FORM A: BID (See B8)

1.	Contract Title	SUPPLY AND DELIVER RESCUE VEHICLES	Y OF RAPID DEPLOYEMENT W	/ATER
2.	Bidder			
		Name of Bidder		
		Usual Business Name of Bidde	er as it appears on Invoice (if different from	m 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 a	oplicable)	
		The Bidder is:		
	(Choose one)	a sole proprietor		
		a partnership		
		a corporation		
		carrying on business und	ler the above name.	
3.	Contact Person	The Bidder hereby authorithe Bidder for purposes of	orizes the following contact pers of the Bid.	on to represent
		Contact Person	Title	
		Telephone Number	Facsimile Number	
		Email Address		
1.	Definitions	All capitalized terms us	sed 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 accordanc Contract for the price(s), in Canadian funds, set out on Form appended hereto.	
6.	Commencement of the Work	The Bidder agrees that no Work shall commence until he receipt of a notice of award from the Award Authority authocommencement of the Work.	
7.	Contract	The Bidder agrees that the Bid Opportunity in its entirety deemed to be incorporated in and to form a part of notwithstanding that not all parts thereof are necessarily atta accompany this Bid.	this offer
8.	Addenda	The Bidder certifies that the following addenda have been recagrees 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 irrevocabl period of sixty (60) Calendar Days following the Submission D	
10.	Signatures	The Bidder or the Bidder's authorized official or officials have s	igned 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 ab	pove)
		(Print here name and official capacity of individual whose signature appears ab	pove)

FORM B: PRICES

(See B9)

SUPPLY AND DELIVERY OF RAPID DEPLOYEMENT WATER RESCUE VEHICLES

UNIT PRICES

01111	11020				
ITEM NO.	DESCRIPTION	SPEC. REF.	UNIT	QUANTITY	UNIT PRICE
1.	Rapid Deployment Water Rescue Vehicle	15008	Each	2	

FORM N: DETAILED SPECIFICATIONS 15008

1.0 DESCRIPTION-

- 1.1 Shall be a nominal approximately 20' to 22' aluminium van bodies or extruded bodies installed on 2015 or newer conventional low profile conventional chassis supplied by the Successful Bidder. The completed vehicles shall be furnished complete and ready for use with all features and auxiliary equipment as described herein.
- 1.2 It will be the responsibility of the Bidder to inform the City of any errors or omissions in these specifications, for under this Contract the Contractor shall be held responsible for the satisfactory operational function of the vehicles.

2.0 SAFETY STANDARDS

- 2.1 All applicable SAE standards form an integral part of these specifications and shall have precedence in any conflict concerning minimum acceptable standards.
- 2.2 The complete Rapid Deployment Water Rescue Vehicles and all of its components and attachments shall comply with the applicable regulations.
- 2.3 The <u>Rapid Deployment Water Rescue Vehicles</u> must comply with current (NFPA) National Fire Protection Association Standard latest revisions, form an integral part of these specifications and any conflict with the specifications shall be brought to the attention of the Contract Administrator in Clause D4 of the Supplemental Conditions.
- 2.4 All applicable SAE standards form an integral part of the **Rapid Deployment Water Rescue Vehicles** specifications and shall have precedence in any conflict concerning minimum acceptable standards.
- 2.5 The Rapid Deployment Water Rescue Vehicles and all associated equipment as stated in the Contract shall comply with the applicable standards:
 - (NFPA) National Fire Protection Association Standard latest revisions
 - Highway Traffic Act
 - Canadian Motor Vehicle Safety Standards
 - Transport Canada
 - National Safety Mark, NSM
 - Manitoba/Winnipeg Safety and Health Act, Parts 12, 22
 - Canadian Standards Association
 - Society of Automotive Engineers
 - City of Winnipeg Lighting Visibility Standard = http://winnipeg.ca/matmgt/pdfs/PublicWorksEquipLightingVisibility.pdf
 - Under Writers of Canada -ULC
- 2.6 In Canada, Modification to new vehicles can only be done at facilities that are recognized by Transport Canada. All of these facilities must have a National Safety Mark from Transport Canada. Transport Canada National Safety Mark is a label that indicates that the modifications are compliant with all current Canadian Motor Vehicle Safety Standards (CMVSS).

STATE (NSM) #-	

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

3.0 SERVICE FACILITY & QUALIFICATIONS OF MANUFACTURER

3.1 For the purpose of warranty repairs and service support, the Contractor shall have an authorized service facility located within 25 kilometres of the City of Winnipeg

	Fire Department Emergency Mechanical Services Branch located at 2546 McPhillips Street, Winnipeg Manitoba (no exceptions). The facility or a portion thereof, shall be dedicated to the service and maintenance of Rapid Deployment Water Rescue Vehicles 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.	
3.2	All components of the Rapid Deployment Water Rescue Vehicles requiring regular scheduled servicing or lubrication shall be easily accessible. The design and construction of the Rapid Deployment Water Rescue Vehicles shall be such that the removal of drive train components including, but not limited to, the engine, transmission and transfer case, can be accomplished without dismantling the Rapid Deployment Water Rescue Vehicle body.	
3.3	The manufacturer of the Rapid Deployment Water Rescue Vehicles shall have five (5) years continuous experience manufacturing Emergency Response Vehicles. The manufacturer shall have in effect a complete and documented quality control program ensuring compliance with all applicable standards.	
3.4	A list of at least five (5) references for Emergency Response Vehicles. shall be included. The list shall include the fire department's name, location, contact person, telephone number and the length of time the Rapid Deployment Water Rescue Unit has been in service. The manufacturer of the Emergency Response Vehicles shall have successfully demonstrated the operation of the type of Emergency Response Vehicles being offered in cold weather (-40°C) conditions.	
	1	
3.5	The Contract Administrator shall determine if the service facility meets the	

4.0 <u>INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS</u>

- 4.1 Where requested to do so, all items in these specifications must be answered indicating compliance or non-compliance. <u>Bidders shall state "yes" for 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.

5.0 INTENDED USE AND APPLICATION-

required qualifications.

