BRUSH UNIT PROPOSAL

REQUEST FOR QUOTATIONS

CLOSING DATE: SEPTEMBER 1, 2017

Request for Quotations are to be submitted to:

Attention: Edward Albury, Fire Chief
District of Taylor
PO Box 300
Taylor, BC V0C 2K0

Request for Quotations

1. INTRODUCTION

The District of Taylor (the "District") invites contractors to provide a quotation on the form attached as Schedule B (the "Quotation") for the supply of the goods described in Schedule A (the "Goods"). The description of the Goods sets out the minimum requirements of the District. A person that submits a Quotation (the "Contractor") should prepare a Quotation that meets the minimum requirements, and may as it may choose, in addition; also include goods or terms that exceed the minimum requirements**.**

2. ADDRESS FOR DELIVERY

A Quotation should be labelled with the Contractor's name and RFQ title. A Quotation should be submitted in the form attached to this RFQ as Schedule B – Quotation. The Contractor may submit a Quotation either by email or in a hard copy, as follows:

a. Email

If the Contractor chooses to submit by email, the Contractor should submit the Quotation electronically in a single pdf file to the District by email at: ealbury@districtoftaylor.com

PDF emailed Quotations are preferred and the District will confirm receipt of emails. Note that the maximum file size the District can receive is 10Mb. If sending large email attachments, Contractors should phone to confirm receipt. A Contractor bears all risk that the District properly receives the Quotation.

b. Hard Copy

If the Contractor chooses NOT to submit by email, the Contractor should submit one (1) original unbound Quotation and one (1) copy (two (2) in totals) which should be delivered to the District at the office:

Attention: Edward Albury, Fire Chief
Address: PO Box 300
Taylor, BC V0C 2K0

3. CLOSING DATE

The District would prefer to receive Quotations on or before **September 1, 2017 at 2:00 p.m.** The District office hours are 8:00 a.m. to 4:30 p.m., Monday to Friday, except statutory holidays. This is not a public opening.

4. INQUIRIES

All inquiries related to this Request for Quotations ("RFQ") should be directed in writing to Edward Albury, Fire Chief at ealbury@districtoftaylor.com. Please ensure all inquiries reference the Brush Truck RFQ.

5. ADDENDA

If the District determines that an amendment is required to this RFQ, the District will issue a written addendum that will form part of this RFQ. Upon submitting a Quotation, Contractors will be deemed to have received notice of all addenda.

6. NO CONTRACT

This RFQ is simply an invitation for quotations (including prices and terms) for the convenience of all parties. It is not a tender and no obligations of any kind will arise from this RFQ or the submission of a Quotation. The District may negotiate changes to any terms of a Quotation, including terms in Schedule A and including prices, and may negotiate with one or more Contractors or may at any time invite or permit the submission of quotations (including prices and terms) from other parties who have not submitted Quotations.

7. ACCEPTANCE

A Quotation will be an offer to the District which the District may accept at any time, within specified time constraints outlined on the Quotation, by providing written notification and delivering it to the Contractor. A Quotation is not accepted by the District unless and until both the Authorized Signatory and the Purchasing Representative have signed on behalf of the District. Delivery of the written notification by the District may be by mail, fax or email.

8. CONTRACTOR'S EXPENSES

Contractors are solely responsible for their own expenses in preparing and submitting Quotations, and for any meetings, negotiations or discussions with the District or its representatives and consultants, relating to or arising from the RFQ. The District will not be liable to any Contractor for any claims, whether for costs, expenses, losses or damages, or loss of anticipated profits, incurred by the Contractor in preparing and submitting a Quotation, or participating in negotiations for a contract, or other activity related to or arising out of this RFQ.

9. CONTRACTOR'S QUALIFICATIONS

By submitting a Quotation, a Contractor represents that it has the expertise, qualifications, resources, and relevant experience to supply the Goods.

10. CONFLICT OF INTEREST

A Contractor must disclose in its Quotation any actual or potential conflicts of interest and existing business relationships it may have with the District, its elected or appointed officials or employees. The District may rely on such disclosure.

11. CONFIDENTIALITY

All Quotations become the property of the District and will not be returned to the Contractor. All Quotations will be held in confidence by the District unless otherwise required by law. Contractors

should be aware the District is a "public body" defined by and subject to the *Freedom of Information and Protection of Privacy Act* of British Columbia.

12. SIGNATURE

The legal name of the person or firm submitting the Quotation should be inserted in the Quotation. The Quotation should be signed by a person authorized to sign on behalf of the Contractor.

13. PRICES

All prices submitted shall be for the entire Goods described in Schedule A with options shown separately, where permitted. Prices shall be shown on the Quotation form with GST/PST, Environmental Taxes and Levies. The Contractor shall state the length of time that submitted price(s) will be held firm effective from the closing date. Prices are to be quoted F.O.B. Destination, including freight, unloading at destination, import duties, brokerage fees, royalties, handling charges, overhead, profit and all other costs included. Fluctuations in GST/PST or Environmental Tax Rates will be allowed. Prices to be quoted in Canadian currency, the lowest or any Quotation may not necessarily be accepted.

14. BRAND NAME SPECIFICATIONS AND/OR REFERENCES

The use of the name of a manufacturer or of any particular make, model or brand in describing an item does not restrict Contractors to that manufacturer or specific article unless limited by the term **"no substitute".** However, the article being offered must be of such character and quality so that it will serve the purpose for which it is to be used equally as well as that specified, and the Contractor shall warrant to the District that it is fit for that purpose. Quotations on comparable items must clearly state the exact article being offered including any and all applicable options and the Contractor shall furnish such other information concerning the article being offered as will be helpful in evaluating its acceptability for the purpose intended. If the Contractor does not indicate that the article offered is other than as specified, it will be understood that the Contractor is offering the article exactly as specified. Contractors should complete documentation on the specifications and quality levels of the proposed products. Quotations submitted that do not contain this documentation may be subject to rejection.

