

**PART A**

**BID SUBMISSION**

**FORM A: BID**  
(See B7)

1. Project Title SUPPLY & DELIVERY OF CUTAWAY VANS WITH ALUMINUM BODIES

2. Bidder

\_\_\_\_\_  
Name of Bidder

\_\_\_\_\_  
Street

\_\_\_\_\_  
City

\_\_\_\_\_  
Province

\_\_\_\_\_  
Postal Code

(Mailing address if different)

\_\_\_\_\_  
Street or P.O. Box

\_\_\_\_\_  
City

\_\_\_\_\_  
Province

\_\_\_\_\_  
Postal Code

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

4. Definitions

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

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 Purchase Order authorizing the commencement of the Work.

Template Version: G320040301

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 Submission.

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

In witness whereof 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 CUTAWAY VANS WITH ALUMINUM BODIES**

**UNIT PRICES**

ITEM NO.	DESCRIPTION	SPEC. REF.	UNIT	APPROX. QUANTITY	UNIT PRICE	AMOUNT
1	Cutaway Van with Aluminum Body	04017	Each	3	\$ _____	\$ _____
TOTAL BID PRICE (GST and PST extra) (in figures) \$ _____ (in words) _____ _____						

\_\_\_\_\_  
 Name of Bidder

## FORM N: DETAILED SPECIFICATIONS 04017

### CUTAWAY VAN WITH ALUMINUM BODY

*(Water & Waste)*

#### 1.0 TYPE

- 1.1 Shall be a nominal 14 ft. aluminium van body installed on a cutaway van chassis supplied by the Successful Bidder. The complete 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 being bid: \_\_\_\_\_

#### 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 completed unit and all its components shall comply with all C.M.V.S.S. and Manitoba Highway Traffic Act regulations and requirements including, but not limited to, a Manitoba Government Inspection with Safety Sticker on 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 warranty work be performed by the City of Winnipeg Repair Facility. 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 2004: \$65.00/hour).

#### 4.0 INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS

- 4.1 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.
- 4.2 Each bidder is required to fill in every blank. **Failure to do so may be used as a basis for rejection of bid.**

#### 5.0 CUTAWAY VAN CHASSIS

- 5.1 Make and model – 2004/2005 cutaway van chassis, state make and model being bid. \_\_\_\_\_
- 5.2 GVWR – 19,500 lbs. min.. \_\_\_\_\_

- 5.3 Wheelbase – 166 in. approx., state. \_\_\_\_\_
- 5.4 Cab to axle – 100 in. approx., state. \_\_\_\_\_
- 5.5 Engine – V8 diesel engine, state make, model and size. \_\_\_\_\_
- 5.5.1 Horsepower – 210 min., state. \_\_\_\_\_
- 5.5.2 Torque – 520 lb-ft min.. \_\_\_\_\_
- 5.6 Block heater – immersion type, 750 Watt min., with covered recessed male plug, located under driver's side door. \_\_\_\_\_
- 5.7 Radiator & coolant – standard cooling, antifreeze to -35°C (-37°F). \_\_\_\_\_
- 5.8 Winter front – heavy-duty vinyl w/twist lock or snap type fasteners. \_\_\_\_\_
- 5.9 Alternators – dual alternator system, 200 Amp min. combined capacity. \_\_\_\_\_
- 5.10 Batteries – three (3) total. \_\_\_\_\_
- 5.10.1 Chassis batteries – two (2), 1200 combined CCA min., state. \_\_\_\_\_
- 5.10.2 Isolator battery – one (1), min. 700 CCA deep cycle, isolated from chassis batteries. \_\_\_\_\_
- 5.11 Engine speed – fast idle or auxiliary idle control, state type. \_\_\_\_\_
- 5.12 Transmission – automatic with column shift, state make and model. \_\_\_\_\_
- 5.13 Transmission cooling – maximum cooling package. \_\_\_\_\_
- 5.14 Front axle – 7,000 lbs. GAWR min.. \_\_\_\_\_
- 5.15 Front tires – radials, all-season tread, load rating to match GVWR. \_\_\_\_\_
- 5.16 Rear axle – 13,500 lbs. GAWR min. with rear limited slip differential. \_\_\_\_\_
- 5.17 Rear tires – radials, mud and snow or all-season tread, load rating to match GVWR. \_\_\_\_\_
- 5.18 Rear stabilizer bar – required. \_\_\_\_\_
- 5.19 Brakes – power. \_\_\_\_\_
- 5.20 Steering – power. \_\_\_\_\_
- 5.21 Cab mounts – Hystec style cab to frame mounts. \_\_\_\_\_
- 5.22 Seats – two (2) bucket seats with arm rests, air suspension, cloth or cloth with vinyl trim. \_\_\_\_\_
- 5.23 Floor covering – rubber matting. \_\_\_\_\_

