FORM A: BID
(See B7)

1. Contract Title — SUPPLY & DELIVERY OF EMERGENCY SERVICE TRUCKS

2. Bidder

_____
Name of Bidder

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

_____
Street

_____
City Province Postal Code

(Mailing address if different)

_____
Facsimile Number

_____
Street or P.O. Box

_____
City Province Postal Code

_____
GST Registration Number (if applicable)

(Choose one)

The Bidder is:

☐ a sole proprietor

☐ a partnership

☐ a corporation

carrying on business under the above name.

3. Contact Person — The Bidder hereby authorizes the following contact person to represent the Bidder for purposes of the Bid.

_____
Contact Person Title

_____
Telephone Number Facsimile Number

_____
Email Address

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

5. Offer

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

6. Commencement of the Work

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

7. Contract

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

8. Addenda

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

No. _____ Dated _____

_____ _____

_____ _____

9. Time

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

10. Signatures

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

_____ day of _____ , 20_____ .

Signature of Bidder or
Bidder's Authorized Official or Officials

_____

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

_____

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

FORM B: PRICES
(See B8)

SUPPLY & DELIVERY OF EMERGENCY SERVICE TRUCKS

UNIT PRICES

ITEM NO.	DESCRIPTION	SPEC. REF.	UNIT	APPROX. QUANTITY	UNIT PRICE	AMOUNT
1.	Emergency Service Trucks WW-WATER SERVICES (Unit #'s 225-5204, 225-5206)	09058	(Each)	(2)	$_____	$_____
2.	Emergency Service Truck WW-WATER SERVICES (Unit # 225-5205)	09058	(Each)	(1)	$_____	$_____
3.	Emergency Service Truck WW-WSTWTR-SEWER (Unit # 161-2030-no steamer/boiler)	09058	(Each)	(1)	$_____	$_____
4.	Emergency Service Truck WW-WSTWTR-INTERCEPTION (Unit # 251-2067-no steamer/boiler)	09058	(Each)	(1)	$_____	$_____

TOTAL BID PRICE (GST and MRST extra) (in figures) $ _____

(in words)_____

_____

_____
Name of Bidder

FORM N: DETAILED SPECIFICATIONS 09058

1.0 DESCRIPTION-

1.1 Shall be a nominal approx.15'-16' aluminium van body installed on a 2012 or 2013 conventional low profile chassis supplied by the Successful Bidder. The completed vehicle shall be furnished complete and ready for use with all features and auxiliary equipment as described herein.

1.2 State make and model of van body and chassis being bid: _____

_____

1.3 It will be the responsibility of the Bidder to inform the City of any errors or omissions in these specifications, for under this Contract the Contractor shall be held responsible for the satisfactory operational function of the vehicle.

2.0 OTHER SPECIFICATIONS AND STANDARDS-

2.1 All applicable SAE standards form an integral part of these specifications and shall have precedence in any conflict concerning minimum acceptable standards.

2.2 The **Complete Emergency Service Trucks and all its components and attachments** shall comply with the applicable regulations:

Highway Traffic Act = http://web2.gov.mb.ca/laws/statutes/ccsm/h060e.php

Manitoba Motor Vehicle Act = http://www.tc.gc.ca/acts-regulations/GENERAL/M/mvsa/menu.htm

Canadian Motor Vehicle Safety Standards, CMVSS = http://www.gnb.ca/0062/regs/83-163.htm

Transport Canada = http://laws.justice.gc.ca/en/notice/index.html?redirect=%2Fen%2FM-10.01%2F250448.html

National Safety Mark, NSM = http://www.tc.gc.ca/acts-regulations/GENERAL/M/mvsa/regulations/mvsrg/001/mvsr3-5.html

Manitoba/Winnipeg Safety and Health Act, Parts 12, 22 = http://web2.gov.mb.ca/laws/statutes/ccsm/w210e.php and http://www.gov.mb.ca/labour/safety/

Canadian Standards Association, CSA = http://www.csa.ca/about/Default.asp?language=english

Under Writers of Canada, U/L = http://www.ulc.ca/

Society of Automotive Engineers, SAE = http://en.wikipedia.org/wiki/Society_of_Automotive_Engineers

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

STATE (NSM) #- _____

2.4 The vehicle shall be complete with a current Manitoba Safety Sticker affixed to the driver's side window.

3.0 SERVICE FACILITY-

3.1 For the purpose of warranty repairs, the Bidder shall have an authorized service facility located within 10 km of the boundaries of the City of Winnipeg. The facility, or a portion thereof, shall be dedicated to the service and maintenance of the type equipment being offered. Further to B9.1, Bidders shall provide a description of the service facility including, but not limited to, number of qualified service staff, years of service experience, and general service capabilities within three (3) Business Days upon request of the Contract Administrator.

3.2 If a suitable warranty facility is not available within 10 km of the boundaries of the City of Winnipeg, the Bidder may propose that the City of Winnipeg Repair Facility perform warranty work. Any Work performed by the City of Winnipeg Repair Facility shall be charged to the Contractor at the Facility's shop rate in effect at the time the work is performed **(for example, shop rate for 2011: $82.00/hour and $112.00/hour for overtime and callout).**

3.3 Location of the service facility located within 10 km of the boundaries of the City of Winnipeg.

The Bidder shall choose and fill in one of the Clauses listed below. --- 3.4) or 3.5)

3.4 Bidder's own facility location. **State the location of the service facility below**.

_____

3.5 Bidder elects to have warranty work be performed by the City of Winnipeg.

_____

4.0 QUALIFICATIONS OF MANUFACTURER & CONTRACTOR-

4.1 The manufacturer of the Complete Equipment shall have five (5) years continuous experience manufacturing chassis, van bodies and the associated equipment of the type being offered.

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

5.0 INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS

5.1 Where requested to do so, all items in these specifications must be answered indicating compliance or non-compliance. **Bidders shall state "yes" for compliance or state deviation,** or give reply where requested to do so. Deviations shall be clearly stated and fully detailed. Alternatives will be considered subject to evaluation.

5.2 Each bidder is required to fill in every blank. **Failure to do so may be used as a basis for rejection of bid.**

6.0 INTENDED USE AND APPLICATION-

6.1 The intended use of these vehicles is 24 hour, 7 days a week Emergency Service Trucks operated by the City of Winnipeg Water & Waste Department. These units arrive at various designated locations for repairs to the City of Winnipeg Water infrastructure. The intention of these trucks is to turn off the chassis engine, and have the truck APU and the Inverter power the following:

- Exterior Lights as specified in this tender
- Interior Lights as specified in this tender
- Heating as specified in this tender
- Air Conditioning as specified in this tender
- Electric Receptacles as specified in this tender
- Electric Power Tools as specified in this tender
- Hydraulic Pac as specified in this tender
- Hydraulic Power Tools as specified in this tender
- Steamer Boiler as specified in this tender
- Power Inverter as specified in this tender

6.2 The purpose is to continue to provide the essential services without the chassis engine running, which causes unnecessary idling, fuel consumptions, environmental impacts, decreased truck life cycles of the chassis. Given the above, it is the responsibility of the bidder to notify the Contract Administrator of any design or performance constraints including complete weight distribution of all equipment within.

7.0 SUB-CONTRACTORS-

7.1 The bidder shall list all of their subcontractors (Sub-Contractor name, address, phone #, fax, e-mail address)

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

7.2 The Contractor shall assign the warranty to the City of Winnipeg to improve logistics, unnecessary down time, regarding warrantable failures.

8.0 REFERENCE LIST-

8.1 **The bidder must provide a minimum of five (5) Canadian references** for recently built units that are used as Emergency Service Vehicles in this specification.
No prototypes will be accepted.

1. _____
2. _____
3. _____
4. _____
5. _____

9.0 GVWR /WEIGHT DISTRIBUTION-

9.1 The **Complete Emergency Service Trucks** shall not exceed the City of Winnipeg's limit for gross vehicle weight, axle and tire loads.