15. ANTICIPATED QUANTITIES

The District reserves the right and discretion to place orders on quoted items during the duration of the term of the Quotation on an as per need basis. All quantities are anticipated quantities only and may or may not increase or decrease according to requirements.

SCHEDULE A
SPECIFICATIONS OF GOODS

1. GENERAL DESCRIPTION

It is the intent of this specification to provide for the purchase of one (1) new ***OR*** used Type 5/6 Brush Truck. The successful Contractor shall coordinate and act as project manager for the build and supply of the brush truck. It is to have a road package that meets all legal requirements for operation on public roadways, including the BC *Motor Vehicle Act*, the federal Mo*tor Vehicle Safety Act*, Work Safe BC Regulations, and to be built in accordance with SAE standards.

If a quotation is submitted for a used brush truck, the unit must meet the following criteria:

a. Truck must be not be older than a 2015 model;
b. Truck must not have more than 30,000 km;
c. Truck must meet technical specifications outlined in this Schedule; and
d. Truck must carry warranties applicable in British Columbia, Canada.

2. EQUIVALENT PRODUCT

Quotations will be accepted for consideration on any make or model that is equal or superior to the truck chassis specified. Decisions of equivalency will be at the sole interpretation of the Fire Chief for the District of Taylor. A blanket statement that equipment proposed will meet all requirements will not be sufficient to establish equivalence.

3. QUOTATION LIMITATIONS

Quotations must not exceed $160,000 (CND), including taxes. Additional upgrades may be included that increase the quotation limit, however these add-ons must be shown separately and identified as outside of the scope outlined in this Schedule. The District of Taylor may choose, at its sole discretion, to add any or all of the optional items to this purchase. Contractor shall provide a cover letter with a list of all available options and prices.

4. DELIVERY

The truck including the body shall be delivered F.O.B. Destination, Freight Prepaid, to the District of Taylor in first class operating condition. Contractor shall state delivery time after receipt of order.

SCHEDULE A-1
TECHNICAL SPECIFICATIONS

The specifications herein state the minimum requirements of the District of Taylor. All Quotations must be regular in every respect. Unauthorized conditions, limitations, or provisions shall be cause for rejection.

1. Cab & Chassis

(Ford model preferred, equivalent will be considered)

Unit is to be installed on a Ford F550, 2017, Extended Cab, 4 x 4:

- GVWR : 19,500 lb
- GAWR front: 7,000 lbs.
- GAWR rear: 14,706 lbs.
- 4.88 Ratio Limited Slip Axle
- Rear and Front Stabilizer suspension bar
- Axle – Front Monobeam with coil spring suspension
- Extra Heavy Service Suspension Package

The power train should consist of the following:

- Ford Power stroke V10, 6.8 L Gas Motor
- Torque: 457 lb-ft @ 3250 rpm.
- Horsepower: 362 hp SAE net @ 4750 rpm.
- TorqShift 6-Speed Automatic Transmission
- Manual Shift-On-Stop (MSOS) 4x4 System with Manual-locking Hubs
- Heavy Duty Alternator – 175 amps
- Battery System 12 volts, 650 CCA, 78 Amp-hr.
- Brake System – 4-Wheel Anti-lock System (ABS), Hydro-Boost
- Parking Brake cable actuated
- Engine Block Heater

Interior requirements are XL Decor package:

- Black floor mats in place of carpeting
- Front Seats – vinyl 40/20/40 split bench
- Rear Seats - 60/40 vinyl flip-up/fold-down bench seat with 3 head restraints
- Upfitter switches (4)
- Air conditioning with high output fresh air heater
- Am/Fm Stereo, CD and MP3 player with digital clock
- Mirrors, manually telescoping trailer tow
- Power Equipment Group (90L) includes:
    - Manual telescoping trailer tow mirrors with power, heated glass, heated convex spotter mirrors, integrated clearance lamps & turn signals
    - Perimeter anti-theft alarm

- Power front side windows
- Power locks
- Remote keyless entry
- securiLock anti-theft ignition
- upgraded door trim panel

Exterior requirements are as follows (XL Decor package):

- The chassis shall be painted by the chassis manufacturer according to the chassis manufacturer's factory standards.
- Cab to be Ford Red Race (PQ)
- Black front bumper
- Black grill
- Dual front tow hooks
- The chassis exhaust system shall be extended to the rear of the right rear wheel.
- The wheel base should be 168" wheelbase, Cab to Axle (C.A.) should be 60"

Major Standard Features:

- Exterior cargo light – Back of cab
- Fuel tank – 40 gallon capacity
- Grab handles – Driver and front passenger
- Power steering
- Roof clearance lights
- Solar tinted glass
- Steering damper
- Windshield wipers – interval

Safety & Security:

- Airbag – Driver and front passenger
- Belt-Minder safety belt reminder
- BlockerBeam – includes valance air dam

Ford Warranty:

- 3 years 36,000 miles bumper to bumper
- 5 years 60,000 miles Transmission
- 5 years 100,000 miles motor

2. Cab & Chassis Add-on's

3" Chassis Lift Kit:

- A 3" leveling kit shall be provided and installed on the Ford chassis truck to match the super single wheels.

Super Single Wheels:

- OEM shall be removed (stock Ford Tires/Rims) and be supplied "Super Single" conversion kit on the front and rear axle of the apparatus; the tires shall be Good year 335/80R20

military grade tires, 12 ply or higher, 41" diameter with Hutchinson 20" rims. Spare tire on rim supplied. No carrier/mount needed.

Front Fender Flares:

- 8" black plastic fender flares shall be installed instead of OEM Ford front fenders. Brand name shall be BuskStop or equivalent.

Black Brush Guard:

- A Warn Trans4mer or of like design black coated grille/brush guard which wraps to the outside of the headlights shall be installed at the front of the chassis cab. A grille guard to protect the vehicle's grille area and a headlamp guard to protect the vehicle's headlamps shall be supplied. Also needing to have a spot for a quality light bar fitted with spec to what we should purchase in the future.
- There shall be a winch carrier to mount the winch with a Warn 2" front receiver mounted directly on cab & chassis frame without drilling.