- 5.24 Windshield – tinted. \_\_\_\_\_
  - 5.25 Heater with defroster – standard. \_\_\_\_\_
  - 5.26 Air conditioning – required at front. \_\_\_\_\_
  - 5.27 Tilt steering – required. \_\_\_\_\_
  - 5.28 Horn – dual electric. \_\_\_\_\_
  - 5.29 Insulation package – deluxe, complete with headliner and door trim panels. \_\_\_\_\_
  - 5.30 Windshield wipers – electric, intermittent. \_\_\_\_\_
  - 5.31 Instrumentation:
    - 5.31.1 Oil pressure gauge. \_\_\_\_\_
    - 5.31.2 Engine temperature gauge. \_\_\_\_\_
    - 5.31.3 Ammeter/voltmeter. \_\_\_\_\_
    - 5.31.4 Hourmeter. \_\_\_\_\_
    - 5.31.5 Transmission temperature gauge. \_\_\_\_\_
    - 5.31.6 Air restriction indicator – dash mounted. \_\_\_\_\_
  - 5.32 Side mirrors – break-away style, black moulded composite, 12" x 7" min. with convex section. \_\_\_\_\_
  - 5.33 Radio – AM/FM, factory installed. \_\_\_\_\_
  - 5.34 Ignition keys/door keys – three (3) sets required. \_\_\_\_\_
  - 5.35 Frame pucks (isolators) – required. \_\_\_\_\_
  - 5.36 Frame spacers – as required for 14 ft. body, state quantity and type. \_\_\_\_\_
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- 5.37 Front tow hooks – frame mounted. \_\_\_\_\_
  - 5.38 Fuel tank – 150 L capacity minimum, fully fuelled upon delivery. \_\_\_\_\_
  - 5.39 Running boards – full door length, required left and right. \_\_\_\_\_
  - 5.40 Trailer towing package – as required for Class V trailer towing. \_\_\_\_\_
  - 5.40.1 Trailer plug wiring – factory installed 7-wire harness complete with wiring to end of frame. \_\_\_\_\_

5.41 Chassis colour – blue or grey interior, bright white exterior. \_\_\_\_\_

**6.0 ALUMINUM BODY DIMENSIONS**

6.1 Body length, interior (measured from back of cab to end of body) – approx. 168 in., state length. \_\_\_\_\_

6.2 Body height, interior – 78-80 in., state. \_\_\_\_\_

6.2.1 Floor height – approx. 36 in. from ground level, state height. \_\_\_\_\_

6.2.2 Overall height – 124 in. max. to top of body, state height. \_\_\_\_\_

6.3 Body width, exterior – 96 in. max., state width. \_\_\_\_\_

**7.0 VAN BODY, EXTERIOR**

7.1 Walls – smooth aluminum, construction method to be either snap-lock panels – minimum 0.125" thick on 12" centres; or frame and skin construction – 1½" "Z" type extrusions on 12" centres with minimum 0.125" panels fastened with aluminum rivets. State construction method. \_\_\_\_\_

7.2 Roof – smooth aluminum stressed-skin, walk-on style roof, minimum 10 ga. aluminum. \_\_\_\_\_

7.2.1 Roof bows – hat type on 12 in. centres. \_\_\_\_\_

7.3 Floor, cross sills – full width 2" x 2" x 0.125" hollow structural steel tubing or equivalent on 16 in. centres. State material. \_\_\_\_\_

7.3.1 Floor, long sills – structural C-channels or equivalent. State material. \_\_\_\_\_

7.4 Floor insulation – 2-3 in. of spray foam insulation on underside of floor. \_\_\_\_\_

7.5 Mudflaps – no-name, black rubber type with steel bar anti-sail brackets, installed in front and behind rear tires. \_\_\_\_\_

7.6 Rear bumper – full width, heavy-duty step bumper, minimum 14 in. deep c/w a grip strut step surface. Exact bumper design and dimensions to be discussed at pre-production meeting. \_\_\_\_\_

