FORM A: BID (See B7)

1. Project Title SUPPLY & DELIVERY OF SERVICE TRUCKS

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 ur	der the above name.	
3.	Contact Person	The Bidder hereby auth the Bidder for purposes	norizes the following contact p of the Bid.	erson to represent
		Contact Person	Title	
		Telephone Number	Facsimile Number	e-mail address
4.	Definitions		used in the Contract shall hat e General Conditions and D3	
5.	Offer		ers to perform the Work in ac), in Canadian funds, set out c	

6. Commencement The Bidder agrees that no Work shall commence until he is in receipt of of the Work a Purchase Order 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 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 officials have signed this	l or
		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 SERVICE TRUCKS

UNIT PRICES

ITEM NO.	DESCRIPTION	SPEC. REF.	UNIT	APPROX. QUANTITY	UNIT PRICE	AMOUNT
1	Supply & Delivery of Service Trucks	07071	Each	(7)	\$	\$
2	Parts manuals, CD preferred	07071	Each	(1) Set	\$	\$
3	Technical service manuals, CD preferred	07071	Each	(1) Set	\$	\$
TOTAL BID PRICE (GST and PST extra) (in figures) \$ (in words)						

Name of Bidder

FORM N: DETAILED SPECIFICATIONS 07071

SUPPLY & DELIVERY OF SERVICE TRUCKS

1.0 <u>TYPE</u>

- 1.1 Shall be a nominal approx. **13 FT. ALUMINIUM VAN BODY INSTALLED ON A TRUCK 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:

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. Canadian Motor Vehicle Safety Standards, M.H.T.A. Manitoba Highway Traffic Act, S.S.A Safety Standards Act, F.M.V.S.S Federal Motor Vehicle Safety Standards, D.O.T Department of Transportation, NVSM National Safety Mark, 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.
- 3.1.1 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 2007: \$80.00/HOUR AND \$105.00/HOUR FOR OVERTIME AND CALLOUT).

3.2. 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. --- 3.2.1) OR 3.2.2)

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

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

4.0 INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS

- 4.1 Where requested to do so with exception of Clause 43.2, all items in these specifications must be answered indicating compliance or non-compliance. <u>BIDDERS SHALL STATE "YES" FOR</u> <u>COMPLIANCE OR STATE DEVIATION</u>, 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.

CHASSIS SPECIFICATIONS- (LOW PROFILE DESIGN ONLY)				
GVWR	20,000 lbs.			
FRONT	8,000 lbs. minimum			
REAR	12,000 lbs. minimum			
GCW	Gross Combined Weight, STATE-			
DIMENSIONS-				
WHEELBASE - As requ	uired for an approx. 13 ft. interior measurement.			
(Measured from bulk he	ead door to rear doors). STATE WB-			
CAB TO AXLE - As rec	uired for requested finished interior cargo length.			
(Measured from rear of	drivers seat to back doors). STATE CA-			
ENGINE-				
<u>Type</u>	Diesel, state make & model-			
<u>Horsepower</u>	230 hp gross minimum			
<u>Torque</u>	620 lb-ft minimum			
Engine shut down	Low oil pressure / high water temperature			
Anti-idling	Programmable anti-idling shut down			
Air intake warmer	required			
Fuel Shut-off	Electric solenoid type			
<u>Air cleaner</u>	Dry type standard filter element			
Air intake restriction	Dash mounted restriction indicator			
<u>Oil drain plug</u>	Magnetic type			
<u>Oil filter</u>	Full flow, spin-on type			
Fuel filter	Spin-on type			
	GVWR FRONT REAR GCW DIMENSIONS- WHEELBASE MHEELBASE - As required (Measured from bulk he CAB TO AXLE - As required (Measured from rear of CAB TO AXLE - As required (Measured from rear of CAB TO AXLE - As required (Measured from rear of CAB TO AXLE - As required (Measured from bulk he CAB TO AXLE - As required (Measured from bulk he (Measured from rear of (Measured from rear o	GVWR20,000 lbs.FRONT8,000 lbs. minimumREAR12,000 lbs. minimumGCWGross Combined Weight, STATE-DIMENSIONS- WHEELBASE - As required for an approx. 13 ft. interior measurement. (Measured from bulk head door to rear doors). STATE WB- CAB TO AXLE - As required for requested finished interior cargo length. (Measured from rear of rivers seat to back doors). STATE CA-ENGINE- TypeDiesel, state make & model- elorsepower10rque620 lb-ft minimumEngine shut downLow oil pressure / high water temperatureAnti-idlingProgrammable anti-idling shut downAir intake warmerrequiredEuel Shut-offElectric solenoid typeAir intake restrictionDash mounted restriction indicatorOil drain plugMagnetic typeOil filterFull flow, spin-on type		

