmission case shall be heavy duty cast iron. A magnetic drain plug shall be provided. Transmission case shall include a dip stick for checking oil level. Transmission case interior shall be powder coated to reduce oil contamination. Transmission case shall be equipped with a removable plate for quick inspection of gears, shafts, and bearings inside the transmission. The pump drive shaft shall be precision ground, heat treated alloy steel, with a minimum 2-1/2" x 10" spline. The net through-torque rating of the gearbox shall exceed 19,000 foot pounds. Gears shall be helical design, and shall be precision ground for quiet operation and extended life. The gears shall be manufactured from alloy steel and carburized for surface hardness and strength.			

The pump clutch gear shall be a heat treated alloy-steel splined spur gear to engage either the pump drive gear or the truck drive shaft gear, and shall have bullet-nosed teeth to reduce the possibility of a butt-tooth condition. The pump clutch gear shall be separate from the main drive gear in order to maintain the greatest precision for driving the pump gear train. The pump transmission shall require no further lubrication beyond that provided by the intrinsic action of the gears, to reduce the likelihood of failure due to loss of auxiliary lubrication.			
DRIVELINE INSTALLATION The chassis drivelines shall be sized for intended application and torque requirements. The installation shall comply with driveline manufacturer's guidelines.			
MANUALS Two (2) manuals covering the fire pump transmission and fire pump shall be provided with the apparatus.			
6000 LPM FIRE PUMP SPECIFICATIONS The fire pump shall be a DARLEY model PSM midship mounted with a rated capacity of 6000 LPM (Litres per minute). The pump shall meet current ULC-S515 requirements.			

The pump shall be certified to meet the following deliveries: 6600 LPM @ 1150 kPa 6000 LPM @ 1000 kPa 4200 LPM @ 1350 kPa 3000 LPM @ 1700 kPa			
<u>LEFT SIDE -- 6" UNGATED INTAKE</u> One (1) 6" ungated suction intake shall be installed on the left side pump panel to supply the fire pump from an external water supply. The threads shall be 6" NST. The intake shall be provided with a removable screen. A 6" lightweight aluminum cap shall be provided. The threads shall be NST and the cap shall be equipped long handles.			
<u>RIGHT SIDE -- 6" UNGATED INTAKE</u> One (1) 6" ungated suction intake shall be installed on the right side pump panel to supply the fire pump from an external water supply. The intake shall be provided with a removable screen. A 6" lightweight aluminum cap shall be provided. The threads shall be NST and the cap shall be equipped long handles.			
<u>MECHANICAL SEAL SPECIFICATIONS</u>			

The mechanical seal shall be formed from silicon carbide with welded springs. The stationary face of the mechanical seals shall be made from silicon carbide, an extremely hard and heat dissipative material, which resists wear and dry running damage.			
<u>ELECTRIC/PNEUMATIC PUMP SHIFT SPECIFICATIONS</u> An air powered pump shift shall be installed in the cab driver's area where not subject to accidental engagement. The pump shift shall be air operated and shall incorporate an air cylinder with an electric actuated switch to shift from road to pump and back. The apparatus pump shift shall be engaged only when apparatus is in a stationary position and the parking brake is engaged. The following indicator lights shall be included with pump shift. 1. A green indicator light, labeled "PUMP ENGAGED" shall indicate pump shift has successfully been completed. 2. A green indicator light, labeled "OK TO PUMP" shall indicate the chassis transmission is in pump gear and parking brake is engaged. 3. Pump shift and interlocks shall comply with applicable sections of NFPA standards. 4. The pump shift shall have an instruction label and			

nameplate to indicate function and proper operation.			
	Yes	**No**	**Specify**
<u>TRIDENT PRIMER – AUTOMATIC</u> An automatic fire pump priming system shall be provided and installed. The system shall be oil-less type and environmentally safe. Once engaged, the system shall be fully automatic and not require any action from the pump operator/engineer when pump draft is lost. This feature provides an additional safety margin by maintaining pump flow from the available water source automatically during drafting operations. When air is introduced during a drafting operation from conditions such as whirlpools or turbulence from porta-tank refill operations, the priming system shall automatically engage to remove the air and stabilize water flow and pump pressure. For additional safety, the entire system shall operate at less than 70dBA of ambient noise. The priming system shall engage automatically whenever the pump discharge falls below five (5) psi and shall remain engaged until a pump prime has been achieved. The priming system shall automatically disengage when a positive pump discharge pressure has been established. The electrical current draw from the chassis batteries shall not exceed four (4) amps at any			

given time of operation and allow for unlimited run time without causing an overheat condition for of any of the system components. A single engagement switch shall be provided on the pump control panel that will allow the operator to engage the automatic pump priming system. There shall be a light provided on the pump control panel to indicate when the system is engaged. The pump shall be capable of taking suction and discharging water with a lift of 10 feet in not more than 30 seconds with the pump dry, through 20 feet of suction hose of appropriate size. The priming system shall comply with applicable sections of NFPA standards.			
<u>PRIMER CONTROL</u> A rocker switch control shall be provided on the pump operator's panel, for the main pump primer control.			
<u>PRESSURE GOVERNOR AND MONITORING DISPLAY</u> A Fire Research PumpBoss model PBA400-A00 pressure governor and monitoring display kit shall be provided on the pump panel. The kit shall include a control module, pressure sensor, and cables. The control module case shall be waterproof and have dimensions not to exceed 6 3/4" high by 4 5/8" wide by 1 3/4"			

deep. 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. The following continuous displays shall be provided: • CHECK ENGINE and STOP ENGINE warning LEDs • Engine RPM; shown with four daylight bright LED digits more than 1/2" high • Engine OIL PRESSURE; shown on an LED bar graph display in 10 psi increments • Engine TEMPERATURE; shown on an LED bar graph display in 10 degree increments • BATTERY VOLTAGE; shown on an LED bar graph display in 0.5 volt increments • PSI / RPM setting; shown on a dot matrix message display • PSI and RPM mode LEDs • THROTTLE READY LED. A 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. The brightness of the displays shall be automatically adjusted for day or night viewing. The program shall store the accumulated operating hours for the pump and engine, previous incident hours, and current incident hours in a non-volatile memory. Stored elapsed hours			

shall be displayed at the push of a button. It shall monitor inputs and support audible and visual warning alarms for the following conditions: • High Engine RPM • Pump Overheat • High Transmission Temperature • Low Battery Voltage (Engine Off) • Low Battery Voltage (Engine Running) • High Battery Voltage • Low Engine Oil Pressure • High Engine Coolant Temperature 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 control knob that uses optical technology shall adjust pressure or RPM settings. I t shall be 2" in diameter with no mechanical stops, a serrated grip, and have a red idle push button in the center. 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.			
PUMP ANODES There shall be sacrificial, zinc anodes in the pump steamer ports which shall protect the pump and piping from electrolysis. These anodes shall also act as screens.			
PUMP PLUMBING SYSTEM The fire pump plumbing system shall be of rigid stainless-steel pipe or flexible piping with stainless-steel fittings. Mechanical grooved couplings shall be installed to permit flexing of the plumbing system and allow for quick removal of piping or valves for service. Flexible hose couplings shall be threaded stainless-steel or mechanical grooved coupling connections. The fire pump and plumbing shall be hydrostatically tested in compliance to applicable sections of NFPA standards. The test results shall be included in the delivery documentation.			
FIRE PUMP MASTER DRAIN			

The fire pump plumbing system and fire pump shall be piped to a single pump panel mounted 'handwheel' type master pump drain assembly. The master drain valve shall be a bronze master drain with a rubber disc seal, a universal joint and a handwheel control on the pump panel. The master drain shall also provide for low point drainage of the fire pump and auxiliary devices.			
ADDITIONAL LOW POINT DRAINS The plumbing system shall be equipped with additional low point manually operated drain valves to allow total draining of the fire pump plumbing system. These valves shall be accessible from the side of the vehicle and labeled for exact location.			
STAINLESS-STEEL INTAKE MANIFOLD The suction manifold assembly shall be fabricated with Schedule #10 type 304 stainless-steel. All threaded fittings shall be a minimum of Schedule 10 stainless-steel. The suction manifold assembly shall have radiused sweep elbows to minimize water turbulence into the suction volute. The suction manifold shall be welded and pressure tested prior to installation. The stainless-steel manifold assembly shall be attached to the pump intake volute with a heavy-duty, flexible Victaulic coupling.			

The stainless-steel manifold assembly shall have a ten (10) year warranty.			
STAINLESS-STEEL DISCHARGE MANIFOLD The discharge manifold assembly shall be fabricated with minimum of Schedule #10 Type 304 stainless-steel. All threaded fittings shall be a minimum of Schedule #40 stainless-steel. The discharge manifold assembly shall have radiused sweep elbows to minimize water turbulence. The manifold shall be welded and pressure tested prior to installation. The stainless-steel manifold inlet shall be attached to the pump discharge and have additional brackets as required to support the discharge manifold, valves and related components. The stainless-steel manifold assembly shall have a ten (10) year warranty			
PLUMBING SYSTEM The plumbing system shall be unpainted			
HOSE THREADS The hose threads shall be National Standard Thread (NST) on all base threads on the apparatus intakes and discharges.			
WATER TANK TO PUMP LINE A 3" water tank to the rear mounted fire pump line shall be			

provided with a full flow quarter turn ball valve, 4" piping, and with flex hose and stainless-steel hose clamps. The tank to pump line shall be equipped with a check valve to prevent pressurization of the water tank. The line shall be flow tested during the fire pump testing and shall meet applicable requirements of NFPA standards. The tank to pump valve shall be controlled at the pump operator's panel. The valve shall be an Elkhart three-inch (3") swing-out ball valve. The valve shall have an all brass body with flow optimizing stainless-steel ball and dual polymer seats. The valves shall be capable of bi-directional flow and incorporating a self-locking ball. The valve shall not require lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance. The valve shall be equipped with a manually operated, pull rod with quarter-turn locking feature. The handle shall be equipped with a color-coded name plate.			
<u>FIRE PUMP TO WATER TANK FILL LINE</u> A 2" fire pump to water tank refill and pump bypass cooler line shall be provided. The valve shall be a full flow quarter turn ball			

valve with 2" piping and flex hose to tank. The valve control handle shall have a nameplate located near the valve control. The valve shall be an Elkhart two-inch (2") swing-out ball valve. The valve shall have an all brass body with flow optimizing stainless-steel ball and dual polymer seats. The valves shall be capable of bi-directional flow and incorporating a self-locking ball. The valve shall not require lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance. The valve shall be equipped with a manually operated, pull rod with quarter-turn locking feature. The handle shall be equipped with a color-coded name plate. <u>FIRE PUMP SPLIT SHAFT DRIVESHAFTS AND INSTALLATION</u> The mid-ship split shaft fire pump shall be installed and shall include installation of the fire pump, modification and/or fabrication of new drivelines and all pump-mounting brackets. The drive shaft(s) shall be spin balanced prior to final installation.			
<u>INTAKE RELIEF/DUMP VALVE</u> A TFT A18 series, 2-1/2" intake relief/dump valve preset at 125 psi shall be permanently installed on the suction side of the fire pump. The valve shall have an adjustment range of 75 psi to 250			

psi, and shall be designed to automatically self-restore to a non-relieving position when excessive pressure is no longer present. Discharge side of the intake relief valve shall be plumbed away from the pump operator			
FIRE PUMP COOLING The fire pump shall be equipped with 3/8" cooling line from the pump to the water tank. This re-circulation line shall be controlled by a pump panel control valve with nameplate label noting it as the "fire pump bypass cooler". There shall be a check valve installed in the pump cooler line to prevent tank water from back flowing into the pump when it is not in use.			
CHASSIS ENGINE HEAT EXCHANGER COOLING SYSTEM The apparatus shall be equipped with a heat exchanger for supplementary chassis engine cooling during fire pump operations. A manually opened valve, mounted at the operator's panel, shall direct water from the fire pump to the heat exchanger that is mounted in the engine radiator cooling hose. The system shall provide cooling water from the fire pump to circulate around the engine radiator coolant without mixing or coming in direct contact with the engine coolant.			

A nameplate label shall be installed on the pump panel noting "engine cooling system" with "on-off" opening directions noted.			
	Yes	**No**	**Specify**
CANADIAN UNDERWRITERS LABORATORIES CERTIFICATION The apparatus shall undergo a Canadian Underwriters Laboratories Incorporated *(NO EXCEPTION)* inspection and test per current ULC standards, prior to delivery of the completed apparatus. These tests shall include pump, tank, weight, brake, and other applicable ULC inspection and testing. The test shall be performed on site by UL/ULC staff and shall include a listing of the apparatus as a fire fighting appliance. The manufacturer shall be ULC certified as a listed fire firefighting appliance manufacturer. The ULC acceptance certificate and listing label shall be furnished with the apparatus on delivery.			
FIRE ULC PUMP TEST The pump shall tested as LPM (Litres per Minute). ULC to 6,000LPM.			
LEFT SIDE -- 2-1/2" GATED INTAKE One (1) 2-1/2" gated suction intake shall be installed on left			

side pump panel to supply the fire pump from an external water supply. The control valve shall be a quarter turn ball valve and shall have 2-1/2" CSA female thread of chrome plated brass. The intake shall be equipped with a ¾" drain and bleeder valve. A nameplate label and removable screen shall be installed. An Innovative Controls ¾” cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift to open and push down to close. A 2-1/2" chrome plated plug shall be provided. The threads shall be CSA and the plug shall be equipped rocker lugs and chain or cable securement. The valve shall be an Elkhart two and one half-inch (2-1/2") swing-out ball valve. The valve shall have an all brass body with flow optimizing stainless-steel ball and dual polymer seats. The valves shall be capable of bi-directional flow and incorporating a self-locking ball. The valve shall not require lubrication of seats or any other internal waterway parts, and be capable of swinging			

out of the waterway for maintenance. The valve shall be equipped with a manually operated, swing-type manual control located adjacent the intake. The control handle shall be equipped with self-locking feature. The valve shall be equipped with a color-coded name plate.			
<u>TWO (2) 1-1/2" CROSSLAY DISCHARGES</u> Two (2) pre-connect 1-3/4" hose crosslays shall be installed over pump enclosure, with quarter turn 2" diameter ball valves. The outlets shall be a 2" NPT female swivel x 1-1/2" male NPSH hose threads. The crosslay hosebeds shall have smooth aluminum sides. The hosebed decking shall be constructed with slots integrated into the hosebed floor. A divider shall be installed to separate the crosslay beds. One (1) 1.5" crosslay is foam capable. Labels are orange and red. Each hose bed shall provide for a minimum capacity of 200 feet of 1-3/4" diameter double jacket hose with the hose and nozzle provided by the fire department. An Innovative Controls ¾" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome			

plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift to open and push down to close. The specified valve shall be an Elkhart two-inch (2") swing-out ball valve. The valve shall have an all brass body with flow optimizing stainless-steel ball and dual polymer seats. The valves shall be capable of bi-directional flow and incorporating a self-locking ball. The valve shall not require lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance. For valve actuation, the specified discharge shall be equipped with a side mount valve control. The ergonomically designed 1/4 turn push-pull T-handle shall be chrome plated zinc with recessed labels for color coding and signage. The gear-control rod, double laminated locking clips, and rod housing shall be stainless-steel and provide true positive lock that will eliminate valve drift. Bronze and Teflon impregnated stainless-steel bushings in both ends of rod housing shall eliminate rod deflection, never need lubrication and ensure consistent long-term operation.			