Note: The City of Winnipeg and the Province of Manitoba limits the gross vehicle weight and axle and tire loads to:

- Front axle (steering axle) – 7300 kg (16,094 lbs.).
- Rear axle (single axle) – 9100 kg (20,062 lbs.).
- Tire load – 9 kilograms for each millimetre width of tire (approx. 500 lbs. per inch of tire width).
- Bidder to provide Weight distribution documentation _____

9.2 **Weigh scale ticket** – The Contractor shall provide a certified weigh scale ticket upon delivery of the completed unit. The scale ticket shall include front and rear axle weights including two (2) operators, full of liquid, and all equipment and any attachments. _____

9.2.1 **Payload- State available payload including all components, water, hydraulic oil, fuel with two (2) 200 lbs. operators**- (It should be noted, that preference will be given to the bidder that can provide higher payload capacities for productivity and efficiency requirements. _____

10.0 CHASSIS SPECIFICATIONS- (LOW PROFILE DESIGN TO ACCOMEDATE ENTRY AND EXIT HEIGHTS. BIDDER SHALL PROVIDE THE CONTRACT ADMINISTRATOR PROOF AND DOCUMENTATION THAT THE CHASSIS IS INDEED A LOW PROFILE CHASSIS)

10.1 Drive vehicle must be provided from **a local Winnipeg major truck manufacturer**. No "home made" proprietary truck chassis will be accepted. Chassis must be low profile single axle chassis as per below specifications.

10.2 **State make & model-** _____

11.0 WEIGHTS- (It should be noted that the chassis will be towing a Temporary Water Trailer rated for 7000 GVW)

11.1	**GVWR**	19,500 lbs.	_____
11.2	**FRONT GVWR**	7,000 lbs.	_____
11.3	**REAR GVWR**	12,500 lbs.	_____
11.4	**GCWR**	Gross Combined Weight Rating, **state-**	_____
11.5	**GAWR**	Gross Actual Weight Rating, **state-**	_____

12.0 DIMENSIONS-

12.1	**WHEELBASE** -	As required for an approx. 15 ft. interior measurement. (Measured from bulk head door to rear doors). **State WB**-	_____
12.2	**CAB TO AXLE** -	As required for requested finished interior cargo length. (Measured from rear of drivers seat to back doors). **State CA**-	_____

13.0 ENGINE-

13.1	Type	Diesel **Tier IV**-Engines shall be warranted to use biodiesel at a B10 blend level (10% biodiesel to 90% ultra low sulphur diesel), where the biodiesel will meet product specification ASTM D 6751 to ensure fuel quality.	_____
13.2	Horsepower	300 hp gross	_____
13.3	Torque	660 lb-ft	_____
13.4	Engine shut down	Low oil pressure / high water temperature	_____
13.5	Anti-idling	Programmable anti-idling shut down	_____
13.6	Air intake warmer	required	_____
13.7	Fuel Shut-off	Electric solenoid type	_____
13.8	Air cleaner	Dry type standard filter element	_____
13.9	Air intake restriction	Dash mounted restriction indicator	_____
13.10	Oil drain plug	Magnetic type	_____
13.11	Oil filter	Full flow, spin-on type	_____
13.12	Fuel filter	Spin-on type	_____
13.13	Fuel/water separator	Drainable, mounted under hood, located to be protected from road spray. **State** location-	_____
13.14	Fuel line primer pump	required	_____
13.15	Block heater	Immersion type, 1000 Watt w/ covered recessed male plug, located under driver's side door	_____
13.16	Coolant	Extended Life coolant, antifreeze to -34°F	_____
13.17	Coolant filter	required	_____
13.18	Coolant hoses	Premium type or Gates Blue Stripe	_____
13.19	Fan Drive	thermostatically controlled, automatic type	_____

13.20	Air compressor	Air compressor required with 13 cfm	_____

14.0 ELECTRICAL SYSTEM-

14.1	Electrical system	Multiplexed or equivalent	_____
14.2	Alternator	Leece Neville 220 Amp, **state-**	_____
14.3	Starter	Delco Remy 29 MT , **state-**	_____
14.4	Circuit breakers	Auto-reset, readily accessible	_____
14.5	Batteries	Three (3), 12-volt, group 31, 1950 CCA combined capacity, must be deep cycle batteries.	_____
14.6	Battery Box	Under cab or frame mounted c/w enclosure. Not to impede with body installation, **state** location-	_____
14.7	Remote boost terminal	Remote battery boost terminal, protected from road spray, covered, **state** location-	_____
14.8	Marker lights	LED Cab marker lights	_____
14.9	Accessory switches	Twelve (12) programmable dash mounted rocker switches required, all switches complete and wired for body installation, labelled and backlit.	_____

15.0 EXHAUST SYSTEM-

15.1	Exhaust System	**State** recommend exhaust routing as per application-	_____

16.0 TRANSMISSION-

16.1	Model	Allison RDS transmission with PTO provision suitable for requested horsepower, torque, GVWR, and application.	_____
16.2	Shift selector	Dash mounted T-Bar shift selector	_____
16.3	Cooling capacity	As per manufacturer's recommendation for severe duty cycle.	_____
16.4	Oil level dipstick	Bayonet type with high and low level markings	_____
16.5	Trans. drain plug	Magnetic type	_____

17.0 FRONT AXLE-

17.1	Front axle type	7000 lbs. capacity min., **state make and model**-	_____

18.0 REAR AXLE-

18.1	Rear axle type	12,500 lbs. capacity min., **state make and model-**	_____
18.2	Ratio	Rated 110 km/hr maximum top speed, **state ratio-**	_____
18.3	Differential	Rear limited slip differential of differential lock up	_____

19.0 HUB SEALS-

19.1	Type	Oil lubricated front and rear	_____

20.0 FRONT SUSPENSION-

20.1	Front Suspension Type	Taper leaf front suspension, 7,000 lbs. capacity	_____

21.0 REAR SUSPENSION-

21.1	Rear Suspension Type	Programmable air ride suspension to dump With park brake, 12,500 lbs. capacity, **state make and model-**	_____
21.2	Suspension Control	Manual dump valve for air suspension c/w dash mounted switch, indicator light, gauge & buzzer.	_____

22.0 WHEELS-

22.1	Front	19.5 x 6.75 steel disk, hub piloted Powder coated. Must meet requested GVWR	_____
22.2	Rear	19.5 x 6.75 steel disk, hub piloted Powder coated. Must meet requested GVWR	_____

23.0 TIRES FRONT-

23.1	Front Tires	Must be steer tires, suitable for Manitoba weather conditions, (mud, snow, rain etc.) **state make and model-**	_____
23.2	Size	225/70R/19.5 Low Profile, must meet requested GVWR	_____

24.0 TIRES REAR-

24.1	Rear Tires	Must be drive tires, suitable for Manitoba weather conditions, (mud, snow, rain etc.) **state make and model**	_____
24.2	Size	225/70R/19.5 Low Profile, must meet requested GVWR	_____
24.3	Spare Tire and Rim-	Required	_____

25.0 FRAME-

25.1	Type	Single rail, suitable for requested GVWR and height requirements, outside frame clear of components for body installation.	_____
25.2	Frame height	Frame height from ground level to top of frame Rail shall not exceed 29" unladen	_____
25.3	Application	Suitable for cutaway van body application	_____
25.4	Chassis fasteners	Grade-8 threaded hex headed frame fasteners	_____
25.5	After frame	As required for van body application	_____

26.0 STEERING-

26.1	Steering Type	Power steering required	_____

27.0 BRAKES-

27.1	Type	Hydraulic, ABS, front & rear brakes	_____
27.2	Parking brake	**State type-**	_____
27.3	Moisture ejector	**State if required-**	_____
27.4	Drain valves	Manual, chain or cable operated, required on each air tank	_____
27.5	Air dryer	Heated Air Dryer required, **state** make & model-	_____

28.0 FUEL TANKS-

28.1	Type	40 Gallon (151 L) aluminium fuel tank.	
28.2	Tank straps	Steel straps with minimum 1/16 in. rubber or neoprene isolators to prevent galvanic corrosion.	
28.3	Fuel separator	Heated, drainable type	