- The intended use of these vehicles is a 24 hour, 7 days a week Water Rescue Vehicles operated by the City of Winnipeg Fire Paramedic Services. These units must be able to rapidly deploy a Zodiac style boat to affect a water rescue. The intention of these vehicles is to turn off the chassis engine, and have an Auxiliary Power Unit (APU) power the following:
 - LED Exterior Lights including LED Command Light tower as specified in this tender
 - LED Interior Lights as specified in this tender
 - All LED compartment lighting as specified in this tender

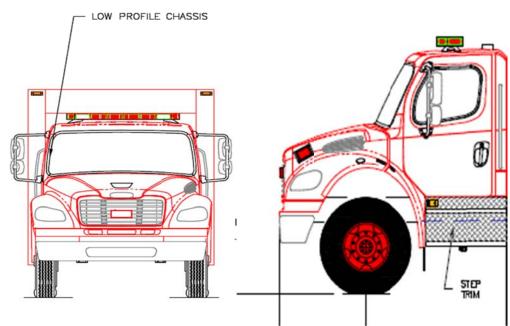
- Heating as specified in this tender
- Air Conditioning as specified in this tender
- Exterior and Interior Electric Receptacles as specified in this tender
- WFPS Tool List as specified in this tender
- 5.2 The purpose is to continue to provide the essential services without the chassis engine running, which causes unnecessary idling, fuel consumptions, environmental impacts, and decreased truck life cycle of the chassis engine. Given the above, it is the responsibility of the bidder to notify the Contract Administrator of any design or performance constraints including complete weight distribution of all equipment within.

6.0	MAKE/MODEL-
6.1	State make and model of Vehicle and Body being bid-
6.2	Chassis-
6.3	Body
7.0	SUB-CONTRACTORS-
7.1	The bidder shall list all of their subcontractors (Sub-Contractor name, contact, address, phone #, fax, e-mail address)
	•
	•
	•
7.2	When required, the Contractor shall assign the warranty to the City of Winnipeg to improve logistics, unnecessary down time, regarding warrantable failures.
8.0	SPECIFICATIONS-
	GVWR /WEIGHT DISTRIBUTION-
8.1	The Complete Rapid Deployment Water Rescue Unit shall not exceed the City of Winnipeg's limit for gross vehicle weight, axle and tire loads.
	Note: The City of Winnipeg and the Province of Manitoba limits the gross vehicle weight and axle and tire loads to:
•	Front axle (steering axle) – 7300 kg (16,094 lbs.).
•	Rear axle (single axle) – 9100 kg (20,062 lbs.).
•	Tire load – 9 kilograms for each millimetre width of tire (approx. 500 lbs. per inch of tire width).
•	Bidder to provide Weight distribution documentation
8.2	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 five (5) operators, full of liquid, and all equipment and any attachments.

- 8.3 Payload- State available payload including all components, tools, to accommodate a Zodiac Classic Mark 1 (11'6") aluminum boat, (2) Yamaha 25F out board engines, and five (5) 300 lbs. operators-
- 9.0 CHASSIS SPECIFICATIONS- (LOW PROFILE DESIGN TO ACCOMEDATE ENTRY AND EXIT HEIGHTS. BIDDER SHALL PROVIDE THE CONTRACT ADMINISTRATOR PROOF AND DOCUMENTATION THAT THE CHASSIS IS INDEED A LOW PROFILE CHASSIS)



- 9.1 Chassis must be provided from <u>a local Winnipeg major truck manufacturer</u>. No "home-made" proprietary truck chassis will be accepted.
- 9.2 State make & model-

10.0 WEIGHTS-

10.1 **GVWR** Approx. 24,000 lbs. _____

10.2 **FRONT GVWR** Approx. 9,000 lbs. _____

10.3 **REAR GVWR** Approx. 15,000 lbs.

10.4 **GCWR** Gross Combined Weight Rating, **state-**

10.5 **GAWR** Gross Actual Weight Rating, **state-**

11.0 <u>DIMENSIONS</u>-

11.1 **WHEELBASE** - As required for an approx. 22 ft. body

measurement. State WB-

11.2 **CAB TO AXLE** - As required for an approx. 22 ft. body

measurement. State CA-

11.3	AFTER FRAME -	As required for an approx. 22 ft. body measureme State AF -	nt.
12.0	ENGINE-		
12.1	Туре	Cummins Diesel Tier IV Final -Engines shall be warranted to use biodiesel at a B10 blend level (10% biodiesel to 90% ultra low sulphur diesel), where the biodiesel will meet product specification ASTM D 6751 to ensure fuel quality.(Emergency Service Vehicle) rated, state model-	n
12.2	Horsepower	330 hp gross (Emergency rated high output horsepower)	
12.3	Torque	800 lb-ft (Emergency rated rated high output torque)	
12.4	Engine shut down	Low oil pressure / high water temperature	
12.5	Anti-idling	Programmable anti-idling shut down	
12.6	Air intake warmer	required	
12.7	Fuel Shut-off	Electric solenoid type	
12.8	Air cleaner	Dry type standard filter element, with ember screen	
12.9	Air intake restriction	Dash mounted restriction indicator	
12.10	Oil drain plug	Magnetic type	
12.11	Oil filter	Full flow, spin-on type	
12.12	Fuel filter	Spin-on type	
12.13	Fuel/water separator	Heated Drainable, mounted under hood, located to be protected from road spray and not to impede with body installation. State location-	
12.14	Fuel line primer pump	required	
12.15	Block heater	Immersion type, 1000 Watt w/ covered recessed male plug, located under driver's side door	
12.16	Coolant	Extended Life coolant, antifreeze to -34°F	
12.17	Coolant filter	required	
12.18	Coolant hoses	Premium type or Gates Blue Stripe	
12.19	Fan Drive	thermostatically controlled, automatic type	
12.20	Air compressor	Air compressor required with 13 cfm	

12.21	Air compressor option	State if air compressor with higher cfm is available and price-	\$
13.0	ELECTRICAL SYSTEM-		
13.1	Electrical system	Multiplexed only acceptable-	
13.2	Alternator	Delco Remy 240 Amp, or equivalent state-	
13.3	Starter	Delco Remy 29 MT or equivalent , state-	
13.4	Circuit breakers	Auto-reset, readily accessible	
13.5	Batteries	Three batteries (3), 12-volt, group 31, 2850 CCA combined capacity, must be maintenance free batteries.	
13.6	Battery Option	State optional price of (4 th) battery if available-	
13.7	Battery Box	Under cab or frame mounted c/w enclosure. Not to impede with body installation, state location-	
13.8	Remote boost terminal	Remote battery boost terminal, protected from road spray, covered, state location-	
13.9	Marker lights	LED Cab marker lights	
13.10	Accessory switches	Twelve (12) multiplex programmable dash mounted rocker switches required, all switches complete and wired for body installation, labelled and backlit.	
14.0	EXHAUST SYSTEM-		
14.1	Exhaust System	The tailpipe configuration must be compatible for use with a "Plymovent" automatic exhaust disconnection system and shall include the installation of the appropriate adapter. Must be on passenger side. Preferably underneath of R3	
15.0	TRANSMISSION-		
15.1	Model	Emergency Rated EVS 3000 Allison transmission with PTO provision suitable for requested horsepower, torque, GVWR, and application.	
15.2	Shift selector	Dash mounted shift selector	
15.3	Cooling capacity	As per manufacturer's recommendation for Severe duty cycle.	
15.4	Oil level dipstick	Bayonet type with high and low level markings	
15.5	Trans. drain plug	Magnetic type	