The control assembly shall include a decorative chrome-plated zinc panel mounted bezel with recessed color-coded label. Two (2) 2-1/2" (65mm) diameter IC pressure gauge with (Dual Scale PSI/kPa) (0-400) shall be provided. The face of the gauge shall be a WHITE dial with black letters. The gauges will be located on the pump instrument panel.			
2-1/2" CROSSLAY DISCHARGE A pre-connect 2-1/2" hose crosslay shall be installed over the pump enclosure with a quarter turn 2-1/2" diameter ball valve. The hosebed decking shall be constructed with slots integrated into the hosebed floor. 2.5" crosslay is foam capable. Labels are yellow. Each hose bed shall provide for a minimum capacity of 200 feet of 2-1/2" diameter double jacket hose with the hose and nozzle provided by the fire department. The outlet shall be equipped with 2-1/2" NPT female swivel x 2-1/2" male CSA hose threads. An Innovative Controls ¾" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof			

stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift to open and push down to close. The specified valve shall be an Elkhart two and one half-inch (2-1/2") swing-out ball valve. The valve shall have an all brass body with flow optimizing stainless-steel ball and dual polymer seats. The valves shall be capable of bi-directional flow and incorporating a self-locking ball. The valve shall not require lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance. For valve actuation, the specified discharge shall be equipped with a side mount valve control. The ergonomically designed 1/4 turn push-pull T-handle shall be chrome plated zinc with recessed labels for color coding and signage. The gear-control rod, double laminated locking clips, and rod housing shall be stainless-steel and provide true positive lock that will eliminate valve drift. Bronze and Teflon impregnated stainless-steel bushings in both ends of rod housing shall eliminate rod deflection, never need lubrication and ensure consistent long-term operation. The control assembly shall include a decorative chrome-			

plated zinc panel mounted bezel with recessed color-coded label. One (1) 2-1/2" (65mm) diameter IC pressure gauge with (Dual Scale PSI/kPa) (0-400) shall be provided. The face of the gauge shall be a WHITE dial with black letters. The gauges will be located on the pump instrument panel.			
CROSSLAY HINGED COVER WITH END FLAPS The crosslay hosebed shall be equipped with a single aluminum diamond plate hinged cover with vinyl end flaps with hook & loop fasteners. The cover shall have rubber bumpers, latching devices, and lift up handle on each end of the cover. The hosebed cover shall be labeled, "Not a Standing or Walking Surface", per NFPA.			
CROSSLAY HOSE BED TRIM The crosslay hosebed shall be equipped anodized aluminum angle overlays, one on each end of the hosebed.			
	Yes	**No**	**Specify**
CROSSLAY HOSEBEDS Crosslay hosebed(s) shall be mounted over the upper pump panel or gauge panel in the upper portion of the pump enclosure. The crosslay hosebed shall be			

approximately 12" from the top of the pump enclosure.			
<u>LEFT SIDE PUMP PANEL -- 2-1/2" DISCHARGE</u> One (1) 2-1/2" discharge shall be installed on the left side pump panel area and shall be controlled by a quarter turn ball valve. The discharge shall have 2-1/2" NST male hose threads. A color coded nameplate label shall be provided adjacent the control handle. An Innovative Controls ¾" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift to open and push down to close. One (1) lightweight aluminum, color coded, elbow with rocker lugs shall be provided with 2-1/2" NST swivel female x 2-1/2" CSA male hose threads. Labels and elbows/caps are white. One (1) 2-1/2" CSA rocker lug color coded vented cap and cable or chain securement shall be provided. The specified valve shall be an			

Elkhart two and one half-inch (2-1/2") swing-out ball valve. The valve shall have an all brass body with flow optimizing stainless-steel ball and dual polymer seats. The valves shall be capable of bi-directional flow and incorporating a self-locking ball. The valve shall not require lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance. For valve actuation, the specified discharge shall be equipped with a side mount valve control. The ergonomically designed 1/4 turn push-pull T-handle shall be chrome plated zinc with recessed labels for color coding and signage. The gear-control rod, double laminated locking clips, and rod housing shall be stainless-steel and provide true positive lock that will eliminate valve drift. Bronze and Teflon impregnated stainless-steel bushings in both ends of rod housing shall eliminate rod deflection, never need lubrication and ensure consistent long-term operation. The control assembly shall include a decorative chrome-plated zinc panel mounted bezel with recessed color-coded label. One (1) 2-1/2" (65mm) diameter IC pressure gauge with (Dual Scale PSI/kPa) (0-400) shall be provided. The face of the gauge shall be a WHITE dial with black letters. The gauges will be			

located on the pump instrument panel.			
<u>RIGHT SIDE PUMP PANEL -- 2-1/2" DISCHARGE</u> One (1) 2-1/2" discharge shall be installed on the right side pump panel area and shall be controlled by a quarter turn ball valve. The discharge shall have 2-1/2" NST male hose threads. A color coded nameplate label shall be provided adjacent the control handle. Labels and elbows/caps are blue. An Innovative Controls ¾" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift to open and push down to close. One (1) lightweight aluminum, color coded, elbow with rocker lugs shall be provided with 2-1/2" NST swivel female x 2-1/2" CSA male hose threads. One (1) 2-1/2" CSA rocker lug color coded vented cap and cable or chain securement shall be provided. The specified valve shall be an Elkhart two and one half-inch (2-			

1/2") swing-out ball valve. The valve shall have an all brass body with flow optimizing stainless-steel ball and dual polymer seats. The valves shall be capable of bi-directional flow and incorporating a self-locking ball. The valve shall not require lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance. For valve actuation, the specified discharge shall be equipped with a side mount valve control. The ergonomically designed 1/4 turn push-pull T-handle shall be chrome plated zinc with recessed labels for color coding and signage. The gear-control rod, double laminated locking clips, and rod housing shall be stainless-steel and provide true positive lock that will eliminate valve drift. Bronze and Teflon impregnated stainless-steel bushings in both ends of rod housing shall eliminate rod deflection, never need lubrication and ensure consistent long-term operation. The control assembly shall include a decorative chrome-plated zinc panel mounted bezel with recessed color-coded label. One (1) 2-1/2" (65mm) diameter IC pressure gauge with (Dual Scale PSI/kPa) (0-400) shall be provided. The face of the gauge shall be a <u>WHITE</u> dial with black letters. The gauges will be			

located on the pump instrument panel.			
<u>RIGHT SIDE PUMP PANEL -- 3" x 4" DISCHARGE</u> One (1) 3" discharge shall be installed on the right side pump panel area and shall be controlled by a full flow 3" slow-close quarter turn ball valve. The discharge shall have 4" NST male hose threads. A color coded nameplate label shall be provided adjacent the control handle. An Innovative Controls ¾" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift to open and push down to close. One (1) color coded elbow with 30 degree slant shall be provided. Threads shall be 4" Storz with lugs and manual locks x 4" female swivel NST with rocker lugs. Label are yellow/white and elbows/caps are yellow. One (1) 4" color coded Storz cap with cable or chain securement shall be provided.			

The specified valve shall be an Elkhart three-inch (3") swing-out ball valve. The valve shall have an all brass body with flow optimizing stainless-steel ball and dual polymer seats. The valves shall be capable of bi-directional flow and incorporating a self-locking ball. The valve shall not require lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance. One (1) Elkhart valve equipped with a manually operated pull rod, with quarter-turn locking feature and a manual slow-close device shall be provided on the specified discharge. The handle shall be equipped with a color-coded name plate. One (1) 2-1/2" (65mm) diameter IC pressure gauge with (Dual Scale PSI/kPa) (0-400) shall be provided. The face of the gauge shall be a <u>WHITE</u> dial with black letters. The gauges will be located on the pump instrument panel. <u>REAR RIGHT SIDE -- 2-1/2" DISCHARGE</u>			
	Yes	**No**	**Specify**
<u>REAR RIGHT SIDE -- 2-1/2" DISCHARGE</u> One (1) 2-1/2" discharge shall be installed on the right side rear panel of the apparatus body and shall be controlled by a quarter turn ball valve on the pump			

panel. The discharge shall have 2-1/2" NPT x 2-1/2" NST male hose threads. The outlet shall be equipped with an engraved nameplate label shall be installed adjacent the valve control handle. An Innovative Controls ¾" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift to open and push down to close. One (1) lightweight aluminum, color coded, elbow with rocker lugs shall be provided with 2-1/2" NST swivel female x 2-1/2" CSA male hose threads. Labels and elbows/caps are black. One (1) 2-1/2" CSA rocker lug color coded vented cap and cable or chain securement shall be provided. The specified valve shall be an Elkhart two and one half-inch (2-1/2") swing-out ball valve. The valve shall have an all brass body with flow optimizing stainless-steel ball and dual polymer seats. The valves shall be capable of bi-directional flow and incorporating a self-locking ball. The valve shall			

not require lubrication of seats or any other internal waterway parts, and be capable of swinging out of the waterway for maintenance. For valve actuation, the specified discharge shall be equipped with a side mount valve control. The ergonomically designed 1/4 turn push-pull T-handle shall be chrome plated zinc with recessed labels for color coding and signage. The gear-control rod, double laminated locking clips, and rod housing shall be stainless-steel and provide true positive lock that will eliminate valve drift. Bronze and Teflon impregnated stainless-steel bushings in both ends of rod housing shall eliminate rod deflection, never need lubrication and ensure consistent long-term operation. The control assembly shall include a decorative chrome-plated zinc panel mounted bezel with recessed color-coded label. One (1) 2-1/2" (65mm) diameter IC pressure gauge with (Dual Scale PSI/kPa) (0-400) shall be provided. The face of the gauge shall be a <u>WHITE</u> dial with black letters. The gauges will be located on the pump instrument panel. <u>3" MONITOR DISCHARGE</u> One (1) 3" discharge shall be piped to the area over the pump enclosure with 3" NPT male threads provided. The pipe shall			

be equipped with Victaulic couplings (if necessary) and shall be properly secured to prevent movement when a monitor or deck gun is attached. The quarter turn ball valve shall be controlled on pump panel. One (1) permanent secured Discharge Monitor shall be supplied and mounted to the 3" discharge on top of the truck. The Monitor shall be able to rotate 360 degrees. A color coded nameplate label shall be provided adjacent the valve control handle. Labels are silver. An Innovative Controls ¾" cast bronze quarter-turn drain/bleeder valve shall be installed. The valve shall be complete with a chrome plated bronze ball, reinforced teflon seals, and blow-out proof stem rated to 600 PSI. A chrome plated zinc handle shall be provided on each drain valve complete with a recessed ID label provision. The handle shall lift, to open and push down, to close. The specified valve shall be an Elkhart three-inch (3") swing-out ball valve. The valve shall have an all brass body with flow optimizing stainless-steel ball and dual polymer seats. The valves shall be capable of bi-directional flow and incorporating a self-locking ball. The valve shall not require lubrication of seats or			

any other internal waterway parts, and be capable of swinging out of the waterway for maintenance. One (1) Elkhart valve equipped with a manually operated pull rod, with quarter-turn locking feature and a manual slow-close device shall be provided on the specified discharge. The handle shall be equipped with a color-coded name plate. One (1) 2-1/2" (65mm) diameter IC pressure gauge with (Dual Scale PSI/kPa) (0-400) shall be provided. The face of the gauge shall be a <u>WHITE</u> dial with black letters. The gauges will be located on the pump instrument panel. <u>FRONT BUMPER CROSSLAY PRE-CONNECT 1 -3/4”</u> pre-connect 1-3/4" hose crosslay shall be installed in the front bumper, with quarter turn 2" diameter ball valves. The outlets shall be a 1-1/2" male NPSH hose threads. The crosslay front bumper hosebed shall have smooth aluminum sides. The hosebed decking shall be constructed with a cover. For valve actuation, the specified discharge shall be equipped with a side mount valve control. The ergonomically designed 1/4 turn push-pull T-handle shall be chrome plated zinc with recessed			

labels for color coding and signage. The gear-control rod, double laminated locking clips, and rod housing shall be stainless-steel and provide true positive lock that will eliminate valve drift. Bronze and Teflon impregnated stainless-steel bushings in both ends of rod housing shall eliminate rod deflection, never need lubrication and ensure consistent long-term operation. The control assembly shall include a decorative chrome-plated zinc panel mounted bezel with recessed color-coded label. One (1) 2-1/2" (65mm) diameter IC pressure gauge with (Dual Scale PSI/kPa) (0-400) shall be provided. The face of the gauge shall be a WHITE dial with black letters. The gauges will be located on the pump instrument panel.			
	Yes	**No**	**Specify**
FOAM PRO FOAM SYSTEM A FoamPro part number S107-1600/2.0 electronic foam system shall be provided. The system shall be designed for use with Class A foam concentrate. The foam proportioning operation shall be designed for direct measurement of water flows and shall remain consistent within the specified flows and pressures. The system shall be capable of			