29.0 CAB-

29.1	Type	**CONVENTIONAL STYLE CAB ONLY**, to accommodate body application. Cab must have corrosion inhibitor.	
29.2	Construction	Aluminium or galvanized steel construction	
29.3	Front axle to (BOC)	**State** front axle to back of cab measurement-	
29.4	Front grille	OEM Standard	
29.5	Cab interior / trim	Premium Insulation including cloth or vinyl headliner on roof, door panels and rear interior of cab.	
29.6	Cab silencer package	Required for minimal decibel level	
29.7	Hood/Firewall/Engine	Insulated hood liner, engine cover and firewall	
29.8	Floor covering	Moulded vinyl floor covering with under-padding	
29.9	Floor mats	Three (3), rubber floor mats	
29.10	Driver's seat	One (1) National High back, air suspension w/foldable armrests, heavy-duty cloth upholstery , lumbar support, **state** make & model of seat-	
29.11	Passenger seat	One (1) National High back, air suspension seats w/foldable armrests, lumbar support, heavy-duty cloth upholstery, **state** make & model of seat-	
29.12	Sun visors	Dual flip-up type	
29.13	Steering wheel	Telescopic and Tilt steering	
29.14	12-Volt power outlet	Two (2) Required on dash	
29.15	Radio	Factory installed AM/FM/CD	
29.16	Starter switch	Key operated c/w three (3) sets of keys	
29.17	Interior light	Dome light with driver and passenger door switches	
29.18	Heater / Defroster	High output, capable of keeping all windows clear at an outside temperature of -35°F (-37°C)	

29.19	Air conditioning	High out put air conditioning required	_____
29.20	Foot Pedals	Hanging type brake and accelerator pedals	_____
29.21	Horn	Dual electric	_____
29.22	Exterior mirrors	Dual black moulded composite aerodynamic mirrors, heated, lighted, 2-way motorized adjustment, exterior mirrors to include convex mirrors, suitable for 102 in. equipment width.	_____
29.23	Down view mirror	Required over passenger door, 5" x 4" approx.	_____
29.24	Windows & windshield	Factory tinted	_____
29.25	Windows and Locks	Power windows and locks	_____
29.26	Windshield wipers	Electric, intermittent	_____
29.27	Wiper blades	OEM Winter Wiper Blades	_____
29.28	Windshield washer	Electric, required with spray nozzles on wiper blades.	_____
29.29	Grab handles	Dual exterior grab handles	_____
29.30	Entrance steps	One each side, open grate / grip type with boot brush mounted on driver and passenger sides	_____
29.31	Winter-front	Heavy-duty vinyl w/twist lock or snap type fasteners	_____
29.32	First Aid Kits-	20 lbs First Fire Extinguisher and First Aid Kit, **State recommended locations**-	_____

30.0 <u>INSTRUMENTATION</u>-

30.1	Oil pressure	Gauge	_____
30.2	Coolant temperature	Gauge	_____
30.3	Transmission oil temp.	Gauge	_____
30.4	LOP/HWT	Warning light and buzzer	_____
30.5	Voltmeter	Gauge	_____
30.6	Air reservoir pressure	Gauge with LAP warning light and buzzer	_____
30.7	Engine hour meter	Required, non reset able type	_____

31.0 TOW HOOKS-

31.1	Location	Readily accessible, front frame mounted	_____

32.0 FRONT BUMPER-

32.1	Type	Front bumper full width chrome	_____

33.0 COLOUR/WARRANTY-

33.1	Exterior	White	_____
33.2	Interior	Blue or grey	_____
33.3	Frame & suspension	Primed and finished with black Imron 5000 paint	_____
33.4	Wheels	Powder coated white	_____
33.5	Chassis warranty-	The bidder shall submit complete details of Chassis warranties	_____

CUTAWAY VAN BODY

34.0 **GENERAL DIMENSIONS**- It should be noted that the **complete Emergency Service Trucks** must meet all requirements of the Manitoba Motor Vehicle Act and Canadian Motor Vehicle Safety Standards (Reference item 2.2)

Manitoba Motor Vehicle Act = http://www.tc.gc.ca/acts-regulations/GENERAL/M/mvsa/menu.htm
Canadian Motor Vehicle Safety Standards, CMVSS = http://www.gnb.ca/0062/regs/83-163.htm

35.1 **INTERIOR CARGO LENGTH-** Bulk head wall to back door **approx 15'-16'**, finished interior, **state exact measurement-** _____

35.2 **OVERALL LENGTH-** **State overall length including chassis "bumper to bumper"-** _____

35.3 **OVERALL HEIGHT-** Approx., 124", **state exact height**- _____

35.4 **OVERALL WIDTH-** 96" _____

35.5 **INTERIOR HEIGHT-** Approx., 78", finished height, **state exact height-** _____

35.6 **FLOOR HEIGHT-** Approx., 36" from ground level, **state floor height-** _____

35.7 **UNIT WEIGHT-** Total finished weight, **state front & rear axle total finished weight-**

Total Weight- _____ **Front Axle-** _____ **Rear Axle-** _____

35.8 **Facility Entrance Dimensions**- Completed vehicle must clear shop with door dimensions of 117" W X 124" H. It is the responsibility of the Contractor to facilitate the completed design fits the shop doors at the Water & Waste Department located at 552 Plinquet Street Winnipeg, Manitoba. _____

36.0 INTERFACES-

36.1 All interfaces between aluminium and steel are to be separated by 1/16 in" 3M tape and are to be bolted through with stainless steel bolts and nonconductive bushings. _____

37.0 WALL CONSTRUCTION-

37.1 **Walls** -smooth aluminium, construction method to be either snap-lock panels - 0.125 in. thick on 12 in. centres; or frame and skin construction - 1½ in. "Z" type extrusions on 12 in. centres with 0.125 in. panels fastened with aluminium rivets. **State construction method and thicknesses-** _____

38.0 INSULATION-

38.1 **Insulation** -Two (2) inches spray foam, (**R7 rating per inch**) _____

39.0 INTERIOR LINING-

39.1 **Complete interior lining** -Interior walls and ceiling must be lined with 3/8" plywood and lined over with white glass board Kemlite products or equivalent, **state-** _____

40.0 EXTERIOR WINDOWS-

40.1 **Exterior windows**- (2) upper driver side tinted windows with sliding vents to allow for natural Sun light and ventilation when needed. **State size and exact location**- _____

41.0 ROOF-

41.1 **Construction** - Smooth aluminium stressed-skin, walk-on style roof 10 gauge aluminium. _____

41.2 **Roof bows** - Hat type on 12 in. centres. _____

41.3 **Insulation** – Approximate two (2) inches, (**R7 rating per inch**), **state type & R rating-** _____

41.4 **Roof lining** - ¼ in. plywood covered with glass board (Kemlite) panel. _____

42.0 STORAGE KICK-

42.1 **Storage kick**- Van roof to be cut-out as required and equipped with a sloped 'kick-over", aluminium construction with open storage area. Walk-through to be full height for operators, approx. 30-36" wide. Upper storage area shall be c/w a 2 inch lip so equipment will not fall during transportation. The storage kick over shall have 2" lip storage sections for organizing various items. The bidder shall provide an interior design drawing of the recommended design layout. _____

43.0 FLOOR-

43.1 **Cross sills**- Full width 2 in. X 2 in. X 0.125 in. hollow structural Galvanized or Stainless steel tubing or equivalent on 16 in. centres, **state material-** _____

43.2 **Insulation**– **3" in**. of spray foam urethane insulation on underside of floor. _____

43.3 **Under-coating-** Complete sub-frame including cross-members to be sealed with **Line X products or Full Metal Jacket Spray** on Materials or equivalent spray on protective materials with a life time warranty protective coating. Coating shall be sprayed over the to protect the material from water, rust, rocks, corrosion, and falling insulation and provide a higher R-rating. _____

43.4 **Long sills**- Galvanized or Stainless steel structural C channels, **state material-** _____

43.5 **Floor material**- Extruded aluminium non-skid safety floor material _____

44.0 REAR DOORS-

44.1 **Rear doors**- Approx. 72" H X 30" W right hand door and 72" H X 10" W left hand door, complete with safety glass, top and bottom on right hand door. Doors to open maximum distance, manufacture shall choose adequate heavy duty hinge system to achieve maxim fully opened positions. Bidder shall provide the Contract Administrator proof that hinges and door latches are indeed classified as "heavy duty". _____

44.2 **Safety glass-** Two tinted (2) required on right hand door, 20" H X 14" W each. _____

44.3 **Hinges**- Four (4) **heavy-duty** stainless steel hinges per door, **state type, warranty and part #-** _____

44.4 **Door Latch System**- Manufacture's heavy duty standard slam action type. Rod-actuated with locking exterior handle. **State type, warranty and part #** _____

44.5 **Door stays**- Designed to **hold rear doors** in fully open position, "Grabber" U-style (Cast Products Inc.), or equivalent. **State type, warranty and part #** _____

44.6 **Rear access door handles-** Tri-mark, stainless steel, two stage, paddle type handles. **State type, warranty and part #** _____

