



Shop Order

Town of Oromocto
Municipal Building
4 Doyle Drive
Oromocto, NB E2V 2V3

Exp. Date: 01/10/2020
Quote No: Oromocto, NB-0121
Job/Order No: 21473
BODY: 00-10-15 Metalfab Pumper - ULC 05/13

11/19/2021

Page 1

PART NO	S	DESCRIPTION	QTY	ID
		== Metalfab Pumper - ULC 05/13 - 0.000 ==	1	MTL
	S	CHANGE ORDER F	1	MTL
00-05-0010		Dealer - Metalfab	1	MTL
00-10-1500		Metalfab Pumper	1	MTL
00-20-1000		Company Profile	1	MTL
00-20-1500		Standard Body Warranty	1	MTL
00-20-1550		Metalfab Limited Ten (10) Year Paint and Corrosion Warranty	1	MTL
00-20-1700		Hale Pump Warranty - 5 years	1	MTL
00-20-1800		Polypropylene Tank Lifetime Warranty	1	MTL
00-20-2000	S	Plant Visits - unlimited at customer expense	1	MTL
		Department will inspect the chassis when it arrives at Metalfab		
		Department will do a pre-paint inspection visit		
		Department will do a final inspection visit		
00-20-2100	U	Price Adjustment	1	
00-20-3000	S	No Bonding Requested	1	MTL
00-20-3500		Certification for Fusion Welding of Aluminum	1	MTL
00-20-4000	S	Quality System registered to ISO 9001:2015	1	MTL
00-20-4500		Fire Apparatus Manufacturers' Association Membership	1	MTL
		GENERAL INFORMATION	1	MTL
10-11-0000		Intent E	1	MTL
10-11-0110		Vehicle data recorder included with chassis	1	MTL
10-11-1101	S	ULC S515-13 Compliance	1	MTL
		Designated Walking Areas of standing/walking surface on upper areas of apparatus. 1" wide safety yellow on surface higher than 48".		
		The purchaser is aware that some aspects of the specifications do not fully comply with NFPA, and understands the risks associated with not fully following the NFPA standard in all areas. The intent is to produce an apparatus with as many safety features as is possible, therefore the vehicle is not required to meet NFPA in all areas, for example the specified maximum vehicle speed is non-compliant with NFPA. The truck must meet ULC and other Canadian standards.		
10-11-1500	S	> ULC Testing - Pumper - Imperial units of measure	1	MTL
		ENG. NOTE:		
		Note in the shop note if the Fire Department wishes to witness the test		
		Notify the department two (2) weeks before the ULC test and they may attend to witness the test. As discussed on the 04.15.2020 conference call.		
10-11-2100	S	Maximum length - 472", but prefer 456"	1	MTL
		The maximum length will change from 468" to 472" in order to keep the 24" rear bumper. As discussed with Chief Jody Price on 03.31.2021 at the chassis inspection visit.		
10-11-2200	S	Maximum height - 128"	1	MTL
10-11-2400		Overall length is 30' or more	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
10-11-2500		General Construction	1	MTL
10-11-2600	S	<p>Preconstruction Meeting - within 30 days of award date</p> <p>The Pre-Construction Meeting to be at the Oromocto Town Hall, 4 Doyle Drive Oromocto within 30 days of awarded date.</p> <p>Metalfab received acceptance letter on February 28.2020.</p> <p>Acceptance letter was dated February 25.2020.</p>	1	MTL
10-11-3000		<p>Manuals - two copies</p> <p>***Two copies of manuals are required.</p>	1	MTL
10-11-3600	S	<p>> Delivery - FOB Fire Department - four days of training</p> <p>ENG. NOTE:</p> <p>Note in the shop note if more than 4 hours of training is required</p> <p>Delivery - within 12 months from the date of the pre-construction meeting to the Oromocto Fire Department 50 Miramichi Road Oromocto, NB</p> <p>Upon delivery, a factory-trained and authorized delivery instructor shall then remain with the apparatus to train Fire Department personnel in the proper operation, care and maintenance of the apparatus. The training will be delivered for 4 consecutive days (one day for each shift) scheduled on consultation with the OFD.</p>	1	MTL
10-11-4000	S	<p>Payment Terms - chassis when it arrives at Metalfab, body and equipment</p> <p>Net 30</p> <p>Payment for chassis upon arrival at Metalfab, body and equipment Net 30 days upon delivery.</p> <p>Penalty for late delivery will be \$250.00 per calendar day beyond the specified date.</p> <p>Chassis invoice to be supplied to customer 60 days before arrival of chassis to Metalfab as discussed on conference call 05.06.2020</p>	1	MTL
10-20-1400	S	<p>> Hose capacity exceeding ULC/NFPA requirements</p> <p>ENG. NOTE:</p> <p>Specify the type of hose and quantity of hose to be carried on the vehicle</p> <p>Hose capacity exceeding ULC/NFPA requirements</p> <p>Front bumper - 250' 1.75"</p> <p>Transverse - 800' 1.75, 400' 2.5"</p> <p>Rear - 1000' 5", 500' 2.5", 1000' 1.75"</p> <p>***Additional weight allowance of 1810 pounds***</p>	1	MTL
10-20-2000		<p>Equipment carrying capacity - standard ULC Pumper</p> <p>This vehicle is designed to carry the standard ULC miscellaneous equipment load of 2000 pounds for a Pumper with less than 250 cubic feet of compartment space.</p>	1	MTL
CHASSIS INFORMATION				
20-11-1000	S	<p>Chassis supplied by Metalfab - Spartan Gladiator with 10" raised roof</p> <p>65,000 lb GVWR 21,000 lb front axle 44,000 lb rear axle</p> <p>234" Wheelbase 166.5" cab to axle - Changed to option 2103-234</p> <p>Cummins X15 - 505 HP @ 1800 rpm 2100 governed rpm</p> <p>1850 torque @ 1150 rpm</p> <p>Allison 4000 EVS automatic transmission - PTO locations are 8:00/1:00</p> <p>5th gear startup / 6th mode as discussed on conference call</p> <p>320 Amp alternator</p> <p>65 US gallon fuel tank</p> <p>70 MPH top road speed (Note - OFD is aware that this does not meet NFPA requirement of maximum road speed of 60 MPH)</p> <p>Polished aluminum wheels and trim</p> <p>26" front bumper extension with gravel shield. Pre-plumbed for front suction (4" piping) and 1-1/2" front discharge (2" piping) LH/roadside (other front discharge will be piped by Metalfab).</p> <p>There shall be a front receiver centered under the front bumper provided by Spartan.</p> <p>Dual Vista Touchscreen IV in cab - one left side, one right side.</p> <p>PPG two tone paint - FBCH 927311 white over FBCH 927310 red with "Classic" paint break line and 1/2" gold reflective pinstripe</p>	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
		Spray-outs to be sent to the Customer for approval Kussmaul Auto charge 40LPC included ***Add to SPARcon - 3314-037 - Kussmaul 12 volt Aux Air Compressor - behind driver seat due to Evolution grill change ***Add to SPARcon - 3305-001 - Aux air reservoir ***Add to SPARcon - 8034-002 - Customer Inspection - Chassis ***Add to SPARcon - 8803-002 - ABS Software ***Add to SPARcon - 8809-002 - VMUX Software ***Add to SPARcon - 8801-005 - Engine Software ***Add to SPARcon - 8802-002 - Transmission Software ***Add to SPARcon - 8804-004 - Interface Module ***Add to SPARcon - 8034-002 - Customer Inspection - chassis ***Update SPARcon - use 2902-012 for Nederman exhaust connector 10 degrees IPO 2902-010 ***Update SPARcon - use 3328-006 for longer hose connection for the air outlet IPO 3328-004 ***Update SPARcon for the lightbar as per 6.1.6 of the Tender document (wasn't a pick-able Spartan option when the Tender was prepared). See also 50-11-6110. ***Air horn location to be ordered as "shipped loose" as discussed in the pre-construction conference call meeting. Code 2216-017 and air horns can be installed on each side of the front bumper receiver if required ***If possible order chassis with Canadian flag graphic in grille (ref 60-33-2300 ***Air Pump shift in cab and location to be beside steering wheel column- Code 5013-013 in SPARcon Emergency engine shut down in cab and control on pump panel Code 1716-QXX 2nd warning light in cab for Light tower deployed Code 5406-064 Ventilation fans in corner of windshield with switch on fan base Code 1608-002 On Spot traction chains controlled on Vmux screen Code 3801-002 Changed to Evolution grill to match customer's last unit Code 1518-QXX		
20-11-1500		2013 Emission chassis modifications	1	MTL
20-11-1700	S	Chassis Motor Vehicle Inspection required - NB E Chassis is provided with a New Brunswick Motor Vehicle Inspection dated the month of delivery.	1	MTL
20-21-0500		Fluid capacity plate	1	MTL
20-21-0600		Pumping test plate	1	MTL
20-21-1050	S	Maximum riders sign - 8 persons - with chassis	1	MTL
20-21-1510	S	Seat belt warning labels - 4 door chassis - with chassis	1	MTL
20-21-1520	S	Helmet warning label - do not wear helmet - with chassis	1	MTL
20-21-1570	S	LED Tire Pressure Indicators - Tandem Axle - with chassis	1	MTL
20-21-1600		Apparatus Information Label An information label is provided in the chassis cab, visible to the driver, stating: "When manufactured, this vehicle was: ** m high ** m long ** kg GVW Changes in height since the apparatus was manufactured shall be noted on this plate by the Fire Department"	1	MTL
20-21-2500		Shifter lock not required E	1	MTL
20-21-3500		Rear step warning label	1	MTL
20-21-3800	S	Front mudflaps/splash guards - at rear portion of cab Mud flaps shall be installed behind the front wheels (by Spartan). No additional mud flaps required as discussed at 04.15.2020 conference call.	1	MTL
20-21-4000	S	Rear mudflaps - Metalfab Logo White rear mudflap with Metalfab logo was approved at 04.29.2020 conference call	1	MTL
20-21-4500	S	Transportation Safety Kit Basic First Aid Kit Safety Triangle - with flairs (3) - 1580317 2-1/2 pound Fire Extinguisher (with Spartan chassis)	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
20-31-0100		Fuel tank or step covers not required	1	MTL
20-31-0200		Fuel fill label -Ultra Low Sulfur Diesel only	1	MTL
20-31-1900	S	Chassis cab painted white over red by Spartan	1	MTL
20-31-4800	S <	Hose well modifications in extended bumper and cargo net cover A divider/partition will be installed to separate the two hose lays. A black cargo net will be installed over the hose well to secure the fire hose. See also 30-44-1020	1	MTL