Stainless Steel or Aluminum Side Step Bars/Planks:

- One (1) set of 3" diameter stainless steel side step bars or aluminum. Steps to be marine grade 304 if quoting steel. Either steel or aluminum acceptable for quote, must be primed, powder coated or dipped Black matching front bumper, step pad to be heavy duty grip or to allow dirt to fall through. Preferred self-cleaning Diamond step/plank with under step if suggested or the need is warranted.

Inside Doors Reflective:

- All driving and crew compartment doors shall have at least 96 in^2 of reflective material affixed to the inside of each door.

Flat Bed Body:

- One (1) custom Fire Application aluminum flatbed body, 120" long x 94-5/8'' wide. The aluminum plate used in construction is .100" 3003-H22 polished aluminum alloy treadplate.
- Body sub-frame is made from 6061-T6 aluminum tubes and channels. Sub-frame crossmembers are installed every 16". The channel is 1-1/2" wide x 3" high x 3/16" thick. The body crossmembers shall extend the full width to support the compartment framing and shall be welded to the sub-frame main members.
- The Body sub-frame main members consist of 6061-T6 Aluminum square tubing of 2" wide x 6" high x 3/16" thick.
- The perimeter shall be made with 1/8" thick forged 3003H14 Aluminum. Forged aluminium brings a strong design that was specially made to embed emergency lighting & designed to fit properly a 4" reflective stripping.
- The body shall be attached to the chassis rails with a minimum of four (4) heavy duty "U" bolts. The body shall be separated from the chassis by 3/8" Teflon. Attachment of the body and sub-frame will allow the body to resist from all distortion and off road operational condition.
- The body is a modular design to allow removal from the chassis for major repair or mounting on a new chassis. Isolating material between the body and the chassis to be installed

- All welding shall be done electrically using 5356 aluminum welding wire.
- Rear vertical skirt will be made from 1/8" 3003-H22 polished aluminum alloy treadplate.
- Rear skirt to include Signal, brake, reverse lights, D.O.T., license plate & NFPA steps.
- Clearance, marker, license plate lights and reflectors will be furnished and installed per D.O.T. Junction box supplied and installed under the flat bed.
- License plate light shall be an Eon light with SS polish case that has a light output equivalent to a 10 watt halogen lamp. Eon light to have a 50,000 hr LED life or suggestion equivalent to spec.
- LED Signal, brake and reverse lights will be High Quality Grote Automotive lights recessed mount into rear aluminum skirt area of body per FMVSS 108 and CMVSS 108 requirements. Light to be LED Oval with chromed housing.
- Two (2) LED Amber marker/clearance lights with chrome housing and clear lens will be installed on the front side of the bed, one (1) each side. Two (2) LED Red marker/clearance lights with chrome housing and clear lens will be installed on the rear side of the bed, one (1) each side. Three (3) LED Red marker/clearance lights with chrome housing and clear lens will be installed at the rear center of the bed. Amber & Red reflectors shall be installed around the perimeter of the bed as per DOT requirement.
- Two (2) heavy duty tow eyes shall be installed at the rear of the body (NFPA 1906 requirement). The tow eyes will be fastened directly to each rear chassis frame rail. Hardware shall have a clear and unobstructed access.
- The rear of the flat bed shall have two (2) non-skid rear steps for access to pump and controls. The rear steps shall be made so it can be folded up for use in rough terrain. All steps shall sustain a minimum static load of 500 lb (227 kg) without deformation (NFPA 1906 & 1901 compliant). Stepping height from the ground to the first step shall not exceed 24".
- An angle of approach and an angle of departure of at least 20 degrees shall be maintained at the front and the rear of the vehicle when it is loaded.
- **There will be no exception to the body specifications**. Pre-built commercial flatbed bodies are not acceptable.

Striping:

- DOT Chevron striping, red and fluorescent yellow, 50% min, (NFPA Required)(Flat Bed and Rear)(3M product)

Compartments – Doors:

Quote both Role-up and Swing on Hinge for comparison

- All compartments will be made with 1/8" tread plate aluminum sheet.
- All compartments shall have a minimum of one (1) louvered panel bolted into a wall to provide the proper airflow inside the compartment.
- All compartments shall be of sweep-out type with no lip at bottom edge for easy cleaning.

Transverse Compartment:

- One (1) transverse compartment of 13-1/2" long x 22" high x 94" wide shall be installed. Each side door shall be horizontally hinged, drop down style with retaining cables.
- The overlap aluminum diamond plate compartment doors shall be securely attached to the body with a full stainless steel hinge. Door openings shall be fitted with solid neoprene weather strip completely sealing the perimeter of the compartment door opening. The drop-down door shall be retained with cable. Compartment door seams is sealed with a pliable automotive body caulking. The compartment door is latched with recessed, polished stainless steel "D" ring handles and locks.

Top Transverse Storage Hose Tray:

- One (1) aluminum storage hose tray shall be supplied and installed on top of the transverse compartment.
- The dimensions of the storage tray shall be full length of the top compartment, 94" L x 9-3/8" W x 8" H.
- The area shall be designed to prevent the accumulation of water and allow for ventilation to aid in drying hose in the storage area. Black Turtle Tiles to be installed and bolted on the floor. The storage tray shall be covered with black canevas and rear net.