7.13	Fuel/water separator	Heated, drainable, mounted under hood, located to be protected from road spray. State location-	
7.14	Fuel line primer pump	required	
7.15	Block heater	Immersion type, 1500 Watt minimum w/ covered recessed male plug, located under driver's side door	
7.16	<u>Coolant</u>	Extended Life coolant, antifreeze to -34°F	
7.17	Coolant filter	required	
7.18	Coolant hoses	Premium type or Gates Blue Stripe	
7.19	<u>Fan Drive</u>	thermostatically controlled, automatic type	
7.20	Air compressor	Air compressor required with minimum 13 cfm	
8.0	ELECTRICAL SYSTEM	Λ-	
8.1	Electrical system	Multiplexed or equivalent	
8.2	Alternator	Delco Remy, brushless type, 200 Amp, state-	
8.3	<u>Starter</u>	Delco Remy 41-MT/OCP 450 Series with thermal protection	
8.4	Circuit breakers	Auto-reset, readily accessible	
8.5	<u>Batteries</u>	Two (2), 12-volt, group 31, 2100 CCA combined capacity minimum, must be deep cycle batteries.	
8.6	Battery Box	Under cab or frame mounted c/w enclosure. Not to impede with body installation, state Location-	
8.7	Remote boost terminal	Remote battery boost terminal, protected from road spray, covered, state location-	
8.8	Marker lights	LED Cab marker lights	
8.9	Accessory switches	Twelve (12) programmable dash mounted rocker switches required, all switches complete and wired for body installation, labelled and backlit.	
9.0	EXHAUST SYSTEM-		
9.1	Exhaust System	See item 36.14 in miscellaneous section	
10.0	TRANSMISSION-		
10.1	<u>Model</u>	Allison RDS transmission with PTO provision suitable for requested horsepower, torque, GVWR, and application.	

10.2	Shift selector	Push button operated transmission mounted park brake.	
10.3	Cooling capacity	as per manufacturer's recommendation for severe duty cycle.	
10.4	Oil level dipstick	Bayonet type with high and low level markings	
10.5	<u>Trans. drain plug</u>	Magnetic type	
11.0	FRONT AXLE-		
11.1	Front axle type	8000 lbs. capacity min., state make and model-	
10.0	REAR AXLE-		
10.1	Rear axle type	12,000 lbs. capacity min., state make and model-	
10.2	Ratio	Rated 110 km/hr maximum top speed, state ratio-	
10.3	<u>Differential</u>	Rear limited slip differential	
11.0	HUB SEALS-		
11.1	Туре	Oil lubricated front and rear	
12.0	FRONT SUSPENSION	<u>.</u>	
12.1	Front Suspension Type	Taper leaf front suspension, 8,000 lbs. capacity minimum.	
13.0	REAR SUSPENSION-		
13.1	Rear Suspension Type	Programmable air ride suspension, 12,000 lbs. capacity minimum, state make and model-	
13.2	Suspension Control	Manual dump valve for air suspension c/w dash mounted switch, indicator light, gauge & buzzer.	
14.0	WHEELS-		
14.1	<u>Front</u>	19.5 x 6.75 steel disk, hub piloted Powder coated. Must meet requested GVWR	
14.2	Rear	19.5 x 6.75 steel disk, hub piloted Powder coated. Must meet requested GVWR	

Drain valves

Air dryer

19.5

air tank

15.0 **TIRES FRONT-**15.1 Front Tires Must be steer tires, suitable for Manitoba weather conditions, (mud, snow, rain etc.) Michelin XZE 15.2 245/70R/19.5 Low Profile, must meet requested GVWR <u>Size</u> 16.0 **TIRES REAR-**16.1 **Rear Tires** Must be drive tires, suitable for Manitoba weather conditions, (mud, snow, rain etc.) Michelin XDE M/S 16.2 245/70R/19.5 Low Profile, must meet requested Size GVWR 17.0 FRAME-17.1 Single rail, suitable for requested GVWR and Type height requirements, outside frame clear of components for body installation. 17.1.1 Frame height Frame height from ground level to top of frame Rail shall not exceed 28" unladen 17.2 Suitable for cutaway van body application **Application** Chassis fasteners Grade-8 threaded hex headed frame fasteners 17.3 17.4 After frame As required for van body application 18.0 STEERING-18.1 Power steering required Steering Type 19.0 **BRAKES-**19.1 Type Hydraulic, ABS, front & rear brakes 19.2 Parking brake Air actuated 19.3 Moisture ejector Bendix DV-2, heated, required in wet tank. 19.4 Manual, chain or cable operated, required on each

Heated Air Dryer required, state make & model-

20.0 FUEL TANKS-

20.1	<u>Type</u>	Dual 50 gallon/ 189 litre aluminum fuel tanks. Tanks not to Impede with body installation. Exact location to be determined during pre-production meeting.	
20.2	Tank straps	Steel straps with minimum 1/16 in. rubber or neoprene isolators to prevent galvanic corrosion.	
20.3	Fuel separator	Heated, drainable type	