20-41-0500	S	Intake air shutoff for engine w/ chassis The emergency shut down ordered with Spartan Code 1716-QXX will have a control on the pump panel. As discussed on conference call on 04.29.2020	1	MTL
20-41-0900		Auxiliary braking system disabled when pumping	1	MTL
20-41-1100		Transmission programming - Allison WT	1	MTL
20-41-1500	S	Extend exhaust pipe - RS front of rear wheels Engineering to specify exhaust pipe material as required by the chassis manufacturer. Engineering to sign off on the exhaust configuration to make sure it meets the chassis manufacturer's emission specifications. Customer to specify any special clearances required for the Nederman exhaust extraction system Clear distance from bottom of rub rail to top of exhaust pipe is 3 cm - See picture F:/Data/Jacques/Current Project/Oromocto/Pictures/IMG_2688 and IMG_2689 How far exhaust pipe it to extend past the rub rail is 3 cm - See picture F:/Data/Jacques/Current Project/Oromocto/Pictures/IMG_2688 and IMG_2689 See also 20-41-16AA as supplied by Richard Cummings by e-mail on 05.25.2020 Department has been advised that the exhaust will have to be mounted outboard of the frame rail to allow space for the pump gear box therefore there will be a notch in the R1 compartment. As discussed at the 04.20.2020 conference call.	1	MTL
20-41-16AA	U	Nederman receiver puck for exhaust extraction system - supply and install A Nederman receiver puck part anchor plate #20372003 (Metalfab p/n 1580748) shall be supplied and installed as specified by OFD. OFD provided specifications and locations, pictures: Height of the puck from the ground - 87 cm. See pictures saved at F:/Data/Jacques/Current Projects/Oromocto/Pictures/IMG_2688 and IMG_2689 as supplied by Richard Cummings by e-mail on 05.25.2020	1	
20-41-1900		Battery boost terminals with chassis E	1	MTL
20-41-2000		Chassis batteries remain in OEM location	1	MTL
20-41-2561	U	Fuel fill at LS rear fender well with Signature 4 SCBA style door Stainless Steel door from Signature 4 to match the model in the proposal drawing as requested by Engineering on 02.22.2021	1	
20-41-2600		Chassis fuel tank remains in OEM location	1	MTL
20-41-5000		Rear Tow Hooks - under body *** Flat bar tow hooks under rear step (2)	1	MTL
20-41-5200	S	Rear receiver under rear step/platform Confirmed at Pre-construction conference call meeting on 04.29.2020 that "Buyers" equivalent brand would be acceptable	1	MTL
20-41-5215	S	Side receiver, under body Located each side behind of rear wheels under the rubrails to allow more space for the blocking compartment 60-80-0100 Confirmed with customer that "Buyers" equivalent brand would be acceptable. As discussed on the 04.29.2020 conference call	2	MTL
20-51-0700		Master Battery Disconnect included with chassis	1	MTL
20-51-2500	S	Back up alarm included with chassis (Preco, Model 1040)	1	MTL
20-51-3100	S	Air inlet not requested	1	MTL
20-51-3400		Protection valve installed for air operated accessories	1	MTL
20-51-3500	S	Air outlet Components are included with the Spartan chassis shipped loose - shutoff valve included. Outlet to be located on the left side pump panel as approved by Richard	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
Cummings by e-mail on 06.15.2020				
20-51-6200	S	> 120 volt 20 A shore line connection ENG. NOTE: Requires 20-51-75 120 volt auto eject or 20-51-80 120 volt inlet Standard 5-20R duplex receptacle, not fused Receptacles are installed in compartments L1, L2, L3, L4, R1, R2, R3, R4 and one in cab or a location to be determined for the fridge to plug into. They shall be wired to the automatic transfer switch to run off the hydraulic generator when it is running and shore power when in the station. All receptacles will be installed in the upper back wall portions of the compartments as shown on the proposal drawing unless otherwise specified. Receptacle locations were confirmed at the Pre-construction conference call meeting of 05.06.2020 - location will be up high in every compartment as shown on drawing	9	MTL
20-51-6501	S	Kussmaul battery conditioner and compressor included with Spartan chassis Conditioner is located behind the drivers seat 12 volt compressor is located behind driver seat (Spartan code 3314-007) because of the change to the Evolution grill	1	MTL
20-51-65AA	U	Kussmaul 110-volt inlet cover - RED The yellow Kussmaul cover will be removed and shipped loose with the completed unit. A new RED cover will be supplied and installed as requested by Chief Jody Price at the chassis inspection visit of 03.31.2021	1	
20-51-7102		Electric System Manager included with chassis E	1	MTL
20-51-8505		Engine compartment light included with chassis E	1	MTL
20-51-9001	S	Air horns under front bumper - shipped loose w/ Spartan The air horns will be included with chasis and will be shipped loose. The final mounting location will be determined after the chassis arrives at Metalfab. They can be installed under the bumper on each side of the front receiver as long as they are protected. As discussed on conference call of 04.15.2020 The air horns will be controlled at the steering wheel, officer foot switch and dual lanyards - Spartan part # 5512-055	1	MTL
20-52-0010	U	Air horn control on LH pump operators panel	1	
20-52-3500		> Chassis steering wheel lined up by Metalfab E ENG. NOTE: Freightliner, Sterling, and Spartan only The chassis steering wheel shall be straightened after the body and load is applied - prior to delivery to the customer.	1	MTL
20-52-4003	U	Installation of rear view camera when supplied by Spartan - include shield The rear view camera that is supplied with the Spartan chassis is installed on the rear face of the body - A protective aluminum treadplate cover shall be installed above the camera.	1	
20-60-0400		Chassis wheelbase does not change	1	MTL
20-90-1820	U	Custom map box in cab on doghouse to match existing unit There will be a custom map box installed on the doghouse as specified by OFD (Reference pictures in section 10.1.2 of the Tender document) Zolatoned to match cab interior See department supplied sketch saved at F:/Data/Jacques/Current Projects/Oromocto/Map box and pictures "Console 1" to "Console 25" as provided by Richard Cummings by e-mail on 05.21.2020 Removed mention of the radios where that had changed at Inspection visit of 05.12.2021	1	
PUMP AND PLUMBING				
30-11-8600	S	Hale QMAX-XS 1500 IGPM single stage pump	1	MTL
30-12-3500		Mechanical seal for Hale QMAX/QTWO pumps	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
30-15-0104		Plumbing - Hale manifold pump SM SS E	1	MTL
30-20-0500		Valves and controls - side mount panel	1	MTL
30-20-1002		Akron valves specified	1	MTL
30-20-1600		Piping stainless steel - general	1	MTL
30-20-1700	S	1-1/2" thread specifications NPSH with Red Head Storz adapters	1	MTL
30-20-1800	S	2-1/2" thread specifications - 7 x 3.062 with Red Head Storz adapters	1	MTL
		Department will supply a sample male and female threaded adapter for testing purposes. As discussed on conference call of 05.06.2020		
30-20-18AA	U	Red Head Storz adapters for 2-1/2" and 1-1/2" hose threads 1-1/2" discharge thread specifications - Red Head Storz (NO EXCEPTIONS) with NPSH behind. 2-1/2" discharge thread specifications - Red Head Storz (NO EXCEPTIONS) with 7 x 3.062 behind This includes all 1-1/2" and 2-1/2" discharges, suctions, and any related equipment (i.e. venturi on low level strainer, adapter for rear fill, etc.) SOPT #46 - truck specific	1	
30-20-2000		Piping hydrostatic test	1	MTL
30-20-2500		Anodes in suction and discharge piping Install one anode on discharge side of pump, one anode on suction side of pump - do not use teflon tape or thread sealant. Paint flange silver and mask brass anode before painting for visibility.	1	MTL
30-21-9510	S	Tank to Pump 4" Ball valve SS, handwheel control with check valve manifold pump Trident hand wheel control - see 30-23-05AA	1	MTL
30-22-0520	S	Tank Fill valve 2" SS Trident hand wheel control - see 30-23-05AA	1	MTL
30-23-05AA	U	Trident Tru-Flow valve control handwheel (6") for tank to pump and tank fill Trident Tru-Flow Valve Position Indication 6" Hand- Wheels. Ratios to match the corresponding Akron valve used for the tank to pump and the tank fill lines. SOPT in file Discussed at the Pre-construction conference call meeting on 05.06.2020 that manual Trident Tru-glow handwheel option is required	2	
30-31-4010	S	Suction - 6" each side manifold pump - electric control, bleeder See 30-31-7200 for the electric controlled valve	1	MTL
30-31-5000	S	Suction - 4" SS piping to front - electric control - 6" connection, bleeder See 30-31-7200 for the electric controlled valve Pre-piping to front by Spartan	1	MTL
30-31-5100	S	Suction - 4" SS piping to rear - electric control - 6" connection, bleeder See 30-31-7200 for the electric controlled valve Inlet located right of dump line - piping routed through water tank	1	MTL
30-31-7200	S	> Hale master intake suction valve - electric control ENG. NOTE: Required for top mount panels Show location in Shop Note MIV-E's are for the following inlets; Left side 6" inlet - electric control will be on the LS pump operators panel with the manual over ride next to the inlet in LS Right side 6" inlet - electric control will be on the LS pump operators panel with the manual over ride next to the inlet on RS. Front 6" inlet - electric control will be on the LS pump operator panel with the manual over ride on the RS pump panel Rear 6" inlet - electric control will be on the LS pump operators panel with the manual over ride on the LS pump panel. All four (4) controls to be installed in the same area with the pre-primer controls (70-20-2501) as requested at the inspection visit of 05.12.2021	4	MTL