Left (Driver) Side Compartment:

- One (1) 72'' long x 30'' high x 22'' deep compartment behind the chassis, located at the left (driver) side of the water tank.
- Compartment doors shall be equipped with Amdor brand roll-up doors complete with the following features: door ajar switch, LED Lumabar light, aluminum double wall slats with continuous ball & socket hinge joint and recessed slat seal, double wall reinforced bottom panel with stainless steel lift bar latching system, reusable slat shoes with positive snap-in securement, one-piece aluminum door track / side frame, top gutter with non-marring seal, non-marring side seals, bottom seal, with all wear component material to be Type 6 Nylon. Roll-up doors shall be anodized gray.
- One (1) switch shall be installed so the compartment light(s) shall come on only when compartment door is open.
- There shall be a set of tracks for future installation of adjustable shelf(s) in each compartment. These tracks shall be installed vertically on the walls of the compartment(s) and shall offer a multitude of height adjustment possibilities.
- The compartment floor will be covered with Plastic Tiles. The tiles shall be black with yellow angled leading edges.

Right (Passenger) Side Compartment:

- One (1) 72'' long x 30'' high x 22'' deep compartment behind the chassis, located at the right (passenger) side of the water tank.
- Compartment doors shall be equipped with Amdor brand roll-up doors complete with the following features: door ajar switch, LED Lumabar light, aluminum double wall slats with continuous ball & socket hinge joint and recessed slat seal, double wall reinforced bottom panel with stainless steel lift bar latching system, reusable slat shoes with positive snap-in securement, one-piece aluminum door track / side frame, top gutter with non-marring seal,

non-marring side seals, bottom seal, with all wear component material to be Type 6 Nylon. Roll-up doors shall be anodized gray.

- One (1) switch shall be installed so the compartment light(s) shall come on only when compartment door is open.
- There shall be a set of tracks for future installation of adjustable shelf(s) in each compartment. These tracks shall be installed vertically on the walls of the compartment(s) and shall offer a multitude of height adjustment possibilities
- The compartment floor will be covered with Plastic Tiles. The tiles shall be black with yellow angled leading edges.

Four (4) Adjustable Shelves:

- There shall be four (4) adjustable shelving formed from .125 thick smooth aluminum sheet. Each shelf shall be fastened to the tracking using four (4) adjustable shelf clips and stainless steel hardware.
- The shelves shall be located one (1) on each opening.
- Hardware for adding shelves will be supplied.

Rear Storage Compartment:

- One (1) integrated to the platform compartment with opening 5'' high x 22'' wide x 104'' long for suction hose storage and folding ladders or pike poles. A flip down horizontally hinges door is furnished at the rear. The interior compartment is made from 3003-H14 alloy smooth plate. Steel frame underneath Drop-In-Unit shall not be acceptable.

Wheel Chocks:

- Medium Kochek Wheel Chocks with storage brackets shall be provided and mounted underneath the flatbed behind the chassis cab.

Rear Mud Flaps:

- Rear rubber mud flaps are provided. A bracket attached to the side of the muffler pipe end is installed to prevent any damaged that can occur to the mud flap.

Electrical components:

- A 12 volt electrical system is supply.
- Wiring diagrams will be supplied with delivery documentation.
- The wiring is secured in place, readily accessible and protected against heat, water and physical damage.
- The complete electrical system is separated from the chassis wiring system except for a power supply connection at chassis battery. It is also protected by bolt-on type automatic circuit breakers.
- All wiring will be run in heat and moisture resistant plastic convoluted split loom. Loom shall be held in place with screw-mounted holders spaced at appropriate distance.
- Grommets will be used where conductors or loom pass through metal.
- Power control relays and solenoids shall have a direct current rating of 125 percent of the maximum current for which the circuit is protected.
- Conductor insulation will conform to S.A.E. requirements. All circuit are protected by automatic reset circuit breakers.

- All wiring furnished will conform to the national Electric Code.
- All circuits will be wired in conformance with S.A.E. J1292, Automobile wiring standard.
- All wiring will be function worded schematically.
- A set (2) of electric diagrams will be remited upon delivery.
- Clearance, marker, license plate lights and reflectors will be furnished per D.O.T.

3. Interior Add-on's

Console:

- One aluminum fire application custom console installed between seats with rocker switch. The central portion of the front bench shall be removed to fix the custom console in place. To be quickly identified and visible to the driver and passenger while seated, the rocker switches shall be installed on the top face of the console designed with a 40 deg. angle. This area shall be able to hold at least two rows of rocker switch. All switches shall be rocker style internally lighted and appropriately identified by panel mounted legends.
- Console must have at least two (2) cup holders either stock with truck or built into console.
- The first lighted rocker switch shall be a red Master Optical Warning switch. A master body disconnect automatic switch, normally open contacts, shall be provided to disconnect all electrical loads not provided by the chassis manufacturer. The starter solenoids shall be connected directly to the batteries.
- All rocker switches to have a green "On" indicator that is visible from the driver's position shall be provided.
- The console will have an area to accommodate department map books, clipboards file folders etc; area to be at least 16" long x 13" wide x 9" high.
- The console shall have an area for radio head & Siren installation.
- All electrical components like breaker, relays, wiring etc. will be installed inside this customized console and protected with an aluminium box. This console will be design to easily gain access to those breaker, relays, wiring, etc.
- Controls and switches that are expected to be operated by the driver while the apparatus is in motion shall be within convenient reach for the driver.
- Console shall be painted black scratch free Herculiner finish or equivalent.

PFP-20hpHND-MR Pump Engine Control in the Cab:

- A key switch, throttle and choke controls, pressure gauge, tank-to-pump electric valve switch, monitor joystick and two (2) front bumper spray nozzle toggle switches, one (1) for each side, shall be installed in the cab console to control the PFP-20hpHND-MR pump engine.

4. Exterior Add-on's

Emergency Lighting:
Equivalent recommendations will be accepted

- One (1) 56" LED Whelen Lightbar, Justice model #JE2NFPA shall be provided and mounted on the aluminum headrache.
- For Blocking Right-of-Way Mode of operation, white Super LED Inner lights (2) shall be turned off when parking brake is applied.