21.0 <u>CAB-</u>

21.1	Туре	CONVENTIONAL OR CUTAWAY CAB STYLE ONLY , to accommoda body application. Cab must have corrosion inhibitor.	ite
21.2	Construction	Aluminium or galvanized steel construction	
21.3	Front axle to (BOC)	State front axle to back of cab measurement-	
21.5	Front grille	Stationary type	
21.6	Cab interior / trim	Premium Insulation including cloth or vinyl headliner on roof, door panels and rear interior of cab.	
21.7	Cab silencer package	Required for minimal decibel level	
21.8	Hood/Firewall/Engine	Insulated hood liner, engine cover and firewall	
21.9	Floor covering	Moulded vinyl floor covering with under-padding	
21.10	Floor mats	Three (3), rubber floor mats	
21.11	Driver's seat	One (1) National High back, air suspension w/foldable armrests, heavy-duty cloth upholstery, lumbar support state make & model of seat-	
21.12	Passenger seat	One (1) National High back, air suspension seats w/foldable armrests, lumbar support, heavy-duty cloth upholstery state make & model of seat-	
21.13	Sun visors	Dual flip-up type	
21.14	Steering wheel	Telescopic and Tilt steering	
21.15	12-Volt power outlet	Two (2) Required on dash	
21.16	<u>Radio</u>	Factory installed AM/FM/CD	
21.17	Starter switch	Key operated c/w three (3) sets of keys	
21.18	Interior light	Dome light with driver and passenger door switches	
21.19	<u>Heater / Defroster</u>	High output, capable of keeping all windows clear at an outside temperature of -35°F (-37°C)	

21.20	Air conditioning	High out put air conditioning required	
21.21	Foot Pedals	Hanging type brake and accelerator pedals	
21.22	<u>Horn</u>	Dual electric	
21.23	Exterior mirrors	Dual black moulded composite aerodynamic mirrors, heated, lighted, 2-way motorized adjustment, exterio mirrors to include convex mirrors, suitable for 102 in. equipment width.	r
21.24	Down view mirror	Required over passenger door, 5" x 4" approx.	
21.25	Windows & windshield	Factory tinted	
21.26	Windows and Locks	Power windows and locks	
21.27	Windshield wipers	Electric, intermittent	
21.28	Wiper blades	OEM Winter Wiper Blades	
21.29	Windshield washer	Electric, required with spray nozzles on wiper blades.	
21.30	Grab handles	Dual exterior grab handles	
21.31	Entrance steps	Dual each side, open grate / grip type with boot	
		brush mounted on driver and passenger sides	
21.32	Winter-front	Heavy-duty vinyl w/twist lock or snap type fasteners	

22.0 INSTRUMENTATION-

22.1	Oil pressure	Gauge	
22.2	Coolant temperature	Gauge	
22.3	Transmission oil temp.	Gauge	
22.4	LOP/HWT	Warning light and buzzer	
22.5	<u>Voltmeter</u>	Gauge	
22.6	Air reservoir pressure	Gauge with LAP warning light and buzzer	
22.7	Engine hour meter	Required, non reset able type	

23.0 <u>TOW HOOKS-</u>

23.1 Location Readily accessible, front frame mounted

24.0 FRONT BUMPER-

24.1 <u>Type</u> Front bumper full width

25.0	COLOUR-		
25.1	<u>Exterior</u>	White	
25.2	Interior	Blue or grey	
25.3	Frame & suspension	Primed and finished with black Imron 5000 paint	
25.4	<u>Wheels</u>	Powder coated white	
26.0	CUTAWAY VAN BODY	DIMENSIONS AND WEIGHTS-	
26.1	Interior Cargo length-	Bulk head wall to back door approx 10 ft.	
26.2		To accommodate approx.13 ft. finished exterior chassis as per specified herein. gth-	
26.3	Overall height - 124 in.	maximum, state-	
26.4	Body width exterior - 9	96 in. maximum, state-	
26.5	Interior height – 78-80	inches finished height, state-	
26.6	<u>Floor height</u> – Approx.	36 inches from ground level, state-	
26.7	Unit weight -including c	hassis, state-	
27.0	INTERFACES-		
27.1	by a minimum of 1/16 in	luminium and steel are to be separated . thick rubber or neoprene sheet and with stainless steel bolts and non-	
28.0	WALL CONSTRUCTIO	<u>N-</u>	
28.1	panels - min. 0.125 in. th construction - 1½ in. "Z"	m, construction method to be either snap-lock nick on 12 in. centres; or frame and skin type extrusions on 12 in. centres with min. d with aluminium rivets. State construction	
28.2	Insulation -Two (2) inch	nes minimum spray foam, (R7 rating per inch)	
28.3		<u>g</u> -Interior walls must be lined with minimum 3/8" with white glass board Kemlite products.	
29.0	ROOF-		
29.1	Construction - Smooth minimum 10 gauge alun	aluminium stressed-skin, walk-on style roof ninium.	

29.2	Roof bows - Hat type on 12 in. centres.	
29.3	Insulation - Two (2) inches, (R7 rating per inch), state type-	
29.4	Roof lining - 1/4 in. plywood covered with glass board (Kemlite) panel.	
30.0	STORAGE KICK-	
30.1	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, approx. 30" wide. Upper storage area shall be c/w a 2 inch lip.	
31.0	FLOOR-	
31.1	<u>Cross sills</u> - Full width 2 in. x 2 in. x 0.125 in. hollow structural Galvanized steel tubing or equivalent on 16 in. centres, state material-	
31.1.1	<u>Under-coating-</u> Sub-frame including cross-members to be sealed with <u>Line X products</u> protective coating. Coating shall be sprayed over the to protect the material from water, rust, rocks, and corrosion.	
31.2	Long sills- Structural C channels or equivalent, state material-	
31.3	Floor material- Extruded aluminium non-skid safety floor material-	
31.4	Insulation - 3" in. of spray foam urethane insulation on underside of floor	
32.0	<u>REAR DOORS-</u> (SEE REAR ELEVATION DRAWING)	
32.1	<u>Rear doors</u> - Two (2) hinged type, approx. 72" H X 30" W right hand door and 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 hinge system to achieve maxim fully opened positions.	
32.2	<u>Safety glass</u> - Two (2) required on right hand door, min. 20" H X 14" W each.	
32.3	Hinges - Three (3) heavy-duty stainless steel hinges per door, state type-	
32.4	Door Latch System - Manufacture's heavy duty standard slam action type. Rod-actuated with locking exterior handle.	
32.5	Door stays - Designed to hold rear doors in fully open position, "Grabber" U-style (Cast Products Inc.), no substitutes.	