16.0	FRONT AXLE-		
16.1	Front axle type	7000-9000 lbs. capacity., state make and model	l
17.0	REAR AXLE-		
17.1	Rear axle type	12,500-15,000 lbs. capacity., state make and model-	
17.2	Ratio	Rated 120 km/hr maximum top speed, state ratio-	
17.3	Differential	Rear limited slip differential of differential lock up	
18.0	HUB SEALS-		
18.1	Туре	Oil lubricated front and rear	
19.0	FRONT SUSPENSION-		
19.1	Front Suspension Type	Taper leaf front suspension, 7,000 lbs. capacity	
20.0	REAR SUSPENSION-		
20.1	Rear Suspension Type	Programmable air ride suspension to dump With park brake, 12,000 lbs. capacity, state make and model-	
20.2	Suspension Control	Manual and programmable dump valve for air suspension c/w dash mounted switch, indicator light, gauge & buzzer.	
21.0	WHEELS-		
21.1	Front	19.5 x 6.75 polished aluminium disk, hub piloted Must meet requested GVWR	
21.2	Rear	19.5 x 6.75 polished aluminium disk, hub piloted Must meet requested GVWR	
22.0	TIRES FRONT-		
22.1	Front Tires	Must be low profile steer tires, suitable for Manitoba weather conditions, (mud, snow, rain etc.) Preferred Michelin	
22.2	Size	245/70R/19.5 Low Profile, must meet requested GVWR	
23.0	TIRES REAR-		
23.1	Rear Tires	Must be low profile drive tires, suitable for Manitoba weather conditions, (mud, snow, rain etc.) Preferred Michelin XDS2	

23.2	Size	245/70R/19.5 Low Profile, must meet requested GVWR	
23.3	Spare Tire and Rim-	Required	
24.0	FRAME-		
24.1	Туре	Single rail, suitable for requested GVWR and height requirements, outside frame clear of components for body installation.	
24.2	Frame height	Frame height from ground level to top of frame Rail shall not exceed approx. 29-32" unladen State-	
24.3	Application	Suitable for cutaway van body application	
24.4	Chassis fasteners	Grade-8 threaded hex headed frame fasteners	
24.5	After frame	As required for van body application	
25.0	STEERING-		
25.1	Steering Type	Power steering required	
26.0	BRAKES-		
26.1	Туре	Air Brakes, ABS, front & rear brakes	
26.2	Parking brake	State type and location park brake valve-	
26.226.3	Parking brake Moisture ejector	State type and location park brake valve- Heated	
	-		
26.3	Moisture ejector	Heated Cable operated, required on each	
26.3 26.4	Moisture ejector Drain valves	Heated Cable operated, required on each air tank	
26.326.426.5	Moisture ejector Drain valves Air dryer	Heated Cable operated, required on each air tank	
26.326.426.527.0	Moisture ejector Drain valves Air dryer FUEL TANKS-	Heated Cable operated, required on each air tank Spin on Heated Air Dryer required	
26.3 26.4 26.5 27.0 27.1	Moisture ejector Drain valves Air dryer FUEL TANKS- Type	Heated Cable operated, required on each air tank Spin on Heated Air Dryer required 40 Gallon (151 L) aluminium fuel tank. State if an additional tank can be installed, But not impede in with the body installation- Steel straps with minimum 1/16 in. rubber or	
26.3 26.4 26.5 27.0 27.1 27.2	Moisture ejector Drain valves Air dryer FUEL TANKS- Type Option- Larger Tank	Heated Cable operated, required on each air tank Spin on Heated Air Dryer required 40 Gallon (151 L) aluminium fuel tank. State if an additional tank can be installed, But not impede in with the body installation-	
26.3 26.4 26.5 27.0 27.1 27.2	Moisture ejector Drain valves Air dryer FUEL TANKS- Type Option- Larger Tank Tank straps	Heated Cable operated, required on each air tank Spin on Heated Air Dryer required 40 Gallon (151 L) aluminium fuel tank. State if an additional tank can be installed, But not impede in with the body installation- Steel straps with minimum 1/16 in. rubber or neoprene isolators to prevent galvanic corrosion.	
26.3 26.4 26.5 27.0 27.1 27.2 27.3	Moisture ejector Drain valves Air dryer FUEL TANKS- Type Option- Larger Tank Tank straps Fuel separator	Heated Cable operated, required on each air tank Spin on Heated Air Dryer required 40 Gallon (151 L) aluminium fuel tank. State if an additional tank can be installed, But not impede in with the body installation- Steel straps with minimum 1/16 in. rubber or neoprene isolators to prevent galvanic corrosion.	

28.3	Front axle to (BBC)	106-108 "front axle to back of cab measurement-	
28.4	Front grille	OEM Standard	
28.5	Cab interior / trim	Premium Insulation including cloth or vinyl headliner on roof, door panels and rear interior of cab.	
28.6	Cab silencer package	Required for minimal decibel level	
28.7	Hood/Firewall/Engine	Insulated hood liner, engine cover and firewall	
28.8	Floor covering	Moulded vinyl floor covering with under-padding	
28.9	Floor mats	Two (2), rubber floor mats	
28.10	Driver's seat	One (1) Bostrom Air ride seat w/foldable armrests, vehicle seat sensors, heavy-duty cloth upholstery, lumbar support. Cordura Fabric	
28.11	Passenger seat	One (1) Bostrom Air ride seat w/foldable armrests, vehicle seat sensors, heavy-duty cloth upholstery, lumbar support. Cordura Fabric	
28.12	Sun visors	Dual flip-up type	
28.13	Steering wheel	Telescopic and Tilt steering	
28.14	12-Volt power outlet	Two (2) Required on dash	
28.15	Radio	Factory installed AM/FM/CD/with blue tooth	
28.16	Starter switch	Key operated c/w three (3) sets of keys	
28.17 A	Anti-theft Device	Vehicle Anti-theft switch to cut power to the Transmission.	
28.18	Interior light	Dome light with driver and passenger door switches	
28.19	Heater / Defroster	High output, capable of keeping all windows clear at an outside temperature of -35°F (-37°C)	
28.20	Air conditioning	High output air conditioning required	
28.21	Foot Pedals	Floor or hanging type brake and accelerator pedal State-	,
28.22	Horn	Dual electric, and (2) air horns	
28.23	Exterior mirrors	Westcoast style, heated, lighted, 2-way motorized adjustment, exterior mirrors to include convex mirrors, suitable for 102 in. equipment width.	
28.24	Down view mirror	Required over passenger door, 5" x 4" approx.	