7.6.1 Bumper shall be bolted to chassis frame and to van body, structurally reinforced and fastened with Grade 8 bolts. Mounting height shall provide a 17-19 in. step height from ground level. \_\_\_\_\_

7.6.2 Trailer hitch – receiver type hitch, "A" frame design, bolted to chassis frame web. \_\_\_\_\_

7.6.3 Combination hitch insert – Buyers Products BH8-2000, height adjustable, secured to insert flange with Grade-8 fasteners. \_\_\_\_\_



7.6.4 Hitch mount shall extend a maximum of 2 in. from rear of bumper. \_\_\_\_\_

7.6.5 Lunette eyes for trailer safety chains – two (2) required, one on each side of hitch. Each lunette eye shall be rated at full capacity of hitch, Buyers Products B56727 or equal. \_\_\_\_\_

7.7 Rear vertical exhaust w/muffler guard – located at passenger side rear of vehicle, exhaust tip shall be complete with a 90° bend and a 45° cut-off. Exhaust shall be located to provide minimal obstruction for rear access doors and lighting. \_\_\_\_\_

7.7.1 Any exhaust modifications on underside of vehicle shall be routed over rear axle. \_\_\_\_\_

7.8 Exterior storage compartments – two (2) required, one (1) per side, steel construction, under-body, frame mounted, approx. 6'L x 17"H X 17"D each. Compartment dimensions shall be designed to provide sufficient ground clearance. State dimensions. \_\_\_\_\_

7.8.1 Compartment floor liner – heavy-duty rubber matting. \_\_\_\_\_

7.8.2 Interior finish – Zolotone or speckled trunk paint. \_\_\_\_\_

**8.0 REAR DOORS**

8.1 Rear doors – two (2) doors, side hinged, aluminum double skin design, approx. 75" H x 22" W complete with safety glass top & bottom. The right-side door shall overlap the left-side door. \_\_\_\_\_

8.2 Safety glass – two (2) per door, minimum 20" H x 14" W each with appropriate safety markings. \_\_\_\_\_

8.3 Hinges – three (3) per door, heavy duty, stainless steel. \_\_\_\_\_

8.4 Door latch system – manufacturer's standard slam action type latch system, rod-actuated with locking exterior handle. Top and bottom latch insets to be reinforced to prevent wearing. State details of left and right side door latching system including interior handles/actuators. \_\_\_\_\_

8.5 Door stays – designed to hold doors in fully open position, "Grabber" U-style (Cast Products Inc.), no substitutes. \_\_\_\_\_

**9.0 VALVE KEY AND STOP SIGN STORAGE COMPARTMENTS**

9.1 Driver side compartment – shall securely enclose eight (8), 15' x 4½" diameter PVC tubes, ergonomically positioned for access to valve keys. Tubes shall be mounted at a 5° angle in a false wall in the interior of the van. The compartment shall be complete with a double walled, aluminum construction rear access door c/w a stainless steel, 2-stage, non-locking, paddle type handle. Tubes shall provide for adequate

drainage to exterior of van for cleaning purposes.

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9.2 Passenger side compartment – shall securely enclose six (6), 6' x 4½" diameter PVC tubes, ergonomically positioned for ease of valve key access. The PVC tubes shall be installed in a false wall c/w a door as described in Section 9.1.

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9.3 Stop sign storage compartment – two (2) stop signs shall store in the passenger side compartment to the left of the valve keys in a separate compartment using the same door as the passenger side compartment. Stop sign storage compartment dimensions shall be approx. 6'L x 6"W.

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## **10.0 INTERIOR, GENERAL**

10.1 Walls – lined with ½ in. plywood, fastened with counter-sunk screws.

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10.2 Ceiling – lined with min. 3/8 in. plywood, fastened with counter-sunk screws.

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10.3 Floor – extruded aluminum non-skid safety flooring.

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10.4 Insulation – urethane spray-on foam, minimum 1 in. thick in walls and ceiling, minimum 2 in. thick under floor, rear doors shall be insulated as much as practicable.

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10.5 Storage kick – van roof to be cut-out as required and equipped with a sloped "kick-over", aluminum construction with open storage area. Walk-through to be full height, approx. 30 in. wide. Upper storage area shall be c/w a 2 in. lip.

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10.6 Bulkhead – full width, 12 ga. aluminum with sufficient soundproofing, or plywood bulkhead.