33.0 INTERIOR BULKHEAD-

- 33.1 <u>**Bulkhead**</u>- Full width, 12 gauge aluminium with sufficient soundproofing, located directly behind third passenger seat.
- 33.2 **Bulkhead** shall be designed to permit full rearward seat travel with the seat in a comfortable reclined position. A 1" (inch) space shall be provided between the bulkhead and the seat to prevent rubbing.
- 33.3 <u>Bulkhead door</u> centre, swinging door with minimum 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.

34.0 <u>PASSENGER SIDE-</u> (SEE CURBSIDE INTERIOR ELEVATION DRAWING)

- 34.1 <u>Third Passenger / Storage Seat-</u> (3rd) passenger storage seat. Seat design to accommodate (1) one operator to use as a passenger seat during transportation. Storage seat shall be approx. 38" L x 24" D. Seat must be CSA and UL approved.
- 34.2 **Work bench** 102" L x 24" D with approx. 34 in. working height. Bench top to be laminated wood, approx. 2 in. thick.
- 34.3 <u>**Drawers</u>** Three (3) pull-out, 24" W x 24" D x 30" H, latch able, drawers to have heavy-duty sliders to maintain min. 300 lbs capacity.</u>
- 34.4 **<u>Storage cabinet # 1</u>-** 39"Wx 24" D x 30" H c/w two (2) height adjustable shelves. Cabinet shall have swinging, latch able doors.
- 34.5 **Storage cabinet # 2** 39"Wx 24" D x 30" H, c/w two (2) height adjustable shelves. To accommodate (1) one Webasto Air Top 3500 12-volt diesel.
- 34.5.1 <u>Interior Matting</u>- All interior, cabinets, drawers, closets, shelving, shall require rubber matting to protect under surfaces. (Note: roadside & curbside)
- 34.6 <u>Vice-</u> 5 in. Record with swivel mounted to top, right-hand side of work bench.
- 34.7 <u>Rear heater</u> -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 air flow as recommended by heater manufacture. <u>Intake air shall be</u> <u>located near upper outside wall in order to keep contaminants and</u> <u>dirt out of the air intake.</u>

34.8	Rear heater cover- Aluminium construction covering top and sides, removable using clamp fasteners or pull-down latches. Air intake end to be constructed for sufficient air flow as recommended by heater manufacture. Heater cover shall include a 2 inch top lip.	
34.9	<u>Rear Heater Control</u>- Shall be ergonomically located within driver's reach and easily serviceable. Exact mounting location to be determined at time of installation.	
34.10	Floor Mounting Ducting Locations- Mounting and ducting locations to be determined at pre-production production meeting.	
34.11	Storage cabinets and drawers -to be mounted on a 4 in. riser.	
34.12	Upper Workbench shelves - Three (3) 108" L X 12" wide, with a 2" wrap a lip, mounted 1' below ceiling to accommodate miscellaneous tools and equipment, min. 300 lbs Capacity each.	round
34.13	<u>Rear Floor Open space</u> - Remainder of curb-side interior to be open space.	
35.0	DRIVER SIDE (SEE INTERIOR ROADSIDE ELEVATION DRAWING)	
35.1	Computer Work station -48" working height, approx. 38" W X 24" D, bottom 24" left as open area, with three (3) 6"H X 38"W X 24" D drawers with heavy duty sliders. Wall mounted LED or fluorescent work light with switch on fixture. Location behind drivers seat directly in front of bulkhead wall. Exact working height to be determined upon pre-production meeting.	
35.2	Literature holder- Weather Guard model 8870, located near computer station area.	
35.3	<u>Clothing storage compartment</u> - 72" H x 30" W x 24" D approx., aluminium construction mounted on 4" riser, with double over lapping doors and latch able lock located on driver.	
35.3.1	Shelf - full width and full depth, located 18 in. from top of locker with 1 in. front lip.	
35.3.2	<u>Clothes hooks</u> - five (5) hooks, one right and left side, three on rear side.	
35.4.3	Shelving Material - 10 gauge aluminium minimum, state-	
35.5	<u>Cabinet (1)-</u> Minimum 30" W- Cabinet (1) with 2 heavy duty deep sliding Drawers to accommodate 300 lbs.	