accurately delivering foam solution as required by applicable sections of the NFPA standards. The system shall be equipped with a control module suitable for installation on the pump panel. There shall be a microprocessor incorporated within the motor driver that shall receive input from the system's flow meter, while also monitoring the foam concentrate pump output. The microprocessor shall compare the values to ensure that the desired amount of foam concentrate is injected onto the discharge side of the fire pump. A "foam capable" paddlewheel-type flow meter shall be installed in the discharge side of the piping system. <u>The control module shall enable the pump operator to:</u> • Activate the foam proportioning system • Select the proportioning rates from 0.1% to 1.0% • See a "low concentrate" warning light flash when the foam tank level becomes low and in two (2) minutes, if the foam concentrate has not been added to the tank, the foam concentrate pump shall be capable of shutting down. A 12-volt electric motor driven positive displacement plunger pump shall be provided. The pump capacity range shall be 0.1 to 1.7 GPM (6.4L/min) at 200 PSI (1400 kPa) with a maximum			

operating pressure up to 400 PSI (2750 kPa). The system shall draw a maximum of 30 amps at 12 volts. The motor shall be controlled by the microprocessor which shall be mounted to the base of the pump. It shall receive signals from the control module and power the 1/3 horsepower (.25 Kw) electric motor in a variable speed duty cycle to ensure that the correct proportion of concentrate is injected into the water stream. A full flow check valve shall be provided in the discharge piping to prevent foam contamination of the fire pump and water tank. A 5 PSI (35 kPa) opening pressure check valve shall be provided in concentrate line. Components of the complete proportioning system as described above shall include: • Operator control module • Paddlewheel flow meter • Pump and electric motor/motor driver • Wiring harnesses • Low level tank switch • Foam tank • Foam injection check valve • Main waterway check valve • Flow meter and tee with 2" male NPT threads. The foam system shall be installed and calibrated to manufacturer's requirements. In			

addition the system shall be tested and certified by the apparatus manufacturer to meet applicable NFPA standards. The foam system design shall be tested and pass environmental testing in accordance to SAE standards. The system shall be third party tested to certify compliance with RFI/EMI emissions per MIL-STD-416E. An installation and operation manual shall be provided for the unit. The system shall have a one (1) year limited warranty by the foam system manufacturer.			
CONTROL CONNECTION CABLE -- FOAM SYSTEM The FoamPro 1600 Series foam system shall be provided with a twelve (12) foot control cable from the controller to the foam pump assembly. PUMP PANEL CONTROL -- FOAM SYSTEM The FoamPro 1600 Series foam system shall be provided with a standard pump panel mounted FoamPro control head.			
FLOWMETER AND TEE -- FOAM SYSTEM A FoamPro brass flow meter shall be provided. The flow meter shall be installed in the "foam capable" discharge line. The flow meter shall have maximum			

accuracy between the flow range of 10 GPM and 320 GPM and be capable of operation between 3 GPM to 380 GPM. The tee shall have 1-1/2" NPT and 2" Victaulic inlet and outlets connections.			
LOW-LEVEL TANK SENSOR FOAM TANK A FoamPro low-level foam tank sensor shall be provided. The sensor shall be capable of mounting side of foam tank that shall interface with the microprocessor. The unit shall have a 1/8" NPT thread size.			
MAIN WATERWAY CHECK VALVE -- FOAM SYSTEM A FoamPro full-flow check valve shall be provided. The valve shall prevent foam contamination of the fire pump and water tank or water contamination of the foam tank. The unit shall have a nickel-electro plated body with stainless-steel components. The valve shall have 2" NPT threads with an injection and drain port size of 1/2" NPT			
FOAM SYSTEM -- INJECTOR FITTING A Foam Pro injector fitting shall be provided with the foam system.			
INSTRUCTION AND RATING LABEL -- FOAM SYSTEM			

A FoamPro part number 6032-0018 instruction and system rating label shall be provided. The label shall display information for a FoamPro 1600 Series foam system and shall meet applicable sections of the NFPA standards.			
SCHEMATIC LABEL -- FOAM SYSTEM A FoamPro part number 6032-0015 foam system schematic label shall be provided shall be installed on the pump panel near foam controls. The label shall be a diagram of a single tank foam system layout and shall meet applicable sections of the NFPA standards. Foam plumbed to One (1) 1.5" crosslay ,2.5" crosslay. And the 1.5” bumper extension crosslay.			
1" FOAM TANK CONTROL -- CLASS A A Class A foam tank shall be plumbed with 1" valve and corrosion resistant hose from the foam tank to the foam inlet of the foam system. The manually opened valve shall be provided behind the pump panel with a label.			
INTEGRAL CLASS A FOAM TANK -- 30 GALLON A thirty (30) gallon Class A foam tank shall be installed within the water tank. The non-corrosive			

foam tank shall meet applicable sections of NFPA standards. The foam concentrate tank shall be provided with sufficient wash partitions so that the maximum dimension perpendicular to the plane of any partition shall not exceed 36 inches. The swash partition(s) shall extend from wall to wall and cover at least 75 percent of the area of the plane of the partition. The foam concentrate tank shall be provided with a fill tower or expansion compartment having a minimum area of 12 square inches and having a volume of not less than 2 percent of the total tank volume. The fill tower opening shall be protected by a completely sealed air-tight cover. The cover shall be attached to the fill tower by mechanical means. The fill opening shall be designed to incorporate a 1/4 inch removable screen and shall be located so that foam concentrate from a five (5) gallon container can be dumped directly to the bottom of the tank to minimize aeration without the use of funnels or other special devices. The foam tank fill tower shall be equipped with a pressure/vacuum vent that enables the tank to compensate for changes in pressure or vacuum when filling or withdrawing foam concentrate from the tank. The pressure/vacuum vent shall not allow atmospheric air to enter the			

foam tank except during operation or to compensate for thermal fluctuations. The vent shall be protected to prevent foam concentrate from escaping or directly contacting the vent at any time. The vent shall be of sufficient size to prevent tank damage during filling or foam withdrawal. A color coded label or visible permanent marking that reads "FOAM TANK FILL" shall be placed at or near any foam concentrate tank fills opening. A label shall be placed at or near any foam concentrate tank fill opening that specifies the type of foam concentrate the system is designed to use. Any restrictions on the types of foam concentrate that can be used with the system shall also be stated, and a warning message that reads "WARNING: DO NOT MIX BRANDS AND TYPES OF FOAM." The foam concentrate tank outlet connection shall be designed and located to prevent aeration of the foam concentrate and shall allow withdrawal of 80 percent of the foam concentrate tank storage capacity under all operating conditions with the vehicle level. The foam tank(s) shall be fabricated by United Plastic Fabricating.			

FOAM TANK DRAIN -- UNDER TANK The foam tank shall have a 1" gate valve drain provision installed			
FOAM SYSTEM DESIGN AND PERFORMANCE REQUIREMENTS The proportioning system shall be capable of proportioning foam concentrate in accordance with the foam concentrate manufacturer's recommendations for the type of foam concentrate used in the system over the system's design range of flow and pressures. The foam proportioning system water flow characteristics and the range of proportioning ratio shall be specified as noted herein. The latest foam system shall be in compliance with applicable NFPA standards as it relates to this specified system			
PLUMBING AND STRAINER The foam concentrate supply line shall be non-collapsible. A means shall be provided to prevent water back flow into the foam proportioning system and the foam concentrate storage tank. A strainer or filter shall be provided on the foam concentrate supply side of the foam proportioner to prevent any debris that might affect the operation of the foam proportioning system from entering the system. The strainer assembly shall consist of a			

removable straining element, housing, and retainer. The strainer assembly shall allow full flow capacity of the foam supply line.			
FOAM SYSTEM CONTROLS The foam proportioning system operating controls shall be located at or near the pump operator's position and shall be clearly identified. Foam proportioning system shall be provided with accessible controls to completely flush the system with water according to the manufacturer's instructions.			
LABELS AND INSTRUCTIONS An instruction plate shall be provided for the foam proportioning system that include, at a minimum, piping schematic of the system and basic operating instructions. Labels that are marked clearly with the identification and function shall be provided for each control, gauge, and indicator related to the foam proportioning system. A label shall be provided on the pump operator's panel that identifies the type of foam concentrate that the foam proportioning system is designed to use. It shall also state the minimum/maximum foam proportioning rate at the minimum/maximum foam proportioning rated system flow and pressure.			

Two (2) copies of an operations and maintenance manual shall be provided. They shall include a complete diagram of the system together with operating instructions and details outlining all recommended maintenance procedured			
FOAM SYSTEM TESTING The accuracy of the foam proportioning system shall be certified by the foam equipment manufacturer and also tested by the installer prior to delivery of the apparatus in compliance to NFPA standards.			
SIDE MOUNT PUMP ENCLOSURE The side mount pump enclosure shall be removable and supported from the chassis frame rails. This enclosure will allow independent flexing of the pump enclosure from the body and allow for quick removal. The support structure shall be constructed of extruded aluminum tubing and angle. All pump suction and discharge controls are to be mounted on the driver side pump operator's panel so as to permit operation of the pump from a central location. The fire pump, valves and controls shall be accessible for service and maintenance as required by applicable sections of NFPA standards. The "master" gauges shall be suitably enclosed and mounted on a full pump compartment width			

"hinged" gauge panel constructed of the same material as the pump operators control panel, allowing access to the backside of all gauges and gauge lines. The individual gauges shall be mounted inline with the control handle or adjacent to the control handle. Panel is to include a stainless-steel piano hinge, flush mounted chrome plated trigger latch, and stainless-steel cable end stops. Electrical wiring and all gauge lines shall be properly tie wrapped to prevent kinking or cutting of the lines when the panel is opened. The following controls and equipment as specified in the specifications, shall be provided on the pump panel or within the pump enclosure: • Primer. • Pump and plumbing area service lights. • Pressure control device and throttle control. • Fire pump and engine instruments. • Pump intakes and discharge controls. • Master intake and discharge gauges. • Tank fill control. • Tank suction control. • Water tank level gauge. • Pump panel lights.			
<u>CROSSLAY INSTALLATION</u> The area atop the pump enclosure shall be notched for the installation			

of a crosslay hose bed. The hosebed shall have smooth sides and a perforated floor to allow for drainage. Provisions shall be provided to secure hose and equipment per requirements of applicable NFPA standards.			

LEFT SIDE RUNNING BOARD -- SIDE MOUNT PANEL The left side mount pump panel shall be equipped with side running board. The running board will extend along the width of the pump enclosure from the forward end of the body module to behind the chassis cab. The running board shall be constructed of aluminum tread plate, bolted in place with stainless-steel fasteners. The step surfaces shall be in compliance with applicable sections of NFPA requirements.			
RIGHT SIDE RUNNING BOARD -- SIDE MOUNT PANEL The right side mount pump panel shall be equipped with side running board. The running board will extend along the width of the pump enclosure from the forward end of the body module to behind the chassis cab. The running board shall be constructed of aluminum tread			

plate, bolted in place with stainless-steel fasteners. The step surfaces shall be in compliance with applicable sections of NFPA requirements.			
RIGHT SIDE PUMP PANEL ACCESS -- INTERMEDIATE STEP An auxiliary step constructed of aluminum tread plate or equal surface, compliant with applicable sections of NFPA standards shall be installed. This step shall serve as an intermediate step on the right side of the pump panel.			
PUMP ENCLOSURE ACCESS DOOR -- RIGHT SIDE UPPER A pump panel access door shall be provided on the upper right side of the side mount pump enclosure. The door shall be constructed of 14 gauge #304 brushed stainless-steel with push button type latches.			
FRONT ACCESS PUMP PANEL A removable front access panel shall be installed on the front of the pump enclosure of the apparatus. The panel shall be constructed of aluminum tread plate and be fastened to the pump enclosure with stainless-steel bolts and nut-serts. (no sheet metal screws)			

PUMP PANELS -- SIDE MOUNT The pump operator's panel, along with the lower left hand and right hand pump panels shall be constructed of 14 gauge #304 brushed stainless-steel and be fastened to the pump enclosure with 1/4" stainless-steel bolts. The instrument area shall have a stainless-steel continuous hinge that shall swing for easy access to gauges.			
HINGED PUMP PANEL -- LEFT SIDE The pump panel installed on the on the left-hand side of the pump enclosure shall be hinged with push-button latches.			
HINGED PUMP PANEL -- RIGHT SIDE The pump panel installed on the on the right-hand side of the pump enclosure shall be hinged with push-button latches.			

PUMP PANEL STAINLESS-STEEL TRIM PANELS Stainless-steel intake and discharge trim rings shall be installed to the apparatus with mounting bolts. These assemblies will be used to identify intake and discharge ports with color and verbiage, using separate identification tags protected by chrome plated bezels. These trim rings are designed and manufactured to withstand the environment and shall be backed by a warranty equal to that of the exterior paint and finish. All labels shall be backed with 3M permanent adhesive (200MP), which meets UL969 and NFPA standards.			
PUMP COMPARTMENT HEATER SYSTEM The interior of the pump enclosure shall be equipped with a minimum of 30,000 BTU hot water heater system. The unit shall be piped to the chassis radiator system with standard heater hose. The hose shall be properly clamped and secured in place, and be properly protected from engine exhaust or mechanical damage. The heater system shall be equipped with a 12-volt blower fan with switch located on the pump operator's panel. The switch shall be labeled accordingly.			

