

FORM A: BID
(See B8)

1. Contract Title SUPPLY & DELIVERY OF A SERVICE TRUCK

2. Bidder

Name of Bidder

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

Street

City

Province

Postal Code

Email Address of Bidder

Facsimile Number

(Mailing address if different)

Street or P.O. Box

City

Province

Postal Code

GST Registration Number (if applicable)

The Bidder is:

(Choose one)

a sole proprietor

a partnership

a corporation

carrying on business under the above name.

3. Contact Person

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

Contact Person

Title

Telephone Number

Facsimile Number

Email Address

4. Definitions

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

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

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

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

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

No.	Dated
_____	_____
_____	_____
_____	_____

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

10. Signatures The Bidder or the Bidder's authorized official or officials have signed this _____ day of _____, 20____.

Signature of Bidder or
Bidder's Authorized Official or Officials

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

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

FORM B: PRICES
(See B9)

SUPPLY & DELIVERY OF A SERVICE TRUCK

UNIT PRICES

ITEM NO.	DESCRIPTION	SPEC. REF.	UNIT	QUANTITY	UNIT PRICE
1.	Service Truck	17032	Each	1	

Name of Bidder

FORM N: DETAILED SPECIFICATIONS 17032

SERVICE TRUCK

1.0 DESCRIPTION OF EQUIPMENT/APPLICATION-

- 1.1 These specifications describe **Service Truck** and other equipment and features as specified herein. This unit is an integral portion of the City of Winnipeg Fire Paramedic Service. This vehicle is will be tasked with responsibilities of transporting larger pieces of equipment and or supply within the City of Winnipeg. This unit is also required to tow the WFPS Hazmat Decontamination Trailers. Below are photos of the current service truck and Hazmat Decontamination Trailer.



- 1.2 The **Service Truck** shall be new 2017 model year or newer.
- 1.3 The **Service Truck** and all other items/components shall be the manufacturer's latest model. The equipment shall be furnished complete and ready for operation. Any parts or accessories not specifically mentioned, but which are required to complete and place the equipment and associated attachments in successful operation shall be furnished as though specifically mentioned in these specifications. The equipment and associated and attachments, and all parts thereof, shall conform in strength and quality of material and workmanship, to the best standards and engineering practice of the industry.

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 **Service Truck** shall comply with the applicable regulations:

- Highway Traffic Act
- Manitoba Motor Vehicle Act
- Canadian Motor Vehicle Safety Standards, CMVSS Transport Canada
- National Safety Mark, NSM
- Manitoba/Winnipeg Safety and Health Act, Parts 12, 22
- Canadian Standards Association, CSA
- Under Writers of Canada, U/L
- Society of Automotive Engineers, SAE
- City of Winnipeg Lighting Visibility
Standard=<http://winnipeg.ca/matmgt/pdfs/PublicWorksEquipLightingVisibility.pdf>.

- 2.3 It will be the responsibility of the Bidder to inform the City of any deficiencies in these specifications, for under this Contract the Contractor shall be held responsible for the design, performance, reliability and satisfactory operational function of the units.

- 2.4 The manufacturer/installer shall be a certified vehicle completer and must affix their National Safety Mark (NSM) certification sticker on each unit.

State NSM number: _____

3.0 SERVICE FACILITY-

- 3.1 For the purpose of warranty repairs, the supplier shall have an authorized service facility located within 10 kilometres 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 B11., Bidders shall provide a description of the service facility including, but not limited to, number of qualified service staff, years of service experience, and general service capabilities within three (3) Business Days upon request of the Contract Administrator.

4.0 REFERENCES-

- 4.1 If available, please provide five (5) Canadian references where this equipment is used in a working environment where climatic conditions are similar to the City of Winnipeg.

5.0 MAKE & MODEL-

- 5.1 **State** make and model of the **Service Truck** being bid- _____

6.0 INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS-

- 6.1 Each bid will be evaluated based on adherence to all terms, conditions and requirements outlined in the Bid Opportunity package.

- 6.2 All items in these specifications must be answered indicating compliance or non-compliance. **BIDDERS SHALL STATE "YES" FOR COMPLIANCE OR STATE DEVIATION**, or give reply where requested to do so. Deviations shall be clearly stated and fully detailed. Alternatives will be considered subject to evaluation.