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10.6.1 Bulkhead shall be designed to permit full rearward seat travel with the seat in a comfortable reclined position. A 1-in. space shall be provided between the bulkhead and the seat to prevent rubbing.

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10.6.2 Bulkhead door – centre, sliding door with two (2), minimum 18" x 18" Lexan windows. 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.

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## **11.0 INTERIOR LAYOUT & SHELVING**

11.1 Shelving material – 10-gauge aluminum min., state gauge.

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Roadside Interior – Figure 1 attached.

11.2 Workbench – 80"L x 22"W x 38"H approx., located directly behind bulkhead providing three (3) separate compartments. Workbench shall be complete with a minimum 7/8 in. thick hardwood surface. (See Figure 1).

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Note: For the purpose of these specifications, the workbench compartments shall be specified compartments 1-3 beginning with Compartment 1 located

directly behind the bulkhead. Compartment dimensions may be modified slightly by the supplier to accommodate wheel wells.

11.2.1 Compartment 1 – approx. 32 in. width c/w swing-out latchable doors. Compartment shall be equipped with two (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.

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11.2.2 Compartment 2 – approx. 16 in. width, including three (3), 12 in. drawers on medium duty rollers. Drawers shall pull-out approx. 14 in. from face of cabinet.

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11.2.3 Compartment 3 – approx. 32 in. width c/w swing-out latchable doors. Compartment shall be equipped with one (1) centre, horizontal shelf, full width and full depth. Shelf shall be equipped with a 2 in. lip.

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11.3 Storage bin – shall mount on top of workbench along wall, generally as shown in Figure 1.

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11.4 Steamer – Washex model M22, supplied and installed at rear driver's side corner of van c/w applicable Manitoba Department of Labour certification.

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Washex  
3-850 Marion Street  
Winnipeg MB R2J 0K4  
(204) 233-9600

11.4.1 Water tank – polyethylene tank, 150 L capacity approx., exact size and configuration to be determined at time of installation.

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11.4.2 Steam hose – 50 ft. of ½ in. ID steam hose, pressure and temperature rated for steamer.

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11.4.3 Steamer hose storage spool – shall safely and ergonomically store 50 ft. of steam hose, hand-crank type, retractable.

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Curbside Interior – Figure 2 attached

11.5 Locker – 78"H x 24"W x 30"D approx., located directly behind bulkhead. Door not required.

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11.5.1 Shelf – located 12 in. from top of locker, full width and full depth, c/w a 1½ in. lip.

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11.5.2 Coat hooks – six (6) required, two (2) hooks per side.

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11.6 Pullout drawer – located at or near floor level, generally as shown on Figure 2.

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11.7 Barricade storage brackets – 87 in. spacing required for mounting "City of Winnipeg" barricades, c/w rubber lining, located directly behind locker, passenger side.

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11.7.1 Barricade stand storage box – located on top of pullout drawer, 22"W x 20"H x 24"D approx., 1½ in. angle iron frame construction with a 16 ga. sheet metal front plate.

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11.8 Metal detector storage box – aluminum construction, 44"L x 6½"H x 6"D, located above rear heater c/w hinged, latchable lid.

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11.9 Rear heater – Webasto Air Top 3500 12-Volt diesel fired heater, located at or near floor level. Heater duct(s) shall be c/w round, swivel type air deflector(s). Air intake to be constructed for sufficient airflow as recommended by heater manufacturer. Intake air shall be drawn from the inside of the van body. Exact location to be determined at time of installation.

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11.9.1 Rear heater cover – aluminum construction covering top and sides, removable using clamp fasteners or pull-down catches. Air intake end to be constructed for sufficient air flow as recommended by heater manufacturer. Heater cover shall include a 2 in. top lip.

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11.9.2 Rear heater control – shall be ergonomically located within driver's reach and easily serviceable. Exact mounting location to be determined at time of installation.

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## **12.0 ELECTRICAL AND LIGHTING**

12.1 All vehicle lighting shall conform to C.M.V.S.S. and Manitoba Highway Traffic Act requirements.

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12.2 Supplier installed lighting shall be LED Truck Lite (except where otherwise noted) and shall include the following components:

12.2.1 Combination stop, turn and taillights – P/N 44302R, one (1) per side with P/N 40700 mounting grommets, flush or recessed mounted.

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12.2.2 High mounted stop, turn and taillights – P/N 44302R, one (1) per side with P/N 40700 mounting grommets, flush or recessed mounted.

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12.2.3 Turn signal flash rate – 70-90 flashes per minute.