PART NO	S	DESCRIPTION	QTY	ID
30-32-7530		Suction - 2-1/2" left side SS, bleeder, Hale manifold pump Lever control by valve	1	MTL
30-32-8030		Suction - 2-1/2" right side SS, bleeder, Hale manifold pump Lever control by valve	1	MTL
30-40-30AA	U	5" RS discharge, SS, 4" electric valve, 5" Storz connection, bleeder 5" Storz connection and blind cap to be Red Head brand.	1	
30-41-2020		2-1/2" RS discharge SS, bleeder, Hale manifold pump	1	MTL
30-41-2520		2-1/2" LS discharge SS, bleeder, Hale manifold pump	2	MTL
30-42-8520	S	1-1/2" rear discharge SS, plumbed 2" Both towards left side rear to be used as pre-connected lines as discussed on the conference call of 05.06.2020 - Red Head Storz with blind plug.	2	MTL
30-43-1520		2-1/2" rear discharge SS, plumbed 2-1/2", bleeder One each side at rear as shown on the proposal drawing - Red Head Storz with blind plug.	2	MTL
30-44-0520	S	1-1/2" crosslay (each) SS, 2" valve, bleeder The 1-1/2" pre-connects are located in the transverse hose bed above the pump panel. Discharges shall be installed on the side pump panels just below the floor of each crosslay bed 2 each side - forward most. The transverse hose bed is equipped with stainless steel rollers on each end for easier hose removal. Bleeder valve provided on pump panel. Each hose bed will be 5" inside width and the stack will be 24" high minimum as confirmed by the department by e-mail on 06.17.2020	4	MTL
30-44-1020	S	> 1-1/2" front trash line SS, plumbed 2", hosewell ENG. NOTE: Requires extended front bumper, gravelshield There shall be two 1-1/2" front trash lines, SS, plumbed 2" to the front hosewell Each equipped with CP swivel installed on top of the bumper external of the hosewell to allow use from either side of the unit. The hosewell is constructed of aluminum with a cargo net cover, capable of being unlatched with gloved hands. One hose well shall hold 150 feet of 1.75 hoseline (to be stored closer towards the chassis cab) and the second shall hold 100 feet of 1.75 hoseline (stored towards the front outer edge of the bumper) as discussed on the conference call of 04.13.2020. There will be auto drains supplied and installed on the low spots of the line as discussed at the inspection visit of 05.12.2021	2	MTL
30-44-3520	S	2-1/2" crosslay SS, plumbed 2-1/2", bleeder The 2-1/2" pre-connects are located in the transverse hose bed above the pump panel. Discharges shall be installed on the side pump panels just below the floor of each crosslay bed 1 each side - rearward most. The transverse hose bed is equipped with stainless steel rollers on each end for easier hose removal. Bleeder valve provided on pump panel. Each hose bed will be 6" inside width and the stack will be 24" high minimum as confirmed by the fire department by e-mail on 06.17.2020.	2	MTL
30-44-6520	S	Piping for monitor SS, plumbed 3", bleeder Piping will be centered front to back and side to side in the area behind the crosslays. Piping will terminate low and the TFT Extend-a-Gun component of the 80-99-30AA TFT Crossfire monitor package will be installed so that the monitor will not be above the maximum height of the unit.	1	MTL
30-51-0500	S	Pump shift-Midship air ordered with chassis ***Includes "Pump Engaged" and "OK to Pump" indicator lights in cab ***Includes "Throttle Ready" indicator light on Pump operating panel The pump shift control is ordered with the chassis cab and will need to be relocated to the right side of the steering column above the air bag module as discussed with Chief Jody Price at chassis inspection visit of 03.31.2021.	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
30-51-0600	S	Manual over ride for pump shift on pump panel by Metalfab - cable operated on LS Located on LS pump panel ***Manual over ride system to be ordered with pump.*** There will be a lever on the pump panel that will extend out every time the pump is engaged and retract when the pump is disengaged. As discussed with Jody Price and Kevin by phone on 06.17.2020	1	MTL
30-51-1500	S	Power shift PTO - Automatic transmission - for the hydraulic generator Control in cab within easy reach of driver.	1	MTL
30-51-1501	S	> PTO driveshaft for the hydraulic generator ENG. NOTE: Quantity of 2 for pumps mounted on 4 door cabs due to length	1	MTL
30-51-6640		Class One "TPG Plus" Governor/Throttle	1	MTL
30-51-7003	U	Suction side relief V/V, manifold pump One required for each MIV-E Left side intake, right side intake, front intake and rear intake. All will terminate with Red Head Storz fittings (with 7 x 3.062 male thread behind) and no blind plug or cap (ref 30-20-18AA).	4	
30-51-7719	S	Trident Automatic Air Primer 3 barrel 5 location with gauge Location #1 - Main pump Location #2 - Left side 6" intake pre-prime Location #3 - Right side 6" intake pre-prime Location #4 - Front 6" intake pre-prime Location #5 - Rear 6" intake pre-prime	1	MTL
30-51-7720	S	Additional air tank for air primer system - ordered with chassis An additional air tank is provided to improve air primer capacity	1	MTL
30-51-8100		Heat exchanger included with chassis Control located on left side pump operators panel	1	MTL
30-51-8500		Pump cooler with control valve, check valve Control located on left side pump operators panel	1	MTL
30-51-9100		Thermal Relief Valve with warning light Warning light located on left side pump operators panel	1	MTL
30-52-1000		Master drain V/V, 12 port	1	MTL
30-52-2000		Drain valve for foam system header	1	MTL
30-52-4310	S	Foam System - Hypro FoamPro 2002 Dual Tank The foam pump and controller shall be mounted above the level of the top of the pump so that it is above flood water level as specified by OFD. The foam system shall provide foam to the following discharges: Two front bumper lines Six cross lays Deck gun Four rear discharges Order with 4" manifold for flow meter/check valve	1	MTL
30-52-6500		FoamPro dual tank selector valve (manual)	1	MTL
30-52-9100		Foam concentrate label at foam tank fill	2	MTL
30-52-9200		Foam System Instruction Plates	1	MTL
30-52-9400		NFPA Foam System certification test	1	MTL
WATER AND FOAM TANKS				
40-11-2100		Polypropylene water tank (Imperial gallons)	1	MTL
40-11-2200		Water tank capacity certification (tank manufacturer)	1	MTL
40-11-7000	S	Tank capacity 1750 Imperial Gallons The front of the tank will have notches to allow the L1/R1 compartments to go higher as discussed at the conference call of 04.20.2020	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
40-12-5000		Foam cell - 30 Imperial gallon	2	MTL
40-13-0100	S	> Through the tank tunnel for ladder storage ENG. NOTE: Charge 60 per cubic foot of tunnel volume Ref 60-40-9000	1	MTL
40-21-1000		4" tank to pump connection	1	MTL
40-22-0500		2" tank fill connection	1	MTL
40-23-0500		1" water level gauge connection	1	MTL
40-23-1000		1" foam level gauge connection	2	MTL
40-23-1050		4" Fireman's Friend connection	1	MTL
40-23-1060		10" Newton dump connection	1	MTL
40-30-0500		Sump drain valve (3" gate valve) with linkage E	1	MTL
40-30-1000		Water Fill Box front left corner	1	MTL
40-31-3500		10" rear Newton dump, stainless steel The dump valve shall have a "NO STEP" label on the top of the 36" stainless steel telescopic extension.	1	MTL
40-31-3600		Newton dump - stainless steel 36" telechute	1	MTL
40-31-5510	S	Electric operator for Newton dump, side mount The dump valve shall have an electric actuation and shall be controlled by two (2) switches at the back, one each side. These switches shall be protected by a CAST PRODUCT aluminum waterproof box. (Note: will have to be large enough for the LAS and PTS switches as well) Provisions are made to allow manual operation of the dump line in the event of an emergency.	2	MTL
40-31-9000	S	4" Storz rear fill, Fireman's Friend, bleeder Located right of dump line. Install the 4" to 2 1/2" Storz reducing fitting 80-99-15AA with blind cap on the fill.	1	MTL
ELECTRICAL			1	MTL
50-11-0400		Base electrical system - Spartan multiplex	1	MTL
50-11-0600		Warning Light Certification	1	MTL
50-11-0700		Low Voltage Electrical system test	1	MTL
50-11-0800		Low Voltage Electrical System Documents As required by ULC and NFPA standards	1	MTL
50-11-09AA	U	Switches - chassis dash The following switches in the chassis dash will be repositioned: Move the "under dash light" from the center panel to the panel over the driver seat - beside the "rear crew heater" switch Rearrange the switches in the center dash panel so the order from left to right is: Differential lock, two (2) blank, front scene, left scene, right scene, front scene, three (3) blank and Q2B brake switch. As discussed with Chief Jody Price at the chassis inspection of 03.31.2021 The switch for the Opticom (50-13-0500) will be installed on the chassis dash in order to be accessible to both the driver and officer. As discussed with Chief Jody Price by phone	1	
50-11-2500	S	Siren and speakers supplied with chassis Q2B pedestal mounted siren - includes left and right foot switch controls and two red momentary switches on dash for siren brake (Spartan part # 5513-233). There will be a kill switch under the front bumper from Spartan Code #5513-233 as discussed on 04.20.2020 conference call. Federal PA 300 siren - located in center panel towards the right side, auxiliary activation by left and right momentary switches at driver and officer seating position as confirmed on 05.06.2020 conference call. Spartan option 5515-066 Two (2) 100 watt speakers in front bumper	1	MTL
50-11-6110	S	Whelen light bar included with chassis Whelen 72" Freedom Roto Beam (6 total) c/w Two F4RB red on ends, Four F4R7 red front and Four (4 total) super LED (Two white and Two red) placement of	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
		lights as specified by OFD Customer approved lightbar on 07.16.2020		
50-11-6600	S	Rear LED Traffic Advisor warning lights - surface mount Model TAZ86 LINZ6 series -surface mount An 8-lamp amber LED flashing directional light is installed under the rear hose bed with control head in cab - to the left of the siren control like their previous unit. As discussed on 04.20.2020 conference call. See picture F:/Data/Jacques/Current Projects/Oromocto/Pictures Note: to be programmed so that when emergency mode is on the traffic advisor flashes in a warning mode SOPT #580 - truck specific	1	MTL
50-11-8630	U	Rear LED beacons-Whelen MCFLED2* (pr) one red (LS), one amber (RS) The location of the beacons will be red on the LS and amber on the RS as discussed on the 04.20.2020 conference call	1	
50-12-5022	S <	Front LED flashers (pr) - Whelen LED M6 - red with red lens SOPT #952a There will be a pair of Whelen M6 red flashers supplied and installed on the front of the chassis cab. They will be installed beside the existing flashers supplied by Spartan. As requested by Chief Jody Price on 03.31.2021	1	MTL
50-12-8521	S	Front flashers, intersection lights included with chassis, Whelen M6	1	MTL
50-12-86AA	U	Rear LED flashers (pr)-Whelen red LED M6 - Lower level above tail lights	1	
50-12-86BB	U	Rear LED flashers (pr)-Whelen red LED M9 - upper level At rear below hose bed as shown on the proposal drawing	1	
50-12-8840	U	Body side inter lts (pr)-Whelen red LED M6 - rearward in rear fenders	1	
50-12-88BB	U	Body side inter lts (pr) - Whelen red/white split LED M9 - upper front level There will be one (1) pair installed on the upper front portion of the body as discussed with Chief Jody Price on 03.15.2021	1	
50-12-8903	U	Add'l body side inter lts (pr)-Whelen red LED M6 - forward in rear fenders	1	
50-13-0500	U	Opticom Model 492H - mounted on cab roof Opticom- shall be model 492H to be mounted on cab roof. Control will be a switch on the dash to match their previous unit as discussed on the 04.20.2020 conference call. SOPT #750 - truck specific	1	
50-13-05AA	U	Federal LED Traffic Clearing Light (TCL) front face of cab - 9" x 7" Location to be the center front bumper and the color is to be White. TCL will be controlled by the Vista display unless otherwise specified and will be disabled when the park brake is set. As discussed on the 04.20.2020 conference call. SOPT and various model numbers in file	1	
50-21-27AA	U	Command light - 120 Volt AC - KL415A-FS - six Spectra heads with back light Command light is mounted on top of cab - cab has reinforcement pad included. Control for light tower will be in the L1 compartment unless otherwise specified and the orientation will be as shown on the drawing. A removable deck plate shroud is required around the Command light and the light will be wired to a Do Not Move Apparatus (5406-064) light in the chassis cab. As discussed on the 04.29.2020 conference call. The light tower will be orientated towards the officer side to make the wire harness to the L1 compartment as short as possible. As discussed with Chief Jody Price by phone.	1	
50-21-5100	S >	Compartment lighting - LED tube lights in each compartment (rollup doors) ENG. NOTE: Rollup doors only Tube lights in compartments with roll up doors. 4" grommet mounted LED lights will be installed on each side wall in the upper compartments over the rear wheels. One light will be low and the opposite light	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
		will be mounted high to allow the adjustable shelf to be illuminated. As discussed with Chief Jody Price on 03.31.2021 at the chassis inspection visit. 4" grommet mounted LED light in the small back compartment at step level. As discussed on the 04.29.2020 conference call		
50-21-5500	S	Door Ajar / Equipment not stowed warning light Warning Light as supplied with the Spartan chassis. ***Audible alarm will be programmed on the Vista displays so that both the driver and officer positions can override alarm***	1	MTL
50-21-55AA	U	Light Tower Deployed light The second Do Not Move Apparatus Light on the chassis ceiling (Part # 5406-064) will be wired to the light tower to identify when it is not stored. As discussed on the 04.29.2020 conference call The light lens cover is amber from Spartan. If red is required for ULC, the amber light cover is to be shipped loose with the completed unit as advised by Chief Jody Price at the chassis inspection visit of 03.31.2021	1	
50-21-8001		Step lights for body steps - 4" LED Switched when park brake is set.	1	MTL
50-21-8201	S	Step lights for chassis steps - LED Switched when park brake is set.	1	MTL
50-21-8510	S	Rear LED clearance lights on rubber arms (pr)	1	MTL
50-21-8600		LED clearance lts and reflectors	1	MTL
50-21-8800		LED intermediate turn signal/clearance/reflector length >30'	1	MTL
50-22-0700	S	Whelen 64 LED tail/brake-turn-backup module (pr)	1	MTL
50-31-4010	S	10 kW hydraulic generator - Harrison brand Hydraulic generator is installed in the location specified by OFD. Specify - On top of the hose bed as shown on the proposal drawing Generator will be turned on from both the Vista display and when the water pump is engaged to ensure activation at low RPM. As discussed on the 04.29.2020 conference call. Order with shaft driven hydraulic pump for remote mount.	1	MTL
50-31-6024	S <	Scene lights (pr) - FRC SPA260-Q20 12 volt LED Spectra-Max surface mount, 20K lu SOPT #1168 Two on each side of body inboard of the flashing upper level lights. These will be switched by the Spartan supplied rocker switches in cab that control the side scene lights on the cab. As discussed with Chief Jody Price on telephone on 03.15.2021	2	MTL
50-31-61AA	U	Whelen PCPSM1C rear scene light (pr) The rear scene lights will be installed on the rear of the body as high as possible over the tail light modules as shown on the proposal drawing. These lights will be switched from the Vista controls in cab and also activated by a rocker switch on rear. As discussed on the 04.29.2020 conference call. The make and model changed to Whelen PCPSM1C rated at 10,444 Lumens was changed to fit in the space - as discussed with Chief Jody Price by phone on 03.15.2021	1	
50-31-6505		Ground lighting included with chassis E Switched when park brake is set.	1	MTL
50-31-6570		Ground lighting (LED Lumabar) - side mount body Switched when park brake is set.	1	MTL
50-35-0500	S	Installation of customer supplied mobile radio Radio information list to be obtained at the pre-construction meeting for the make and models of radios, sizes, pictures of existing, location, wired battery direct or through master disconnect etc. The radios will be two (2) Motorola CM300D and one (1) Motorola APX 4500 as	3	MTL