- 6.3 **EACH BIDDER IS REQUIRED TO FILL IN EVERY BLANK. FAILURE TO DO SO MAY BE USED AS A BASIS FOR REJECTION OF BID**

7.0 PERFORMANCE RELIABILITY-

- 7.1 The responsibility for the design of the **Service Truck**, its performance and reliability shall rest upon the Contractor.

- 7.2 The term "repeated failures" as used herein is defined to mean that the same component, subassembly, or assembly develops repeated defects, breakdowns and/or malfunctions rendering the vehicle inoperative, or requiring repeated shop correction, service and/or replacement during the warranty period applicable for said component, subassembly, of assembly. Minor items or ordinary service adjustments are not included, or considered under the scope of "repeated failures", as well as other factors, such as operational damage due to accidents, misuse or lack of proper maintenance, service and lubrication attention by not following the manufacturer's preventative maintenance schedule.

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

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

8.0 **FUEL**

8.1 The **Service Truck** must be fully fuelled upon delivery (**no exceptions**).

9.0 **QUALIFICATIONS OF MANUFACTURER & CONTRACTOR**

9.1 The manufacturer of the **Service Truck** shall have five (5) years continuous experience manufacturing **Service Trucks**.

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

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

10.0 **CHASSIS SPECIFICATIONS-**

10.1 GVWR

The 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 (tandem axle) – 9100 kg (20,056 lbs.)

•Tire load – 9 kilograms for each millimeter width of tire (approx. 500 lbs. per inch of tire width).

10.2 Weigh scale ticket

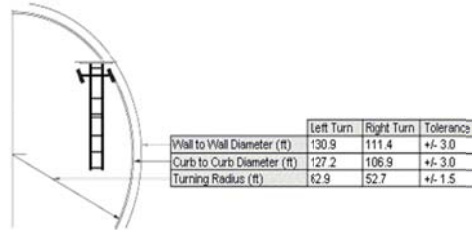
The Contractor shall provide a certified weigh scale ticket upon delivery of the completed unit. The scale ticket shall include front and rear axle weights including two (2) operators, and all attachments.

10.3 GVWR/Dimensions/Turning Radius

•GVWR Total- 39,000 lbs.
•GVWR Front- 16,000 lbs.
•GVWR Rear- 23,000 lbs.



- 10.4 Cab to Axle- As required for a 10' x 8' Service Body and Hiab Model 125 crane _____
- 10.5 Wheelbase- As required for a 10' x 8' Service Body and Hiab Model 125 crane _____
- 10.6 After-frame- As required for a 10' x 8' Service Body and Hiab Model 125 crane _____
- 10.7 Turning radius- Turning Radius- **State** the vehicle turning radius- _____

Example:



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

- 10.8 Engine Tier IV Final Diesel, inline 6-cylinder _____
- 10.9 Horsepower 370 HP gross _____
- 10.10 Torque 1250 lbs. ft. torque _____
- 10.11 Engine shut down Low oil pressure / high water temperature _____
- 10.12 Air intake warmer Required _____
- 10.13 Fuel Shut-off Electric solenoid type _____
- 10.14 Air intake Fire Ember Screen Type _____
- 10.15 Air cleaner Dual stage air cleaner _____
- 10.16 Air intake restriction Dash mounted restriction indicator _____
- 10.17 Oil drain plug Magnetic type _____
- 10.18 Oil filter Full flow, spin-on type _____
- 10.19 Fuel filter Spin-on type _____
- 10.20 Fuel/water separator Heated, drainable under hood _____
- 10.21 Fuel line primer pump Required _____
- 10.22 Block heater Immersion type, 1000 Watt with covered recessed male plug, located under driver's side door _____
- 10.23 Radiator Aluminum 1200 square inch _____
- 10.24 Coolant **Extended Life** coolant, antifreeze to -35°F 37°C) _____