45.0 INTERIOR BULKHEAD-

45.1 **Bulkhead**- Full width, 12 gauge aluminium with sufficient insulation and Soundproofing. _____

45.2 **Bulkhead-** shall be designed to permit full rearward seat(s) travel with the seat(s) in a comfortable reclined position. A one (2" inch) space shall be provided between the bulkhead and the seat to prevent rubbing. _____

45.3 **Bulkhead door** - centre, swinging door with two (2), 18 in. x 18 in. Lexan window located in upper and lower door. Lower window shall be located to provide driver rear visibility when bulkhead door is closed. Door shall be designed in a secure manner to prevent rattling and have a heavy duty locking system for security purposes. _____

45.4 **Over Head Protection-** Bulkhead shall have over head strike protection In order for the operator alleviate head strikes. _____

46.0 EXTERIOR STORAGE/LIGHTING/ MISCELLENOUS -

46.1 **Exterior Storage**- Exterior storage boxes shall be incorporated into the body design on both driver and passenger sides with sufficient clearance for chassis to go over street curbs during daily operation. Four (4) required, two per side, under-body, supported by chassis frame. All doors shall open downward as for operators to use the doors for temporary tools or miscellaneous equipment placement. Three (3) storage boxes shall be plumbed for heat. One storage box shall be used for fuel, oil and or special chemicals and must be vented. This box shall be labelled on exterior for hazardous materials. Complete storage boxes shall have **heavy duty floor liner rubber matting** and interior storage straps for equipment securing if needed. All storage boxes shall be insulated and have **heavy duty weather stripping** for concealment. All storage boxes shall **heavy duty type and be lockable with heavy duty hinges and latches**.
State dimensions and exact recommended locations- _____

46.2 **Valve key Doors and Tubes (Note: All trucks)** - Two (8) only 13 ft. X 4½ in. diameter PVC tubes, x 4½ in. diameter PVC tubes per side. Valve key tubes to be enclosed at a 5 degree angle in a false wall on interior of van, complete with rear access doors. Doors must be 14" higher than top tube. Dimensions approximately 8" W X 45"H. The key compartment shall be able to accommodate 12 ft. keys with also a maximum handle width of 28 " in length. _____

46.3 **Tubes**- shall provide for adequate drainage to exterior of van for cleaning purposes _____

46.4 Exterior Stop Sign Storage- An location to secure and store temporary stop Signs, shall be incorporated into the exterior body design. Shall be ergonomically Located at a height in which operators have accessibility. _____

47.0 REAR BUMPER

47.1 **Rear bumper** - full width, heavy-duty step bumper, and 14 in. deep c/w a grip strut step surface. _____

47.2 **Bumper**- Bumper shall be bolted to chassis frame and to van body, structurally reinforced and fastened with Grade 8 bolts. Mounting height shall provide a 18 in. step height from ground level. _____

47.3 **Hitch Receiver**- The bidder shall provide an incorporated rear hitch trailer receiver into the bumper design. Bidder shall contact the Contractor Administrator to view current rear hitch trailer Receiver currently in service to ensure design accuracy. _____

48.0 MUD FLAPS

48.1 **Mud flaps** - No-name black rubber type with steel bar anti-sail brackets, installed in front and rear tires _____

49.0 DIRECTIONAL SIGNAL

49.1 **Directional Signal**- Whelen Directional Signal- One (1) 48" High Intensity LED c/w 10 segment SWS, 48 inch length, high density, basic controller mounting location to be rear facing above roofline at rear of van. _____

50.0 ROOF VENT-

50.1 **Roof vent**- (2) Fan-Tastic, model 4000 power vents or equivalent with 3 speeds reversible fan, installed in roof of cargo area, switch panel actuated. _____

51.0 HOSE EXIT PORTS-

51.1 **Hose Exit ports**- Shall be located as per bidders recommendation. Port must be of latch style. Two (2) ports required. Exit ports must be able to Hold air and heat. **State recommended location-** _____

52.0 RADIO

52.1 **2-way radio circuit**-Independent 20 Amp circuit, ignition powered, wired under dash loose, labelled. _____

53.0 SAFETY

53.1 **Flare kit** - three (3) triangular reflectors, CVSA approved. _____

53.2 **Fire Extinguisher**- (20) lbs. pound Fire Extinguisher mounted secured and accessible to operators. _____

54.0 SHELVING/CABINETS

54.1 **Shelving/cabinets**- All shelving & cabinets shall included heavy-duty rubber Matting. _____

54.2 **Cabinet Locks**- All Cabinets and Drawers shall be able to lock _____

55.0 INTERIOR LIGHTING LAYOUT (All interior light must be LED)

55.1 **Interior lights**- Four (4) Bright High Intensity LED lighting, actuated through switch panel _____

55.2 **Light Mounting Locations**- Five (5) Bright High Intensity LED mounted above centre isle, evenly spaced, one (1) located on driver's side ceiling near workbench. All interior lights shall actuate through one (1) switch and door switches. Generally shown on Interior Floor Plan Drawing**.** _____

55.3 **Interior Cab Dome Lights-** Two (2) High Intensity LED lighting overhead lights, one (1) roof mounted driver side, one (1) roof mounted passenger side. Lights to be actuated through OEM dash mounted switch and door switches. _____

55.4 **Map Light**- High Intensity LED passenger side mounted light, exact location to be determined at time of installation. _____

56.0 ELECTRICAL DEMAND-

56.1 All trucks shall be cable to power the following electrical tools- (It should be noted that up to 2 Power tools can be used at the same time). **The bidders shall ensure the electrical supply of the complete vehicle shall be capable to achieve this.**

- **Electric jack hammer** – 2ft 8 inches high x7inches wide-Serial # 63559 120volts
- **Mule (valve turner)-**3ft long x 1ft wide-model # 700-½ hp-26 -30 rpm
- **Electric Pump**-Godwin Sub-Pump model # gsp-10-1, Voltage 115, Frequency 60, 1 ½ft high x 8inches wide
- **Dewalt Grinder**- D28474. 8000 rpms 2ft x 6 inches
- **Pelsue Vent Blower**-Model # 1325D Axial Blower-120 vac-60hz-1ph-4amp-1/3 hp 2ft x 2ft
- **Washex M22 Steamer boiler-** _____

56.2 **Conform**- All vehicle lighting shall conform to C.M.V.S.S. and Manitoba Highway Traffic Act requirements. _____

56.3 **All body supplier installed wiring-** shall be numbered, colour coded, loomed, properly secured and protected from damage. Successful bidder shall provide electrical diagram schematics upon delivery of the vehicles. _____

56.3.1 **All electrical connectors**- shall be crimped and soldered, then sealed using heat shrink tubing. _____

56.4 **All joining of wires-** shall be soldered and sealed using heat shrink tubing (crimp on electrical connectors for joining wires are not acceptable). _____

56.5 **All holes**- required for routing wiring shall be drilled (not punched), grommetted and sealed as required. _____

56.6 **Wiring access panel**- Wiring for interior lights, switch panel wiring, outlets, etc., shall be accessible from an access panel running along the inside corner of the ceiling. _____

56.7 **LED Requirements**- Supplier installed lighting shall be (except where otherwise noted) and shall include the following: _____

56.8 **Combination Stop, turn and tail lights** – LED one (1) per side with mounting grommets, flush or recessed mounted. _____

56.9 **High mounted stop, turn and tail lamps** – LED one (1) per side with mounting grommets, flush or recessed mounted. _____

56.10 **Turn signal flash rate-** 70-90 flashes per minute. _____

56.11 **Back-up lights-** LED one (1) per side with 40700 mounting grommets. _____

56.12 **Three Light Cluster-** LED, three (3) only with mounting grommets. _____

56.13 **Clearance Lights-** LED with with mounting grommets. _____

56.14 **License plate lamp** – LED, complete with license plate bracket _____

56.15 **Lighting harnesses** – Properly routed and secured, **state make & model-**_____

56.16 **Junction box** – Complete with necessary compression fittings, required for all vehicle lighting harness connections, located inside rear of truck frame. state make & model _____

56.17 **All plug-in connectors**- shall be coated with Truck-Lite NYK or equivalent compound prior to assembly. _____

56.18 B**ack-up alarm** – 97 dB(A) rating, installed at rear of of body, located to be protected from damage. _____

56.19 **Front/Rear Work lights-** Two (2) LED utility lamps, mounted above rear doors. Lights shall be wired through neutral safety switch, switch panel actuated. Two LED work lights mounted underneath the storage kick over illuminating the chassis steps on both sides. _____