28.25 28.26	Windows & windshield Windows and Locks	Factory tinted Power windows and locks	
28.27	Windshield wipers	Electric, intermittent	
28.28	Wiper blades	OEM Winter Wiper Blades	
28.29	Windshield washer	Electric, required with spray nozzles on wiper blades.	
28.30	Grab handles	Dual exterior grab handles	
28.31	Entrance steps	One each side, open grate / grip type with boot brush mounted on driver and passenger sides	
28.32	Winter-front	Heavy-duty vinyl w/twist lock or snap type fastene	ers
28.33	Safety equipment-	5 lbs First Fire Extinguisher and First Aid Kit, State recommended locations-	
29.0	INSTRUMENTATION-		
29.1	Oil pressure	Gauge	
29.2	Coolant temperature	Gauge	
29.3	Transmission oil temp.	Gauge	
29.4	LOP/HWT	Warning light and buzzer	
29.5	Voltmeter	Gauge	
29.6	Air reservoir pressure	Gauge with LAP warning light and buzzer	
29.7	Engine hour meter	Required, non-reset able type	
30.0	TOW HOOKS-		
30.1	Location	Readily accessible, front frame mounted, Closed eye hook type.	
31.0	FRONT BUMPER-		
31.1	Туре	Front bumper full width chrome	
31.2	Bumper horns-	Front facing forward bumper mounted air horns, Approx 18".	
32.0	COLOUR-	Арргох то .	
32.1	Paint –	Painted two tone, with bottom half Red (SIIKENS Brand Code 911662 and top half Black (SIKKENS Brand Code 910788) using a polyurethane enamel paint.	
32.2	Interior	Blue or grey	
32.3	Frame & suspension	Primed and finished with black Imron 5000 paint	

33.0 KUSHMAL AUTO EJECT-

33.1 Auto Eject System

Model: Kussmaul Auto Charge 1200 Pump Plus, Part #091-193-12 required

OPERATOR STATION ERGONOMICS

34.0 Cab or station layout should provide a comfortable seating position for the 5th to the 95th percentile of personnel. Figure 1 below illustrates the variance between a 5th to a 95th percentile of North American males and females when seated.

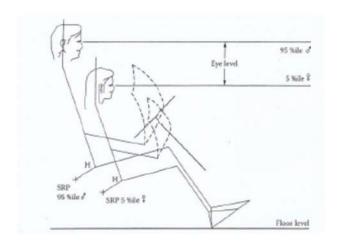
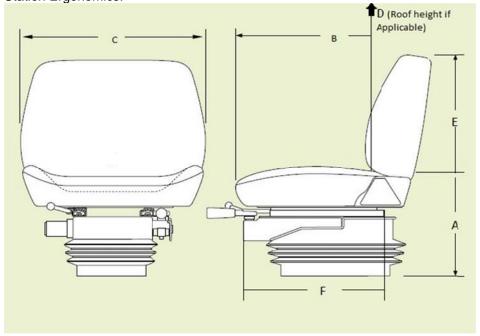


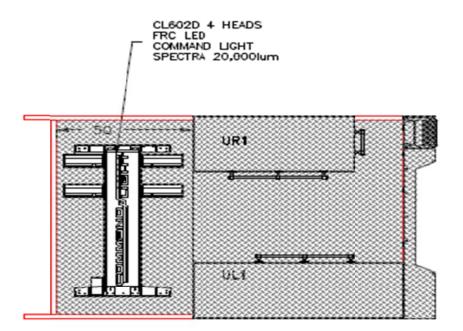
Figure 2: Use the below diagram to answer the specifications for Operator Station Ergonomics.



34.3	Seat length/depth (B)		State, seat length/depth in inches		
34.4	Seat width (C)	Seat width (C)		State, seat width in inches	
34.5	Cab height from applicable) (D)	Cab height from seat to roof (if applicable) (D)		State, cab height range in inches	
34.6	Back rest heigh	it (E)		State, back rest height in inches	
34.7	Seat travel rang	ge (F)		State, seat travel in inches	
34.8	Include any other ergonomic spectapplicable range	cifications and			
	WARRANTY-				
35.0	successful bidd	er shall provid	de all published	nd include all exclusions. The divery anty information upon delivery anty information.	
35.1	Basic Vehicle	One (1) year	, unlimited km,	state-	
35.2	Batteries	One (1) year	, unlimited km	state-	
35.3	Drivetrain	Two (2) year	s, unlimited km	state-	
35.4	Cab structure/ corrosion	Five (5) year	e unlimited km	o stato-	
35.5	Frame &				
35.6	Cab paint	One (1) year	or 100 000 km	state-	
35.7	Engine	Engine Three (3) years or 240 000 km state-			
35.8	Transmission	Two (2) year	s, unlimited km	state-	
35.9	Emissions (DPF	F) Five (5) yea	ars, unlimited k	m state-	
35.10	Axles, front & re	ear Two (2) y	ears or 161 00	0 km state-	
			WATER RES	SCUE BODY	
36.0	GENERAL DIMEI CONSTRUCTION			type or extruded aluminium, action method-	
36.1	Interior Cargo Le	ength-	•	to rear back roll up door approx. ed interior, state exact t-	
36.2	Overall Length-			length including chassis to rear bumper"-	
36.3	Overall Height-		Approx., 126-	-130", state exact height-	
36.4	Overall Width-		96-99" not inc	cluding mirrors	

36.5	Interior Height-	Approx., 78", finished height, state exact height-	
36.6	Floor Height-	Approx., 36" from ground level, state floor height-	
36.7	Unit Weight-	Total finished weight. State front & rear axle total finished weight. Bidder shall provide weight scale ticket upon delivery to ensure the submitted weights are accurate.	
		Total Weight- Front Axle- Rear Axle-	
37.0	INTERFACES/INSTALLATION	<u> -</u>	
37.1	Interfaces-	All interfaces between aluminium and steel are to be separated by 1/16 in"3M tape and are to be bolted through with stainless steel bolts and nonconductive bushings.	
37.2	Mounting-	Mounting brackets shall be bolted to chassis frame using Grade-8 fasteners. 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.	e
37.3	Tire Clearance-	Bumper pad clearance plus 3"	
37.4	Operator Entry-	The van body/extruded body shall be mounted as low as practicable and shall incorporate wheel wells.	
37.5	Quality-	All holes for latches, outlets, etc. shall be neatly cuand de-burred. Any holes required in the chassis frame web must be drilled and reamed to fit bolts, exceptions.	
37.6	Edges-	All edges and corners shall be rounded to prevent accidental injury	
37.7	Drilling-	Drilling on chassis frame flanges is not permitted.	
37.8	Welding-	Welding on the chassis frame is not permitted.	
38.0	WALL CONSTRUCTION-		
38.1	<u>Walls</u> -	Smooth aluminium, construction method to be either snap-lock panels - 0.125 in. thick on 12 in. centres; or frame and skin construction - 1½ in. "Z" type extrusions on 12 in. centres with 0.125 in. panels fastened with aluminium rivets. State construction method and thicknesses-	