PUMP ENCLOSURE HEAT PAN A removable casing fabricated from smooth aluminum, completely enclosing the underside of the pump compartment and heated by the engine exhaust shall be provided. The heat pan assembly shall include individual panels that can be easily removed from there mounting locations. The two outer slide-out panels shall be bolted in place.			
BODY AND PUMP HOUSE FLEX JOINT RUBBER GASKET A flexible rubber gasket shall be installed between the pump compartment and the apparatus body. This gasket will be designed to seal the pump compartment to the apparatus body as tightly as practical. This gasket is necessary for winter operation in extremely cold climates.			
LABELS Safety, information, data, and instruction labels for apparatus shall be provided and installed at the operator's instrument panel. The labels shall include rated capacities, pressure ratings, and engine speeds as determined by the certification			

tests. The no-load governed speed of the engine, as stated by the engine manufacturer, shall also be included. The labels shall be provided with all information and be attached to the apparatus prior to delivery.			
COLOR CODED PUMP PANEL LABELING AND NAMEPLATES Discharge and intake valve controls shall be color coded in compliance to guidelines of applicable sections of NFPA standards. Innovative Controls permanent type nameplates and instruction panels shall be installed on the pump panel for safe operation of the pumping equipment and controls.			
MIDSHIP PUMP PANEL LIGHTS -- LEFT SIDE Three (3) LED lights with clear lenses shall be installed under an instrument panel light hood on the left side pump panel. The lights shall be controlled by a switch located on the operator's instrument panel.			
MIDSHIP PUMP PANEL LIGHTS -- RIGHT SIDE Two (2) LED lights with clear lenses shall be installed under an instrument panel light hood on the right side pump panel.			

The lights shall be controlled by a switch located on the operator's instrument panel.			
PUMP ENGAGED LIGHT One (1) pump panel light shall be illuminated at the time the fire pump is engaged into operation. The remaining lights shall be controlled by a switch located on the operator's instrument panel.			
MASTER DISCHARGE AND INTAKE GAUGE BEZEL Two (2) 4" (100mm) diameter IC discharge pressure and intake gauges Dual Scale (PSI/kPa, 30"-0-400 PSI & -100-0-2760 kPa) shall be provided. The gauges and test ports shall be mounted in an IC bezel assembly, P/N HI-3005999. The gauges will be located on the pump instrument panel. The master gauges shall have clear scratch resistant molded crystals with captive O-ring seals shall be used to ensure distortion free viewing and to seal the gauge. The gauges shall be filled with a synthetic mixture to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from –40°F to +160°F. Each gauge shall exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous			

bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy. A polished chrome-plated brass bezel shall be provided to prevent corrosion and protect the lens and gauge case.			
<u>WATER/FOAM TANK LEVEL GAUGE - PUMP PANEL</u> The apparatus shall be equipped with an Innovative Controls SL Series Tank Level Monitor System shall be installed. The display model # shall be 3030359-04. The system shall include an electronic dual water/foam display module, two (2) pressure transducer-based sender units, and two (2) 15' connection cables. The display module shall show the volume of water/foam in the tanks using 10 super bright easy-to-see LEDs arrangement. The 10-LED arrangement shall form a straight vertical pattern to easily distinguish the tank level at a glance. Tank level indication is enhanced by the use of green LEDs at the full and near-full levels, amber LEDs between ¾ and ¼ tank levels, and red LEDs at the near-empty and empty levels. The electronic dual water/foam display module shall be waterproof and shock resistant being encapsulated in a urethane-based potting compound. The potted dual water/foam display module shall be mounted to a chrome plated			

panel-mount bezel with a durable easy-to-read polycarbonate insert featuring blue graphics and a water icon for water and red graphics and a foam icon for foam. All programming functions shall be accessed and performed from the front of the display module. The programming includes self-diagnostics, manual or self-calibration, and networking capabilities to connect remote slave displays. Low tank level warnings shall include flashing red LEDs starting below the ¼ level and an output for an audible alarm. The display module shall receive an input signal from a pressure transducer. This stainless-steel sender unit shall be installed on the outside of the water tank near the bottom. All wiring, cables and connectors shall be waterproof without the need for sealing grease. Location of the water/foam tank level display shall be at the pump panel.			
<u>PUSH ROCKER STYLE-BUTTON</u> A push rocker-style button with a label shall be installed on the pump instrument panel to operate the air horns, pump panel lights, pump compartment heater, left scene light, right scene light and rear scene light.			

The buttons are to have a protective weatherproof cover.			
HANDRAIL SIDE PUMP PANEL Two (2) extruded aluminum non-slip handrails, approximately 12" in length, shall be provided and vertically mounted. Both hand rails are to be installed on the right side of the pump house in a best-fit configuration with the provided folding steps.			
WATER TANK - 1000 GALLON The apparatus shall be equipped with a one-thousand (1000) gallon polypropylene water tank. The tank shall be equipped with a four-inch (4") overflow pipe (a six-inch (6") overflow pipe shall be provided if required by dump valve installation).			
WATER TANK The apparatus shall be equipped with a rectangular tank.			
WATER TANK FILL TOWER A fill tower measuring approximately 10” x 10” square shall be provided on the water			

tank up to and including 1500 gallons total capacity. Fill towers are to be a minimum 12" from front wall of hose bed. The apparatus shall be equipped with a polypropylene water tank. The tank body and end bulkheads shall be constructed of .75" thick, polypropylene, nitrogen-welded and tested inside and out. Tank construction shall conform to applicable NFPA standards. The tank shall carry a lifetime warranty. The transverse and longitudinal .375" thick swash partitions shall be interlocked and welded to each other as well as to the walls of the tank. The partitions shall be designed and equipped with vent holes to permit air and liquid movement between compartments. The .5" thick cover shall be recessed .375" from the top of the side walls. Hold down dowels shall extend through and be welded to both the covers and the transverse partitions, providing rigidity during fast fill operations. Drilled and tapped holes for lifting eyes shall be provided in the top area of the booster tank. A combination vent/water fill tower shall be provided at front of the tank. The 0.5" thick polypropylene fill and overflow tower shall be equipped with a			

hinged lid and a removable polypropylene screen. The overflow tube shall be installed in fill tower and piped with a minimum schedule 40 PVC pipe through the tank. The water tank sump shall be located in the forward area of the tank. There will be a schedule 40 polypropylene tank suction pipe from the front of the tank to the tank sump. The tank drain and clean out shall be located in the bottom of the tank sump. The sump shall have a minimum 3" threaded outlet on the bottom to be used for a combination clean out and drain. The pump to tank refill connection shall be a sized to mate with tank fill discharge line. A deflector shield inside the tank will also be provided. The tank shall rest on the body cross members in conjunction with such additional cross members, spaced at a distance that would not allow for more than 530 square inches of unsupported area under the tank floor. In cases where overall height of the tank exceeds 40 inches, cross member spacing must be decreased to allow for not more than 400 square inches of unsupported area. The tank must be isolated from the cross members through the use of hard rubber strips with a			

minimum thickness and width dimension of 1/4” x 1” and a hardness of approximately 60 durometer. The rubber must be installed so it will not become dislodged during normal operation of the vehicle. Additionally, the tank must be supported around the entire bottom outside perimeter and captured both in the front and rear as well as side to side to prevent tank from shifting during vehicle operation. A picture frame type cradle mount with a minimum of 2" x 2" x 1/4” mild steel, stainless-steel, or aluminum angle shall be provided or the use of corner angles having a minimum dimension of 4" x 4" x 1/4” by 6” high are permitted for the purpose of capturing the tank. Although the tank is designed on a free floating suspension principle, it is required that the tank have adequate vertical hold down restraints to minimize movement during vehicle operation. If proper retention has not been incorporated into the apparatus hose floor structure, an optional mounting restraint system shall be located on top of the tank, half way between the front and the rear on each side of the tank. These stops can be constructed of steel, stainless-steel or aluminum angle having minimum dimensions of 3" x 3" x 1/4” and shall be approximately 6” to 12” long.			

These brackets must incorporate rubber isolating pads with a minimum thickness of 1/4” inch and a hardness of 60 durometer affixed on the underside of the angle. The angle should then be bolted to the body side walls of the vehicle while extending down to rest on the top outside edge of the upper side wall of the tank. Hose beds floors must be so designed that the floor slat supports extend full width from side wall to side wall and are not permitted to drop off the edge of the tank or in any way come in contact with the individual covers where a puncture could occur. Tank top must be capable of supporting loads up to 200 lbs per sq. foot when evenly distributed. Other equipment such as generators, portable pumps, etc. must not be mounted directly to the tank top unless provisions have been designed into the tank for that purpose. The tank shall be completely removable without disturbing or dismantling the apparatus structure. The water tank shall be certified for the capacity of the water tank prior to delivery of the apparatus. This capacity shall be recorded on the manufacturer's record of construction and the certification shall be provided to the purchaser when the apparatus is delivered.			

HOSEBED SINGLE AXLE The hose bed compartment deck shall be constructed entirely from maintenance-free, extruded aluminum slats. The slats shall have an anodized, radiused ribbed top surface. The slats shall be of widths approximately 3/4" high x 6" wide and shall be welded into a one-piece grid system to prevent the accumulation of water and allow ventilation to assist in drying hose. The apparatus hose body shall be properly reinforced without the use of angles or structural shapes and free from all projections that might injure the fire hose. The main apparatus hose body shall run the full length of the apparatus body from behind the pump panel area to the rear face of the body. The upper rear interior of the hose body on the right and left sides shall be overlaid with brushed stainless-steel to protect the painted surface from damage by hose couplings.			
HOSE BED STORAGE CAPACITY The hose bed shall be designed to have a storage capacity for a minimum of 55 cubic feet of fire department supplied fire hose.			

BULKHEAD DIVIDER There shall be a full width smooth aluminum bulkhead behind the fill tower(s).			
ALUMINUM HOSEBED COVER The hosebed shall be equipped with a reinforced hinged .125" aluminum diamond plate cover. The covers shall be of the sloped design for proper water runoff. Positive hold-open devices shall be provided to hold the door in the open position. The cover, approximately 49” to 74” wide with a center opening, shall be installed the full length of the hose bed. The hosebed cover shall be labeled, "Not a Standing or Walking Surface", per NFPA. The hose bed doors shall cover the complete hose bed excluding the dunnage area where the water tank fill towers are located.			
MAIN HOSEBED DIVIDER One (1) stationary hosebed divider shall be provided in the main hosebed. The hosebed divider shall be fabricated of 1/4" smooth aluminum sheet stock, pressed into a "T" shaped aluminum extrusion for added strength			

along the bottom and front edges of the divider. Divider shall be bolted in place, front and rear, to allow for ease of removal or relocation. <u>MANUALLY OPERATED ALUMINUM HOSEBED COVER</u> The polished aluminum treadplate hosebed covers extending the full-length and width of the main hosebed shall have lift up handles installed on each hose cover to manually open the hosebed covers.			
<u>HOSEBED LED LIGHTS</u> Two (2) 48" long OnScene Solutions Access LED light shall be installed and produce approximately 10050 lumens per light. The light stick shall be rated at 100,000 hours of service and shall be provided with a 5 year free replacement warranty. The light shall have a 5/8" LEXAN™ polycarbonate tube enclosure for severe duty applications. The light stick shall be waterproof and be connectible via a jumper wire to add additional lights in series if required. The LED lights shall be recessed into the underside of the hinged aluminum hosebed covers to provide illumination for repacking of fire hose. The 12 volt LED lights shall be automatically controlled by a switch which activates upon			

opening of the door. The lights shall also be connected to the hazard light in the chassis cab to indicate when the hose bed covers are in the open position. REAR VINYL FLAPS FOR ALUMINUM COVER There shall be a vinyl flaps attached to each aluminum hosebed cover. The vinyl flaps shall cover the area on the rear of the hosebed from top to bottom. The flaps shall be independent of each other but attachable with velcro in the center. The bottom edge of the flap shall be shall be secured utilizing a hook and loop fastening system. The vinyl cover shall be red in color.			
3/16" ALUMINUM BODY The body shall be fabricated of aluminum extrusions, smooth aluminum sheet and aluminum treadplate. The aluminum extrusion alloy shall be 6061 with a temper rating of T6, and have a tensile strength of 45,000 PSI and yield strength of 40,000 pounds. The aluminum extrusions shall 3" x 3" aluminum tubing, 1-3/4" x 3" aluminum tubing and 3" x 3" aluminum angle and specially designed extrusions, up to .250" wall thickness where applicable. The smooth aluminum sheet material alloy shall be 5052 with			

a temper rating of H32, and have a tensile strength of 33,000 PSI and yield strength of 28,000 pounds. The aluminum treadplate alloy shall be 3003 with a temper rating of H22, and have a tensile strength of 30,000 PSI and yield strength of 28,000 pounds. The extrusions shall be designed as structural-framing members with the smooth aluminum and treadplate fabricated to form compartments, hosebeds, and floors All aluminum material shall be welded together using the latest mig spray pulse arc welding system. Compartment floors shall be of the sweep out design with the floor higher than the compartment door lip and to be water and dust proof. All compartments shall be made to the maximum practical dimensions to provide maximum storage capacity. To ensure maximum storage space, the apparatus shall be constructed without any void spaces between the body and the compartment walls. Double wall construction does not meet this requirement. All exterior compartments shall have polished aluminum drip moldings installed above the doors where necessary to prevent water from entering the compartments.			

Wheel well panels shall be formed aluminum that is welded in place. There shall be no visible bolt heads, retention nuts or fasteners on the exterior surface of the panel. To fully protect the wheel well area from road debris and to aid in cleaning, a full depth radius wheel well liner shall be provided. The frame side of the wheel well area on each side of the opening shall be attached to the frame side of the front and rear compartments. All seams on the frame side of the body shall be welded and caulked to prevent moisture from entering the compartments. The rear wheel wells shall be radius cut for a streamlined appearance. A fenderette shall be furnished at each rear wheel well opening, held in place with stainless-steel fasteners			
<u>FASTENERS</u> All aluminum and stainless-steel components shall be attached using stainless-steel fasteners. Compartment door hinges, handrails and running boards shall be attached using minimum 1/4" diameter machine bolt fasteners. 3/16" diameter fasteners shall only be used in nonstructural areas such as; door handles, trim moldings, gauge mounting, etc.			