56.20 **Valve key storage compartment lights**- LED, located top inside of doors, one (1) per compartment, with rubber grommets, actuated through "rear work lights" switch on switch panel. _____

56.21 **Warning light system** - six (6) LED lights, amber lens, switch panel actuated. _____

56.22 **Warning Light mounting locations**:

i) **Front –LED**, two (2) top corner mounted. _____

ii) **Sides – LED**, one (1) per side, top-centre mounted. _____

iii) **Rear – LED**, two (2) top corner mounted. _____

56.23 **Flash pattern** - Lights shall be sequentially wired in alternating flash pattern_____

56.24 **Side mounted scene lights-** Four (4) LED Whelen 90E000ZR c/w trim ring, installed near roofline, two (2) per side, switch panel actuated on two separate switches. _____

56.25 **Inverter-** (**Not required for unit #251-2067, APU will provide AC Power For this unit)**

Xantrex, 5000 Watt or equivalent specifications, powered from auxiliary battery, switch panel actuated, mounted above driver in storage kick area. Must have an inverter system control panel in order to read the trouble codes when there is a fault with the inverter.State make, model and manufacturers warranty- _____

56.26 **Electrical Outlets**- Six (6) 120 Volt duplex outlets required, GFI, CSA approved. Two (2) located over workbench, one (1) located at each corner of the van body. _____

56.27 **Trailer connector** - 6-pole, Dominion Auto 76-4009, wired ,installed in hitch plate. _____

56.28 **Continuous duty solenoid**- Cole Hersee part # 24059 or 24016, controlled by "ACC" & "RUN" on ignition switch. _____

56.29 **Complete lighting part # list**-Upon delivery of the vehicles, the successful bidder shall provide a complete lighting part # list of all lights and electrical components used to build the complete unit and also applicable warranties for each item. _____

56.30 **Supply wiring schematics**- Bidder shall supply wiring schematics for all body wiring and routing _____

57.0 APU & Hydraulic Pac

57.1 **Heating & Air Conditioning and Hydraulic Provisions**

APU- (**Model Patriot by Canadian Extreme Climate Systems Auxiliary Temperature Management System**)

57.2 The intent of the APU is to provide van body heat, air conditioning and electrical power with reducing chassis idling by turning the chassis engine off). The APU shall be located at exterior incorporated into the body design.
State location and required dimensions for the APU- _____

Tereck Diesel
1655 Dugald Road
Winnipeg, MB R2J 0H3
(204) 654-9646

Hydraulic Pac- Model MH1 (All-in-One Hydraulic Drive Conditioning System)

Accudraulics
449 Lucas Ave
Box 46 GRP 200 RR 2
Winnipeg MB R3C 2E6
(204) 837-8366

57.3 The intent of the Hydraulic Pac is to provide the operator the ability to operate Hydraulic tools rather than electric tools in case the operator need to operate Tool near or in water with out posing a safety threat. The Hydraulic Pac shall be located at exterior incorporated into the body design beside the APU.
State location and required dimensions for the Hydraulic Pac- _____

57.4 Heater duct(s) shall be c/w round, swivel type air deflector(s). Air intake to be constructed for sufficient airflow as recommended by manufacturer. Intake air shall be drawn from the inside of the van body. Intake air shall be located near upper outside wall in order to keep contaminants and dirt out of the air intake. State quantity of heating duct outlets and location of condenser for air conditioning- _____

57.5 It is crucial that sufficient heating ducts are located near the steamer boiler Lines and the rear step area in order to keep ice away from operator exit and entries. _____

57.6 **Temperature Control** – shall be ergonomically located within driver's reach and easily serviceable. **State exact mounting locations**- _____

58.0 INSTALLATION _____

58.1 Mounting brackets shall be bolted to chassis frame using Grade-8 fasteners. _____

58.2 Mounting of the body shall be in accordance with the chassis manufacture's guidelines for body mounting, including, but not limited to, guidelines for tire and suspension clearance and fuel filler installation. _____

58.3 Tire Clearance- Bumper pad clearance plus 3" _____

58.4 Operator Entry- The van body shall be mounted as low as practicable and shall incorporate wheel wells. _____

58.5 All holes for latches, outlets, etc. shall be neatly cut and de-burred _____

58.6 All edges and corners shall be rounded to prevent accidental injury _____

58.7 Any holes required in the chassis frame web must be drilled and reamed to fit bolts, no exceptions. _____

58.8 Drilling on chassis frame flanges are not permitted. _____

58.9 Welding on the chassis frame is not permitted. _____

59.0 FINISH

59.1 The complete van body shall be properly cleaned, primed and finished as follows:

i) Exterior - entire van body (excluding roof) shall be painted white, to match chassis cab with two (2) coats of polyurethane Enamel, Dupont Imron or Akzo Sikkens. _____

ii) Bumpers - Chrome _____

iii) Rear Bumper-painted with two (2) coats of grey argent Enamel. _____

60.0 PASSENGER SIDE- (ITEM # 1 WW-WATER SERVICES Unit #'s 225-5204, 225-5206, ITEM #3 WW-WSTWTR-SEWER Unit # 161-2030-no steamer/boiler)

61.1 **Open Locker – # 1**- 78"H x 24"W x 30"D approx., located directly behind bulkhead. Lower locker shall have a 3" lower lip as to secure miscellaneous loose equipment. _____

61.2 **Closed Locker – # 2**- 78"H x 24"W x 30"D. The interior of the locker shall be plumbed for heat in order to dry operator's jackets, clothing or specialized tools which are required to stay warm. _____

61.3 **Open & Closed Locker # 1 & 2 Upper Shelf** – located 12 in. from top of locker, full width and full depth, c/w a 2" lip. _____

61.4 **Open & Closed Locker # 1 & 2 Locker coat hooks** – six (6) required, three (2) heavy duty hooks per side. _____

61.5 **Upper Wall Barricade/Stop Sign storage brackets** – 87 in. spacing required for mounting "City of Winnipeg" Barricade Upper Arms which are (Dimensions) and Temporary Stop Signs which are (Dimensions). The is a total of 8 Barricade Upper Arms and 4 Temporary Stop Signs. All Storage Brackets should have rubber linings as to eliminate rattling. Location shall be directly behind Close Locker # 2 locker, passenger side Upper and Mid wall. All brackets shall be supplied with securing straps _____

61.6 **Barricade stand storage box** – Approx. 50"W X 34"H X 24"D approx., 1½ in. angle iron frame construction with a 16 ga. sheet metal front plate. Barricade stand storage box shall be supplied with securing straps to secure all Quantity ?? of Barricade Legs . The storage box shall have on inside walls either checker plate or heavy gauge steel to protect the walls from Barricade Leg damage. _____

61.7 **Cabinet -** – approx. 24"W x 36"H x 24"D approx. width c/w heavy duty swing-out latch able doors. Compartment shall be equipped with two adjustable (2) shelves, full width and full depth c/w a centre, full height vertical divider. Shelves shall also be equipped with a 2 in. lip, complete with rubber matting. _____

61.8 **Metal detector storage box** – aluminum construction, 44"L x 6½"H x 6"D, located above rear ward of body. _____

62.0 DRIVER SIDE- (ITEM # 1 WW-WATER SERVICES Unit #'s 225-5204, 225-5206, ITEM #3 WW-WSTWTR-SEWER Unit # 161-2030-no steamer/boiler), ITEM #2 UNIT # 225-5205 THUNDER)

62.1 **Workbench** – Approx. 80"L X 22"D X 34"H approx., located directly behind bulkhead providing three (3) separate compartments. Workbench shall be complete with a ⅞ in. thick hardwood surface work bench or heavy duty or stainless steel work bench, **state type and thickness**- _____

62.2 **Compartment 1** – Approx. 30"L X 22"D X 34"H c/w heavy duty swing-out latch able doors. Compartment shall be equipped with two 6 individual heavy-duty slider trays which can accommodate approx. 300 lbs. each. Slider trays must me lockable type as to not slide out during transportation. Each tray shall have a lip all around. Each tray to have a rubber matting. _____

62.3 **Compartment 2** – Approx. 20"L X 22"D X 34"H, including three (3) drawers on heavy duty rollers. Drawers shall pull-out approx. 14 in. from face of cabinet. Drawers sliders shall be capable of holding 300 lbs of weight each. All drawers, shall have fitting dividers for organizing multi fittings such as ????? _____