PART NO	S	DESCRIPTION	QTY	ID
		<p>advised by Richard Cummings by e-mail on 05.25.2020</p> <p>The radios will have remote heads which will be installed on the dash. There should be one (1) TMR radio head between the siren control and rear traffic advisor control. The other two (2) radio heads should be on the upper corners of the dash. As discussed at the inspection visit of 05.12.2021</p> <p>The TMR Motorola APX4500 was delivered to Metalfab on 06.14.2021. The kit includes - Radio base, remote head, antenna base and cable, 2 mounting brackets, 4 bags of cables, speaker and mic. Logged into inventory on 06.14.2021</p> <p>The VHF radios were delivered to Metalfab on 08.27.2021 and logged into inventory</p>		
50-35-0559	S	<p>Mobile radio antenna bases provided with Spartan chassis</p> <p>Customer confirmed locations (LH front corner, RH front corner, inboard LH front corner) which will space the antennas as far apart as possible. Confirmed by Richard Cummings by e-mail on 05.25.2020</p>	3	MTL
50-35-0560	S	<p>Three antennas to attach to antenna bases - bases by Spartan chassis</p>	1	MTL
50-90-2600	S	<p>Refrigerator 120VAC/12VDC in a location to be determined</p> <p>Refrigerator as specified by Fire Department (drawer type) 120 VAC/12VDC Customer to specify Make and Model (previous truck was Coolmatic CD-030 DC - p/n 1560996) - Same as previous truck is the preferred set up as discussed on the 05.06.2020 conference call.</p> <p>The refrigerator is installed as directed by the Fire Department. - Top of dog house pointing toward rear is the preferred location and wired so it is continuously powered as discussed on the 05.06.2020 conference call</p>	1	MTL
50-99-10AA	U	<p>Hose bed cover lights - 4 x 40" LED Lumabars on under side of covers</p> <p>Switched when hose bed cover door(s) is opened</p>	1	
51-31-3020	S	<p>> 120 volt wiring for hydraulic generator</p> <p>ENG. NOTE: Specify number and capacity of circuits, location and complete specifications of all electrical devices to be installed.</p> <p>Note that Neutral is bonded to chassis ground. Breaker panel is installed in L1 compartment unless otherwise specified. Circuits for; Command light tower - 50-21-27AA Cord reels - 51-31-4000 Transfer switch - 51-31-3100 (ref 51-31-3100 for receptacle type and location) Customer confirmed that no other circuits or receptacles is required. As discussed on the 05.06.2020 conference call</p>	1	MTL
51-31-3100		<p>> Automatic 110 volt transfer switch</p> <p>ENG. NOTE: Requires 20-51-75 or 20-51-80 120 volt inlet</p> <p>Installed in L1 compartment unless otherwise specified next to breaker box. Wired to the eight 20-51-6200 receptacles and one in the cab for the refrigerator if required.</p>	1	MTL
51-31-4000	S	<p>> Electric cord reel with 200' x 12/3 cable, lighted box</p> <p>ENG. NOTE: Specify receptacles required in junction box</p> <p>One cord reel installed in L1 and one in R1 high and toward front of the compartment to leave room for a tool board (60-31-8210) at the other end of the compartment Order reels with motors LH and RH. Standard duplex type receptacles in the lighted box. 12/3 cable is yellow in color. OFD to approve mounting locations and other info Cord reel #1 location - Upper portion of L1 compartment Cord reel #2 location - Upper portion of R1 compartment</p>	2	MTL