- Mounted on front Ford grill, Two (2) Whelen M4 series Linear Super LED, one (1) each side, red with clear lens with a chrome flange.
- Mounted each side of the chassis, Two (2) Whelen Ion-T series Super LED, one (1) each side, red with clear lens with a chrome flange.
- Mounted each side of the body, Two (2) Whelen M4 series Linear Super LED, one (1) each side, red with clear lens with a chrome flange.
- Mounted in the rear section of the body Two (2) Whelen M4 series Linear Super LED, one (1) each side, red with clear lens, each with a chrome flange.

Siren & Speaker:

- One (1) Whelen, model # 295SLSA1, 100 watts electronic siren amplifier with PA and switch control center to be provided and installed. Siren shall have wail, hyper-yelp and air horn tones as well as public address and shall be capable of radio rebroadcast.
- One (1) Whelen, model # SA315P, 100 watt speaker, shall be provided and mounted on the front bumper with mounting bracket.
- If possible, we would like to have a speaker at pump panel at rear of truck with on /off switch. Wiring shall be in place to spice into radio head at console. Suggestions will be taken under consideration.

Telescopic Scene lights:

- Two (2) Fire Research Evolution LED model FCA512-V11 top mount push up telescopic lights shall be installed. The lights pole shall be anodized aluminum and have a knurled twist lock mechanism to secure the extension pole in position. The extension pole shall extend 4' and rotate 360 degrees. A round mounting flange shall be provided. Wiring shall extend from the pole bottom with a 4' retractile cord.
- The lamphead shall have four (4) ultra-bright white LEDs. It shall operate at 12 volts DC, draw 7.5 amps, and generate 11,000 lumens. The lamphead shall direct 50 percent of the light onto the action area while providing 50 percent to illuminate the working area. The lamphead angle of elevation shall be adjustable at a pivot in the mounting arm and the position locked with a round knurled locking knob. The lamphead shall incorporate heat-dissipating fins and be no more than 5 3/16" deep by 3 5/16" high by 7 5/8" wide. The lamphead and mounting arm shall be powder coated white.
- On/Off lamp head switch shall be install on each lamp.
- The scene lights shall be installed at the front of the flatbed, one (1) on each side.
- Preferred that the bottom of the light poles not to exceed the bottom of the deck when in the stowed position if possible.

Compartment Light switches:

- One (1) switch per compartment shall be installed so the compartment light(s) shall come on only and automatically when compartment door is open.

Door Ajar:

Only if needed

- One (1) door ajar warning light shall be provided and installed in the consol to indicate an open body compartment door. The light shall be properly marked with a sign “Warning Door Ajar”.

Battery Charger:

- One (1) Auto Charger Kit, single battery system, 18 amps, 12 volts shall be provided and installed in the chassis cab on the floor, behind the rear bench on the driver side.
- The Auto Charge kits include the Automatic battery charger, circuit breaker & ground fault protected outlet to power accessories on the vehicle and Super Auto Eject with water proof cover. Brand shall be Kussmaul, Auto Charge 1000 model.

Back-up Alarm:

- One (1) back-up alarm that meets the type D (87 dba) requirements of SAEJ994 shall be provided at the rear of the apparatus. It will activate when the transmission is placed in reverse.

5. Fire Applications

CET Fire Pumps Mfg Drop-In-Unit:
Equivalent recommendations will be accepted

- Tank:
  - The water tank shall be constructed of 1/2" thick polypropylene sheet. The material shall be of a certified, high quality, non-corrosive, stress relieved thermo plastic, black in colour with a textured finish, and UV stabilized for maximum protection. The skid type booster tank shall be of a standard configuration and shall be so designed to have complete modular slide in capability. All joints and seams are to be fully nitrogen welded and electronically tested for maximum strength. The unit shall incorporate transverse partitions manufactured for 3/8" PT2E polypropylene which shall interlock with a series of longitudinal partitions constructed of 1/2" PT2E polypropylene. All swash partitions shall be so designed to allow for maximum water and air flow between compartments and are fully welded to each other as well as to the inside of the tank. The passenger side rear wall of the tank shall have a standard built in sight gauge 2" in width, and 70% transparent.

- Fill tower and tank cover:
  - The tank shall be equipped with a combination vent/overflow and manual fill tower. The fill tower shall be an 8" round by 6" high with a moulded drop-on type cover. The cover shall be fastened to the tower with a tether to prevent loss. The tower shall be located in the right rear corner of the tank. There shall be a vent / overflow installed inside and to the extreme rear of the tower approximately 2" down from the top. This vent / overflow shall be of a standard schedule 40 polypropylene pipe with minimum ID of 3". The vent / overflow shall be piped internally toward the front and exit out the front tank wall with a 1" extension past the front tank wall.
  - The tank cover shall be constructed of 1/2" thick polypropylene, black in color, UV stabilized, and incorporate an exclusive self locking design.

- Tank Capacity:
  - The tank shall have a capacity of 300(+) U.S. gallons of water. The tank shall be covered by the *ALL OUT* No Fault Life Time Warranty.
  - In addition, a 10 gallon Drop-in integrated foam cell will be included.

- Sump:
    - The floor of the tank shall be manufactured from 3/4" polypropylene. There shall be one (1) sump as standard per tank. The sump shall be integral to the tank floor and be a minimum of 5/8" deep recessed into the floor. The sump shall not be visible from or protrude through the bottom of the tank.

- Tank Outlets:
    - There shall be two standard tank outlets located in the same vertical plane on the driver side rear wall of the tank. Two (2) 2-1/2" female NPT tank to pump suction fitting and one (1) 1-1/2" female NPT tank fill fitting with flow deflector.

- 1" Tank Drain:
    - There shall be a 1" tank drain to the rear right side of the tank with a plug.

- Tank Mounting Blocks:
    - The cover shall incorporate two (2) booster reel mounting blocks that shall be to accommodate two (2) each sliding nut fasteners. These mounting blocks shall be welded to the covers running from the rear edge of the tank forward.

- Skid Base:
    - There shall be a full width skid base manufactured of 3/4" polypropylene welded to the tank. This base shall be 48" wide by 72" long. The mounts shall allow for the truck to be secured directly to a truck bed without the need for any skid frame work underneath.
    - Tank will be baffled in accordance with NFPA bulletin 1906 requirements.