62.4 **Compartment 3** – Approx. 30"L X 22"D X 34"H c/w heavy duty swing-out latch able doors. Compartment shall be equipped with two adjustable (2) shelves, full width and full depth c/w a centre, full height vertical divider. Shelves shall also be equipped with a 2 in. lip, height adjustable at 3 in. increments, complete with rubber matting. _____

62.5 **Tool Box**- Eight (8) drawer type, commercial grade, heavy duty tool box. Tool box must be able to accommodate heavy tools which requires heavy

duty lockable type drawer sliders _____

62.6 **Important- Shelving and drawer sliders**- All shelving, drawers and sliders shall be able to accommodate 300 lbs of weight each and come with heavy duty rubber matting. _____

62.7 **All Materials** used for cabinets and or shelving shall be non-painted _____

62.8 **Steamer** – Eligible model Washex M22 Steamer boiler **or equivalent** in accordance to B5. Substitutes stated herein. Trucks Unit #'S 161-2030 and 251-2067 do not require this item: (See Form B: Prices) _____

Washex
405 Dawson Road
Winnipeg MB R2J 0K4
1-(204) 233-9600

62.9 **Cabinet Model Steamer** - Supplied and installed at roadside corner of van. Steamer shall be CSA approved. _____

62.10 **Steamer Standards-**The complete steamer and all components shall be CSA approved where applicable. _____

62.11 **Performance-**Shall be capable of consistent top performance for thawing frozen culverts and catch basins during the winter and spring conditions which are normal to the City of Winnipeg. _____

62.12 **Production-** 325*F continuous steam production _____

62.13 **BTU**- 380,000 BTU diesel fired heater _____

62.14 **Water Tank Dimensions & Capacity**- Approx. 16" Wide X 21" Deep X 64 " High ,75 gallaon water tank. Water tank to be polyethylene. Tank to be secured to prevent tanks from bulging. _____

62.15 **Pump-** 250 PSI 115V AC positive displacement pump _____

62.16 **Ignition-** Ignition detection system required _____

62.17 **Steam Valve**- 325*F, 225 PSI, steam valve

62.18 **Voltage Cord**- 120V cord required _____

62.19 **Dimensions-** Steamer 18"W x 34"L
Tank 16" Wide X 21" Deep X 64 " High _____

62.20 **Hose**- Steam hose- 50 ft. of ½ in. ID steam hose, pressure and temperature rated for steamer. Exact size and configuration to be determined at time of installation. **State hose crimp specification-** _____

62.21 **Storage Spool**- Steamer hose storage spool- shall safely and ergonomically store 50 ft. of steam hose, hand-crank type, retractable. _____

62.22 **Drainage**- Fitting for draining the coil and addition of antifreeze required. _____

62.23 **Exhaust Routing- State exhaust location as per chassis manufactures recommendation for current emission regulations.** _____

63.0 PASSENGER SIDE – ITEM # 2 UNIT # 225-5205 THUNDER

63.1 **Open Locker – # 1**- 78"H x 24"W x 30"D approx., located directly behind bulkhead. Lower Locker shall have a 3" lower lip as to secure miscellaneous loose equipment. _____

63.2 **Closed Locker – # 2**- 78"H x 24"W x 30"D approx., located directly behind bulkhead. The interior of the locker shall be plumbed for heat in order to dry operator's jackets, clothing or specialized tools which are required to stay warm. _____

63.3 **Upper Wall Cabinet # 1-** 30"H x 27.5 "W x 30 "D approx _____

63.4 **Upper Wall Cabinet # 2-** 30"H x 27.5 "W x 30 "D approx _____

63.5 **Upper Wall Cabinet # 3-** 30"H x 27.5 "W x 30 "D approx _____

64.0 UNIT 251-2067 – ITEM # 4 WW-WSTWTR-INTERCEPTION

64.1 Exterior compartments – not required. _____

64.2 Rear vertical exhaust – required at rear passenger's side extending to roof line c/w protective heat shield, 90° bend at top with 45° back slash. _____

INTERIOR, GENERAL (ITEM # 4 WW-WSTWTR-INTERCEPTION (Unit # 251-2067)

64.3 Storage kick storage compartment – aluminium checker plate construction, compartment to maximize space on driver's side space in storage kick area, approx. 25"H x 24" W x 38"D c/w left-side hinged door with D-ring style latch. _____

64.4 Bulkhead – wooden bulkhead with sufficient soundproofing, located directly behind rear seats (see 59.8). _____

64.4.1 Bulkhead shall be located to permit a comfortable rear upper seat incline. A 1 in. space shall be provided between the bulkhead and the rear seats to prevent rubbing. _____

64.4.2 Door – centre-sliding door with minimum 18" x 18" Lexan window. _____

64.5 Rear inside step – required for ergonomic entry and egress, full width of rear doors. State dimensions of step. _____

64.6 Letter boxes – four (4) only letter boxes 23" L x 5½" H x 1½" D, mounted at various locations throughout cargo area. Exact mounting locations to be discussed at pre-production meeting. _____

INTERIOR LAYOUT & SHELVING (ITEM # 4 WW-WSTWTR- INTERCEPTION (Unit # 251-2067)

64.7 Material – shelving, drawers, lockers, etc. shall be aluminium unless otherwise noted. State gauge. _____

64.8 Rear passenger seats – one (1) per side, high back bucket type, forward facing ahead of bulkhead, cloth or vinyl knit captain's chairs, back height shall be 26 in. min., adjustable rear incline, seat belt with shoulder restraint. Seat height shall be 18-20 in. from floor. _____

64.9 Rear seats shall be ergonomically positioned for a comfortable seating position, with proper hip, knee and elbow room for a 95th percentile male. _____

Driver's Side: Rear of Bulkhead (ITEM # 4 WW-WSTWTR- INTERCEPTION (Unit # 251-2067)

64.10 Locker – 79"H x 30"W x 24"D approx. c/w one (1) side-hinged, 2-point latchable door, vented at the top. _____

64.10.1 Clothes hanging bar – full width, approx. 5 in. from top of locker. _____

64.11 Storage hooks – two (2) heavy duty hooks, approx. 8"H x 4"D, located approx. 13 in. from ceiling to hook portion. One (1) located on left side exterior of locker, one (1) wall mounted above workbench. _____

64.12 Workbench/Shelving unit – 42"H x 92"W x 22"D c/w laminated wood top surface. Cabinetry below shall consist of Section 1: 42"H x 30"W x 22"D with three (3) height adjustable shelves c/w two (2) aluminium doors, centre latched with D-ring style latch, Section 2: Drawer section consisting of three (3) 14"H x 24"W x 22"D, Section 3: 42"H x 30"W x 22"D with three (3) height adjustable shelves c/w two (2) aluminium doors, centre latched with D-ring style latch. _____

64.13 3-ring binder storage compartment – located at top-rear corner of van body, 54"W x 15"H x 15"D approx. c/w two (2) top-hinged, latchable doors with securing device to hold doors in open position. _____

Passenger's Side: Rear of Bulkhead (ITEM # 4 WW-WSTWTR-INTERCEPTION (Unit # 251-2067)

64.14 Locker – 79"H x 30"W x 24"D approx. c/w one (1) side-hinged, 2-point latchable door, vented at the top. _____

64.15 Storage hooks (large) – four (4) heavy duty hooks, approx. 8"H x 4"D, located approx. 13 in. from ceiling to hook portion, evenly spaced on passenger side wall between locker and air tank storage area. _____

64.15.1 Storage hooks (small) – multiple heavy duty hooks, approx. 3"H x 2"D, mounted or welded onto heavy duty steel flat-bar, 4 in. spacing between hooks, 50 in. from floor, maximizing space on passenger side wall between locker and air tank storage area. _____

64.16 Air tank storage area – approx. 25 in. width, fabrication required to securely store two (2) large City supplied air tanks. _____

64.17 Hose reel – Hanny P/N 718-30-31-20D c/w hose stop. Hose reel shall accommodate 125' of ½" ID, City supplied air hose. _____

64.18 Hose access port – required to run hose through body at rear. _____

64.19 110-Volt electrical outlets – three (3) GFI type, CSA approved, permanently wired to inverter, 15 Amp capacity each. _____

64.19.1 Mounting locations – one (1) located on interior of van body above workbench, two (2) mounted exterior, one on each side-rear of van body, rear mounted duplexes c/w hinged covers. _____

65.0 FINAL DRAWINGS

65.1 Upon bid submission bidders shall supply a final diagram and description showing the body manufacturers recommended body to chassis mount. The drawing shall be as follows:

- Driver side
- Passenger side
- Frond side
- Rear side
- Down view

65.2 **Component warranties**- The bidder shall submit complete details of all component warranties of equipment bid within the Contract- _____

- Chassis_____
- Body_____
- Steamer Boiler_____
- APU_____
- Hydraulic Pac_____
- Invertor_____

FORM O-PREVENTATIVE MAINTENANCE SCHEDULE

Make:

Model:

Year:

Service/Parts Contact info:

PM Checklist and Adjustments

Please fill in all applicable areas and add any missing service intervals or component part numbers that are applicable to the supplied unit.