ELECTROLYSIS CORROSION CONTROL The apparatus shall be assembled using ECK or electrolysis corrosion control, on all high corrosion potential areas, such as door latches, door hinges, trim plates, fenderettes, etc. This coating is a high zinc compound that shall act as a sacrificial barrier to prevent electrolysis and corrosion between dissimilar metals. This shall be in addition to any other barrier material that may be used. All 1/4" diameter and smaller screws and bolts shall be stainless-steel. Due to the expected life of the vehicle, proposals will only be acceptable from manufacturers that include these corrosion features.			
COMPARTMENT FLOORS The compartment floors shall be constructed of smooth aluminum material, to match the compartment interior walls.			
GALVANIZED SUB-FRAME The apparatus body subframe shall be constructed entirely of heavy steel structural channel material. Two full frame lengths, three-inch (3") 3.4 pound per foot			

longitudinal steel channels shall form the sides of the body subframe and sides of the water tank cradle. Subframe crossmembers shall be fabricated with three inch (3") 3.4 pound per foot heavy steel channel cross members welded to the longitudinal body subframe sides and the full length frame pads. Two full frame length 1/2" x 3" flat steel frame pads shall be attached to the body subframe and rest on top of the chassis frame rails for proper frame weight distribution. The steel frame pads, longitudinal steel channels and subframe crossmembers shall be attached to the chassis frame rails using heavy "U" bolt fasteners to allow removal of the subframe and body assembly from the chassis. There shall be a barrier provided between the subframe and body to prevent electrolysis. The rear subframe and lower body platform support members shall be of the "two piece" design, fabricated of 3.4 lb. per foot heavy channel and welded to the full length subframe channel liners at the rear. A minimum of two rear platform support channels shall be provided and constructed of 3.4 lb. Per foot heavy steel material. Each support channel shall have welded in gusset where			

the support meets the rear subframe rails. After fabrication the entire subframe assembly shall be hot dip galvanized to prevent corrosion. p The hot dip galvanized subframe shall have a lifetime warranty against failure due to corrosion. This steel subframe shall carry the weight of the apparatus body, tank, water and equipment. This method of apparatus construction gives an excellent strength/weight ratio.			
<u>FENDERETTES</u> The rear wheel wells shall be radius cut for a streamlined appearance. A polished aluminum fenderette shall be furnished at each rear wheel well opening, held in place with concealed stainless-steel fasteners.			
<u>BODY WIDTH</u> The overall width of the pumper body shall not exceed 98".			
<u>COMPARTMENT DEPTH</u> The left side compartments on the pumper body shall have the maximum available height and depth dimensions. These dimensions shall remain consistent for the full height and depth of the compartment.			

The right side compartments on the pumper body shall have the following dimensions: Lower portion depth of 25" Upper portion depth of 13"			
<u>HOSEBED WIDTH</u> The width of the pumper body hosebed shall be 68".			
<u>COMPARTMENT HEIGHT</u> The left side body compartments shall be 72".			
<u>COMPARTMENT HEIGHT</u> The right side body compartments shall be 72" high.			
<u>ROLL UP DOOR CONSTRUCTION</u> The roll up door(s) shall be fabricated from aluminum extrusions and be manufactured and assembled in the United States. The door slats shall be double-wall extrusions with dimensions of 1.366" high x .315" thick. The exterior surface shall be flat and the interior surface concave to deflect loose equipment to prevent the door from jamming. Each slat shall have interlocking end shoes to prevent the slat from moving side to side resulting in binding of the door. Each slat shall be separated by a co-extruded PVC and rubber inner seal to prevent metal to			

metal contact and minimize dirt and moisture from entering the compartment. The inner seal shall not be visible from the exterior to maintain a clean appearance of door. The slats shall have interlocking joints with a folding locking flange to provide security and prevent penetration by sharp objects. The track shall be a one (1) piece aluminum assembly that has an attaching flange and finishing flange incorporated into the design that facilitates installation and provides a finished look to the door without additional trim or caulking. A low profile side seal shall be utilized to maximize usable compartment space. A drip rail designed to prevent water from dripping into the compartment shall be provided. The drip rail shall have a built in replaceable non-contacting seal to eliminate scratching of the surface of the door. Bottom rail extrusion must have smooth back to prevent loose equipment from jamming the door and have “V” shaped double seal to prevent water and debris from entering the compartment. The door latch system shall be a full width one (1) piece lift bar that enables the user to operate with one hand. The roll mechanism shall have a clip system that connects the curtain slats to the operator			

drum to allow for easy tension adjustment without tools. A four (4) inch diameter counterbalanced operator drum to shall be incorporated to assist in lifting the door.			
PULL DOWN STRAPS Seven (7) elastic nylon straps shall be provided and installed on each roll up door. The straps shall be secured to the side wall of the interior compartment in a way that will allow the strap to contract automatically and tuck inside the compartment when closed to prevent the strap from dangling and hindering closing of the door. When the door is the open position, the straps shall be installed so that they are fully extended as to not interfere with removing items from the compartment. For the ease of locating, the straps shall be bright orange in color.			
LEFT FRONT COMPARTMENT There shall be one (1) full height compartment located ahead of the rear wheels. The compartment shall be equipped with a full height single natural finish roll up door. The compartment shall be equipped with the following: One (1) louver with filter shall be installed in the compartment.			

ADJUSTABLE SHELVING TRACKS The compartments shall be equipped with two (2) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting.			
COMPARTMENT LIGHTS Two (2) ROM vertically mounted roll-up compartment LED V3 door lights shall be installed one each side of the door opening. The compartment lights shall be integrated into the roll-up door tracks with the light actuation with the door opening. The lights shall have a polycarbonate lens to eliminate breakage from impact and eliminate heat buildup. The compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.			
LEFT OVERWHEEL COMPARTMENT There shall be one (1) compartment above the rear wheels. The compartment shall be equipped with a single natural finish roll up door. The compartment shall be equipped with the following: One (1) louver with filter shall be			

installed in the compartment.			
ADJUSTABLE SHELVING TRACKS The compartments shall be equipped with two (2) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting.			
COMPARTMENT LIGHTS Two (2) ROM vertically mounted roll-up compartment LED V3 door lights shall be installed one each side of the door opening. The compartment lights shall be integrated into the roll-up door tracks with the light actuation with the door opening. The lights shall have a polycarbonate lens to eliminate breakage from impact and eliminate heat buildup. The compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.			
LEFT REAR COMPARTMENT There shall be one (1) full height compartment located behind the rear wheels. The compartment shall be equipped with a full height single natural finish roll up door. The compartment shall be equipped with the following:			

One (1) louver with filter shall be installed in the compartment			
ADJUSTABLE SHELVING TRACKS The compartments shall be equipped with two (2) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting.			
COMPARTMENT LIGHTS Two (2) ROM vertically mounted roll-up compartment LED V3 door lights shall be installed one each side of the door opening. The compartment lights shall be integrated into the roll-up door tracks with the light actuation with the door opening. The lights shall have a polycarbonate lens to eliminate breakage from impact and eliminate heat buildup. The compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.			
RIGHT FRONT COMPARTMENT There shall be one (1) full height compartment located ahead of the rear wheels. The compartment shall be equipped with a full height single natural finish roll up door. The compartment shall be equipped with the following:			

One (1) louver with filter shall be installed in the compartment. ADJUSTABLE SHELVING TRACKS The compartments shall be equipped with two (2) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting			
COMPARTMENT LIGHTS Two (2) ROM vertically mounted roll-up compartment LED V3 door lights shall be installed one each side of the door opening. The compartment lights shall be integrated into the roll-up door tracks with the light actuation with the door opening. The lights shall have a polycarbonate lens to eliminate breakage from impact and eliminate heat buildup.			
RIGHT HIGH SIDE COMPARTMENTS There shall be one (1) compartment above the rear wheels. The compartment shall be equipped with a single natural finish roll up door. The compartment shall be equipped with the following: One (1) louver with filter shall be installed in the compartment.			

ADJUSTABLE SHELVING TRACKS The compartments shall be equipped with two (2) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting.			
Compartment lights Two (2) ROM vertically mounted roll-up compartment LED V3 door lights shall be installed one each side of the door opening. The compartment lights shall be integrated into the roll-up door tracks with the light actuation with the door opening. The lights shall have a polycarbonate lens to eliminate breakage from impact and eliminate heat buildup. The compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.			
LEFT OVERWHEEL COMPARTMENT There shall be one (1) compartment above the rear wheels. The compartment shall be equipped with a single natural finish roll up door. The compartment shall be equipped with the following: One (1) louver with filter shall be installed in the compartment.			

LEFT REAR COMPARTMENT There shall be one (1) full height compartment located behind the rear wheels. The compartment shall be equipped with a full height single natural finish roll up door. The compartment shall be equipped with the following: One (1) louver with filter shall be installed in the compartment.			
ADJUSTABLE SHELVING TRACKS The compartments shall be equipped with two (2) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting.			
COMPARTMENT LIGHTS Two (2) ROM vertically mounted roll-up compartment LED V3 door lights shall be installed one each side of the door opening. The compartment lights shall be integrated into the roll-up door tracks with the light actuation with the door opening. The lights shall have a polycarbonate lens to eliminate breakage from impact and eliminate heat buildup. The compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.			

RIGHT FRONT COMPARTMENT There shall be one (1) full height compartment located ahead of the rear wheels. The compartment shall be equipped with a full height single natural finish roll up door. The compartment shall be equipped with the following: One (1) louver with filter shall be installed in the compartment.			
ADJUSTABLE SHELVING TRACKS The compartments shall be equipped with two (2) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting			
COMPARTMENT LIGHTS Two (2) ROM vertically mounted roll-up compartment LED V3 door lights shall be installed one each side of the door opening. The compartment lights shall be integrated into the roll-up door tracks with the light actuation with the door opening. The lights shall have a polycarbonate lens to eliminate breakage from impact and eliminate heat buildup. The compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.			

RIGHT HIGH SIDE COMPARTMENTS There shall be one (1) compartment above the rear wheels. The compartment shall be equipped with a single natural finish roll up door. The compartment shall be equipped with the following: One (1) louver with filter shall be installed in the compartment.			
ADJUSTABLE SHELVING TRACKS The compartments shall be equipped with two (2) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting.			
COMPARTMENT LIGHTS Two (2) ROM vertically mounted roll-up compartment LED V3 door lights shall be installed one each side of the door opening. The compartment lights shall be integrated into the roll-up door tracks with the light actuation with the door opening. The lights shall have a polycarbonate lens to eliminate breakage from impact and eliminate heat buildup. The compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.			

RIGHT REAR COMPARTMENT There shall be one (1) full height compartment located behind the rear wheels. The compartment shall be equipped with a full height single natural finish roll up door. The compartment shall be equipped with the following: One (1) louver with filter shall be installed in the compartment.			
ADJUSTABLE SHELVING TRACKS The compartments shall be equipped with two (2) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting.			
COMPARTMENT LIGHTS Two (2) ROM vertically mounted roll-up compartment LED V3 door lights shall be installed one each side of the door opening. The compartment lights shall be integrated into the roll-up door tracks with the light actuation with the door opening. The lights shall have a polycarbonate lens to eliminate breakage from impact and eliminate heat buildup. The compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.			

REAR BODY CONFIGURATION The rear of the apparatus body shall be of the flat back design.			
REAR CENTER COMPARTMENT There shall be one (1) full height compartment located at the rear of the apparatus. The compartment shall be equipped with a full height natural finish roll up door. The compartment shall be partitioned off from the side compartments. The compartment shall be equipped with the following: One (1) louver with filter shall be installed in the compartment.			
ADJUSTABLE SHELVING TRACKS The compartments shall be equipped with two (2) aluminum adjustable tracks, vertically mounted, that are bolted in place for adjustable shelving and equipment mounting.			
COMPARTMENT LIGHTS Two (2) ROM vertically mounted roll-up compartment LED V3 door lights shall be installed one each side of the door opening. The compartment lights shall be integrated into the roll-up door tracks with the light actuation with the door opening.			