39.0	FLOOR-		
39.1	Cross sills-	Full width 2 in. X 2 in. X 0.125 in. hollow Structural Galvanized or Stainless steel tubing or equivalent on 16 in. centres. State construction method and thicknesses-	
39.2	Long sills-	If applicable to van body type, Galvanized or Stainless steel structural C channels. State construction method and thicknesses-	
39.3	Interior Floor material-	Line X products ,Full Metal Jacket, Rhino Spray on Materials, state-	
40.0	ROOF-		
40.1	<u>Construction</u> -	Smooth aluminium stressed-skin, walk-on style roof 10 gauge aluminium. State construction method and thicknesses-	
40.2	Roof bows -	12 in. centres. State construction method and thicknesses-	
40.3	Roof lining -	Insulated, ¼ in. plywood or equivalent covered with glass board (Kemlite) panel.	
40.4	Roof vent-	(2) Fan-Tastic, model 4000 power vents or equivalent with 3 speeds and reversible fan, installed in roof of cargo area, switch panel actuated.	
40.5	Escape Hatch-	Roof Hatch required, state dimensions and exact location-	
40.6	Command Light-	Command Light CL602D (4) Heads FRC LED Command Light Spectra 20,000 lum.	



41.0 INSULATION-

41.1 Insulation-

3-4" in. of spray foam urethane insulation on underside of Exterior floor. 2-3" in. spray foam walls and ceiling **State** R7 rating-

42.0 <u>UNDERCOATING-</u>

42.1 **Under-coating-**

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

43.0 <u>DRIVER SIDE</u> <u>EXTERIOR</u>-

43.1 <u>Compartments</u>- All compartments shall be sealed plumbed for heat, with

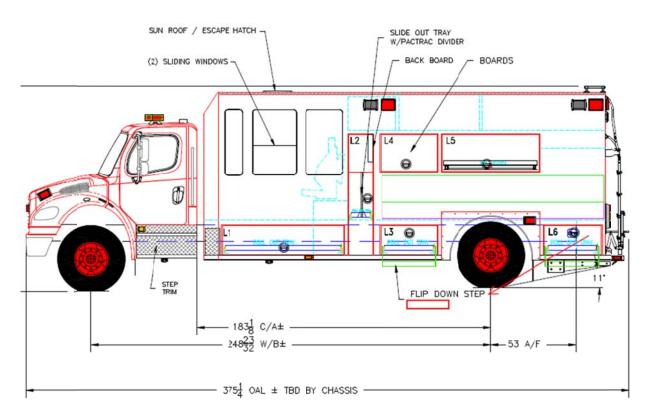
removable matting with LED Lighting on all 4 sides.

43.2 **Handles**- All compartment handles shall be heavy duty type

43.3 <u>Windows</u>- Two sliding type windows driver and passenger side.

43.4 **Approx. Dimensions**- As follows:

Compartment	L1	Roll-Out Tray	77W X 19H X 27D	
Compartment	L2	Roll-Out Tray	16W X 76H X 27/71/98D	
Compartment	L3	Roll-Out Tray, flip step down	36W X 19H X 27D	
Compartment	L4	Standard (not step down)	36W X 24H X 88/82D	
Compartment	L5	Tip Down	62.25W X 24H X 88/82D	
Compartment	16	Roll-Out Tray flip step down	36W X 19H X 27D	



44.0 PASSENGER SIDE EXTERIOR-

44.1 <u>Compartments</u>- All compartments shall be sealed plumbed for heat, with

removable matting with LED Lighting on all 4 sides.

44.2 **Handles**- All compartment handles shall be heavy duty type

44.3 Windows- One sliding type window

44.4 **Approx. Dimensions-** As follows:

Compartment	R1	Standard	16W X 19H X 27D
Compartment	R2	Roll-Up	26W X 34H X 27D
Compartment	R3	Standard	16W X 52H X 27D
Compartment	R4	Roll-Up, Roll-Out Tray, flip step	

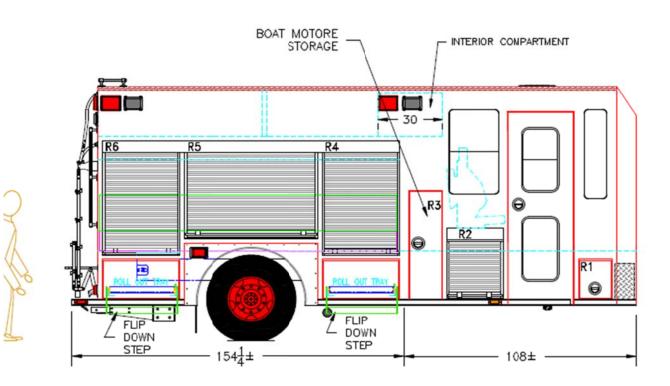
down 36W X 24H X 88/82D Roll-Up 62.25W X 47H X 10/16/27D

Compartment R5 Roll-Up 62.25W X 47H X Compartment R6 Roll-Up Roll-Out Tray, flip step

down 36W X 76H X 10/16/27D

44.5 Entry Door Handle-

Exterior door handle to be single lever time in order for Operator to use with large winter gloves. Exact type To be determined upon pre-production meeting and Approval of the Contract Administrator.