35.6	<u>Steamer hose & storage spool</u> – Each unit shall complete with a hose Reel including 50 ft. of steam hosing, hand-crank type, retractable. State make & model-	
35.7	Shelving Unit- Approx. 32"W X 80"H X 24". One (1) fixed shelf and 32"H with 1" lip, and (2) adjustable shelves with a 1"lip.	
35.8	Boot holder - aluminium, mounting location to be pre-determined prior to production.	
35.9	Wall Hose Bracket - Wall Hose Bracket mount located at rear drivers Side wall. Exact location to be determined during pre-production meet.	
36.0	MISCELLANEOUS	
36.1	Rear bumper - heavy-duty full width, bolted to chassis frame, approx. 9 in. deep with grip strut step surface and recess for pintle hitch mount. Bumper to have boot brush mounted clear of operators exit and entry.	
36.2	Bumper -shall be bolted to chassis frame and to van body, structurally reinforced and fastened with Grade 8 bolts. Shall provide a 15" in maximum low step height from ground level. Exact height to be discussed at a pre-production meeting.	1
36.3	<u>Mud flaps</u> - No-name black rubber type with steel bar anti-sail brackets, installed in front and rear tires	
36.4	Directional Signal- One (1) ArrowStik Code 3 Inc. P/N AS-847HS C/w 8 segment ArrowStik, 47 inch length, 1156 bulbs, basic controller mounting Location to be rear facing above roofline at rear of van c/w branch guard. Exact location of in-cab controller to be determined at time of installation.	
36.5	Valve key Doors and Tubes - 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° angle in a false wall on interior of van, complete with rear access doors. Doors must be 14" higher than top tube. Note: All tubes to be staggered vertically and spaced accordingly. Refer to Rear Elevation Drawing. Dimensions approximately 8" W X 45"H. The key compartment shall be able to accommodate 12 ft.keys with also a maximum handle with of 28 " in length. Exact dimensions and spacing will be determined upon pre-production meeting.	
36.6	<u>Tubes</u> - shall provide for adequate drainage to exterior of van for cleaning purposes	
36.7	Rear access door handles - Tri-mark, stainless steel, two stage, paddle type handles.	

- 36.8 <u>**Roof vent-**</u> (2) Fan-Tastic, model 4000 power vents with 3 speed reversible fan, installed in roof of cargo area, switch panel actuated. See Interior Floor Plan for location.
- 36.9 **Exhaust** Horizontal muffler Located under cab to exit driver side in front or rear drive axle. Exhaust shall be located to provide minimal obstruction for rear access doors and lighting. Exact exhaust exit location to be determined upon pre-production meet.
- 36.15 <u>Exhaust modifications-</u> on underside of vehicle shall be routed over rear axle. <u>All exhaust modifications shall meet the requirements of the OEM chassis manufacturer.</u>
- 36.16 <u>Hose Exit ports</u>- Hose exit port to be determined upon pre-production Meet. Port must be of latch style. Two (2) port required.
- 36.17 Exterior Storage- two (2) required, one (1) per side, <u>aluminium</u> construction under-body, frame mounted, approx. 6'L X 17" H X 20" D each. Driver side storage box to have a 24" divided slit partition and will require venting to outside in order to store fuel containers and oil containers. Compartment dimensions shall be designed to provide sufficient ground Clearance. Complete with compartment floor liner- Heavy Duty rubber matting required, state Dimensions-
- 36.18 **<u>2-way radio circuit</u>**-Independent 20 Amp circuit, ignition powered, wired under dash loose, labelled.
- 36.19 Flare kit three (3) triangular reflectors, CVSA approved.
- 36.20 **<u>Fire Extinguisher</u>** (20) lbs. pound Fire Extinguisher mounted secured and accessible to operators.
- 36.21 <u>Third Seat Exterior Window</u>- 20" X 20" exterior window beside 3rd passenger seat. Window to be vented type.
- 36.22 <u>Wall Hooks-</u> Twelve (12) heavy-duty wall hooks, locations to be determined during pre-production meet.
- 36.23 <u>Facility Entrance Dimensions</u>- Completed vehicle must clear shop with width of the doors of 117" W X 124" H. It is the responsibility of the Contractor to facilitate the completed design fits the shop doors at the <u>Water & Waste</u> <u>Department located at 552 Plinquet Street Winnipeg, Manitoba.</u>

37.0 INTERIOR LIGHTING LAYOUT

- 37.1 Interior lights- Four (4) Groté 61511, actuated through switch panel
- 37.2 <u>Light Mounting Locations</u>- Five (5) 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.

37.3	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.	
37.4	Map Light- Passenger side mounted, Hella 87141. Exact location to be determined at time of installation.	
38.0	ELECTRICAL & LIGHTING	
38.1	All vehicle lighting shall conform to C.M.V.S.S. and Manitoba Highway Traffic Act requirements.	
38.2	All body supplier installed wiring- shall be numbered, colour coded, loomed, properly secured and protected from damage.	
38.3	All electrical connectors- shall be crimped and soldered, then sealed using heat shrink tubing.	
38.4	All joining of wires- shall be <u>soldered</u> and sealed using heat shrink tubing (crimp on electrical connectors for joining wires are not acceptable).	
38.5	<u>All holes</u> required for routing wiring shall be drilled (not punched), grommetted and sealed as required.	
38.6	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.	
39.0	SUPPLIER INSTALLED LIGHTING SHALL BE LED TRUCK LITE (EXCEPT WHERE OTHERWISE NOTED) AND SHALL INCLUDE THE FOLLOWING:	
39.1	Combination Stop, turn and tail lights – P/N 44302R, one (1) per side wir P/N 40700 mounting grommets, flush or recessed mounted.	th
39.2	High mounted stop, turn and tail lamps - P/N 44302R, one (1) per side w P/N 40700 mounting grommets, flush or recessed mounted.	<i>v</i> ith
39.3	Turn signal flash rate- 70-90 flashes per minute.	
39.4	Back-up lights- P/N 44206C, one (1) per side with 40700 mounting grommets.	
39.5	Three Light Cluster- Three (3) only P/N 10250R with P/N 10700 mounting grommets.	
39.6	Clearance Lights- P/N 10250r and 10250Y with P/N 10700 mounting grommets.	
39.7	License plate lamp – P/N 15040, complete with license plate bracket	