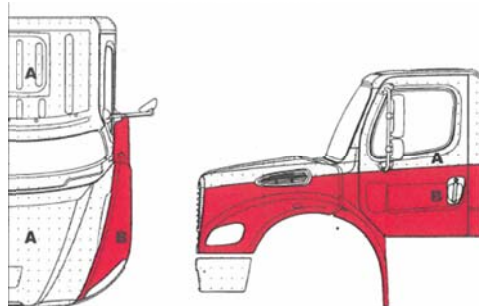
10.25	Coolant filter	Required	_____
10.26	Coolant hoses	Silicone type or Gates Blue Stripe	_____
10.27	Fan Drive	Thermostatically controlled, automatic type with dash switch	_____
10.28	Air compressor	Water cooled, pressure lubricated, 15-18 cfm	_____
10.29	Electrical connector's	Plug-in, sealed type	_____
10.30	Anti-corrosion electrical package	Controllers and sensitive electrical components (PCM, Harnesses' s etc.) mounted in cab preferred. State locations-	_____
			
10.31	Alternator	160-190 Amp brushless type	_____
10.32	Starter	With over crank protect and thermal protection	_____
10.33	Circuit breakers	Auto-reset, readily accessible	_____
10.34	Batteries/Battery location	Three (3) batteries, 12-volt, group 31, approx. 2700 CCA combined preferably located under steps. Batteries not to impede with the installation of a 10' x 8' Service Body and Hiab Model 125 crane State location-	_____
10.35	Battery disconnect	In-cab mounted outboard of driver's seat preferred. State location-	_____
10.36	Battery boost terminal	Remote battery boosts terminal(s), protected from road spray. State location-	_____
10.37	Cab marker lights	LED Cab or Sun Visor Marker Lights	_____
10.38	Cab Light Bar	Light Bar 60" LED FN60VLE Make Whelen Model Freedom	_____
			
10.39	2-way radio circuit	Independent 20 Amp circuit, ignition powered, wired under dash loose, labelled	_____
10.40	Accessory switches	Six (6) required. All switches complete and wired for body installation, labeled and backlit	_____

10.41	Exhaust	Passenger side horizontal exhaust routed behind the rear axle. Configuration as required for As required for a 10' x 8' Service Body and Hiab Model 125 crane Exhaust not to impede in the installation of the body. State type and location-	_____
10.42	Transmission	Emergency Service Rated Allison 3000 EVS with 6-speed programming, Ratio shall be as per inter-city transport application. Transmission shall come with load base Management Programming. Bidder shall provide Allison SCAAN with bid.	_____
10.43	Transmission Fluids	Synthetic	_____
10.44	Shift selector	Digital push-button type, dash mounted	_____
10.45	Cooling capacity	Water to oil transmission cooler, as per manufacturer's recommendation for severe duty cycle	_____
10.46	Oil level dipstick	Bayonet type with high and low level markings	_____
10.47	Trans. drain plug	Magnetic type	_____
10.48	Front Axle	Set back axle , Meritor 16,000 lbs. capacity, with synthetic fluid.	_____
10.49	Rear Axle	Meritor 23,000 lbs. capacity, with synthetic fluid.	_____
10.50	Ratio	For 110 km/hr, as recommended for service body application, state ratio-	_____
10.51	Inter-axle lock	Required w/dash mtd. switch	_____
10.52	Differential lock	Required for drive axle w/dash mtd. Switch	_____
10.53	Hub Seals	Oil lubricated front and rear type	_____
10.54	Front Suspension	Multi-leaf spring suspension, 16,000 lbs. capacity	_____
10.55	Rear Suspension	Air ride suspension, 23,000 lbs. capacity, axle, shall be as recommended for a 10' x 8' Service Body and Hiab Model 125 crane application	_____
10.56	Suspension control valve	Manual dump valve for air suspension c/w dash mtd. switch, indicator light, gauge and buzzer	_____
10.57	Front Wheels	Aluminum, hub piloted, rated for requested GVWR	_____