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12.2.4 Back-up lights – P/N 44206C, one (1) per side with 40700 mounting grommets.

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12.2.5 3-Light cluster – three (3) only P/N 10250R with P/N 10700 mounting grommets.

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12.2.6 Clearance lights – P/N 10250R and 10250Y with P/N 10700 mounting grommets.

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12.2.7 License plate lamp – P/N 15040, complete with license plate bracket.

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12.2.8 Lighting harnesses – Truck-Lite 50 Series Harness system, properly routed and secured.

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12.3 Junction box – P/N 50400, complete with necessary compression fittings,

- required for all vehicle lighting harness connections, located inside rear of truck frame. \_\_\_\_\_
- 12.4 All plug-in connectors shall be coated with Truck-Lite NYK Compound prior to assembly. \_\_\_\_\_
- 12.5 Trailer plug – 7-pole, Grote 82-1058 or equal, installed near hitch on left side, wired as coded and separately fused through the chassis manufacturer’s factory auxiliary fuse panel. \_\_\_\_\_
- 12.6 Back-up alarm – STAR 62-097, 97 dB(A) rating, installed at rear of body, located to be protected from damage. \_\_\_\_\_
- 12.7 Interior lights – four (4) Grote 61511, actuated through switch-panel. \_\_\_\_\_
- 12.7.1 Mounting locations – three (3) mounted above centre isle, evenly spaced, one (1) located on driver’s side ceiling above workbench. All interior lights shall actuate through one (1) switch on the switch panel. \_\_\_\_\_
- 12.8 Interior cab dome lights – two (2) OEM style 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. \_\_\_\_\_
- 12.9 Map light – passenger side mounted, Hella 87141. Exact location to be determined at time of installation. \_\_\_\_\_
- 12.10 Roof vent – Fan-Tastic, model 4000 power vent with 3-speed reversible fan, installed in roof of cargo area, switch panel actuated. \_\_\_\_\_
- 12.11 Rear work lights – two (2) utility lamps, Truck-Lite 80394, mounted above rear doors. Lights shall be wired through neutral safety switch, switch panel actuated. \_\_\_\_\_
- 12.12 Valve key storage compartment lights – located top-inside of doors, one (1) per compartment, Truck-Lite 40244 with rubber grommets. Actuated through “rear work lights” switch on switch panel. \_\_\_\_\_
- 12.13 Warning light system – six (6) Truck-Lite 92690Y lights, amber lens, switch panel actuated. \_\_\_\_\_
- 12.13.1 Warning light mounting locations:
- i) Front – two (2) top corner mounted. \_\_\_\_\_
  - ii) Sides – one (1) per side, top centre mounted. \_\_\_\_\_
  - iii) Rear – two (2) top corner mounted. \_\_\_\_\_
- 12.13.2 Lights shall be sequentially wired in alternating flash pattern. \_\_\_\_\_
- 12.14 Side mounted scene lights – two (2) Whelen 90E000ZR c/w trim ring, installed near roofline, one (1) per side, mounted approx. 4 in. to the rear of the warning lights, switch panel actuated. \_\_\_\_\_

12.15 Inverter – Xantrex RS2000, powered from auxiliary battery, switch panel actuated, mounted above driver in storage kick area. \_\_\_\_\_

12.15.1 Electrical outlets – four (4) 120-Volt duplex outlets required, GFI, CSA approved. Two (2) located over workbench, one (1) located at rear, driver’s side interior for steamer, one (1) located on passenger side exterior near rear of van body. \_\_\_\_\_

12.16 Switch panel – Wired Rite Systems Inc., wired through ignition. Switch panel shall actuate (in the following order, left to right) interior lights, warning lights, inverter, side scene lights, roof vent, rear work lights, one (1) additional blank space labelled “Spare”. Exact mounting location of switch panel to be determined at time of installation. \_\_\_\_\_

12.17 ArrowStik – Code 3 Inc. P/N AS-847HS c/w 8-segment ArrowStik, 47 in. width, 1156 bulbs, basic controller. \_\_\_\_\_

12.17.1 Mounting location – rear facing above roofline at rear of van c/w branch guard. Exact location of in-cab controller to be discussed at time of installation. \_\_\_\_\_

12.18 All body supplier installed wiring shall be numbered, colour coded, loomed, properly secured and protected from damage. \_\_\_\_\_