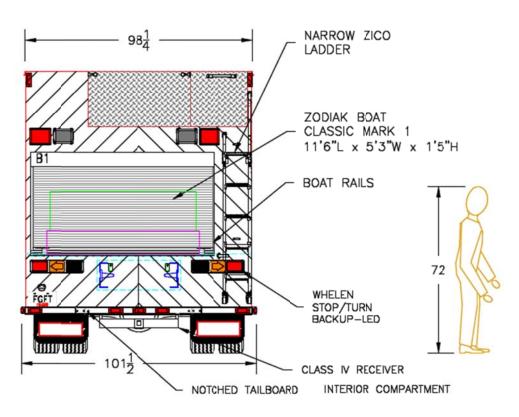
45.0 **REAR EXTERIOR-**45.1 Roll-up door type- B1 Roll-Up 80W X 45H Slide door-45.2 Back-up camera-Required, located approx. mid body above rear roll-up door. 45.3 Narrow Zico ladder located approx. passenger side rear Ladder-Body. State exact height from ground-45.4 **Boat Rails-**Boat rail system must be able to deploy a Zodiac Classic Mark 1 Aluminum (3.5M or 11'6"). System shall be Manual hydraulically assisted for one operator to lower the boat. Boat deployed and lowered to ground level. Exact height to be verified upon pre-production meeting. State Method, type, materials used-45.5 Rear bumper -Full width, heavy-duty step bumper, c/w a grip strut step surface. State depth-45.6 Bumper shall be bolted to chassis frame and to van body, **Bumper**structurally reinforced and fastened with Grade 8 bolts. Mounting height shall designed for easy entry and exit. 45.7 The bidder shall provide an incorporated Class IV rear Hitch Receiverhitch trailer receiver into the bumper design. 45.8 6-pole and 7 pole, Dominion Auto 76-4009, wired, **Trailer connector** installed in hitch plate. 45.9 **Continuous duty** solenoid-Cole Hersee part # 24059 or 24016, controlled by

"ACC" & "RUN" on ignition switch.

45.10 **Upper Body Compartments**-

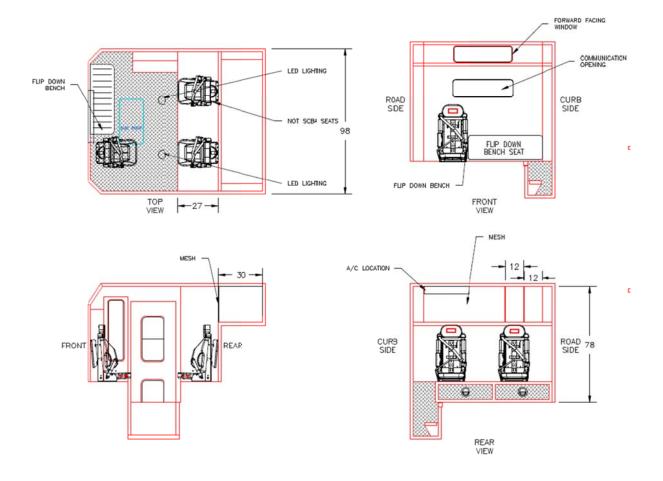
Required, **state** location and dimensions including the depth.-

45.11 Rear Tow Hooks- Required, state location-



46.0 CREW AREA SEATING

46.1	Seating Configuration-	Seating shall have (2) front facing Bostrom High back Dura wear bucket seats (non SCBA), (1) rear facing Bostrom High back Dura wear bucket seat (non SCBA) with flip up seat, and one Flip down Storage bench seat
46.2	Seat Covers-	All seating areas shall have seat covers which are removable to allow for ease of clean up
46.3	Seating Under storage-	Seats shall have under storage with flip up doors.
46.4	Overhead Storage-	Seating area shall have storage above seating overhead contained by mesh. State exact dimensions-



47.0 <u>INTERIOR-</u>

47.1 Complete interior lining -

Interior walls and ceiling must be lined with 3/8" plywood and <u>lined over</u> with white glass board Kemlite products or equivalent, **state-**

47.2 Light Mounting Locations-

Five (5) Bright High Intensity LED mounted above centre isle, evenly spaced. Three (3) Bright High Intensity LED mounted in crew Seating area. Dome lights shall be combination type with clear and red lenses. All lights shall be operated by door switches. Each light shall be equipped with an individual switch at the light.

Photos are for visual reference only

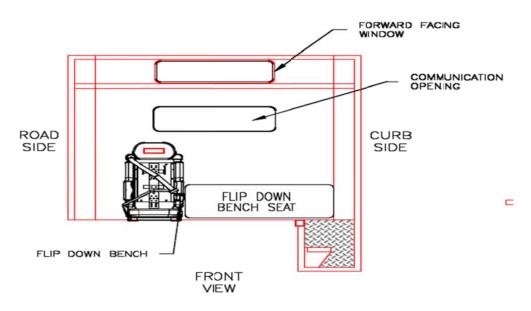


47.3 Map Light-

High Intensity LED, exact location to be determined upon pre-production meeting.

47.4 Communications-

The vehicles shall have a window from the cab Parallel to the body to communicate. It should be noted that the vehicles shall have a rubber boot connected from cab to body.



48.0 APU-

48.1 Intent/Requirements-

The intent of the APU is to provide van body heat, air conditioning and 12V and 110 V electrical power with reducing chassis idling by turning the chassis engine off). APU to provide provisions for the operations of all HVAC, communications, AC power outlets, engine block heater, lighting, and the scene light. The APU shall be located at exterior incorporated into the body design. **State** location and required dimensions for the APU-

48.2 Make & Model-

State APU make and model. APU 12KW or state equivalent.

48.3 **Performance**-

It will be the responsibility of the Bidder to inform

		the City of any errors or omissions in these APU specifications, for under this Contract the Contractor shall be held responsible for the satisfactory operational function of the APU.
48.4	Heater ducting-	Heater duct(s) shall be c/w round, swivel type air deflector(s) that can be also closed manually if needed. Air intake to be constructed for sufficient airflow as recommended by manufacturer. Intake air shall be drawn from the inside of the van body. Intake air shall be located near upper outside wall in order to keep contaminants and dirt out of the air intake. It is crucial that sufficient heating ducts are located also at the operator body entry/exit step area. State -quantity of heating duct outlets and location of condenser for air conditioning-
48.5	Temperature Control –	shall be ergonomically located within driver's reach and easily serviceable. State exact mounting locations-
49.0	ACCESSORIES-	
49.1	Mud flaps -	No-name black rubber type with steel bar anti-sail brackets, installed in front and rear tires
49.2	Radio-	2-way radio circuit-Independent 20 Amp circuit, ignition powered, wired under dash loose, labelled.
50.0	ELECTRICAL-	
50.1	Requirements-	All trucks shall be capable to power the following components:
50.2		1. Lap Top 2. Phone Chargers 3. Thermal Imaging Camera Charger 4. Possible future 8 cameras- rior lighting must conform to NFPA current g standards.
	 Light Bar 60" LED FN60VLE Federal Siren Smart with 100W Speaker 1 X Hand Held Spot Light in 2 X Grille Lights Red 4 X Side Intersection Lights 2 X Rear Lower Warning Lig 4 X Side Upper Warning Lig 2 X Rear Upper Warning Lig 6 X Scene Lights 6X Ground Lights Air Inlet Battery Charging Provision 	Make Whelen Model Freedom Make Whelen Controllor Make Whelen Cab Make Collins Make Whelen Model 600 LED Red Make Whelen Model 600 LED ghts Red Make Whelen Model 600 LED hts Red 9X7 Make Whelen Model 600 LED