39.8	Lighting harnesses – Truck-Lite 50 Series Harness System, properly routed and secured.					
39.9	<u>Junction box</u> – P/N 50400, complete with necessary compression fittings, required for all vehicle lighting harness connections, located inside rear of truck frame.					
39.10	All plug-in connectors shall be coated with Truck-Lite NYK compound prior to assembly.					
39.11	Back-up alarm – STAR 62-097, 97 dB(A) rating, installed at rear of of body, located to be protected from damage.					
39.12	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.					
39.13	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.					
39.14	<u>Warning light system</u> - six (6) Truck-Lite 92690Y lights, amber lens, switch Panel actuated.					
39.15	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.					
39.16	Lights shall be sequentially wired in alternating flash pattern					
39.17	Side mounted scene lights- Four (4) Whelen 90E000ZR c/w trim ring, installed near roofline, one (1) per side, mounted approx. 4 inches to the rear of the warning lights, switch panel actuated on two separate switches.					
39.18	Inverter- Xantrex RS 2000, powered from auxiliary battery, switch panelactuated, mounted above driver in storage kick area.					
39.19	Electrical Outlets- Five (5) 120 Volt duplex outlets required, GFI, CSA approved. Two (2) located over workbench, one (1) located at rear drivers side, one in computer stations to operate computer, one (1) to be located van body exterior, locations to be determined at time of production.					
39.20	Trailer connector - 6-pole, Dominion Auto 76-4009, wired as per					

Detailed Specifications 06010 installed in hitch plate.

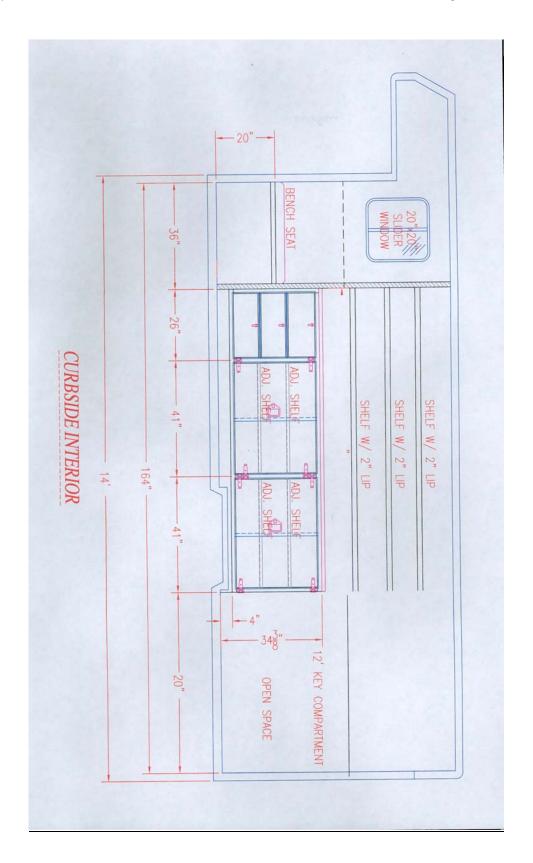
39.21 <u>Continuous duty solenoid</u> - Cole Hersee part # 24059 or 24016, controlled by "ACC" & "RUN" on ignition switch.