12.18.1 All electrical connectors shall be crimped and soldered to the wiring, then sealed using heat shrink tubing. \_\_\_\_\_

12.18.2 All joining of wires shall be soldered and sealed using heat shrink tubing (crimp on electrical connectors for joining wires are not acceptable). \_\_\_\_\_

12.18.3 All holes required for routing wiring shall be drilled (not punched), grommeted and sealed as required. \_\_\_\_\_

12.19 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. \_\_\_\_\_

**13.0 INSTALLATION**

13.1 Upon request of the Contract Administrator, Bidders shall supply a diagram and description showing the body manufacturer’s recommended body to chassis mount. Diagrams shall be supplied within twenty (20) Calendar days upon request. \_\_\_\_\_

13.2 Mounting brackets shall be bolted to chassis frame using Grade-8 fasteners. \_\_\_\_\_

13.3 Any holes required in the chassis frame web shall be drilled and reamed to fit bolts, no exceptions. \_\_\_\_\_

13.4 Welding or drilling on chassis frame flanges and welding on chassis frame web is not permitted. \_\_\_\_\_

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

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13.5.1 Tire clearance – bumper pad clearance plus 3 in. minimum.

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13.6 The van body shall be mounted as low as practicable and shall incorporate wheel wells.

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

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13.7.1 All edges and corners shall be rounded to prevent accidental injury.

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13.8 All interfaces between aluminum 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.

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#### 14.0 **FINISH**

14.1 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) Interior – ceiling and walls shall be painted with off-white speckle type paint.
  - iii) Roof – coated with Morgan NS non-skid coating.
  - iv) Rear bumper – painted with two (2) coats of grey or argent enamel.
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14.2 Prior to painting all surfaces shall be properly primed and prepared.

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#### 15.0 **PERFORMANCE RELIABILITY**

15.1 The responsibility for the design of the complete unit, its performance and reliability shall rest upon the Contractor.

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15.2 The term "*repeat failures*" as used herein is defined to mean that the same component, subassembly, or assembly develops repeated defects, breakdowns and/or malfunctions rendering the unit inoperative, or required repeated shop correction, service and/or replacement during the warranty period applicable for said component, subassembly, or 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 schedules.

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

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## 16.0 WARRANTY

16.1 The Contractor shall warrant **all body equipment** and all parts thereof, against any defects in workmanship, construction and materials, and agrees to repair or replace without cost to the City any article that has become defective and not proven to have been caused by negligence on the part of the user within **one (1) year** from the date the equipment is put into service by the City of Winnipeg.

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16.1.1 A new one (1) year warranty period shall be provided for any article that is repaired or replaced under the terms of the “repeat failures” clause (Section 15.0 Performance Reliability). The new warranty period shall be effective from the date of acceptance of the repaired or replaced article.

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16.2 Further to 16.1, the Contractor shall warrant **all chassis equipment** and all components thereof, against any defects in workmanship, construction and materials, and agrees to repair or replace without cost to the City any article that has become defective and not proven to have been caused by negligence on the part of the user within **three (3) years or 60,000 km** bumper to bumper (lights excluded) from the date the equipment is put into service by the City of Winnipeg.

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## 17.0 MANUALS

17.1 The following manuals shall be supplied with the unit when delivered. The manuals shall be in English and shall cover the complete vehicle including the engine and all attachments:

17.1.1 Operator’s manual – one (1) per unit. Operator’s manuals are required for cab & chassis, steamer, inverter and heater.

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17.1.2 Parts, repair and service manuals, including preventative maintenance schedules for the life of unit – one (1) per unit (CD preferred). Parts, repair and service manuals are required for cab & chassis and rear heater.

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## 18.0 PRODUCTION DRAWINGS

18.1 Drawings – the Contractor shall submit for approval, detailed production drawings of the interior and exterior of the van body prior to construction.

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**FORM O: QUESTIONNAIRE**

1.0 **STATE** the delivery time of the complete order from the date of official notification of award: (See D5.1)

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2.0 **LIST** any significant features that will be supplied standard on the unit being offered, but were not specifically mentioned in the Detailed Specifications:

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3.0 **LIST** three current users of the offered model:

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4.0 **STATE** the location of the cab & chassis service facility:

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4.1 **STATE** the location of the body service facility:

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5.0 Does the equipment being offered meet or exceed the minimum requirements of the Detailed Specifications?

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6.0 **LIST** any deviations that might be considered less than equal to the Detailed Specifications:

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