The lights shall have a polycarbonate lens to eliminate breakage from impact and eliminate heat buildup. The compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.			
<u>REAR STEP - 16” BOLT-ON</u> A 16" deep step surface shall be provided at the rear of the apparatus body, bolted in place and easily removable for replacement or repair. The tailboard shall be constructed of .188" aluminum diamond plate or equal non-slip surface in compliance with NFPA #1901 standards. A label shall be provided warning personnel that riding on the rear step while the apparatus is in motion is prohibited.			
<u>ADJUSTABLE SHELF</u> Seven (7) adjustable shelf shall be constructed of .125” smooth aluminum plate with 1.5” formed vertical lip front & back. Shelf supports on each side to be constructed of .188” aluminum and bolted to an aluminum extrusion (mounted vertically) by use of 3/8” bolts and spring-loaded cam locks. If shelf is longer than 40” a reinforcement by aluminum gusset is to be placed full-length on bottom of shelf. Located:			

- 2x-L1 - 1x-L2 - 1x-L3 - 1x R1 upper - 1x R2 - 1x R3 upper			
ROLLOUT TRAY Two (2) low profile telescoping equipment tray(s) shall be installed in a standard depth compartment. The tray assembly shall have a silver powder coated steel slide frame with sealed roller bearings rated to 300 pounds. A tray constructed of .190" smooth aluminum plate with four 3" sides shall be mounted to the slide frame. The slide frame shall extend 100% allowing the tray to be completely accessible from outside the compartment. An integrated manual quarter turn lock shall hold tray in both the "in" and "out" positions. The slide shall have a 2-3/4" deck height. Located: - 1x-L3 - 1x-R3 An integrated manual quarter turn "gravity" lock shall hold tray in both the "in" and "out" positions. The "gravity lock" manually rotates a rod with a tab to engage the bottom frame			
SLIDE OUT VERTICAL LADDER MOUNTINGS			

The ladder shall slide into the passenger rear of the apparatus, through the passenger side of the body. The vertically mounted slide in assembly shall be an integral part of the body and accessible through a hinged door. The hinged door shall be constructed of smooth material, with chevron striping applied to match the rear of the apparatus body.			
<u>INTERNAL FOLDING ATTIC LADDER MOUNTING</u> An internal mounting shall be provided for the specified folding attic ladder.			
<u>LADDER SOURCE</u> New ground ladders shall be provided by the body builder.			
<u>PIKE POLE MOUNTING BRACKET</u> Two (2) tube shall be provided for pike pole mounting. The tube shall have a 2" interior diameter and shall be mounted in the ladder tunnel.			
<u>PIKE POLE SOURCE</u> The pike poles shall be provided by the body builder.			
<u>HARD SUCTION MOUNTING</u> A hard suction hose compartment shall be provided at the top of the body			

compartments, behind the roll up door, on the driver side. The design shall allow the hose to be individually removed from the rear of the apparatus. The hard suction hose compartment shall have a hinged door with push to latch door catches. The hinged door shall be constructed of smooth material, with chevron striping applied to match the rear of the apparatus body.			
<u>HARD SUCTION MOUNTING</u> A hard suction hose compartment shall be provided at the top of the body compartments, behind the roll up door, on the passenger side. The design shall allow the hose to be individually removed from the rear of the apparatus. The hard suction hose compartment shall have a hinged door with push to latch door catches. The suction hose compartment and door is the same unit as the ladder and pike pole storage. The hinged door shall be constructed of smooth material, with chevron striping applied to match the rear of the apparatus body.			
<u>FOLDING STEPS RIGHT SIDE FRONT</u> Four (4) folding steps of die cast high-strength zinc/aluminum alloy, plated with a superior automotive grade chrome finish			

shall be provided. The greater than 42 sq. in. serrated non-skid step traction area also offers an oversized non-slip grasp hand-hold. A heavy duty stainless steel spring design firmly holds the step in the open or closed positions. A rubber stop prevents any transit noise and rattles in the closed position. Step lighting shall be from a LED light mounted above the step. The step has been third part tested to assure conformation of NFPA 1901 and FHA, 49CFR specifications for stepping surfaces and handhold. The step shall be installed on the right side front compartment face.			
<u>FRONT BODY PROTECTION PANELS</u> Aluminum tread plate overlays and panels shall be installed on the front of the body compartment from the lower edge to the top of the compartment doors.			
<u>CATWALKS</u> Aluminum tread plate catwalks shall be installed on the top of the compartments.			
<u>REAR BODY PROTECTION PANELS</u> The rear body panels of the body shall be a smooth material,			

to allow for the proper application and installation of a "Chevron" stripe on the rear.			
<u>REAR INTERMEDIATE STEP</u> An intermediate fixed step shall be provided at the rear of the apparatus body, bolted in place and easily removable for replacement or repair. The intermediate step shall be constructed of .188” polished aluminum diamond plate or equal non-slip surface in compliance with NFPA #1901 standards and be approximately 8” deep x 48” wide.			
<u>ACCESS LADDER _EZ CLIMB - LEFT REAR</u> There shall be a swing out and down access ladder supplied and installed on the apparatus, for accessing the top of the apparatus. It shall be of an all aluminum design and shall incorporate treads six (6") inches deep and no more than eighteen (18") inches apart. The ground to the first step dimension, on level ground, shall be no more than twenty-four (24") inches. The access ladder shall have integrated hand holds in the steps, to aid in the ascent/descent of the ladder. When in the deployed position the ladder shall have an angle of approximately 75-degrees to facilitate ascending and			

descending the ladder. The ladder shall be retained in the stowed and deployed position by two (2) gas cylinders and shall not require the use of latches to hold it in position.			
HANDRAIL REAR STEP One (1) extruded aluminum non-slip handrail, approximately 60” in length, shall be provided and mounted on the rear of the apparatus. On rear right side of the body			
One (1) extruded aluminum non-slip handrail, approximately 48” in length, shall be provided and horizontally mounted below the hosebed on the rear of the apparatus. The handrail is rear facing on the intermediate step.			
EXTRUDED ALUMINUM RUB RAILS Full body length polished aluminum rub rails shall be bolted in place on the lower right and left body sides. The side rub rails shall be a heavy extruded aluminum "C" channel.			
YLON SPACERS FOR RUB RAILS There shall be nylon spacers provided between the rub rail and the body. This shall allow			

wash out and replacement in the event of damage.			
<u>WHEEL WELL PROVISION LOCATION</u> The wheel well provisions shall be located on the left side of the apparatus, ahead of the rear wheels. A wheel chock storage compartment for two (2) wheel chocks (not supplied) shall be provided and located in the rear wheel well of the apparatus body. The storage compartment shall be constructed entirely of aluminum. The door assemblies shall be provided with a gasket between door and body side, bolted in-place and removable for repair or replacement. A painted door shall be provided.			
<u>WHEEL WELL PROVISION LOCATION</u> The wheel well provisions shall be located on the left side of the apparatus, behind of the rear wheels. A fire extinguisher storage compartment shall be provided in the rear wheel well area of the apparatus body. The compartment shall be constructed of aluminum and removeable for repair or replacement. A painted aluminum door shall be installed.			

An one-inch (1") wide loop of black webbing shall be installed in each SCBA compartment to prevent the bottle from sliding out of the compartment in case of door failure. The loop shall be mounted, centered in the compartment and shall hang within one-inch (1") of the compartment floor to allow the bottle to pass by the strap when the bottle is placed in the compartment. The strap shall loop over the valve.			
<u>WHEEL WELL PROVISION LOCATION</u> The wheel well provisions shall be located on the right side of the apparatus, ahead of the rear wheels. A breathing air cylinder storage compartment for four (4) SCBA cylinders (not supplied) shall be provided and located in the rear wheel well of the apparatus body. The cylinder storage compartment shall be constructed entirely of aluminum. The door assemblies shall be provided with a gasket between door and body side, bolted in-place and removable for repair or replacement. Compartment shall be provided with SCBA cylinder scuff protection. A painted aluminum door shall be installed.			

An one-inch (1") wide loop of black webbing shall be installed in each SCBA compartment to prevent the bottle from sliding out of the compartment in case of door failure. The loop shall be mounted, centered in the compartment and shall hang within one-inch (1") of the compartment floor to allow the bottle to pass by the strap when the bottle is placed in the compartment. The strap shall loop over the valve.			
<u>WHEEL WELL PROVISION LOCATION</u> The wheel well provisions shall be located on the right side of the apparatus, behind of the rear wheels. A breathing air cylinder storage compartment for four (4) SCBA cylinders (not supplied) shall be provided and located in the rear wheel well of the apparatus body. The cylinder storage compartment shall be constructed entirely of aluminum. The door assemblies shall be provided with a gasket between door and body side, bolted in-place and removable for repair or replacement. Compartment shall be provided with SCBA cylinder scuff protection. A painted aluminum door shall be installed.			

An one-inch (1") wide loop of black webbing shall be installed in each SCBA compartment to prevent the bottle from sliding out of the compartment in case of door failure. The loop shall be mounted, centered in the compartment and shall hang within one-inch (1") of the compartment floor to allow the bottle to pass by the strap when the bottle is placed in the compartment. The strap shall loop over the valve.			
<u>BODY PAINT PROCESS</u> While constructing the truck body, all aluminum parts that are to be finish painted shall be properly fitted on the body and then removed to be painted as individually. The back side of all aluminum parts shall be sanded smooth of any burrs and sharp edges. During reassembly of the apparatus, care shall be exercised in fitting and fastening the parts back in their respective position on the vehicle. All aluminum parts shall be bolted to the body using stainless steel fasteners. Zinc or Cadmium plated fasteners are not acceptable. All bright metal fittings, if unavailable in stainless steel shall be heavily chrome plated. Iron fittings shall be copper plated prior to chrome plating.			

All seam shall be caulked both inside and along the exterior edges with a urethane automotive sealant to prevent moisture from entering between any body panels. The body and all parts shall be thoroughly washed with a grease cutting solvent (PPG DX330) prior to any sanding. After the body has been sanded and the weld marks and minor imperfections are filled and sanded, the body shall be washed again with (PPG DX330) to remove any contaminants on the surface. The next two to four coats (depending on need) shall be a PPG DelFleet F4936 High Solids Epoxy Gray Primer. The film build shall be 4-6 mils when dry. The primer surfacer coat, after appropriate dry time, shall be sanded with 320-600 grit sandpaper to ensure maximum gloss of the paint. The last step is the application of at least three coats of PPG Delfleet polyurethane two-component color (single stage). The film build being 2-3 mils dry. The single stage polyurethane, when mixed with corresponding catalyst shall provide a UV barrier to prevent fading and chalking. All products and technicians are certified by PPG every two (2) years.			

APPARATUS COLOR Paint to match Red in color			
INTERIOR COMPARTMENT FINISH Eight (8) apparatus side compartment interiors are to be painted with a spatter finish material. The compartments shall be cleaned with a grease remover, and then the surface sanded and prepared for painting. The compartment shall be provided with two (2) coats of epoxy. The compartments are then coated with a splatter paint top coat. The compartments shall be painted solid light gray.			
TOUCH-UP PAINT One (1) two (2) ounce bottle of touch-up paint shall be furnished with the completed truck at final delivery.			
LETTERING The purchaser shall supply the apparatus lettering.			
CAB AND BODY STRIPE A straight Scotchlite reflective stripe, 4" in width, shall be applied horizontally around the cab and body in compliance with applicable NFPA 1901 standards. The purchaser shall specify the color and location of the stripe.			

COLOR OF STRIPING MATERIAL The color of the 3M brand striping material shall be Gold			
CHEVRON STRIPING The entire rear portion of the body shall have Oralite V98 reflective red and yellow striping installed. The chevron style striping shall be applied at a 45-degree upward angle pointing towards the center upper portion of the rear panel.			
YELLOW SAFETY TAPE - STANDING & WALKING SURFACES The apparatus shall meet NFPA 1901 15.7.1.6 designating any horizontal standing or walking surface higher than 48-in (1220 mm) from the ground and not guarded by railing or structure at least 12-in (300 mm) high shall have at least a 1-in (25 mm) wide safety yellow line delineation that contrasts with the background to mark the outside perimeter of the designated standing or walking surface area, excluding steps and ladders.			
WHEEL CHOCKS Two (2) standard aluminum wheel chocks shall be provided.			

ROOF LADDER One (1) 14 foot aluminum roof ladder with folding steel roof hooks on one end and steel spikes on the other end shall be provided on the apparatus. The ladder shall meet or exceed all latest NFPA Standards.			
EXTENSION LADDER One (1) 24 foot two (2) section aluminum extension ladder shall be provided on the apparatus. The ladder shall meet or exceed all the latest NFPA standards.			
FOLDING LADDER One (1), 10 foot folding aluminum ladder shall be provided on the apparatus. The ladder shall meet or exceed all the latest NFPA Standards.			
PIKE POLE One (1) 6' pike pole with I-Beam handle shall be provided. The pike pole shall be of fiberglass construction. PIKE POLE One (1) 8' pike pole with I-Beam handle shall be provided. The pike pole shall be of fiberglass construction.			
FIRE EXTINGUISHER One (1) 20# ABC dry chemical fire extinguisher shall be provided with mounting. The extinguisher shall			

have a pressure gauge and filled with a dry chemical extinguishing agent. Must be ULC or CSA compliant.			
PRE-DELIVERY FUEL The vehicle shall be fully fueled prior to final delivery to the fire department. PRE-DELIVERY DEF FLUID The vehicle shall have a full DEF tank prior to final delivery to the fire department. ONTARIO VEHICLE INSPECTION The vehicle shall have an Ontario Periodic Mandatory Commercial Vehicle Inspection, and include all paperwork prior to final delivery to the fire department. <u>DEALER SUPPLIED</u> TIRE PRESSURE SENSORS The vehicle shall include tire pressure sensors. Real-Wheels RW sensors shall be provided for the correct tire psi rating. The fire department must fully load the vehicle with estimated in-service equipment and water tank loads prior to installation of tire pressure sensors to achieve accurate readings.			

EMISSIONS TESTING The vehicle shall include an emissions test prior to ownership transfer to the fire department, as may be required for Ontario ownership transfer. ONTARIO LICENSE PLATES The vehicle shall include Ontario permanent emergency vehicle license plates prior to delivery to the fire department. The license plates shall include the municipal fire truck "MFT" code for ownership/license plate purposes. <u>PROFLEET CARE RUST PROOFING</u> A ProFleet Care rust proofing system shall be applied to the completed fire apparatus prior to delivery to the fire department. The Pro Fleet Care rust proofing system creates a barrier of protection for metals and neutralizes the harmful effects of salt and moisture. ProFleet Care is a unique blend of chemicals that penetrate into hard to reach seams and crevices. ROC 40 is a traditional rust proofing product that penetrates seams and is ideal for interior panels and hard to reach areas. ROC 50 is the secondary rust proofing product that is used in high traffic areas where extra protection is needed. ROC50 is best suited for areas such as frame rails and wheel wells.			

ProFleet care is compatible with other manufacturer rust controls products, either applied annually before or after this treatment. For more information on the ProFleet Care system visit https://profleetcare.com/index.html VEHICLE PICK-UP The vehicle shall be picked up by the end-user. Pick up shall be coordinated ahead of the delivery date, establishing a date/time for estimated arrival. The pick up shall include a brief overview of all aspects of the fire apparatus, unless prior arrangements have been made for more involved familiarization. The pick up shall include ownership transfer with full payment provided by the end-user, either at the time of pick up, ahead of pick up, or another previously arranged agreement. All agreed upon loose equipment shall be reviewed and confirmed present at pick up. <u>KOCHEK EQUIPMENT</u> The following Kochek equipment shall be supplied with the offered vehicle: Kocheck two (2) 6" x 10' suction hoses Both suctions shall have - 6" NH female end with long handles			

- 6" NH male end with rocker lugs			
<u>INSPECTION TRIP</u> An inspection trip at the manufacturers' facility prior to delivery of the completed apparatus shall be provided. Accommodations for two (2) fire department personnel to include all transportation, food and lodging shall be included in the bid price.			