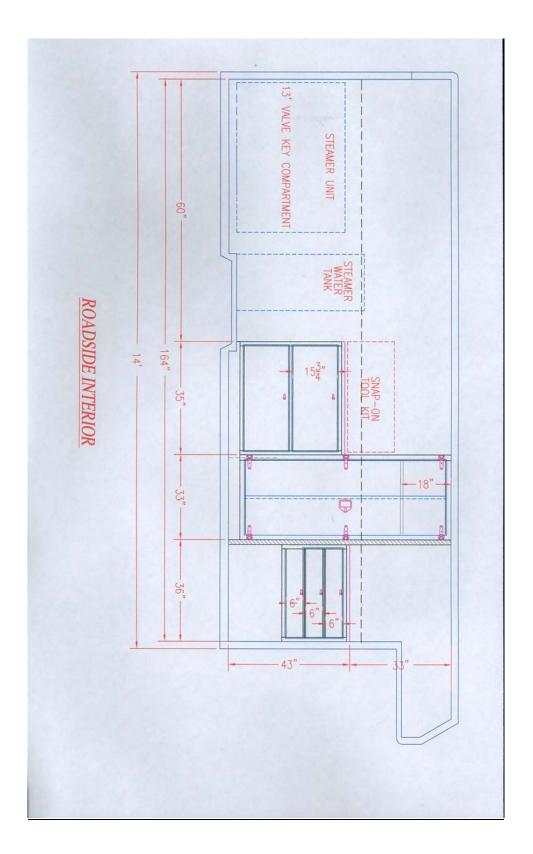
40.0 INSTALLATION

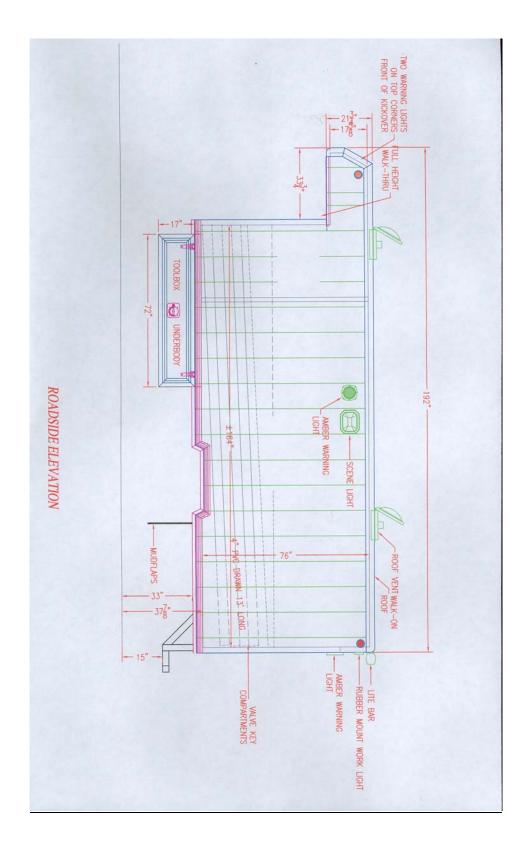
- 40.1 Upon request by the Contract Administrator, Bidders shall supply a final diagram and description showing the body manufacturers recommended body to chassis mount. Diagrams shall be supplied within twenty (20) Calendar days upon request.
- 40.2 Mounting brackets shall be bolted to chassis frame using Grade-8 fasteners.
- 40.3 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.
- 40.4 Tire Clearance- Bumper pad clearance plus 3" minimum
- 40.5 Operator Entry- The van body shall be mounted as low as practicable and shall incorporate wheel wells.
- 40.6 All holes for latches, outlets, etc. shall be neatly cut and de-burred
- 40.7 All edges and corners shall be rounded to prevent accidental injury
- 40.8 Any holes required in the chassis frame web must be drilled and reamed to fit bolts, no exceptions.
- 40.9 Drilling on chassis frame flanges are not permitted.
- 40.10 Welding on the chassis frame is not permitted.