PART NO	S	DESCRIPTION	QTY	ID
		Lighted box #1 mounting location - Close to the reel		
		Lighted box #2 mounting location - Close to the reel		
		15 Amp receptacles for lighted box #1		
		15 Amp receptacles for lighted box #2		
		As discussed on the 05.06.2020 conference call		
51-31-4500		Dielectric strength test for line voltage system	1	MTL
		BODY	1	MTL
60-10-15AA	U	1" drop on lower edge of compartment floor - sweep out type For compartments with roll up doors	1	
60-10-1600		Tandem axle extruded aluminum body	1	MTL
60-10-4100		No "beavertail" rear step supports	1	MTL
60-10-4600		Painted fender surround E	1	MTL
60-10-4770	S	Removable stainless steel fender trim - tandem axle	1	MTL
60-10-5400		> Diamondback pumphouse steps	1	MTL
		ENG. NOTE: Maximum height of step is 24" from ground		
60-10-5430	S	> Diamondback 24" rear step ENG. NOTE: Maximum height of rear step is 24" from ground	1	MTL
60-10-6500	S	Bolt on extruded aluminum rub rail No reflective stripe requested as discussed on the 04.29.2020 conference call.	1	MTL
60-11-0300	S	> Front left side compartments full height ENG. NOTE: Specify critical dimensions in shop note	1	MTL
		The compartment will be as tall as possible and there will be a notch in the tank (40-11-7000) to allow the bigger roll of the rollup door. As discussed on the conference call of 04.20.2020		
60-11-0700	S	> Front right side compartments full height ENG. NOTE: Specify critical dimensions in shop note	1	MTL
		The compartment will be as tall as possible and there will be a notch in the tank (40-11-7000) to allow the bigger roll of the rollup door. As discussed on the conference call of 04.20.2020		
60-11-1000	S	> Rear left side compartments full height ENG. NOTE: Specify critical dimensions in shop note	1	MTL
		The size of 39" wide compartment was discussed and accepted on the 04.29.2020 conference call		
60-11-1400	S	> Rear right side compartments full height ENG. NOTE: Specify critical dimensions in shop note	1	MTL
		The size of 39" wide compartment was discussed and accepted on the 04.29.2020 conference call		
60-11-2000	S	> High side compartment (each) ENG. NOTE: Specify critical dimensions in shop note Specify type of door Specify flip up or drop down Specify which side of body	4	MTL
		Located over the rear wheels. Flush mount doors will flip up.		

PART NO	S	DESCRIPTION	QTY	ID
60-11-21AA	U	Drawer type slide out compartment over rear wheels (ea) Two each side in rear fender well - one (1) towards the front between the SCBA bottle storage and equipment storage. One (1) towards the rear between the equipment storage and the SCBA bottle storage. White reflective stripe is applied on the exposed edge for visibility when the compartment door is open and tray is deployed. The drawers will be approximately 26-1/8" wide x 24-13/16" deep x 3-1/4" tall as approved by Chief Jody Price by e-mail on 05.13.2021	4	
60-11-2500	>	Rear compartment at step level ENG. NOTE: Specify critical dimensions in shop note	1	MTL
60-11-4500		Flush mount aluminum door - single with "D" handle Flip up type doors for 60-11-2000	4	MTL
60-11-4510		Flush mount aluminum door - double with "D" handle For the B1 compartment 60-11-2500	1	MTL
60-11-5520		Rollup door - full height Natural aluminum finish Includes magnetic door switch, LED tube lights, rubber bumpers to prevent pinch point	4	MTL
60-11-5660	U	Amdor pull straps - Flex HD - L1, L4, R1, R4 Order with roll up doors	1	
60-31-4100		Extruded aluminum handrails Minimum 2" clearance from handrail to any surface	1	MTL
60-31-5500	S	Steps at rear of body (folding) with LED lights Each step will incorporate two (2) LED light, chrome bezel, to illuminate the stepping surface, below and above the steps. The steps can be used as a hand hold with built-in openings wide enough for a gloved hand. The step light shall be activated when the parking brake is set. SOPT #925 - truck specific Step - Austin p/n FS-1000-A01-CH LED light housing - MBH-1132-A03-CHR-DBL KIT Six (6) of each required Maximum height between steps is 18"	1	MTL
60-31-5600	S	Steps and grab handles at front of body next to pump panel Steps to be same make and model as rear steps 60-31-5500. Step - Austin p/n FS-1000-A01-CH LED light housing - MBH-1132-A03-CHR-DBL KIT Engineering to determine number of steps required Maximum height between steps is 18" Add a full length grab handle on the front of the left side of the body and a grab handle from the recessed light to the bottom of the angled grab handle on the right side front of the body. Add a short grab handle at the front of each side fender top As discussed at the inspection visit of 08.27.2021	1	MTL
60-31-5700	S	Pull out step under body (each) - one under LS and RS pump house Include switch for equipment not stowed warning in cab. White reflective stripe is applied on the exposed edge for visibility when the step is deployed. 1" wide safety yellow delineation installed on pull out step perimeter (installed on pull out step only, not pump panel step surfaces). The left side step will be as wide as possible. The right side step will be narrower to allow the storage of the removable storage tray (70-11-2200). As discussed at the 04.29.2020 conference call.	2	MTL
60-31-5800	S	Intermediate step on rear above dump 10" deep as wide as possible over the ladder tube opening. 1" wide safety yellow delineation required.	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
60-31-6500	S	<i>Compartment matting - plastic interlocking tile</i>	1	MTL
60-31-7900	U	<i>Vertical unistrut shelf tracking for all compartments</i>	1	
60-31-8003	U	<i>Double SCBA cylinder tubes in rear fender (ea)</i> Bottom/end covered with rubber matting. Door ajar switch required. Retaining loops included Customer to specify make and model of cylinder to be stored Make - MSA Model - G1 4500 PSI Diameter of cylinder - 7" Overall length of cylinder - 23" Photo of valve/cap (to ensure retaining loop will fit) located in F:/Data/Jacques/Current Projects/Oromocto/Pictures/IMG_4323 The door of the tube will be natural finish as discussed on the 04.29.2020 conference call.	4	
60-31-8210	S	> <i>Sliding vertical tool board - open/close latch</i> ENG. NOTE: Specify location Installed in L1 and R1 - 3" from the front wall and 8" from the vertical partition 60-31-8400 and will be 60" tall. There will be a pocket at the bottom of each tool board to support the base of the tool and it will be as wide and deep as possible with a 2" lip. As discussed at the meeting of 07.09.2020 White reflective stripe is applied on the exposed edge for visibility when the compartment door is open. The lock-in/lock-out slides were approved by the department by e-mail on 06.17.2020	2	MTL
60-31-8400	S	<i>Fixed vertical partition</i> Installed in L1 and R1 towards the front of the body - wide enough to allow 3" one one side of the tool board and 8" on the other side. As discussed at the meeting of 07.09.2020	2	MTL
60-31-8800	S	> <i>Sliding tray (ea) - 600 pound capacity</i> ENG. NOTE: Specify location ***Hardware requires 3-1/2" of compartment height White reflective stripe is applied on the exposed edge for visibility when the compartment door is open Location of trays: Tray #1 - R4 - right rear side compartment at floor level Tray #2 - R1 compartment to the left of the vertical partition 60-31-8400 as discussed with Chief Jody Price by telephone on 03.15.2021	2	MTL
60-31-9600	S	> <i>Adjustable shelf (ea)</i> ENG. NOTE: Specify location White reflective stripe is applied on the exposed edge for visibility when the compartment door is open. Shelves are installed as follows: L1 - 4 adjustable shelves between fixed partition and front compartment wall - three full depth and the top one shorter to clear the protective shroud of the electrical panel. As discussed at the inspection visit of 08.27.2021 L2 - 1 adjustable shelf - full depth of compartment L3 - 1 adjustable shelf - full depth of compartment L4 - 2 adjustable shelves - one shallow, one full depth R1 - 3 adjustable shelves between fixed partition and front compartment wall - one shallow, two full depth R2 - 1 adjustable shelf - full depth of compartment R3 - 1 adjustable shelf - full depth of compartment R4 - 2 adjustable shelves - on shallow depth and one full depth	15	MTL