	- (3) Antenna Mounts	Fleet net, GPS, Radio	
50.3	Conform-	All vehicle lighting shall conform to C.M.V.S.S. and Manitoba Highway Traffic Act requirements and NFPA Standards	
50.4	Body supplier installed wiring-	shall be numbered, colour coded, loomed, properly secured and protected from damage. Successful bidde shall provide electrical diagram schematics upon delivery of the vehicles.	
50.5	All electrical connectors-	shall be crimped and soldered, then sealed using heat shrink tubing.	
50.6	All joining of wires-	shall be soldered and sealed using heat shrink tubing (crimp on electrical connectors for joining wires are not acceptable).	
50.7	All holes-	required for routing wiring shall be drilled (not punched), grommetted and sealed as required.	
50.8	Wiring access panel-	Wiring for interior lights, switch panel wiring, outlets, etc., shall be accessible from an access, state location-	
50.9	LED Requirements-	Supplier installed lighting shall be LED	
50.10	<u>Lighting harnesses</u> –	Properly routed and secured, state make & model-	
50.11	Junction box –	Complete with necessary compression fittings, required for all vehicle lighting harness connection located inside rear of truck frame. State make & model-	s
50.12	All plug-in connectors-	shall be coated with Truck-Lite NYK or equivalent compound prior to assembly.	
50.13	Electrical Outlets-	Seven (7) 120 Volt duplex outlets required, GFI, CSA approved. Two exterior and five interior, exalocation to be determined at pre-production meeting. (One) interior outlet shall have universal provisions for USB ports plug in accessories.	ct
50.14	Complete lighting part # list-	Upon delivery of the vehicles, the successful bidde shall provide a complete lighting part # list of all lights and electrical components used to build the complete unit and also applicable warranties for each item.	er
50.15	Supply wiring schematics-	Bidder shall supply wiring schematics for all body wiring and routing	
50.16	Battery charging system –	On-board system with a 0-20 Amp rated automatic charger for charging of the batteries from an external 120-Volt power supply	

50.17	Charging systen	<u>n plug-in</u> –	Located between driver's door and the rear Passenger door. Automatic ejector type with a 20 Amp receptacle. Located approx. 60 to 80 in. above ground level.	
50.18	Power disconne	<u>ct</u> –	Power to all electrical systems shall be wired through a power disconnect system with the master switch or switches located in the cab for operation by the driver. The system shall be designed to prevent alternator damage in the event that the master switch is placed in the off position while the engine is running.	
50.19	Camera System-	:	Wiring Provisions for a future 8 cameras. Exact locations to be determined upon a pre-production meeting.	
51.0	COLOUR-			
51.1	<u>Paint</u> –		Painted two tone, with bottom half Red (SIIKENS Brand Code 911662 and top half Black (SIKKENS Brand Code 910788) using a polyurethane enamel paint.	
52.0	SAFETY		a polyarethane enamer paint.	
52.1	Flare kit -		Three (3) triangular reflectors, CVSA approved.	
52.2	Fire Extinguishe	<u>r</u> -	Two (2) Five (5) lbs. pound Fire Extinguisher mount In cab and body.	ted
53.0	FINAL DRAWING	i <u>s</u>	_	
53.1		manufacturers	all supply a final diagram and description s recommended body to chassis mount. The	
	 Driver sid Passenge Frond sid Rear side Down vie 	er side e	- - - - -	
54.0	WARRANTY- Boo	dy and all Com	nponent warranties-	
54.1	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.			
54.2	Basic Body	State-		
54.3	Batteries	State-		
54.4	APU State-			
54.5	Body Paint- Sta	ite-		
54.6	Body Electrical including Lighting- State-			

55.0 <u>TOOLS</u>-

Auto-Lock (Red) ProSeries Aluminum Carabiner (CMC)- Model # 300253, Six (6) X CMC ProSeries aluminum Key-Lock Carabiners – Model # 300233, Three (3) X (CMI) Ascenders Aluminum Rescue rope Walkers (Self clearing)	
Two (2) - 600' Sterling 3/8 (9.5mm) Ultraline Water Line c/w mesh bag and Two (2) CMC ProSeries (Red) Aluminum Key-Lock Carabiners Model # 300233	
Two (2) - 2 US gallons Roto Pax Gasoline Cans c/w mounting brackets	
Two (2) - Fire Axes 6 lb. (2.7 kg) pick head fire axes with fibreglass handles	
One (1) – Oceanid RDC (Rapid Deployment Craft) Banana Boat c/w paddles and air filling tube and caring bag	
One (1) - Binocular (10x42mm) Weaver Model 849676 Classic	
Two (2) - 12" Knipex Pliers	
One (1) - 30 inch RIDGID S30 Bolt Cutters Model # 14228	
One (1) - 20 lb. (9.1 kg) BC Rated Pressurized Dry Chemical Extinguisher	
Large/Extra Large complete suits, and Two (2) 2XL/3XL complete suits. Also Six (of Whites/Aqua Lung Fusion Boots with the following sizes Two (2) Size 10 pairs of boots # 611841, Two (2) Size 12 pairs of boots # 611843, and Two (2) Size 14 pa boots # 611844. And Six (6) pairs of Whites/Aqua Lung Commercial Grade Dry Gl	6) pairs of irs of oves
Three (3) - Mustang Ice Commander Rescue Suit Pro, c/w integrated harness, yellow, and universal sizing Model IC9002 02	
Three (3) - US Divers Shredder SAR Fin, yellow, pair	
One (1) - Honda Generator Model # EU2000i c/w light	
Two (2) - Portable LED Lights c/w cord reels	
Four (4) – Streamlight pistol grip with tether, Model Waypoint (LED) c/w batteries	
Six (6) – Make: NRS Model: Havoc Size: Universal-Helmets, (Red)	
Six (6) – Black Diamond Storm headlamp 160 Lumens Helmet Lights	
Two (2) – CMC Rescue LSP Cinch Rescue Collars	
	Rescue Pulleys (CMČ) Model # 300301 or ProSeries Model # 300461, One (1) X Auto-Lock (Red) ProSeries Aluminum Carabiner (CMC)- Model # 300253, Six (6) X CMC ProSeries aluminum Key-Lock Carabiners – Model # 300253, Three (3) X (CMI) Ascenders Aluminum Rescue rope Walkers (Self clearing) 333Kn (7500lb), and Two (2) - 10' Extra Large CMC anchor straps Model #20105/ Two (2) - 600' Sterling 3/8 (9.5mm) Ultraline Water Line c/w mesh bag and Two (2) CMC ProSeries (Red) Aluminum Key-Lock Carabiners Model # 300233 (10 - 2) US gallons Roto Pax Gasoline Cans c/w mounting brackets (10 - 2) US gallons Roto Pax Gasoline Cans c/w mounting brackets (11 - Oceanid RDC (Rapid Deployment Craft) Banana Boat c/w paddles and air filling tube and caring bag (11 - Binocular (10x42mm) Weaver Model 849676 Classic (12 - 12" Knipex Pliers (13 - 20 lb. (9.1 kg) BC Rated Pressurized Dry Chemical Extinguisher (13 - 20 lb. (9.1 kg) BC Rated Pressurized Dry Chemical Extinguisher (14 - 20 lb. (9.1 kg) BC Rated Pressurized Dry Chemical Extinguisher (14 - 20 lb. (9.1 kg) BC Rated Pressurized Dry Chemical Extinguisher (15 Whites/Aqua Lung Fusion Tech SAR Swimmers Version Dry Suits Model # 611979 with the following sizes One (1) Small/Medium complete suit, Two Large/Extra Large complete suits, and Two (2) 2XL/3XL complete suits. Also Six (6) Whites/Aqua Lung Fusion Boots with the following sizes Two (2) Size 10 pairs of boots # 611844. And Six (6) pairs of boots # 611843, and Two (2) Size 14 pa boots # 611844. And Six (6) pairs of Whites/Aqua Lung Commercial Grade Dry Givith the following sizes Two (2) pairs of size Medium, Two (2) pairs of size Large, Two (2) pairs of Extra Large gloves. Three (3) - Mustang Ice Commander Rescue Suit Pro, c/w integrated harness, yellow, and universal sizing Model IC9002 02 Three (3) - US Divers Shredder SAR Fin, yellow, pair One (1) - Honda Generator Model # EU2000i c/w light Two (2) - Portable LED Lights c/w cord reels Four (4) - Streamlight pistol grip with tether, Model Waypoint (LED) c/w batteries Six (6)