All items required to maintain warranties must be listed.

Description:	Capacity:	Type:	Description:	Capacity:	Type:
Engine Oil	Litres		Transmission	Litres	
Cooling System	Litres		Transfer Case	Litres	
Hydraulic Tank	Litres		Hydraulic System	Litres	
A/C Refrigerant	Lbs	R-134a	Brake Reservoir	Litres	
Fuel System	Litres		Differential (Front)	Litres	
Final Drives	Litres		Differential (Rear)	Litres	

Type of Filter:	OEM:	Wix:	Purolator:	Fram:	Baldwin:	Fleetguard:
Engine Oil						
Air Primary						
Air Secondary						
Primary Fuel						
Secondary Fuel Filter						
Cab Air Filter						
Hydraulic (pressure)						
Hydraulic (return)						
Transmission						
A/C Belt						
Alt Belt						
Water Pump Belt						
Serpentine Belt						

Make

Model:

Year:

Item	Recommended Service Intervals. Kms/Hours	Comments
List any one time services		
List any one time adjustments		
List regular Adjustments		
Initial Oil and Filter Change		
Engine Valve Lash and Fuel Injector, Timing Check.		
Engine Oil and Filter Changes and/or Oil Sample Intervals		
Lubrication Points and Intervals		
Transmission Filter/Screens-Replace/Clean and/or Obtain Oil Sample		
Primary Fuel Filter (Replace)		
Secondary Fuel Filter (Replace)		
Differential Oil Sample (Front)		
Final Drive Oil Sample (front)		
Hydraulic Filter (Replace and Obtain Oil Sample)		
Front Differential Fluid (Change)		
Rear Differential Fluid (Change)		
Differential Vents		
Transmission Oil (Change)		
Clean Transmission Magnetic Screen		

Make

Model:
Year:

Item	Recommended Service Intervals Kms/Hours	Comments
Change Final Drive Oil (Front)		
Clean Engine Crankcase Breather		
Hydraulic System Oil (Change)		
Engine Valve Lash and Fuel Inj. Timing (Check)		
Cooling system Water Temperature Regulator (Replace)		
Cooling System Coolant Extender (ELC)-Add		
Cooling System		
Wheel nut Torque and Intervals		
Check wheel Nut torque At Every service interval		
Refrigerant dryer (Replace)		

FORM P-DATA COLLECTION SHEET FOR W.F.M.A

UNIT NUMBER		

ITEMS		**DETAILS FROM VENDOR**
MAKE/MANUFACTURER	(e.g. Ford, Volvo, etc.)	
MODEL	Enter model (e.g. F-350)	
YEAR	(Enter model year)	
DISCRIPTION/TYPE	(e.g. Truck, snow blower, mower, tractor)	
FUEL TYPE	(e.g. gas, diesel, hybrid, propane)	
RATED FUEL CONSUMPTION	(L/100 km, L/hr, etc.)	
GVWR	(In pounds [lbs.] and kilograms)	
GAWR FRONT		
GAWR REAR		
GCWR		
DIMENSION HEIGHT	(Overall height m)	
DIMENSION LENGTH	(Overall length m)	
DIMENSION WIDTH	(Overall width m)	
WHEELBASE		
DELIVERY DATE	(Confirmed date)	
SUPPLIER/DEALER	(Name, phone number, and contact person)	
ODOMETER/HOUR METER	(Upon delivery)	
V.I.N. NUMBER		
SERIAL NUMBER (if applicable)		
CAB CONFIGURATION	(Regular, Extended, Crew)	
M.G.I NUMBER (if applicable)		
KEY DOOR NUM		
KEY IGNITION NUM		
PAINT CODE	(Exterior colour)	
PAINT COLOUR	(Exterior colour)	
PAINT TRIM CODE	(Interior code #/colour)	
ITEMS	**SERVICE ITEMS**	**DETAILS FROM VENDOR**
ENGINE MAKE		
ENGINE MODEL		
ENGINE SERIAL NUMBER		
ENGINE HORSE POWER	(Enter as xxx H.P. @ xxxx RPM	

ENGINE DISPLACMENT	(In cubic inches and litres)	
CPL NUMBER		
ENGINE CYLINDERS	(Number of cylinders)	
ENGINE OIL CAPACITY	(Capacity with filter, in litres)	
ENGINE OIL FILTER PART NUMBER	(Number of filters and part numbers)	
ENGINE OIL TYPE	(e.g. 15W40, regular or synthetic)	
ENGINE AIR FILTER (PRI)	(Make, part number, quantity)	
ENGINE AIR FILTER (SEC)	(Make, part number, quantity)	
CAB FILTER	(Part number and location)	
FUEL TANK CAPACITY	(In litres)	
FUEL FILTER # PRIMARY	(Make, part number, and quantity)	
FUEL FILTER # SECONDARY	(Make, part number, and quantity)	
FUEL SEPARATOR	(Make, part number, and quantity)	
COOLANT TYPE	(Heavy-duty, extended life, or regular)	
COOLANT CAPACITY	(In litres)	
COOLANT FILTER NUMBER	(Part number)	
TRANSMISSION		**DETAILS FROM VENDOR**
TRANSMISSION MAKE	(Enter make & model)	
TRANSMISSION SERIAL NUMBER		
TRANSMISSION TYPE	(Hydrostatic, standard, automatic)	
TRANSMISSION FLUID CAPACITY	(in litres)	
TRANSMISSION FLUID TYPE	(Dextron III, synthetic, weight, etc.)	
TRANSMISSION FILTER(S)	(# of filters and part numbers; internal and external filters)	
TRANSMISSION FILTER KITS	(Gasket, o-ring, secondary filters etc.)	
TRANSMISSION COOLER	(Make and part number if applicable)	
FRONT DIFFERENTIAL		**DETAILS FROM VENDOR**
DIFFERENTIAL MAKE		
DIFFERENTIAL MODEL		
DIFFERENTIAL SERIAL #		
DIFFERENTIAL OIL TYPE	(e.g. 80W90, synthetic)	
DIFFERENTIAL CAPACITY	(In litres)	
REAR DIFFERENTIAL		**DETAILS FROM VENDOR**
DIFFERENTIAL MAKE		

DIFFERENTIAL MODEL		
DIFFERENTIAL SERIAL #		
DIFFERENTIAL OIL TYPE	(e.g. 80W90, synthetic)	
DIFFERENTIAL CAPACITY	(In litres)	
TIRES/WHEELS/ETC.		**DETAILS FROM VENDOR**
TIRE MANUFACTURER & BRAND		
TIRE SIZE FRONT		
TIRE SIZE REAR		
WHEEL NUT TORQUE	(lb-ft)	
WHEEL NUT RE-TORQUE INTERVAL		
FINAL DRIVE/HUB	(Oil type and capacity)	
WHEEL SPINDLES OIL CAPACITY	(In litres)	
WHEEL SPINDLES FLUID TYPE	(e.g. 80w90, Dextron, synthetic)	
POWER STEERING CAPACITY	(In litres)	
POWER STEERING FLUID TYPE	(e.g. ATF or synthetic)	
POWER STEERING FILTER #	(Make, part number, quantity)	
BRAKE FLUID	(Type)	
BRAKE TYPE	(Hydraulic/air)	
MISC. ITEMS		**DETAILS FROM VENDOR**
ALTERNATOR	(Enter make, model, part #)	
ALTERNATOR AMPS	Integers only (e.g. 105, 125, etc.)	
BATTERY MAKE		
BATTERY MODEL		
BATTERY CCA		
BATTERY QTY.		
BATTERY VOLTAGE		
BELT A/C PART #	(Enter make and part number)	
BELT COMPRESSOR PART #		
BELT FAN PART #		
BELT ALTERNATOR PART #		
BELT STEERING	(V-belt or serpentine, quantity)	
BELT STEERING PART #		
BELTS OTHER		