- Mounting:
    - The Drop-In-Unit shall be mounted in a manner that allows access to the engine, pump, and auxiliary systems for routine maintenance. The Drop-In-Unit shall not be welded or otherwise permanently secured to other components.

- 8'' to 9" Aluminum under Tank Storage:
    - The full area under the skid base of the tank will be utilized to incorporate an eight (8) inch clear opening storage area made from tubular welded aluminum.
    - The aluminum frame will be natural in color and the skid base will be mounted to the aluminum storage compartment.
    - The storage compartment will be open at both ends to allow for the full amount of storage capacity. A stop guard to be installed at the opening at the cab end to prohibit any items from rubbing the back of cab area.
    - An aluminum door with stainless steel piano hinge and latches shall be installed at the pump platform side.

- Aluminum Hose Reel Support:
    - An aluminum hose reel support shall be installed on the rear left (driver) corner of the flatbed. The ultra-high pressure hose reel shall be secured on the top of the support.

- Aluminum Tread plate Overlay on Pump Platform:
    - The specified pump platform will be covered with a minimum 1/8" bright aluminum tread plate and be attached securely to the pump platform.

- Dual Pump System:
  Equivalent recommendations will be considered
    - The water tank shall be connected to two (2) separate pumps. A Turbo Stream ultra high pressure foam system shall be installed on the left (driver) side of the pump platform and a PFP-20hpHND-MR pump shall be installed on the right (passenger) side of the pump platform.
    - The UHPP pump discharge is connected ONLY to the ultra pressure hose reel. All the other discharges and suction are connected to the pump PFP-20hpHND-MR.
    - Those fire pumps are NOT connected together.

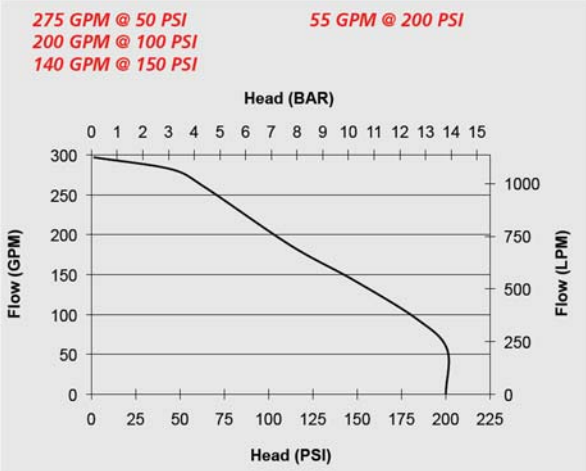
- Turbo Stream Ultra-High Pressure Foam system:
  Equivalent recommendations will be considered however must quote Ultra High Pressure
    - The Turbo Stream is compact and self-contained, and shall produces high energy firefighting power with ease and precision and shall deliver rapid knockdown with high pressure foam. This system shall be built with 3 high pressure plungers.
    - The Turbo Stream shall incorporate a foam concentrate injector system for use with all Class A and low viscosity AFFF Class B concentrates. The control module shall allow the operator to choose injection rates, from 0.3% to 3.0%, with high accuracy, exceeding NFPA 1901 requirements.
    - The system shall deliver 8 gpm (30 L/min) of solution @ 1400 psi (96 BAR). It shall be capable of drafting water up to 6’ (1.8m) and foam to 3’ (0.9m)

- Engine:
    - The pump shall be driven by a 4-stroke Honda 13 HP, the engine shall be air cooled, 12 volt electric start, with a rope starting system back-up.

- 12v Electric Rewind Booster Reel:
    - A 12v Hannay electric booster reel capable of handling a maximum of 100' of 5/8" high pressure hose shall be supplied. The hose reel shall be protected against power shortage. The reel shall have a push button rewind control and a backup geared crank rewind handle. The reel shall be equipped with a 1" NPT 90 degree swivel inlet, and a 1" NST outlet riser. The reel discs and drum shall be manufactured of steel and be red in color. The reel shall be installed on the top of the hose reel support on the rear left (driver) side corner of the flatbed facing rear.
    - 100’ of 5/8” high pressure hose shall be supplied and installed on the reel.
    - High mounted roller and spool assemblies shall be furnished and installed on the reel.

- Dual action spray gun:
    - A Dual-action spray gun shall be supplied with the turbo stream system. It shall deliver foam solution up to or over 45 feet (13 meters).

- Pump: CET Fire Pump, PFP-20hpHND-MR
  Honda model preferred, however equivalent recommendations will be considered
  - The pump shall be a CET DI-PFP-20hpHND-MR single stage centrifugal pump, bolted directly to the engine, with a 2.5" Victaulic suction inlet, and a 1.5" Victaulic discharge outlet.
  - The volute and pump head shall be a lightweight, high strength, seawater resistant, aluminum alloy. The impeller shall be a bronze enclosed type for maximum efficiency, fully machined and balanced. The engine crankshaft shall serve as the pump shaft, with the impeller mounted directly on the crankshaft. The shaft seal shall be self-adjusting, self-lubricating, and mechanical type. The pump shall be equipped with a brass drain cock.
  - The pump piping shall be flexible to prevent any breakage caused by vibration.
  - The pump shall be capable of a maximum discharge volume of 275 GPM. at 50 PSI, and a maximum discharge pressure of 200 PSI while pumping 55 GPM.
  - The performances are based on a maximum altitude of 500ft and any higher elevation will lower the pump performance. The standard engine performance drop 3% for every 1000 ft.



- Engine:
  - The pump shall be driven by a 4-stroke Honda gasoline powered, 20 horsepower engine. The engine shall be air-cooled, 12 volt electric start.
  - The engine shall be connected to the main battery and the fuel tank of the truck.

- Pump Controls:
  - A control panel shall be supplied and installed on the pump. The controls shall consist at a start switch, throttle and choke cable controls, hour meter, 2.5" diameter discharge pressure gauge and a work light.