10.58	Rear Wheels	Aluminum, hub piloted, rated for requested GVWR	_____
10.59	Hubs	Aluminum material	_____
10.60	Wheel nut indicators	Required on all wheel nuts	_____
10.61	Front Tires	385R 22.5 18 ply, snow, mud and ice rated for requested GVWR and application	_____
10.62	Rear Tires	11R 22.5 16 ply, snow, mud and ice rated for requested GVWR and application	_____
10.63	Frame	Single rail	_____
10.64	Frame/Cross member rust inhibitor	Required, state make and type-	_____
10.65	Chassis fasteners	Grade-8 threaded hex headed frame fasteners	_____
10.66	After-frame	As recommended for a 10' x 8' Service Body and Hiab Model 125 crane	_____
10.67	Steering	Tilt and telescopic, power, rated for front GVWR rating. Reservoir approx. 2 quart with see through tank.	_____
10.68	Brakes	Air, ABS, S-cam drum brakes, front & rear Front 16.5" X 6" Rear 16.5" X 7"	_____
10.69	Slack adjusters	(Clearance sensing), automatic type	_____
10.70	Parking brake	Spring set, four (4) chamber system	_____
10.71	Brake pots	Vented type	_____
10.72	Dust shields	Required, front and rear	_____
10.73	Air Tanks	All tanks shall be aluminum air reservoirs	_____
10.74	Moisture ejector	Wabco, heated, required in all air tanks	_____
10.75	Drain valves	Manual, chain or cable operated, required on each air tank	_____
10.76	Air dryer	Wabco Heated System Save 1200	_____
10.77	Fuel Tank	Single 50 gallon fuel tank. Tank shall be fully fuelled upon delivery. Shall not impede in the installation of a 10' x 8' Service Body and Hiab Model 125 crane	_____
10.78	Fuel Water Separator	Heated Fuel water separator	_____

10.79	Tank straps	Steel straps with 1/16 in. rubber or neoprene isolators to prevent galvanic corrosion	_____
10.80	Cab	Conventional w/corrosion inhibitor	_____
10.81	Cab Construction	Aluminum or galvanized steel construction	_____
10.82	Bumper to Back of Cab	BBC 106-117 in., state-	_____
10.83	Cab mounts	Air suspension	_____
10.84	Hood	High visibility hood	_____
10.85	Hood Fender Extensions	2-3" front fender extensions	_____
10.86	Front grille	Stationary mounted to hood	_____
10.87	Cab interior / trim	Extreme climate insulation including cloth or vinyl headliner on roof, door panels and rear interior of cab	_____
10.88	Cab silencer package	Required for minimal decibel level	_____
10.89	Hood/Firewall/Engine insulations	Insulated hood liner, engine cover and firewall	_____
10.90	Floor covering	Rubber mat with under-padding	_____
10.91	Floor mats	Two (2), rubber	_____
10.92	Driver's seat	High back, air suspension w/foldable armrests, heavy-duty cloth upholstery, Cordura or equal	_____
10.93	Passenger seat	High back, air suspension w/foldable armrests, heavy-duty cloth upholstery, Cordura or equal	_____
10.94	Sun visors	Dual flip-up type	_____
10.95	Steering wheel	Tilt and telescopic type	_____
10.96	12-Volt power outlet	(2) required with independent circuit	_____
10.97	Radio	Factory installed AM/FM/ with "hand free" Blue Tooth capability	_____
10.98	Starter switch	Key operated c/w three (3) sets of keys	_____
10.99	Interior light	Dome light with driver and passenger door switches	_____
10.100	Heater / Defroster	High output, capable of keeping all windows clear at an outside temperature of (-40°C)	_____
10.101	Air conditioning	Required	_____
10.102	Brake, accelerator, pedals	Floor or hanging type brake and accelerator pedal, state-	_____