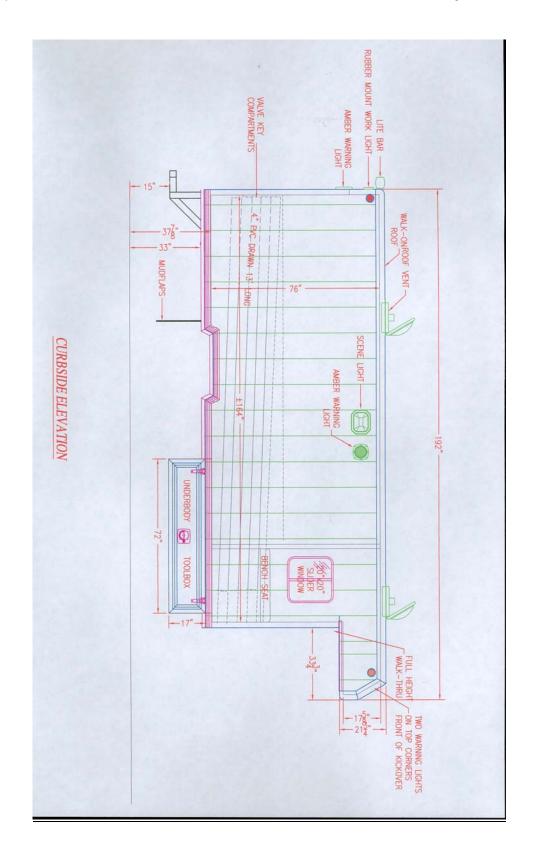
41.0 <u>FINISH</u>

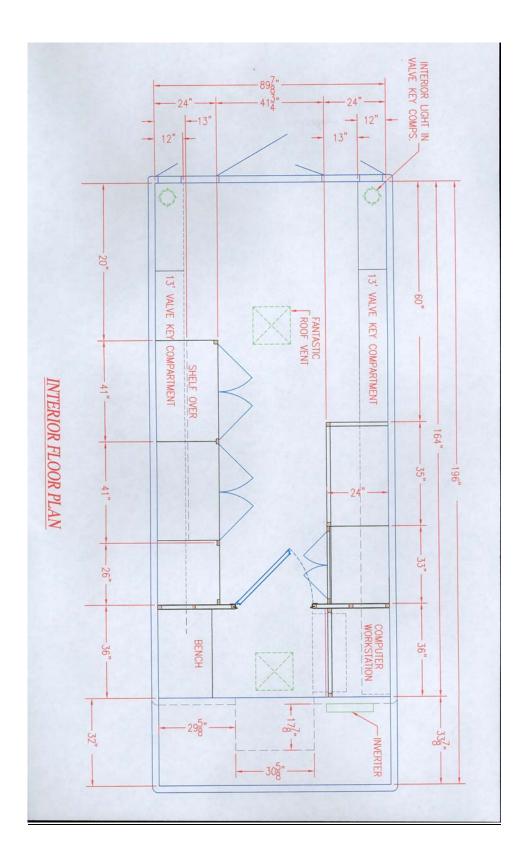
- 41.1 The complete van body shall be properly cleaned, primed and finished as follows:
 - i) Exterior entire van body (excluding roof) shall be painted white, to match chassis cab with two (2) coats of polyurethane Enamel, Dupont Imron or Akzo Sikkens.
 - ii) Interior brackets, mounts, and any other unfinished Cabinets etc., shall be painted white with two coats of White enamel.
 - iii) Bumpers Grey or argent.
 - iv) Rear Bumper-painted with two (3) coats of grey argent Enamel.

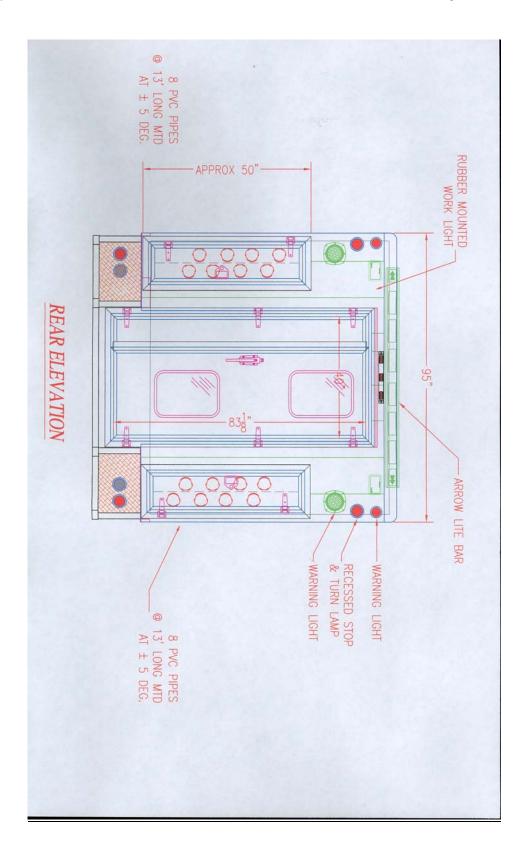












42.0 PERFORMANCE RELIABILITY

- 42.1 The responsibility for the design of the complete unit, its performance and reliability shall rest upon the Contractor.
- 42.2 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.
- 42.3 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.

43.0 WARRANTY

- 43.1 The Contractor shall warrant <u>all body equipment</u> and all parts therof, 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 <u>one (1) year</u> from the date the equipment is put into service by the City of Winnipeg.
- 43.1.1 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 (Clause 42.0 <u>Performance Reliability</u>). The new warranty period shall be effective from the date of acceptance of the repaired or replaced article.
- 43.1.2 The Contractor shall warrant <u>all chassis equipment</u> 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 <u>three (3) years or 60,000 km</u> bumper to bumper (lights excluded) from the date the equipment is put into service by the City of Winnipeg.
- 43.2 The City of Winnipeg may choose to purchase extended warranty on the Chassis upon initial purchase. (Note: these figures do impact the Form B: Prices nor is evaluated. Please state the prices for the following Extended Warranty:
 - i) <u>Extended Engine Warranty</u> (Covers all the engine) 84 months (7) years- 150,000 km's.

State- \$____

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	iii)	Towing Coverage for 60 months (5) years 161,000 km's.	State-\$	
	iv)	Allison transmission warranty 5 years, unlimited km's.	State-\$	
			State-\$	
	v)	Axle warranty 5 years, unlimited km's.	Siale-\$	
44.0	<u>MANUA</u>	<u>ALS</u>		
44.1	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:			
44.1.1	Operator's manual – one (1) per unit. Operator's manuals are required for cab & chassis, steamer, inverter and heater.			
44.1.2	Parts, repair and service manuals, including preventative maintenance schedules for the life of unit – two (2) total, (CD preferred). (2) parts, repair and service manuals are required for cab & chassis and rear heater.			
44.2	Data Co	ollection Sheets- Data Collection Sheets to be completely		
		filled out. See clause D.6 (PMDCS)		
45.0	PRODU	ICTION DRAWINGS		
45.1	producti	gs – the Contractor shall submit for approval, detailed on drawings of the interior and exterior of the van body prior ruction upon request of the Contract Administrator.		
46.0	DELIVE	RY DATE		
46.1	with the Agency <u>fifty-two</u> of Contr	uipment shall be serviced, ready for operation and delivered F.O.E freight prepaid to the City of Winnipeg, Fleet Management Office, 185 Techumseh Street, Winnipeg, Manitoba <u>within</u> <u>o (52) calendar weeks</u> from the date of official notification of awa ract. The Contractor shall contact the Contract Administrator prior ery of the equipment.	rd	