- PFP-20hpHND-MR Pump Engine Control in the Cab:
  (Also referenced in Section 3 – Interior Add-on's)
  - A key switch, throttle and choke controls, pressure gauge, tank-to-pump electric valve switch, monitor joystick and two (2) front bumper spray nozzle toggle switches, one (1) for each side, shall be installed in the cab console to control the PFP-20hpHND-MR pump engine.

- Exhaust Primer (Must Have):
    - The pump engine shall be equipped with a quieter exhaust venturi type primer capable of 15' – 20' lift for fast positive priming. The control for the primer shall be capable of being operated by a person operating controls at the primary pump operator's position.

- Scotty Foam System:
    - There shall be a Scotty model 4171 around the pump foam eductor/mixer installed integral to the pump. The eductor shall be plumbed from the foam cell with ½" flexible reinforced tubing to throughout the eductor to a suction fitting on the pump impeller housing. The eductor shall be calibrated to eductor foam concentrate of 0% to 3.75% at flow rates from 15 to 125 at 100 psi.

- Plumbing and Valves:
    - Intake and discharge piping shall not interfere with the routine maintenance of the pump, engine, or auxiliary systems and shall not unduly restrict the servicing of these components.

- Suction Piping - 2.5" - Two (2) Fire Grade Valves – Steel:
    - All piping on the suction side shall be made of steel (welded joints) painted red. The suction piping, the pump and the discharge shall be tested to 400 PSI.
    - The suction piping shall consist of a 2.5" tank to pump line with a 2.5" flexible rubber hump hose to minimize flex and vibration between the pump and the tank.
    - RIGID PIPING SHALL NOT BE ACCEPTABLE.
    - Between the tank and the pump there shall be a 2.5" full flow electric valve. This valve shall remain open to pump from the tank.
    - This pipe shall have a tee into the suction side of the pump, and shall continue to the rear of the truck for overboard suction where there shall be an additional 2.5" fire grade swing-out style valve.
    - The overboard suction connection shall have a 2.5" BAT male adapter and a 2.5" BAT-F cap with retaining cable.
    - To draft, the tank to pump valve shall be closed, a suction hose connected to the overboard suction connection and placed in a static water supply, and the primer activated.

- Discharge Piping:
    - All piping shall be steel piping or high pressure flexible hose. A 2.5" X 2.5" square steel manifold shall be piped directly to the discharge outlet of the pump. Attached to this discharge manifold, by means of welded steel pipe nipples, shall be all the discharge valves. All piping shall be painted red to match the pump.

- 1" Tank Fill or larger:
    - There shall be a 1" valve piped from the discharge manifold as a means for refilling the tank. The valve shall be Industrial quarter turn valve handle and 1" NPT threads, and shall be connected to the tank fill port by 1" high pressure flexible hose.

- A direct to tank fill of 2.5 female BAT will be considered as an added option.

- Garden Hose Discharge to Rear:
  - There shall be a standard garden hose valve piped from the manifold of the pump. The valve shall be an industrial quarter turn valve with handle and ¾" threads.

- Two (2) 1.5" Discharges To Rear:
  - There shall be two (2) 1.5" valves piped from the discharge manifold to the rear of the truck for connection of forestry hose. The valves shall be fire type quarter turn swing-out valves with 1.5" NPSH threads. The valves shall be furnished with 1.5" NPSH cap and chain.

- One (1) 2.5" Discharge To Rear:
  - There shall be one (1) 2.5" valve piped from the discharge manifold to the rear of the truck. The valve shall be fire type quarter turn swing-out valves with 2.5" BAT threads. The valves shall be furnished with 2.5" BAT cap and chain.

- Discharge to Booster Reel:
  - There shall be a 1" valve piped from the discharge manifold to each booster reel. The valves shall be an industrial quarter turn valve handle and 1" NPT threads, and shall be connected to the reel by 1" high pressure flexible hose.

- One (1) Booster Reel:
  - One (1) 12v electric rewind booster reel capable of handling 150' of 1" diameter booster hose. The reel shall have a push button rewind control and a backup geared crank rewind handle. The reel shall be equipped with a 1" NPT 90 degree swivel inlet, and a 1" NST outlet riser. The reel shall be manufactured of steel and shall be primed and painted red. The reel shall be installed on the rear right (passenger) corner of the flatbed, facing rear.
  - 150' of 1" fabric booster hose shall be supplied and installed on the reel.
  - High mounted roller and spool assemblies shall be furnished and installed on the reel.

- Front Bumper Nozzles:
  - Two (2) front bumper nozzles with two (2) 1" electric valves, one (1) for each nozzle, shall be supplied and installed.
  - Two (2) Elkhart Brass Fog Nozzles shall be installed at the front lower section of the bumper.
  - Two (2) 1" electric valves shall be installed on the pump manifold and shall be controlled inside the cab with two (2) toggle switches, one (1) for each nozzle.
  - One (1) brass automatic drain shall be installed on each front water line.

- Discharge to Front Monitor:
  - There shall be a 2" Akron electric valve piped from the discharge manifold to the front bumper monitor. The valve shall be connected to the front monitor by high pressure flexible hose.

- The discharge shall be equipped with automatic drain valve to prevent freezing in cold climate, and shall open whenever the pressure in the discharge line drops below 5 Psi.
- The drain shall be located in areas that will allow the entire line to drain effectively.
- The outlet of the drain valve shall be extended with hoses to below the chassis frame rails.