10.103	Horn	Dual electric	_____
10.104	Exterior mirrors	Mirrors heated, lighted, 4-way motorized adjustment (with convex mirrors), suitable for 102 in. equipment width	_____
10.105	Down-view mirror	Required over passenger door, 5" x 4" approx.	_____
10.106	Windows & windshield	Tinted	_____
10.107	Power windows	Power driver and passenger side	_____
10.108	Doors	Power door locks	_____
10.109	Windshield wipers	Electric intermittent	_____
10.110	Wiper blades	Heavy duty with winter type boot	_____
10.111	Windshield washers	Electric, required with spray nozzles on wiper Blades preferred	_____
10.112	Grab handles	Dual exterior	_____
10.113	Grab handles	Dual Interior	_____
10.114	Entrance steps	Dual each side, open grate / grip type	_____
10.115	Winter front	Heavy-duty vinyl w/twist lock or snap type fasteners	_____
10.116	Exterior Sun Visor	Required	_____
10.117	Strobe LED lights	Dual amber LED class I strobe lights with stainless brackets mounted to B-Pillar	_____
10.118	Instrumentation	Oil pressure gauge, Coolant temperature gauge, Transmission oil temperature gauge, Voltmeter gauge, Air reservoir pressure gauge with LAP warning light and buzzer, Low Oil Pressure High Water Temperature Warning light and buzzer and non-resettable type Engine hour-meter	_____
10.119	Tow Hooks	Front mounted and Rear mounted	_____
10.120	Exterior Colour	Painted two tone, with bottom half red (B) to match Dupont C8053U (Candy Apple Red) and top half Black (A)	_____



- | | | |
|--------------------------|---|-------|
| 10.121 Interior Colour | Grey | _____ |
| 10.122 Flare kit | Three (3) triangular reflectors, CVSA approved. Kit must be mounted or secured. | _____ |
| 10.123 Fire Extinguisher | 5 lbs. Fire Extinguisher ABC type installed and secured, state location | _____ |
| 10.124 Tool Boxes | Two (2) Aluminum Tool Boxes required mounted on driver and passenger side frame. State dimensions, material, and recommended location as set by the manufacturer | _____ |



CRANE

10.125 Crane

An existing Crane from a decommissioned vehicle shall be removed and reinstalled on the new service truck. It is the responsibility of the Contractor to provide all necessary safety certifications required to place the crane back into service.

Make- Hiab
 Model Type- 125
 Manufacturer No. 127018

The following is required:

- New PTO and Pump to match the chassis transmission.
- New mounting bolts
- New hydraulic oil and filter
- New pressure and return lines
- Only OEM Hiab parts to be used.
- Hiab approved weight and center of gravity report.



SERVICE BODY SPECIFICATIONS

10.126	Outside Body Length	Length, outside – nominal 10 ft.	_____
10.127	Inside Body Length	Length, inside – 9' 6" approx.	_____
10.128	Outside Body Width	Width, outside – to match chassis track width, nominal 8' 6" approx.	_____
10.129	Inside Width	Width, inside – 8' approx.	_____
10.130	Side Wall Height	Height of side walls – 36 in. approx. and with split drop down sides.	_____
10.131	Front Wall Height	Height of front wall – Not to impede with crane operation, state height-	_____

MATERIAL

10.132	Construction Material	All material used in construction to be 3/16 in. Hardox 450 with exception of the cab shield.	_____
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FRONT

10.133	Front	Construction – 3/16 in. continuously welded to sides and floor.	_____
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10.134	Front Construction	Heavy duty steel front with angled corners with 3/16 in. sheeting on 3" tubular frame.	_____
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FLOOR AND SIDES

10.135	Material	Construction – 3/16 in. single walled.	_____
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10.136	Long Sill material	Long sills – 7" channel long sills and 4" I-beam cross members on 12" centers	_____
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10.137	Rear post material	Rear side posts – Shall be built to accommodate rail lift tailgate.	_____
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10.138	Top side rail material	Top side rail – heavy duty, approx. 4" x 6" x 3/16"	_____
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10.139	Tie Downs	Six (6) required, three (3) per side located on inside of service body. Tie downs shall be counter sunk with D-rings. Exact locations to be determined upon a pre-production meeting.	_____
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10.140	Access Ladders	Two (2) required, bolt-on design, one (1) located front curb-side corner and one (1) located front driver's side corner.	_____
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10.141	Ladder Rungs	Traction type rungs, 13-gauge steel, 2¼ in. width, 2 or 4-hole design, Traction Tread Products or equal.	_____
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10.142	Ladder Rungs Location	First rung to be 18-22 in. from ground level, approx. 14 in. rung spacing to top of body.	_____
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10.143	Grab Handles	Located for ergonomic access to top of box.	_____
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TAILGATE