3. Provisional Items

None required

Part “C” Standard Terms and Conditions

1. Definitions

“Bid” The document issued by the municipality in response to which Tenders are invited for the performance of the work or supply of equipment.

“Bidder” A person (s), firm(s) or corporation(s) who has submitted a bid.

“Company” The person(s), firm(s) or corporation(s) to whom the municipality may award or has awarded the contract.

“Confidential Information” includes information, including Personal Information, whether oral, written, visual, electronic, or in any other form, relating in any way to the Purchase Order or other information made available by the Purchaser to the Supplier at any time in connection with the Contract or the Deliverables which is identified as confidential or which would reasonably be considered as being confidential but does not include information which (a) is or becomes public knowledge other than by breach of the Contract; (b) has been independently developed by the Supplier or acquired from a source which was not subject to a duty of confidentiality to the Purchaser.

“Contract” One or a combination of any of the following: the purchase order authorizing the company to do the work, the Tender, the bonds or security (if any), the company's Tender, and change notices, appendices, and addenda (if any), formal contract.

“Equipment” The materials, machinery, assemblies, instruments, devices or articles as the case may be, or components thereof, which are the subject of the contract.

“Municipality” The Township of North Kawartha, its successors and assigns.

“Notice of Award” Notice provided to the successful bidder of contract award.

“Personal Information” means as defined in the Municipal Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c. M.56, as in effect at any time.

“Subcontractor” A person(s), firm(s) or corporation(s) having a contract with the company for any part of the work.

“Work” All materials, equipment fixtures, services, supplies, and acts required to be done, furnished and/or performed by the company.

2. Document Fees

When a document fee is applicable, the bidder must have previously purchased the respective document.

3. Bid Requirements

Bidders are required to conform to the conditions listed below and those failing to do so may be subject to disqualification.

a) Bids must be submitted on the bid form supplied by the municipality. Bid submissions must not be restricted by a statement added to the bid form or by a covering letter, or by alterations to the bid form supplied unless otherwise provided in the bid document.

b) Bid submissions shall consist of “Part “D” Bid Form” and all other sections and requirements as requested within the bid document. See “Part “D” Bid Form” for all requirements requested within the bid document.

c) The Bid Form shall be signed in the space(s) provided by a duly authorized official of the entity bidding. If a joint bid is submitted, it shall be signed on behalf of each of the bidders and if the signing authority for both bidders is vested in one individual, he/she shall sign separately on their behalf. Signatures on behalf of non-incorporated bodies or by individuals shall be witnessed. In the case of an incorporated company, the corporate seal should be affixed to the bid form adjacent to the authorized signature.

d) Bids must be legible, written in ink or typewritten. Erasures, over-writing or strikeouts must be initialed by the person signing on behalf of the bidder.

e) Adjustments by telephone, facsimile (Fax), e-mail or letter to a bid already submitted will not be considered. A bidder desiring to make adjustments to a bid must withdraw the bid and/or supersede it with a later bid submission prior to the specified bid closing time.

f) Bids must be submitted in individually sealed envelopes and must clearly identify the name of the company, address of company, and RFT number on the outside of the envelope. Tenders received after closing time specified in the bid document will not be considered.

   Faxed or Emailed Bid Submissions are not acceptable.

g) Delivery of the bid submission through a courier service shall be the responsibility of the bidder and shall result in the submission being rejected where:
   i. Bid submission is delivered to a location other than which is stated on the submission and fails to be delivered to the Township of North Kawartha Municipal Office prior to the closing date and time; and/or
   ii. Bid submission which is enclosed in the courier envelope that does not state, “Bid Document Enclosed” and is not removed from the courier’s envelope prior to the closing date and time; and/or
   iii. Bid submission is delivered later than the closing date and time.

h) Each item in the bid document shall be a reasonable price for such item. Bids that contain prices which appear to be unbalanced as to affect adversely the interest of the municipality may be rejected. The municipality will be the sole judge in this matter.

4. Bidder’s Statement of Understanding

It is understood that the bidder has carefully examined all of the bid documents and has carefully examined the work to be performed under the contract if awarded. The bidder also understands and accepts the said bid documents, and for the prices set forth in the bid, hereby offers to furnish all labour, machinery, tools, apparatus and other means of implementation, and materials to complete the terms and conditions and requirements in strict accordance with the bid documents.

None of the conditions contained in the bidder’s (seller's) standard or general (printed) conditions of sale shall be of any effect unless explicitly agreed to by the municipality as set forth or specifically referred to therein.

The bidder declares that his submission is not made in connection with any other bidder submitting an offer for the same commodity or commodities, and is in all respects fair and without collusion and fraud.

The contract shall be governed and interpreted in accordance with the laws of the Province of Ontario.

5. Clarification of Bid Documents

No officer, agent or employee of the municipality is authorized to alter orally any portion of these documents. During the period prior to submission of Tenders, alterations will be issued as written addenda. The municipality will issue all written addenda to the Township of North Kawartha website at www.northkawartha.ca/bidsandtenders. It is the bidder’s responsibility to check for addenda prior to submission. The bidder shall list in its bid all addenda that were considered when its Tender was prepared.

6. Bid Deposit Requirements

Bidders may be required to submit a bid deposit with each bid, which must be in the same envelope as the bid.

See Part “A” Information to Bidders, which form part of this bid document.

7. Performance Surety Requirements

Performance surety binding the company faithfully to fulfill the obligations of their bid as accepted, may be required by the municipality within ten (10) working days from the date of request.

See Part “A” Information to Bidders, which form part of this bid document.

8. Insurance and Workplace Safety Insurance Board

The successful bidder shall deliver a certified copy of the firm's Public Liability and Property Damage Insurance, and where applicable the bidder shall carry standard automobile and non-owned automobile liability insurance Policy for the works, within ten (10) working days of receiving the acceptance notice. Coverage shall be at least $5,000,000.00 per incident, with the Township of North Kawartha named as insured. Additional coverage may be required.

The successful bidder will be required to submit proof of Workplace Safety Insurance Board Coverage, within ten (10) working days of receiving the acceptance notice and shall provide additional certificates as often as is deemed necessary by the municipality during the term of the contract to ensure continued good standing with the Workplace Safety & Insurance Board.

Failure to provide such proof shall result in cancellation of the contract.

9. Proof of Ability

The Bidder may be required to show, in terms of experience and facilities, evidence of its ability, as well as that of any proposed subcontractor, to perform the work by the specified delivery date.

10. Document and Site Review

The submission of a bid shall indicate that the bidder agrees and warrants that they have examined all available documents, drawings, specifications and addenda as well as the opportunity for a site visit (if applicable) and that the bid submitted covers the cost of all the items required in the tender. No claims for extras will be entertained on account of conditions, which could be observed on a site visit.

11. Pricing Requirement

Prices shall be in Canadian funds, quoted separately for each item stipulated

F.O.B. the point specified therein.

All prices bid shall include applicable taxes, customs duty, excise tax, freight, insurance and all other charges of every kind attributable to the work. Harmonized Sales Tax shall be shown as extra, unless otherwise specified. If the bidder intends to manufacture or fabricate any part of the work outside of Canada, it shall arrange its shipping procedures so that its agent or representative in Canada is the importer of record for customs purposes.

Except as may be provided in Part “B” Specifications, in the Tender document, the prices bid shall not be subject to adjustment for any cost of the work to the bidder.

In the event of any discrepancy between the unit price and the extension, the unit price shall govern.

12. Disbursements

In general, but not limited to, disbursements such as phone, fax, printing, courier, and/or travel, are to be included. The bidder will identify any costs believed not to be covered by any of the other items noted herein.

13. Errors and Omissions

It is understood and acknowledged that while the RFT. includes specific requirements, a complete review and recommendation is required. Minor items not herein specified but obviously required, shall be provided as if specified. Any misinterpretation of requirements within this Tender bid shall not relieve the bidder of the responsibility of providing the services as aforesaid.

14. Bidders Indemnification

The successful contractor shall indemnify and save harmless the Municipality from and against all losses and all claims, demands, payments, lawsuits, actions, recoveries and judgements of every nature and description made, brought or recovered against the Municipality by reason of any act or omission of the Bidders, their agents or employees, in the execution of their work.

The successful contractor shall be responsible for any and all damages or claims for damages or injuries or accidents done or cause by them, their agents, sub-contractors or employees, resulting from the prosecution of the works, or any of their operations, or

cause by reason of the existence of location or condition of the works, or of any materials, plant or machinery used thereon or therein, or neglect or omission on their part, or on the part of any of their agents, sub-contractors or their employees, to do or perform any or all of the several acts of things required to be done by them under and by these conditions and such damages and claims for damages.

15. Conflict of Interest

The bidder and the Municipal staff are to discuss any perceived conflict of interest prior to Tender submission to the Municipality. The bidder shall declare any actual or potential conflict of interest.

16. Terms of Payment

Unless progress payments or any alternate payment terms are specified in the contract, the contract price may be invoiced after delivery and shall be payable 30 days from receipt of invoice. The effect of any alternative payment terms, stated clearly in the bid submission will be considered in the evaluation of bids. The municipality shall have the right to withhold from any sum otherwise payable to the company such amount as may be sufficient to remedy any defect or deficiency in the work, pending correction of the same.

17. Terms of Payment – For Construction Projects

Payment for materials supplied and work completed shall be on a monthly basis at the rate of 90%, providing for a 10% holdback in accordance with the Construction Lien Act, 1990, or its latest edition.

After performance acceptance of the work, and in accordance with the Construction Lien Act, 1990, or its latest edition, the holdback will be paid (after the hold back period and in the absence of no claims), to the Company upon receipt of a Statutory Declaration that all accounts and labour have been paid in full, receipt of a Workplace Safety & Insurance Certificate of Clearance and receipt of all “As Built" drawings and maintenance manuals, where applicable.

Upon inspection and correction of any deficiencies at the end of the maintenance period, to the satisfaction of the Manager or designate the Performance Sureties will be returned to the company.

All payments will be made within thirty (30) days from receipt of an approved invoice. All invoices must be approved by the manager or designate.

18. Patents and Copyrights

The company shall pay all royalties and patent license fees required for the work.

The company shall at its expense, defend all claims, actions or proceedings against the municipality based on any allegations that the work or any part of the work constitutes an infringement of any patent, copyright or other proprietary right and shall pay to the municipality all costs, damages, charges and expenses, including its legal fees.

If the work or any part thereof is in any action or proceeding held to constitute an infringement, the company shall forthwith either secure for the municipality the right to continue using the work, or shall at the company's expense, replace the infringing items with non-infringing work or modify them so that the work no longer infringes.

19. Assignment

The company shall not assign the contract or any portion thereof without the prior written consent of the municipality.

20. Occupational Health and Safety Act

The successful bidder, for purposes of the Ontario Occupational Health and Safety Act, shall be designated as the constructor for this project and shall assume all of the responsibilities of the constructor as set out in that Act and its regulations. The foregoing shall apply notwithstanding that the successful bidder has been referred to as the 'company' in this and any other related document.

The company acknowledges that he/she has read and understood the Occupational Health and Safety Act together with the municipality’s Health and Safety Policies and Procedures.

The company covenants and agrees to observe strictly and faithfully the provisions of the said Occupational Health and Safety Act and all regulations and rules promulgated there under together with the municipality’s Health and Safety Policies and Procedures.

The company agrees to indemnify and save the municipality harmless for damages or fines arising from any breach or breaches of the said Occupational Health and Safety Act and/or the municipality’s Health and Safety Policies and Procedures.

The company agrees to assume full responsibility for the enforcement of the said Occupational Health and Safety Act and the municipality’s Health and Safety Policies and Procedures and to ensure compliance therewith.

The company further acknowledges and agrees that any breach or breaches of the Occupational Health and Safety Act and/or the municipality’s Health and Safety Policies and Procedures whether by the company or any of its sub- contractors may result in the company and/or sub-contractor being removed from the site and in the immediate termination of this contract herein and the forfeiture of all sums owing to the company by the municipality.

The company shall allow access to the work site on demand to representatives of the municipality to inspect work sites to ensure compliance with the contract and the municipality's Policies and Procedures.

The company agrees that any damages or fines that may be assessed against the municipality by reason of a breach or breaches of the Occupational Health and Safety Act by the company or any of its sub-contractors will entitle the municipality to set-off the damages so assessed against any monies that the municipality may from time to time owe the company under this contract or under any other contract whatsoever.

Where any portion of the work or services in this contract is contracted to a sub-contractor, the company agrees that the provisions of this section will apply to the sub-contractor and the company will enforce said provisions.

The company shall provide a list of all controlled hazardous materials or products containing hazardous materials, all physical agents or devices or equipment producing or omitting physical agents and any substance, compound, product or physical agent that is deemed to be or contains a designated substance in accordance with the Workplace Hazardous Materials Information System (WHMIS) as defined under the Ontario Occupational Health & Safety Act and shall provide appropriate Material Health & Safety Data sheets for these substances used for the performance of the required work, all prior to the performance of said work.

Where hazardous materials, physical agents and/or designated substances are used in the performance of the required work, the company shall ensure that the requirements of the Ontario Occupational Health & Safety Act and associated regulations are complied with.

The municipality reserves the right to cancel any contract for non-compliance with the terms set out herein, health and safety regulations, the Environmental Protection Act, associated regulations and other applicable legislation.

21. Health Emergency Requirements/Covid-19

The company shall comply with all relevant federal, provincial and Peterborough Public Health Unit’s legislations/regulations/orders/health and safety recommendations.

22. Laws, Regulations, Permits, Fees and Licences

The company shall comply with relevant federal, provincial and municipal statutes, regulations and by-laws pertaining to the work and its performance. The company shall be responsible for ensuring compliance by its suppliers and subcontractors

The contract shall be governed by and interpreted in accordance with the laws of the Province of Ontario.

The company shall pay for all permits, licenses and fees, and give all notices and comply with all by-laws and regulations of the municipality and any other governing body.