COMPRESSOR CFM	(e.g. 13.2, 15, 18)	
COMPRESSOR MODEL	(Enter make and model)	
COMPRESSOR PART #		
AIR DRYER	(Enter make and model)	
AIR DRYER PART/SERIAL #		
AIR DRYER DESCIANT		
AIR DRYER FILTER	(part number)	
AUX. HEATER TYPE	(Diesel, electric, etc.)	
AUX. HEATER MAKE		
AUX. HEATER MODEL		
AIR CONDITIONING	(Type, 113 etc.)	
AIR CONDITIONING CAPACITY	(lbs)	
A/C RECEIVER DRYER PART #	(part, number)	
ATTACHMENT ITEMS	(Construction equipment)	**DETAILS FROM VENDOR**
SKID SHOE	(part number)	
STINGER BLADES	(part number)	
STINGER TEETH	(Quantity and part number)	
BUCKET TEETH	(Quantity and part number)	
CUTTING TOOTH		
CLAM BUCKET BLADE	(Dimensions and part number)	
UTILITY BUCKET BLADE	(Dimensions and part number)	
BOX SCRAPER BLADE	(Dimensions and part number)	
BUCKET CAPACITY		
BUCKET BLADES AND SIDES	(Quantity and part number)	
GRADER BLADES	(part number)	
GRADER ICE BLADES	(Part number)	
WING BLADES	(Part number)	
BODY UNIT ITEMS		**DETAILS FROM VENDOR**
BODY SUPPLIER	(Name and contact number)	
BODY TYPE		
BODY MAKE		
BODY MODEL		
BODY SERIAL NUMBER		
BOX SIZE	(Length and/or capacity)	

HYDRAULICS		**DETAILS FROM VENDOR**
HYDRAULIC PUMP	(Make, model and capacity)	
PTO	(Make, model and shift type)	
HYDRAULIC TANK CAPACITY	(In litres)	
HYDRAULIC FILTER NUMBER	(Filter number and screen numbers)	
HYDRAULIC FLUID TYPE	(e.g. N22, synthetic)	
HYDRAULIC FILTER	(Make, quantity and part number)	
HYDRAULIC SCREEN	(Make, quantity and part number)	
HYDRAULIC BREATHER	(Make, quantity and part number)	
HYDRAULIC SPINNER		
HYDRAULIC SPINNER MAKE		
HYDRAULIC SPINNER MODEL		
HYDRAULIC SPINNER SERIAL #		
CONVERYOR MOTOR MAKE		
CONVERYOR MOTOR MODEL		
CONVERYOR MOTOR SERIAL #		
CYCLE TIME DOWN		
CYCLE TIME UP		
SANDER/DUMP CONTROLS:		**DETAILS FROM VENDOR**
CONTROL SYSTEM MAKE		
CONTROL SYSTEM MODEL		
CONTROL SYSTEM SERIAL #		
CONTROL SYSTEM PART #		
CONVEYOR CHAIN	(Length and part #)	
SENSORS	(Part #s)	
CALCIUM PUMP MAKE		
CALCIUM PUMP MODEL		
CALCIUM PUMP SERIAL #		
CALCIUM PUMP CAPACITY		
UNIT ITEMS	**ATTACHMENT(S)**	**DETAILS FROM VENDOR**
TYPE	(e.g. snow blower, mower, spreader, etc.)	
MAKE/ MANUFACTURER	(e.g. John Deere, Colpron, etc.)	
MODEL		

YEAR	(Enter year manufactured)	
AUX. ENGINE	(Make and model)	
AUX. ENGINE DISPLACEMENT	(In cubic inches and litres)	
AUX. ENGINE SERIAL #		
SUPPLIER/DEALER	(Name, phone number, and contact person)	
FUEL TYPE	(e.g. gas, diesel, propane)	
ODOMETER/HOUR METER		
AUX. ENGINE HORSE POWER	(Enter as xxx H.P. @ xxxx RPM	
AUX. ENGINE CYLINDERS	(Number of cylinders)	
AUX. ENGINE OIL CAPACITY	(Capacity with filter, in litres)	
AUX. ENGINE OIL FILTER PART #	(Number of filters and part number)	
AUX. ENGINE OIL TYPE	(e.g. 15W40, regular or synthetic)	
AUX. ENGINE AIR FILTER (PRI)	(Make, part number, quantity)	
AUX. ENGINE AIR FILTER (SEC)	(Make, part number, quantity)	
HYDRAULICS	**ATTACHMENT(S)**	**DETAILS FROM VENDOR**
HYDRAULIC DRIVE MAKE	(Enter make & model)	
HYDRAULIC DRIVE MODEL		
HYDRAULIC DRIVE SERIAL #		
HYDRAULIC DRIVE TYPE	(Hydrostatic, standard, automatic)	
HYDRAULIC DRIVE FLUID CAPACITY	(in litres)	
HYDRAULIC DRIVE FLUID TYPE	(Dextron III, synthetic, etc.)	
HYDRAULIC DRIVE FILTER(S)	(# of filters and part numbers; internal and external filters where applicable)	
HYDRAULIC DRIVE COOLER	(Part number if applicable)	
HYDRAULIC BREATHER CAP	(Part number if applicable)	
SWEEPER		**DETAILS FROM VENDOR**
BROOM SEGMENTS	(part #)	
WATER FILTER	(part #)	
WEAR PLATES	(part #)	
ROLLERS	(part #)	
SKID SHOES	(part #)	

PREDICTIVE MAINTENANCE ITEMS	**Predictive maintenance** (**PdM**) techniques help determine the condition of in-service Equipment in order to predict when maintenance should be performed. The ultimate goal of PdM is to per-form maintenance at a scheduled point in time when the maintenance activity is most cost-effective and before the Equipment loses performance.	**DETAILS FROM VENDOR (Intervals in hrs/kms)**

FORM Q-SUSTAINABILITY QUESTIONNAIRE

Product Information (Yes/No)

Product Sustainability: High Quality, Small Ecological Footprint

1. Have you employed environmentally innovative best practices and/or technologies in the goods you are supplying in this Bid Opportunity as compared to similar goods? If yes, please describe them below. _____

Describe: _____

2. Have you obtained 3rd party environmental certifications for any of the products that you are supplying in this Bid Opportunity? _____

Describe: _____

3. Have you performed a life cycle assessment of the goods you are supplying in this Bid Opportunity? If yes, please describe below. _____

Describe: _____

4. Are there any other environmentally innovative best practices and/or technologies in the goods you are supplying in this Bid Opportunity that we could have specified in this tender, but have not? If yes, please describe them below. _____

Describe: _____

Company Information

Energy and Climate: Reducing Energy Costs and Greenhouse Gas Emissions

1. Have you measured your corporate greenhouse gas emissions? If yes, please report your total annual greenhouse gas emissions reported in the most recent year measured? _____

Describe: _____

2. Have you set publicly available greenhouse gas reduction targets? If yes, what are those targets? _____

Describe: _____

Material Efficiency: Reducing Waste and Enhancing Quality

1. Do you measure the total amount of solid waste generated from the facilities that produce your product(s) for this Bid Opportunity? If yes, please report for the most recent year measured. _____

Describe: _____

2. Have you set publicly available solid waste reduction targets? If yes, what are those targets? _____

Describe: _____

3. Do you measure the total water use from facilities that produce your product(s) for this Bid Opportunity? If yes, please report for the most recent year measured. _____

Describe: _____

4. Have you set publicly available water use reduction targets? If yes, what are those targets? _____

Describe: _____

Natural Resources: Responsibly Sourced Raw Materials

1. Have you established publicly available sustainability purchasing guidelines for your direct suppliers that address issues such as environmental compliance, employment practices and product safety? _____

Describe: _____

Social Responsibility: Ensuring Responsible and Ethical Production

1. Do you have a process for managing social compliance at the manufacturing level? _____

Describe: _____

2. Do you work with your supply base to resolve issues found during social compliance evaluations and also document specific corrections and improvements? _____

Describe: _____

3. Do you invest in community development activities in the markets you source from and/or operate within? _____

Describe: _____

_____

_____