10.144	Style	Column Lift Gate	_____
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10.145	Capacity	Approx. 4400 lbs.	_____
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10.146	Material	Aluminum platform and lift frame to be galvanized steel	_____
10.147	Dimensions	72" long X 96" wide	_____
10.148	Functions	Power up / power down and Power open / power close	_____
10.149	Operation	4 way main toggle control with auxiliary hand held remote	_____

ELECTRICAL & LIGHTING

10.150	Conformance	All lighting to conform to C.M.V.S.S. and Manitoba Highway Traffic Act.	_____
10.151	Lighting	Supplier installed shall be high count Class 1 LED lighting and shall be Truck-Lite, Grote, Whelen or equivalent	_____
10.152	Grille Lights	2 X Grille Lights Red Make Whelen Model 600 LED or equivalent.	_____
10.153	Mid Body Lights	2 X Side Intersection Lights RedMake Whelen Model 600 LED or equivalent.. Exact location to be determined at pre-production meeting.	_____
10.154	Under Body Lighting	2 X Scene Lights Make FRC LED Model 900-Q65 Mounted under body. Exact location to be determined at pre-production meeting.	_____
10.155	Ground Lighting	4X Ground Lights Make Luma Model Bar H20-12". Exact location to be determined at pre-production meeting.	_____
10.156	Grommets	Rubber grommets required.	_____
10.157	Combination turn/stop and taillights	One (1) per side with mounting grommets	_____
10.158	Back-up lights	One (1) per side with mounting grommets.	_____
10.159	Light cluster	Three (3) with mounting grommets, located to be protected from damage.	_____
10.160	Rear light mounting location	Taillights, back-up lights, 3-light cluster and rear-corner mounted clearance lights shall be mounted in the rear sill of the body.	_____
10.161	Clearance lamps	High count LED with mounting grommets.	_____

10.162	Clearance lamp mounting locations:	Front – two (2), located one on each bottom corner	_____
		Sides – two (2) per side, located on front and rear bottom corners.	_____
		Rear – two (2), located one on each bottom corner.	_____
10.163	Standard	No clearance light shall protrude beyond the body.	_____
10.164	Standard	Taillights and back-up lights shall be fully visible when tailgate is lowered to horizontal position.	_____
10.165	Licence plate lamp	Complete with licence plate bracket.	_____
10.166	Harnesses	Harness system, properly routed and secured. All harnesses shall be internally grounded, no exceptions.	_____
10.167	Junction box	Junction box complete with necessary compression fittings, required for all vehicle lighting harness connections, located inside rear of truck frame.	_____
10.168	All plug-in connectors	All plug-in connectors shall be coated with NYK compound prior to assembly.	_____
10.169	Back-up alarm	97 dB(A), installed near rear of body, located to be protected from damage.	_____
10.170	Amber strobe lights	Two (2) oval LED strobe lights rear facing in rear corner B- pillars, one per side	_____
10.171	Wiring	All LED strobe lights shall be wired through the ignition, wired through a single OEM dash mounted switch or on the control panel enclosure, labelled “Strobes” with a permanent type, engraved style label. All wiring for back-up alarm, warning lights, strobes and trailer connector shall be colour coded, loomed and properly secured.	_____
10.172	Trailer connector	SAE J560 7 way primary trailer receptacle.	_____
10.173	Electrical connectors	All electrical connectors shall be crimped and soldered, then sealed using heat shrink tubing.	_____

10.174 Joining of wires All joining of wires shall be soldered and sealed using heat shrink tubing or approved OEM weather tight connections (crimp on electrical connectors for joining wires are not acceptable). _____

10.175 Wiring routing Any holes required to run wires through shall be drilled (not punched), grommeted and sealed as required. _____

WELDING

10.176 Standard All welds shall be continuous welds. All welding performed shall conform to CSA Standard W47.1-03 and W59-03. _____

10.177 Inspection All welds are subject to inspection by a City of Winnipeg Qualified Inspector. _____

INSTALLATION

10.178 Drilling Any holes required in the chassis frame web must be drilled and reamed to fit bolts. _____

10.179 Standard Drilling on chassis frame flanges is not permitted. Welding on the chassis frame is not permitted, with the exception of installation of body pivot support. _____