PART NO	S	DESCRIPTION	QTY	ID
60-32-3500	U	<i>Six adjustable hose divider (each) and one fixed in center to support HB covers</i> Hand hold required in end	6	
60-32-7500		Hose bed - aluminum	1	MTL
60-33-0100	S	<i>Paint exterior - Imron Elite and Clearcoat</i> *** Paint code and colour red with CLEARCOAT to match red on cab	1	MTL
60-33-0200		Undercoat vehicle with KROWN rust protection	1	MTL
60-33-0600	S	<i>Chassis wheels not painted - Aluminum wheels with trim by Spartan</i>	1	MTL
60-33-1000		Paint pump and plumbing job colour	1	MTL
60-33-1500		Buffed finish compartment interior	1	MTL
60-33-2300	S	<i>Lettering - as per Customer's requirements</i> The cab grille will be adorned with a Canadian Flag graphic (Order from Spartan if available). Logo to be about 11.5" high and is supplied by OFD. Will be installed on the front chassis doors. Arrived at Metalfab and logged into inventory on 06.14.2021 The following lettering will be supplied and installed by Metalfab: "415" that measures 6.5" tall to be installed on front right side of chassis bumper will be white reflective with black outline "Oromocto" that measures 6" tall to be installed on the lower part of the front chassis doors will be gold printed small engine turn with black background. Confirmed at Shop Visit of 06.14.2021 "415" that measures 10" tall to be installed on the rear chassis doors in the reflective stripe will be white reflective with black outline "Fire" that measures 8" tall to be installed on the R4/L4 compartments in the reflective stripe will be white reflective with black outline as confirmed at Shop Visit of 06.14.2021 Canadian flag above driver and officer door sized to fit available space Refer to pictures in F:/Data/Jacques/Current Projects/Oromocto/Pictures Lettering drawing approved by Chief Jody Price by phone on 05.27.2021 and confirmed at Shop Visit of 06.14.2021	1	MTL
60-33-3300	S	<i>Reflective stripe - Three 2" wide reflective stripes per Customer's requirements</i> Three 2" wide reflective stripe shall be installed as directed by the OFD. Reference pictures in the Tender document: At least 50 % of the total length of the vehicle and at least 25 % of the width of the front of the vehicle shall have reflective stripes.	1	MTL
60-33-3310	S	<i>Reflective stripe - red and yellow chevron at rear</i> Maximum rear vertical surface 3M Diamond Grade material (3M-983, model 71 and 72) Customer has confirmed that doors are to be covered with Chevron - as discussed on the 05.06.2020 conference call	1	MTL
60-33-3500	S	<i>Tarp (webbing) for rear of hose bed - Special as specified by OFD</i> There shall be a black webbing type end tarps for the hose bed covers. The release/closure system shall be secured by aircraft buckles (CTS aircraft lift lever type part # 10810) that release from the top and will have two pull straps (one each side) that can operated from the ground. This release mechanism will allow the tarp to release by one pull of the strap on each side. As specified by OFD. See image in section 10.1.4. of the Tender document and F:/Data/Jacques/Current Projects/Oromocto/Pictures/IMG_4245 and IMG-4246.	1	MTL
60-33-4600	S	<i>Aluminum cover over crosslays - with end tarps (black webbing)</i> The end tarps shall be black cargo netting, released by CTS aircraft lever type seat belt buckle part # 10810 that shall be large enough to allow it to be grabbed with gloved hands. As specified by OFD. See image 10.1.5. in the Tender document. Add a handle like the ends on the top rear middle portion of the cover to allow deployment from the top of the body. As discussed at the inspection visit of 08.27.2021	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
60-33-50AA	U	Power assisted main hose bed covers The main hose bed shall be covered by two (2) checker plate aluminum panels. The panels shall be operated by switch and will be able to open standing on the ground at the rear of the apparatus (LS over tail lights/flashing lights) Door ajar switches required SOPT #190 Ensure adequate access/clearance by actuator pins is allowed for disengagement in case of mechanical failure. The locking device (60-99-15AA) will only be activated if the covers are opened without the hydraulic actuator in case of mechanical failure. The hose bed covers are to be rigid enough to support the weight of a firefighter - customer has been advised that there will be "Not a stepping surface" labels installed on the covers due to the ULC requirement. As discussed on the 04.24.2020 conference call.	1	
60-40-4500	S	6" Hose tray - side mount (ea) One on LAS, one on PTS to store the 80-11-5000 6" x 10' suction hoses.	2	MTL
60-40-9000	S	> Tube mount through tank for Duo-Safety ladders, with rear door ENG. NOTE: Specify location, ladders to be installed in this tube, complete dimensions of ladders if user supplied The 35' three section Duo-Safety ladder 80-14-2510, the 14' two section Duo-Safety Fresno ladder 80-14-27AA, and the three 10' Fire Hooks Unlimited pike poles 80-13-25AA will be stored in this tube in such a way that any one can be removed with out disturbing another. Door ajar switch required.	1	MTL
60-41-1000	S	Pike Pole tube - rear access Tubes are integral with the 60-40-900 ladder tube and will store pike poles 80-13-25AA as discussed with Chief Jody Price by phone on 04.05.2021	3	MTL
60-41-1500	S	Attic ladder tube with rear door The attic ladder (80-14-9000) will be stored in the water tank tube.	1	MTL
60-41-6001	S	> Zico hydraulic portable tank rack ENG. NOTE: Specify mounting location desired. If Portable tank is customer supplied, specify overall dimensions when the tank is in stored position Left side to store the 2000 Imp gallon portable tank 80-15-1000. To be wired so only operable when park brake is engaged and the flip up doors (roll up door position will not affect movement of the portable tank rack). Flashing lights, and reflective tape required at front and rear to indicate any areas that protrude beyond the body. A 97-decibel alarm (separate from chassis back-up alarm, common to the alarm of the LAS) shall be installed outside the vehicle and will operate only while the rack is in motion. Customer requested that minimal amount of doors be interlocked with the rack to minimize the risk of the rack not deploying due to a bad switch. As discussed on the 04.29.2020 conference call.	1	MTL
60-41-6010	S	ZICO PTS switched at rear above tail light Switch is located on same side as electric rack - left side The switch will be in a CAST PRODUCTS weatherproof aluminum box.	1	MTL
60-41-6110		Painted plate on exterior of Zico PTS	1	MTL
60-41-7100		Tread plate on body behind porta tank rack	1	MTL
60-41-9010	S	ZICO LAS switched at rear above tail light E Switch is located on same side as electric rack - right side The switch will be in a CAST PRODUCTS weatherproof aluminum box.	1	MTL
60-41-90AA	U	Zico LAS-XT-775 two arm ladder access system - right side Right side to store the 24' Duo-Safety two section ladder 80-14-0500 and the 14'	1	