55.20	Four (4) – Pick-of-Life Ice picks/Awis	
55.21	Two (2) Horse Collar Hit Inflatable Life Jackets –Mustang Model # MD315302	
55.22	Four (4) Mustang Zipper Life Jackets (Thermosystem Plus Coat)– Extra Large Model # MC 1535 (Red)	
55.23	Two (2) Mustang PFD Survival SRT Vests (Universal Swift Water Rescue Vest) Size Large- Model # MRV150 or MRV200	
55.24	Two (2) Mustang PFD Survival SRT Vests (Universal Swift Water Rescue Vest) Size Extra Large- Model # MRV150 or MRV200	
55.25	One (1) Set of 3-4 Marker Buoys	
55.26	Two (2) 10 foot Fibreglass Pike Poles with non-slip "D" handle	
55.27	One (1) Reeves Sleeve c/w back board	
55.28	Four (4) (Unidive) Blue Tang Hydralloy Dive Knives – yellow Blunt Tip	
55.29	One (1) 10 foot X 10 foot Salvage Tarp	
55.30	One (1) 8 foot X 8 foot Salvage Tarp	
55.31	Two (2) Throw Balls c/w rope and mesh bag- Make 360 Model XPG85 or similar	
55.32	Two (2) Torpedoes Buoy (Red) c/w tether and shoulder strap (1)-28" & (1)-33"	
55.33	One (1) Water Cooler – 5 QT flip lid Coleman Model 5205A758G	
55.34	Six (6) pairs of NRS Paddlers Glove – Three (3) pairs of X – Extra Large & Three (3) X Large	
55.35	Four (4) Fox 40 Whistles	
55.36	Two (2) 25 HP Yamaha F25 4 Stroke Outboard Motors – Short Shaft. Complete with fuel container and fuel hose.	
55.37	One (1) Zodiac Classic Mark 1 Aluminum (3.5M or 11'6") c/w Bench seat, Paddles, pressure gauge with matching foot pump, bench storage bag, Navigation light kit and transom travel wheels.	
55.38	Two (2) Marsars Model IRSS (Ice Rescue Safety Shuttle) Paddle Boards	
55.39	One (1) Aluminum telescoping pike pole (Blunt tip). Collapsed 4'-5' and extendable to 8'-10'	
55.40	Two (2) "Bullard Eclipse LDX Thermal Imager and Eclipse Powerhouse Bundle" complete with the Electronic Thermal Throttle option. Two (2) additional Eclipse Series rechargeable batteries.	
55.41	Two (2) 75' Water Rescue Professional Throw bags. Make- Mustang Model- MRD175	
55.42	Twelve (12) - Mustang Two Pocket Flotation Vest PFD. Standard PFD's to be handed to external agencies crews (Police, Ambulance and pertinent bystanders). Six (6) XXL Model # MV3119 RP & Six (6) XL Model # MV 3119 RP	

55.43	One (1) Megaphone Portable Loud speaker- Pylepro-PMP50 Bullhorn 50 Watt Megaphone W/Siren & Volume control	
55.44	Two (2) Streamlight Portable Scene Lights Rechargeable Model # 45670 (120v AC/12V DC) complete with shoulder strap and apparatus charging station	
	ed by WFPS and not required in the bid submission. This information is pro-	vided for tool
	-	
55.45	Two (2) Extendable Hydro Poles	
55.46	One (1) Cascade System c/w retractable 30' fill hose	
55.47	One (1) Personnel Accountability System P.A.S. Board	
55.48	One (1) EPCR	
55.49	Two (2) Sherlock Map Books	
55.50	One (1) Set of Culvert Covers	
55.51	One (1) Snow Fence	
55.52	One (1) Fuel Card	
55.53	Two (2) Bottles of Deodorizer Spray	
55.54	One (1) Contamination Bag	
55.55	One (1) Backboard c/w head blocks	
55.56	Two (2) Insect Repellent	
55.57	Four (4) Waterproof Portable Radios	
55.58	Four (4) Blankets	
55.59	Eight (8) Hospital Towels	
55.60	One (1) Set of Mooring Ropes	
55.61	One (1) Oxygen Kit c/w various masks and tubing	
55.62	One (1) Trauma Bag	
55.63	One (1) Zoll Cardiac Monitor	
55.64	Two (2) - Animal Pole Catcher	
56.0	PERFORMANCE RELIABILITY-	
56.1	The responsibility for the design of the Rapid Deployment Water Rescue Vehicles, its erformance and reliability shall rest upon the Contractor.	
56.2	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.

56.3 Where the <u>Rapid Deployment Water Rescue Vehicles</u> develops "repeated failures" in service, the Contractor shall make any necessary engineering changes, repairs, alterations or modifications in order to guarantee reliability of performance.