10.180 Tire clearance Three inches (3 in.) with rear suspension air bags lowered. _____

10.181 Clearance Clearance between body and back of truck cab shall be 3 in.. _____

MISCELLANEOUS

10.182 Rear hitch plate ½ in. thick solid steel, (laminated plates unacceptable) installed to chassis frame. _____



- 10.183 "A" frame hitch reinforcement 3" x 3" x 1/4" angle iron, welded to back of hitch plate and bolted to chassis frame web. _____
- 10.184 Pintle hitch Adjustable in height type, installed on hitch plate at a 24 in. height. _____
- 10.185 Lunette eyes for trailer safety chains One (1) each side of hitch, Buyers Products or equal. _____
- 10.186 Rear Fenders Heavy Duty rear poly half-moon fenders. Shall be installed to have sufficient clearance from body and when chassis suspension is dumped. _____



- 10.187 Mud flaps Black rubber, no-name, required front and rear of back tires c/w anti-sail bracket on each mud-flap. _____
- 10.188 Grease fittings Required on tailgate release mechanisms, pivot points and tailgate as required. _____
- 10.189 Isolators All interfaces between aluminium and steel shall be separated by a minimum of 1/16 in. thick rubber or neoprene sheet and are to be bolted through with stainless steel bolts and non-conductive bushings _____

FINISH

- 10.190 Finish All hitch plates, reservoirs, steel brackets, etc. shall be sandblasted, properly cleaned, primed and finished with the Endura paint process as follows: _____
- 10.191 Primer Dupont or Endura EP32 Intermix Epoxy Primer. _____
- 10.192 Paint 3-5 mils of Endura EX-2C Topcoat or Dupont, black. _____

WARRANTY

10.193	Warranty	The body warranty on the complete vehicle (excluding the chassis) shall include 100% replacement parts and labour at no cost to the City and shall cover the complete equipment and all parts thereof against defects of workmanship, construction and materials for one (1) year from the date the equipment is put into service by the City of Winnipeg.	_____
10.194	Electrical Warranty	One (1) year	_____
10.195	LED Lighting Warranty	State-	_____
10.196	All warranty information shall be detailed and include all exclusions. The successful Bidder shall provide all published warranty information upon delivery of the equipment. Bidder shall state all warranty information.		_____
	•Basic Vehicle	One (1) year, unlimited km, state-	_____
	•Batteries	One (1) year, unlimited km state-	_____
	•Drivetrain	Two (2) years, unlimited km state-	_____
	•Cab structure/corrosion	Five (5) years, unlimited km state-	_____
	•Frame & Cross-members	Five (5) years, unlimited km state-	_____
	•Cab paint	One (1) year or 160,000 km state-	_____
	•Engine	Three (3) years or 240 000 km state-	_____
	•Transmission	Two (2) years, unlimited km state-	_____
	•Axles, front & rear-	Two (2) years or 161 000 km state-	_____

11.0 **DELIVERY**

11.1	Delivery Point: The complete unit shall be serviced, ready for operation and delivered F.O.B. with the freight prepaid, including invoice and N.I.V.S. (if applicable) to the WFMA 185 Tecumseh Street, Winnipeg MB. The successful bidder shall be notified by the Contractor Administrator the delivery address prior to issuance of the purchase order	_____
11.2	Delivery Time: Equipment shall be delivered between 8:00 am and 2:00 pm on Business Days no later than November 15th, 2017 .	_____
11.3	Delivery Contact: The Contractor shall contact the Contract Administrator prior to delivery of the equipment.	_____
11.4	P.D.I: A pre-delivery inspection shall be performed by the Contractor on the equipment. Proof upon inspection including completed check list	_____

12.0 **MANUALS**

12.1 Manuals supplied under this Contract. The manuals shall cover the complete equipment including all components thereof, CD or USB flash drive is preferred where available. _____

12.2 The following manuals shall be supplied with the units when delivered:

a) Operator's manual – Two (2) per unit (one operator manual shall be sent to the Equipment Operator Training Branch) _____

b) Parts and service manuals – One (1) complete sets including preventative maintenance schedules. CDs or USB flash drive are preferred. _____