PART NO	S	DESCRIPTION	QTY	ID
		<p>Duo-Safety roof ladder 80-14-5510 as changed on Change Order A. To be wired so only operable when park brake is engaged and the flip up doors are closed (roll up door position will not affect movement of the portable tank rack), SCBA fender storage tube doors are closed (if required). Flashing lights, and reflective tape required at front and rear to indicate any areas that protrude beyond the body. A 97-decibel alarm (separate from chassis back-up alarm, common to the alarm of the PTS) shall be installed outside the vehicle and will operate only while the rack is in motion. Engineering to Confirm the last three number of the Zico model number (775) Possible part number 1562669 (same as Cobequid M17-19722) Customer requested that minimal amount of doors be interlocked with the rack to minimize the risk of the rack not deploying due to a bad switch. As discussed on the 04.29.2020 conference call.</p>		
60-80-0100	S	<p>Blocking compartment under side body compartment (each) - under L1 As large as space permits - match the depth to the lowest chassis component as discussed with the department. Sliding hardware required "D" handle quarter turn latch with rods White reflective striping on edges Tread plate on face. Door ajar switch required.</p>	1	MTL
60-91-0700	U	<p>Wheel chock compartment in fender well - left side To house the 80-19-0500 wheel chocks. Smooth painted door with two lift and turn latches. Door ajar switch required UHMW is installed on floor of compartment SOPT #144</p>	1	
60-91-0900	U	<p>Decon Compartment A compartment is installed on the left side pump house area and will be able to hold 25 feet of 3/4" hose (maximum) and will have a 3/4" connector. This will be connected to the pump plumbing and shall supply heated water. The heated water should be as warm as possible for use in winter conditions. Circulate water through the heat exchanger to keep it warm, plumbing the return line through a 3 way valve. Metalfab will supply the hose and nozzle to ensure it will fit in the compartment. As discussed on the 04.29.2020 conference call. The compartment will house a Flexzilla Hose reel with rewind supplied and installed by Metalfab as approved by Chief Jody Price by phone on 19.05.2021 There will be a surface mount deck plate door with D-handle supplied and installed on the compartment.</p>	1	
60-99-10AA	U	<p>Mounting provisions for a stokes basket and spine board in hose bed Stokes basket measures 87" long, 26" wide and 11" deep Mounting location to be on the front top portion of the hose bed as discussed on the 04.29.2020 conference call</p>	1	
60-99-15AA	U	<p>Hose bed cover(s) safety locks Locking device(s) will only be used to maintain the hose bed covers firmly in place if covers were deployed during a mechanical failure without the actuators in place. As discussed on the 04.29.2020 conference call SOPT in file - same as Georgina</p>	1	
		INSTRUMENTATION	1	MTL
70-11-0000		Warning Label on Pump Operator's Panel	1	MTL
70-11-0500		<p>Side mount instrument panel No gauge or visual display can be higher than 84" above the operator's standing position Midpoint of any control cannot be higher than 72" above the operator's standing position</p>	1	MTL
70-11-1500	S	<p>Stainless steel instrument panels No gauge or visual display can be higher than 84" above the operator's standing position</p>	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
		Midpoint of any control cannot be higher than 72" above the operator's standing position Panel layout will require department approval prior to build. As discussed on the 05.06.2020 conference call		
70-11-2200	U	Removable storage tray in panel step/running board for supply hose An indent to cradle a 25' roll of 5" hose. Location to be on the right side offset from the pull out steps in same area - (referencing 60-31-5700) and the tray to be floating. Locations - right side as discussed on the 04.29.2020 conference call See image in Tender document under section 10.1.3 SOPT #1165	1	
70-11-23AA	U	Tube for dual water extinguisher in right side fender well Location to be in the right side fender well in a compartment similar to the one in the left side used for wheel chocks (60-91-0700) Locations - right side as discussed with Chief Jody Price on the phone on 04.05.2021 Quantity of two (2) extinguishers as discussed at the inspection visit of 05.12.2021	1	
70-11-3200	S	Colour coded tags Tags and colors will be sized and located in consultation with OFD. Due to the amount of foam lines, the department wish to identify water only lines instead with a blue tag that says "WATER" The left and right sides will be termed "Driver" and "Officer" respectively. As advised by Chief Jody Price by phone on 12.08.2020 and confirmed 03.15.2021 <ul style="list-style-type: none"> • Names to be used on discharges: 30-40-30AA - 5" Officer 30-41-3020 - 2-1/2" Officer 30-41-2520 - 2-1/2" Driver 30-42-8520 - 1-1/2" Rear 300' 1-1/2" Rear 400' 30-43-1520 2-1/2" Rear Driver 2-1/2" Rear Officer 30-44-0520 - 1-1/2" Driver Crosslay 1-1/2" Officer Crosslay 30-44-1020 - 1-1/2" Trashline 100' 1-1/2" Trashline 150' 30-44-3520 - 2-1/2" Driver Crosslay 2-1/2" Officer Crosslay 30-44-6520 - 3" Monitor As requested at the inspection visit of 05.12.2021	1	MTL
70-11-4506	U	Diamondback grip type panel hood step right side	1	
70-11-4606	U	Diamondback grip type panel hood step left side There will be a diamondback step under the crosslay connections on the left side pump panel as requested by Jody price by e-mail on 06.15.2020 The step does not need to be the full width of the panel - see pic F:/Data/Jacques/Current Projects/Oromocto/Pictures/IMG_8936	1	
70-11-5000		Standard cover over rear top of pump house - no storage	1	MTL
70-11-5500		Right side tread plate pump access door No opening dimension less than 18"	1	MTL
70-11-5700	S	Transverse tread plate pump access door Standard transverse tread plate door that will be completely removable as discussed on the 04.29.2020 conference call. Cab has to be tilted to access.	1	MTL
70-11-7500	S	Heat pan-aluminum The heat pan will be a one (1) piece design as per Metalfab standard. As discussed on the 05.06.2020 conference call	1	MTL
70-11-8000		Heater in pump compartment Switch for heater is located on left side pump operator panel.	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
70-20-1120	S	4-1/2" compound gauge - dual face 0-400 Thuemling brand There will be a pump intake and discharge pressure gauge supplied and installed as requested by Chief Jody Price. This will be in addition to the Class One TPG Plus governor (30-51-6640).	2	MTL
70-20-217A	U	2-1/2" pressure gauge - dual face 0-400 with RED LED back lighting Gauge to be no more than 6" from edge of the gauge to the center of the control. All gauges shall be back lit LED in color RED	17	
70-20-2500	S	Primer control - Trident - for the main pump	1	MTL
70-20-2501	S	Additional Primer control-Trident-Pre-prime for LS, RS, Front and Rear 6" inlets	4	MTL
70-20-3100		Class One Governor Control Throttle can be no lower than 42" and no higher than 72" from operator's standing position.	1	MTL
70-20-3500		Electric water level gauge on pump panel, Class One	1	MTL
70-20-3610	S	Remote Whelen XL Tank water level indicators each rear with driver One required on the rear of the body and mounted horizontally as shown on the drawing . There will be two on the side of the Spartan cab that are included with the chassis. Whelen XL Tank (replaces PSTANK2) Interlock with park brake so powered only when the park brake is set. Chrome bezel as discussed on the 04.15.2020 conference call.	1	MTL
70-20-6500		Test gauge panel	1	MTL
70-20-7500		Heat exchanger control valve	1	MTL
70-20-7600		Pump cooler control valve	1	MTL
70-21-1500	S	Electric Foam Level gauge on pump panel, Class One One for the "A" foam cell One for the "B" foam cell	2	MTL
70-21-2100	S	> PTO Hourmeter - included with the Harrison generator FROG control ENG. NOTE: Specify location in shop note	1	MTL
70-99-05AA	U	Right side camera system with monitor on left side pump operators panel RS (passenger) camera with monitor on pump operator's panel (LS driver) showing 180 degrees towards the scene RS (passenger side) CW night vision.	1	
71-21-4500	S	Speaker on pump panel Flush mount on left side pump operators panel. On/Off switch requested at 07.09.2020 meeting Wired to cab radio system. ref 50-35-0500. Department to identify which radio it will be wired to: One of the VHF Motorola CM300d As discussed at the 07.09.2020 meeting	1	MTL
ACCESSORIES			1	MTL
80-11-5000		6" x 10' lightweight suction hose (ea) Stored in 60-40-4500 trays	2	MTL
80-12-2500		6" barrel strainer Stored on 80-12-2510 mount	1	MTL
80-12-2510	U	Supply and install mount for 6" barrel strainer Kochek MM601 - p/n 1501175 Customer specified mounting location to be in upper front portion left side of the hose bed near the water fill tower. As discussed at the inspection visit of 05.12.2021	1	
80-12-4500	S	> 6" low level strainer with 1-1/2" Storz venturi connection ENG. NOTE: Gordon, Kochek says to start at 50 psi but max would be 100 PSI on Jet Siphon	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
		Stored in 80-12-46AA		
80-12-46AA	U	Supply and install mounting bracket for Low Level strainer Custom made storage bracket for the 80-12-4500 low level strainer. Customer specified storage location to be the righth side pump panel door (70-11-5500) to match previous trucks. Mount towards the hinges as discussed at the inspection visit of 08.27.2021	1	
80-13-0500		Rubber mallet Secured by 80-13-0513 Strap	1	MTL
80-13-0513	U	Mounting strap for rubber mallet - PAC Toolok 1003 p/n 1562258 Customer advised to ship bracket loose for department installation after delivery. As discussed at the inspection visit of 05.12.2021	1	
80-13-1500		Bar with bracket Mounted below door opening, above rear step	1	MTL
80-13-25AA	U	Pike pole, metal handle NY roof hook, hammer head, 10' ***Fire Hooks Unlimited brand*** Tube mounted.	3	
80-13-25BB	U	Pike pole, metal handle NY roof hook, pry bar tip, 6' ***Fire Hooks Unlimited brand*** Mount on rear of body in either configuration: One (1) each outside corner of the body with a cup at the bottom and PAC latching bracket at the tool end (pry tool towards the bumper and roof hook pointed up). Or option B if this is not possible due to how much the ladders overlap at the rear of the body - Mount both on the rear left side in a stacked fashion. Both tips to be in a cup, PAC latching bracket to latch both together and a friction bracket for the rear tool so it will not fall when only one (1) tool is deployed. As discussed at the inspection visit of 08.27.2021	2	
80-13-25CC	U	Pike pole, metal handle NY roof hook, pry bar tip, 5' ***Fire Hooks Unlimited brand*** Mounted with 80-13-3000 axe bracket clip (part # 1560346) due to size of tool shaft. Customer specified mounting locations to be on tool boards (60-31-8210) in L1/R1 compartments. As discussed at inspection visit of 05.12.2021 The tool will be mounted on the outside edge of the board on the 3" wide side with the hook pointed downward. As discussed at the inspection visit of 08.27.2021	2	
80-13-3000	S	Pike pole bracket Part # 1560346 will be used due to the size of the tool shaft. As discussed at the inspection visit of 08.27.2021	4	MTL
80-13-4000	S	Axe, pick head, fiberglass handle and bracket Customer specified mounting location to be on tool board (60-31-8210) in L1 compartment. As discussed at inspection visit of 05.12.2021 It will be mounted on the 3" wide side of the tool board as far back as possible. Axe bracket part # 1560346 required for handle only. As discussed at the inspection visit of 08.27.2021	1	MTL
80-13-4500	S	Axe, flat head, fiberglass handle and bracket Customer specified mounting location to be on tool board (60-31-8210) in L1 compartment. As discussed at inspection visit of 05.12.2021 It will be mounted on the 8" wide side of the tool board as close to the handhold as possible. Axe bracket part # 1560346 required for handle only. As discussed at the inspection visit of 08.27.2021	1	MTL
80-14-0505	U	Duo Safety 24' two section extension ladder Stored on the LAS	1	