23. Substitutes and Alternatives

Unless qualified by the provision "No Substitute", the use of the name of a manufacturer, brand, make or catalogue designation in specifying an item does not restrict bidders to that manufacturer, brand, make or catalogue designation identification. This is used simply to indicate the character, quality and/or performance of the goods and/or services desired, but the goods and/or services on which bids are submitted must be of such character, quality and/or performance that it will serve the purpose for which it is to be used as well as that specified. In submitting a bid on goods and/or services other than as specified, the bidder must furnish complete data and identification with respect to the alternate goods and/or services he/she proposes to furnish.

Consideration will be given to bids submitted on alternate goods and/or services to the extent that such action is deemed to serve the best interests of the municipality. If the bidder does not indicate that the goods and/or services he/she proposes to furnish is other than specified, it will be construed to mean that the bidder proposes to furnish the exact goods and/or services as described in the bid document.

24. Quantities

Where quantities are shown as approximate, they are not guaranteed to be accurate and are furnished without any liability on behalf of the municipality and shall be used as a basis for comparison only.

25. Samples

Samples when required must be submitted strictly in accordance with instructions. If samples are requested subsequent to the opening of the bid, they shall be delivered within three (3) working days following request, unless additional time is granted. Samples must be submitted free of charge and will be returned at the bidder’s expense, if so requested, provided they have not been destroyed by tests, or provided they are not required for comparison purposes.

The acceptance of samples by the municipality shall be at its sole discretion and any such acceptance shall in no way be construed to imply relief of the company from its obligations under the contract.

26. Request for Tender Procedures

Tenders will be called, received, evaluated, accepted and processed in accordance with the municipality's Procurement Policy.

27. Contract Award

The municipality reserves the right to award by item, or part thereof, groups of items, or parts thereof, or all items of the bid, and to award contracts to one or more bidders submitting identical bids as to price; to accept or reject any bids in whole or in part; to waive irregularities and omissions. The municipality also reserves the right to enter into negotiations with the highest scored compliant proponent if the price bid is over the budgeted amount of the project. Should the municipality be unable to reach an agreement with the highest scored compliant proponent, the municipality reserves the right to enter into negotiations with the next highest scored compliant proponent, or to cancel the call. If in so doing, the best interests of the municipality will be served. No liability shall accrue to the municipality for its decision in this regard.

The lowest or any bid may not necessarily be accepted as the Township of North Kawartha reserves the right to reject any or all bids. Bids shall be irrevocable for 90 days after the official closing time and the municipality may at any time within that period without notice, accept a bid whether any other bid has been previously accepted or not.

All bids are prepared at the sole risk and cost of the bidders. No payments shall be made to any bidder regarding the preparation and submission of Bids.

Award of this contract is subject to appropriate funding acceptable to the municipality.

The successful bidder will be notified of the award of the Tender. This Request for Tender document, along with any addenda, together with the successful proponent’s submission, and any agreed upon amendments, may form the contract, and if requested, an additional contract may be entered into within thirty (30) working days.

This acceptance shall be conditional on the bidder providing all documentation, security and certifications as required by the bid document within ten (10) working days of the date that the notice of award.

Notwithstanding and without restricting the generality of the statements above, the Township of North Kawartha shall not be required to award or accept a Tender, and may choose to either cancel the call for Tenders or recall the Tender at a later date:

a) When only one bid has been received as the result of a Tender call;
b) Where the lowest responsive and responsible bidder exceeds the available project budget for the supplies or services;

c) When all bids received fail to comply with the specifications of the Tender terms and conditions;
d) When a change in the scope of work or specifications is required

28. Contract Cancellation

The municipality shall have the right, which may be exercised from time to time to cancel any uncompleted or unperformed portion of the work or part thereof. In the event of such cancellation, the municipality and the company shall negotiate a settlement.

a) If the company; commits any act of bankruptcy; or if a receiver is appointed on account of its insolvency or in respect of any of its property; or if the company makes a general assignment for the benefit of its creditors; then, in any such case, the municipality may, without notice; terminate the contract.

b) If the company; fails to comply with any request, instruction or order of the municipality; or fails to pay its accounts; or fails to comply with or persistently disregard statutes, regulations, by-laws or directives of relevant authorities relating to the work; or fails to prosecute the work with the skill and diligence; or assigns or sublets the contract or any portion thereof without the municipality's written consent; or refuses to correct defective work; or is otherwise in default in carrying out its part of any of the terms, conditions and obligations of the contract, then, in any such case, the municipality may, upon expiration of ten (10) days from the date of written notice to the company, terminate the contract.

c) Any termination of the contract by the municipality, as aforesaid, shall be without prejudice to any other rights or remedies the municipality may have.

d) If the municipality terminates the contract, it is entitled to:
    i. Take possession of all of the work in progress and finish the work by whatever means the municipality may deem appropriate under the circumstances;
    ii. Withhold any further payments to the company until its liability to the municipality is ascertained;
    iii. Recover from the company loss, damage and expense incurred by the Municipality by reason of the company's default (which may be deducted from any monies due or becoming due to the company, any balance to be paid by the company to the municipality).

The municipality shall not be liable to the company for loss of anticipated profit on the cancelled portion or portions of the work.

29. Availability of Labour and Escalation

The bidders shall fully inform themselves regarding availability of labour in the area relative to the requirements of the schedule. The bidder shall make their own assessment of escalation in costs and increased labour costs and include all of these costs in their bid.

30. Correction of Defects

If at any time prior to one year after the actual delivery date of the equipment or service any part of the equipment or service becomes defective or is deficient or fails due to defect in design, material or workmanship, or otherwise fails to meet the requirements of the contract, then the company, upon request, shall make good every such defect, deficiency or failure without cost to the municipality. The company shall pay all transportation costs for parts and/or equipment both ways between the company's factory or repair depot and the point of use. Or in the event of a deficient service, the company must make every effort to correct the deficiency to the satisfaction of the Township.

31. Disclosure

Request for Tenders will be opened in a public format and only the name of the bidders submitting responses to the Request for Tender and the amount of the RFT will be read. Details of the Tenders or any financial information will not be publicly disclosed at the opening. After the RFT opening, requests may be submitted to the municipality’s Treasurer for the results, and only the names of bidders as read out at the RFT opening will be given in the reply.

32. Freedom of Information

All information obtained by the company in connection with this bid is the property of the Township of North Kawartha and must be treated as confidential. It may not be used for any purpose other than for replying to this bid, and for fulfillment of any subsequent contract. Any company who requires that the information in its bid be kept confidential must explicitly advise the municipality of that fact.

The company may declare confidentiality of their bid; however, the municipality is required by law to adhere to the requirements of the Municipal Freedom of Information and Protection of Privacy Act, as amended.

Personal information contained on this bid form is collected under the authority of Section 29(2) of the Municipal Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c.M.56 as amended and will be used to purchase goods and/or services

and for the execution of contractual documents. If you have any questions about the collection, use or disclosure of this information by the Township of North Kawartha, please contact the Clerk, Township of North Kawartha, P.O. Box 550, 280 Burleigh St, Apsley, Ontario K0L 1A0, 705-656- 4445.

33. Confidentiality

The successful bidder shall safeguard and keep confidential all Confidential Information and shall use such Confidential Information only for the purposes of carrying out its obligations under the Contract.

The successful bidder shall, within five (5) business days (or such other period agreed to in writing by the municipality) after a direction by the Purchaser to do so, return or destroy all Confidential Information in the Supplier's possession, custody or control.

If the municipality or the bidder is required by law to disclose Confidential Information, it shall promptly notify the other party so that party may take action to prevent the disclosure.

The bidder specifically acknowledges that the municipality is subject to the Municipal Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c. M. 56, and that the municipality may be compelled by law to disclose certain Confidential Information.

34. Privacy

Where the successful bidder collects, obtains, uses or discloses Personal Information in connection with the Contract, the Supplier shall:

a) Comply with all applicable privacy law; and

b) Take all appropriate measures against the unauthorized or unlawful collection, use or disclosure of Personal Information and against accidental loss, destruction of, or damage to Personal Information.

35. Complaints

Any complaint on the process and procedures as outlined in the municipality's Procurement Policy Bylaw (as amended) to define the procedures with respect to the procurement of goods and services by the Corporation of the Township of North Kawartha shall be in writing and shall be submitted to the Chief Administrative Officer for review and response.

36. Accessibility

The Township of North Kawartha is committed to the accessibility principles of preventing and removing barriers in accessing goods and services for people with disabilities and is bound by the Standards under the Accessibility for Ontarians with Disabilities Act, 2005 as may be amended from time to time.

Regulations enacted under the Act apply to every designated public-sector organization and other third parties that provide goods and services to the members of the public.

The contractor, and all sub-contractors hired by the contractor in the completion of its work, will meet or exceed compliance with all applicable regulations under the Accessibility for Ontarians with Disabilities Act, 2005 as may be amended from time to time.

It is the contractor's responsibility to ensure they are fully aware of, and meet all requirements under the Act. A Declaration of Accessibility Compliance will be required by the successful bidder.

Part “D” Bid Form

The Corporation of the
Township of North Kawartha
P.O. Box 550
280 Burleigh Street
Apsley, Ontario
K0L 1A0

Tender No. RFP-05-24

One Front Line Pumper Fire Truck

The contents of the Tender submission should not exceed 8 pages excluding schematics, C.V.’s, schedules and illustrations and contents page.

The Tenders shall include this Bid Form along with the following:

- Demonstration of the bidder’s understanding and proposed approach to the project. This includes a detailed work plan describing the main tasks to be undertaken, as per the Scope of Work and Drawing Package. This also includes all sub-tasks and activities necessary to execute all aspects of the work. For greater certainty this includes a project schedule meeting the prescribed deadlines.
- The bidder’s qualifications and experience to handle the proposed work, including at least (3) outlines of relevant and similar projects undertaken and successfully completed, complete with references.
- Outline of key project team members, demonstrating relevant experience and roles that will be assumed in the execution of work.
- Completed Specifications List
- One (1) Original and One (1) Copy of the Complete Bid Document Signed & Sealed
- Insurance Certificate (upon award)
- WSIB Certificate (upon award)

Part "D" Bid Form

Bidders Information Form

Bidders must complete this form and include with the Bid Submission
Please ensure all information is legible.

Company Name	
Respondent's Main Contact Individual	
Address (incl. Postal Code)	
Office Phone #	
Toll Free #	
Fax #	
Email Address	
HST Account #	

Acknowledgement to Receipt of Addenda

This will acknowledge receipt of the following addenda and that the pricing quoted includes the provision set out in such addendum(s)

Addendum # Date Received

#_____ _____

_____ _____

_____ _____

☐ Check here if No Addenda Considered.

_____ _____ _____
Respondent Signature Date

Declaration of Accessibility and Privacy Compliance

Company Name: _____

Print Name: _____

Title: _____

Dated: _____

I/ we acknowledge that as a contractor of the Township of North Kawartha we are bound to comply with all accessibility Standards under the Accessibility for Ontarians with Disabilities Act, 2005 as amended from time to time.

I/we acknowledge that the municipality is subject to the Municipal Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c. M. 56, and as a contractor of the Township of North Kawartha we are bound to comply with all applicable privacy law; and shall take all appropriate measures against the unauthorized or unlawful collection, use or disclosure of Personal Information and against accidental loss, destruction of, or damage to Personal Information.

I/we declare that I/we have read, understand and will meet or exceed all enacted accessibility standards as amended from time to time.

I/we further declare that I/we will undertake to ensure all sub-contractors hired by us in completion of our work will also comply with the above standards.

_____	_____	_____
Respondent	Signature	Date

Part “D” Bid Form

Schedule of Items & Prices

All unit prices are Not to include HST

The undersigned agrees to supply and deliver the goods and services as specified and required in accordance with Parts “A”, “B”, “C” and “D” of the Tender for the following prices:

The municipality reserves the right to cancel any or all items.

Description	**Cost**
RFT Items	$
HST	$
Total Cost	$

Part “D” Bid Form

Bidder’s Declaration

To The Corporation of the Township of North Kawartha, hereafter called the “Municipality”:

I/We _____the undersigned declare:

1. That the several matters stated in the said bid are in all respects true accurate and complete.

2. That I/we have read and fully understand all information, terms and conditions contained within the Bid Document including: Part “A” Information to Bidders; “Part “B” Specifications; Part “C” Standard Terms and Conditions and Part “D” Bid Form.

3. That I/we do hereby bid and offer to enter into a contract to supply and deliver all materials mentioned and described or implied therein including in every case freight, duty, currency exchange, HST in effect on the date of the acceptance of bid, and all other charges on the provisions therein set forth and to accept in full payment therefore, in accordance with the prices and terms set forth in the bid herein.

4. That this bid is irrevocable for ninety (90) days and prices for as long as stated elsewhere in the bid document, and that the municipality may at any time within that period without notice, accept this bid whether any other bid has been previously accepted or not.

5. That the awarding of the contract by the municipality is based on this submission, which shall be an acceptance of this bid.

6. That if the bid is accepted, I/we agree to furnish all documentation, security and certifications as required by the bid document and to execute a formal contract in triplicate, if required, within ten (10) working days after notification of award. I/we understand that any acceptance by the municipality is fully conditional upon the receipt of said documentation, security and certifications by the municipality within ten (10) working days. Bid documents shall form the contract if project is awarded to the bidder. If I/we fail to do so, the municipality may accept the next highest scored bid or any bid or to advertise for new bids, or to carry out completion of the works in any other way they deem best.

7. That I/we agree to save the municipality, its agents, or employees, harmless from liability of any kind for the use of any composition, secret process, invention, article

or appliance furnished or used in the performance of the contract of which the bidder is not the patentee, assignee, or licensee.

The undersigned affirms that they are duly authorized to execute this bid.

Bidder's Signature and Seal: _____

Position: _____

Witness: _____

Position: _____

(If Corporate Seal is not available, documentation should be witnessed)

Dated at the _____ of _____
(Town/City)

this _____ day of _____ 2026.