- Akron Remote Control Turret Package Model Forestry #3462:
  - An electric remote controlled turret shall be mounted at the front of the apparatus.
  - The turret shall be constructed from hardcoat anodized aluminum with a silver powder coat interior and exterior finish shall be provided. The turret shall include factory installed motor control circuits to control rotation, elevation and nozzle pattern and shall have a 2" NPT female quick connect inlet and a 1 1/2" NH outlet.
  - The turret shall have a joystick style control station mounted in an enclosure box and control horizontal rotation, vertical elevation and nozzle stream pattern and have a momentary trigger button that can control the electrically operated water valve by squeezing if desired.
  - The turret shall have the following travel capabilities: full horizontal rotation with travel 185 degrees left and right of center, full 135 degrees of vertical travel with field changeable vertical stops at 45 degrees above and 20 degrees below horizontal, field changeable rotation stops shall be provided 90 degrees left and right of center, flow capability of 500 GPM with no more than 25 PSI loss, maximum operating pressure of 200 PSI.
  - The turret shall be plumbed from the pump discharge with an electric valve kit. The valve package shall include a stainless steel valve with controller mounted on valve, and an interface box for connection of joystick control, monitor and power.
  - The turret shall be located at the front of the apparatus and mounted directly to the brush guard towards the right side so the operator can see the turret in its operating envelope.
  - Auto drains shall be installed at each and every low point within the plumbing from the manifold to the intake of the monitor.

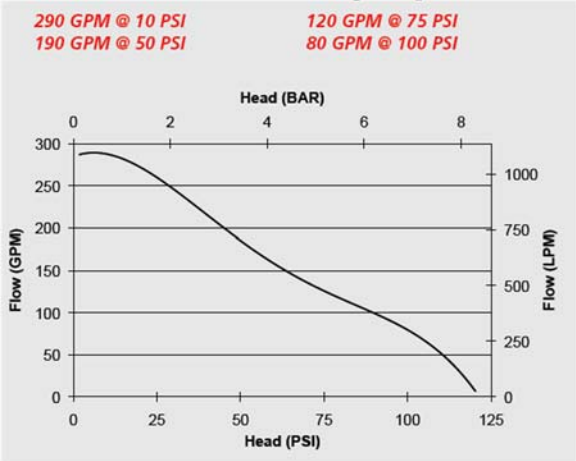
- Turret Nozzle Akron Model 3293:
  - An adjustable nozzle with electrically operated pattern control shall be provided. The nozzle design shall allow for straight stream through dense wide fog patterns and be able to be flushed without shutting down. The nozzle shall have a 1-1/2" female NH swivel rocker lug coupling and a user adjustable flow range of 30-60-95-125 GPM at 100 PSI. A waterproof electrical connection for use with remote control monitors shall be included.

- Testing:
  - The pump shall be tested after the pump and all its associated piping and equipment have been installed on the fire apparatus. The tests shall be conducted at the manufacturer's approved facility.
  - The testing shall include at least the pumping tests, the priming device test, the vacuum test, the water tank-to-pump flow test, and the piping integrity test.

CET Fire Pump, PFP-11hpHND-EM – Full Frame:

No substitutes will be accepted

- The pump shall be a CET PFP-11hp-EM single stage centrifugal pump, bolted directly to the engine, with a 2.5" BAT-M suction inlet and a 2.5" BAT-M discharge outlet.
- The volute and pump head shall be made from aluminum alloy, high strength. The impeller shall be a bronze enclosed type for maximum efficiency, fully machined and balanced. The engine crankshaft shall serve as the pump shaft, with the impeller mounted directly on the crankshaft. The shaft seal shall be self-adjusting, self-lubricating, and mechanical type. The pump shall be equipped with a brass drain cock.
- The pump piping shall be flexible to prevent any breakage caused by vibration. The pump shall be capable of a maximum discharge volume of 285 GPM at 10 PSI, and a maximum discharge pressure of 118 PSI while pumping 20 GPM. In the center of the performance curve, the pump shall be capable of pumping 150 GPM at 60 PSI and 75 GPM at 100 PSI.
- The performances are based on a maximum altitude of 500ft and any higher elevation will lower the pump performance. The standard engine performance drop 3% for every 1000 ft.



- The pump shall be driven by a single cylinder, gasoline engine powered, Honda 11 horsepower engine. The engine shall be air cooled, with a 12 volt start and recoil back-up start.
- The engine shall be fueled from a 6 quarts fuel tank which is to be mounted on the engine. The engine shall be connected to a 12 volt battery.
- The pump shall be secured on the rear left (driver) side corner of the flatbed.

Two (2) Suction Hoses:

- Two (2) suction hoses, 2-1/2" BAT x 8' shall be provided. The suction hoses shall be fitted in the rear integrated compartment.

Drop Tank / Porta Tank:

- Mfg will supply Porta tank / drop tank with unit. Tank must fit into storage area under drop in unit.
- Tank must have a drain system – drop down shoot.

SCHEDULE B
QUOTATION

District of Taylor
RFQ : Brush Truck Type 5/6

CONTRACTOR

Legal Name : _____

Address : _____

Phone : _____

Fax : _____

E-mail : _____

This Quotation is offered by the Contractor this _____ day of _____, 2017

_____ _____
(Signature of Authorized Signatory) (Signature of Authorized Signatory)

_____ _____
(Print Name & Position of Authorized Signatory) (Print Name & Position of Authorized Signatory)

The Contractor offers to supply to the District of Taylor the Goods for the prices plus applicable taxes as follows:

Year, Make & Model:

_____

All costs to meet the minimum specifications shall be included in the following delivered prices, F.O.B. Destination, Freight Prepaid in Canadian Dollars.

BRUSH UNIT PRICE: $_____

ADDITIONAL ADD-ON PRICE: $_____

ENVIRONMENTAL LEVY [BATTERY]: $_____

TIRE STEWARDSHIP B.C. (TSBC) LEVY: $_____

SUB-TOTAL: **$**_____

GST: 5% = $_____

PST: 7% = $_____

TOTAL QUOTED PRICE : $_____

The completed unit shall be delivered within _____ days after receipt of purchase order.

Complete Vehicle Warranty: _____

Warranty repairs shall be performed at: _____

Please complete if applicable: British Columbia Certified ☐

This Quotation is offered and valid until: (DD/MM/YYYY) _____