PART NO	S	DESCRIPTION	QTY	ID
80-14-2510	U	Duo Safety 35' three section extension ladder Tube mounted	1	
80-14-27AA	U	Duo Safety 14' two section Fresno Series 701 extension ladder Tube mounted	1	
80-14-5510	U	14' Duo Safety ladder There will be a 14' Duo Safety Ladder supplied and installed on the LAS. As discussed at the 04.15.2020 conference call.	1	
80-14-8510	U	Duo Safety 10' folding attic ladder Mounted with 60-41-1500 attic ladder tube.	1	
80-15-1000		2000 l gallon portable tank - Husky Standard yellow liner. Aluminum frame. Stored on the PTS.	1	MTL
80-19-0500	S	Large folding wheel chock - aluminum (ea) Stored in the left side rear fender compartment 60-91-0700	2	MTL
80-99-05AA	U	Red Head Storz hose wrenches and hydrant wrench in bracket - S-148-3 Triple P/n 1520136 Located one each side and back as specified by OFD at inspection visit of 05.12.2021 Mounting locations to be: Lower back left side corner of the chassis cab Under the red flasher on the right side rear of the body - part of the wrench can overlap the flasher - see yellow tape for location. Upper left corner of the right side pump panel As discussed at the inspection visit of 08.27.2021	3	
80-99-10AA	U	Red Head Storz hose wrenches in bracket S-146-2 Double P/n 1520186 Located one each side and back as specified by OFD at inspection visit of 05.12.2021 Mounting locations to be: Back left side corner of the chassis cab above the triple wrenches To the right of the Fireman Friend - see yellow tape for location. Upper left corner of the right side pump panel - beside the triple wrenches As discussed at the inspection visit of 08.27.2021	3	
80-99-10BB	U	Red Head Storz hose wrenches in bracket S-146-1 Double P/n - 1520757 Located one each side and back as specified by OFD at inspection visit of 05.12.2021 Mounting locations to be: Back left side corner of the chassis cab above the Storz wrenches To the left of the dump valve - see yellow tape for location. Upper left corner of the right side pump panel - beside the Storz wrenches As discussed at the inspection visit of 08.27.2021	3	
80-99-15AA	U	4" Storz x Customer 2-1/2" Storz adapter for rear fill, with Storz cap The adapter will be 4" Storz to 2.5" Storz (no department thread included). As discussed on the 05.06.2020 conference call. Installed on rear direct fill	1	
80-99-20AA	U	Supply mounts and mount Customer's extrication tools as directed The customer supplied extrication tools will be installed as per fire department instructions on pull out tray in R4. The tools include; ONE (1) HOLMATRO POWER UNIT (GAS/PETROL DUO PUMP SR 20 PC 2 E) Note: Second pump will be stored in L4 ONE (1) HOLMATRO RAMS (1 - Model 4340) ONE (1) HOLMATRO SPREADER (Model 4242)	1	

PART NO	S	DESCRIPTION	QTY	ID
		<p>ONE (1) HOLMATRO CUTTER (Model 3040 NCT) Suggested PAC brackets for the above are as follows; 6 - 1562621 - 1006-Y Adjustment strap/bracket 2 - 1001340 - K5035FL - Bracket for cutter/combo tool 1 - 1001339 - K5026FL - Bracket for spreader 6 - 1562280 - 1070 - Jumbolock - Straps for Rams and hydraulic hoses. Custom brackets will be made to secure the Power units, pockets for rams, etc. as measured by engineering department PAC Brackets that wont be used will be shipped loose with the completed unit. As discussed at the inspection visit of 08.27.2021</p>		
80-99-25AA	U	<p><i>Streamlight bank charger with five 90500 hand lights - mounted and wired</i> P/n - 1521648 - 90500 Streamlight P/n - 1521612 - 90400 Bank charger Cumings quote in file Customer advised mounting location of bank charger to be on the upper shelf in the L4 compartment. As discussed at the inspection visit of 08.27.2021</p>	1	
80-99-30AA	U	<p><i>TFT Crossfire Monitor package XFC-62, includes telescoping waterway, base, etc.</i> TFT Crossfire Monitor Part No XFC-62 package includes; Crossfire Monitor XFT-NJ 3" manual telescoping waterway - Part No XG18PL-XL MST-4NJ - 2.5" NH Stacked Tips XF-B - Storage bracket M-R1250NJ - 2.5" NH Automatic Pressure Nozzle - ship loose XFH-2** (special thread) Ground base shall be two 2.5" Storz (thread behind Storz shall be 7x3.062) Red head Customer thread XF-SS5 - 2.5" NH Stream Straightener XGB-23 Bracket set Engineering to confirm above numbers before ordering Customer specified mounting location of storage bracket for ground base to be at the front of the hose bed near the light tower. As discussed at the inspection visit of 08.27.2021</p>	1	
80-99-35AA	U	<p><i>Streamlight Vulcan 180 LED light with charger - mounted and wired</i> Vulcan 180 LED Lantern with charger/vehicle mount - Streamlight number 44311. Cumings quote in file Customer specified location of charger/vehicle mounts to be on the top shelf in the L4 compartment. Mount as many as possible beside the bank charger (80-99-25AA) and ship the remainder loose with the completed unit. As discussed at the inspection visit of 08.27.2021</p>	4	
80-99-40AA	U	<p><i>Red Head 30 degree swivel - 6" FNH x 5" Storz with blind cap</i> Red Head #SE- LH - 30 degree 5" Storz x 6" FNH Red Head #SC - 5" Storz cap Will be installed on the right and left side suction as discussed on the 05.06.2020 conference call.</p>	2	
80-99-45AA	U	<p><i>Zico UHH-2 Helmet holders - shipped loose</i> p/n 1562643 The helmet brackets will be shipped loose as discussed at the inspection visit of 05.12.2021</p>	8	
80-99-50AA	U	<p><i>Blitzfire HE Oscillator Monitor package XXC-53-HE</i> Package includes; Blitzfire HE Oscillator Monitor withStorz inlet (3.062x7 behind Storz) Storz outlet (3.062x7 behind Storz). Dual Force Tip 3.062x7 inlet Stacked Tips 3.062x7 inlet Stream straightener 3.062x7 inlet/outlet Storage bracket Customer specified mounting location to be in the back compartment under the dump valve. Rubber interlocking tile will not be required, the Blitzfire will be restrained by a PAC bracket and both nozzles will be shipped loose. The</p>	1	

PART NO	S	DESCRIPTION	QTY	ID
		mounting bracket supplied with the Blitzfire will be shipped loose as well. As discussed at the inspection visit of 08.27.2021	As	
80-99-55AA	U	50' lengths - 1-3/4" Mercedes MTF5-800-DP hose with Red Head Storz couplings Quote in file Hose to be Purple in color with Red Head Storz couplings	24	
80-99-60AA	U	50' lengths - 2-1/2" Mercedes MTF5-800-DP hose with Red Head Storz couplings Quote in file Hose to be Purple in color with Red Head Storz couplings	24	
80-99-65AA	U	1-1/2" TFT nozzle - Metro 1 - 150 gpm @ 75 psi TFT #ME1VS-173 order with 7/8" smooth bore slug tip with NPSH thread Will need 1-1/2" Storz adapters as per 30-20-18AA - to be shipped with completed unit The nozzles only were picked up at the inspection visit of 08.27.2021 - refer to signed inspection form	6	