13.0 **FIRST SERVICE PREVENTATIVE MAINTENANCE KIT**

13.1 In order to assure minimum downtime of the equipment in future service, the Contractor shall provide for **the chassis only** one (1) complete replacement set of new OEM filters for each unit purchased. The set of required filters shall include (if applicable to the equipment type) air, fuel, oil, cab and hydraulic, or otherwise all known necessary common replacement filters required for the first preventative maintenance servicing. _____

13.2 The Contractor shall provide a list of factory recommended lubricants to be used with the equipment, as well as a complete cross reference guide for all warranty approved lubricants and filters that can be used during preventative maintenance servicing. _____

14.0 **DISCOUNT FOR PARTS AND LABOUR**

14.0 **State** Parts and Labor discount- _____ %
_____ %

15.0 **ERGONOMICS**

Entry/ Exit

15.1 First step entry height **State**, height of first step in inches _____

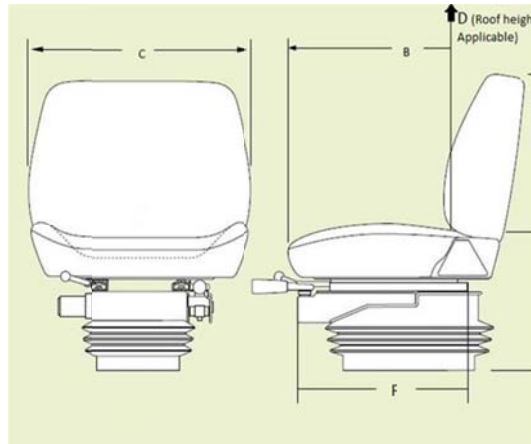
15.2 First handhold entry height **State**, first handhold entry height in inches _____

15.3 Access to equipment **State**, door opening height in inches _____

15.4 Access to equipment **State**, door opening width in inches _____

15.5 Designed to prevent slipping Anti-slip steps/handholds **(Y or N)?** _____

Seat (use below diagram to answer questions)



- | | | | |
|-------|---|---|-------|
| 15.6 | Sitting height range from floor (where feet rest) (A) | State, seat height range in inches | _____ |
| 15.7 | Seat length/depth (B) | State, seat length/depth in inches | _____ |
| 15.8 | Seat width (C) | State, seat width in inches | _____ |
| 15.9 | Cab height from seat to roof (if applicable) (D) | State, cab height range in inches | _____ |
| 15.10 | Back rest height (E) | State, back rest height in inches | _____ |
| 15.11 | Seat travel range (F) | State, seat travel in inches | _____ |
| 15.12 | Lumbar support | Is lumbar support provided (Y or N)? | _____ |
| 15.13 | Head rest | Is head rest provided (Y or N)? | _____ |
| 15.14 | Seat is made of breathable material | State, type of seat material | _____ |

Operation

- | | | | |
|-------|--|--|-------|
| 15.15 | a) Reaching distance to usual work | State, reaching distance in inches | _____ |
| 15.16 | b) Maximum reaching distance | State, maximum reach distance in inches | _____ |
| 15.17 | Adjustable pedals (accelerator/brake/clutch) | Are pedals adjustable (Y or N)? | _____ |
| 15.18 | Adjustable steering wheel | Is steering wheel adjustable (Y or N)? | _____ |
| 15.19 | Adjustable shoulder belt | Is belt adjustable and anchored (Y or N)? | _____ |

Cargo Area

- | | | | |
|-------|-------------------------------------|--|-------|
| 15.20 | Lid opens to provide adequate space | Adequate space provided (Y or N)? | _____ |
|-------|-------------------------------------|--|-------|

15.21 Loading height **State**, trunk height in inches _____

Environment

15.22 Operator compartment is insulated from equipment noise (while operating) **State**, dBA inside cab while operating _____

15.23 Operator insulated from equipment vibration Is operator insulated from vibration (Y or N)? _____

15.24 Heating/cooling systems **State**, cab temperature range _____

15.25 Cab lighting **State**, lumens inside cab _____

**Maintenance/
Inspection**

15.26 Lift assistance provided (when necessary) Is lift assistance provided (Y or N)? _____

15.27 Easy access to compartment doors Is easy access provided (Y or N)? _____

15.28 Include any other relevant ergonomic specifications and applicable range of adjustment

