



Shop Order

Town of Oswego Fire District
 Brian Katzman Fire District Commissioner
 640 County Route 20
 Oswego, NY 13126
 1-315-529-1140
 bkatzman@otvfd.com

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Sales Rep: Ryan A. Stacy, CET Business Development Manager	Terms: Chassis Net 10 days Body and equipment COD upon pickup
Drawing #: FT-11610-C	
Est. Delivery Date: 11/30/23	
Customer PO #:	Penalty:
Customer #:	None
QPF #:	

Exp. Date: 10/14/2020
Quote No: ROSNY-0018
Job/Order No: 22947
BODY: 00-10-15 Metalfab Pumper - ULC 05/13

02/23/2024

PART NO	S	DESCRIPTION	QTY	ID
	<i>S</i>	<i>Change Order K</i>		<i>MTL</i>
<i>00-05-0020</i>	<i>S</i>	<i>Dealer - New York State Dealer</i>	<i>1</i>	<i>MTL</i>
<i>00-10-1510</i>	<i>U</i>	<i>Metalfab Pumper</i>	<i>1</i>	
00-20-1000		Company Profile	1	MTL
<i>00-20-1500</i>	<i>S</i>	<i>Standard Body Warranty</i>	<i>1</i>	<i>MTL</i>
00-20-1550		Metalfab Limited Ten (10) Year Paint and Corrosion Warranty	1	MTL
<i>00-20-1600</i>		<i>Waterous Pump Warranty - 5 years</i>	<i>1</i>	<i>MTL</i>
<i>00-20-1800</i>	<i>S</i>	<i>Polypropylene Tank Lifetime Warranty - Metalfab tank</i>	<i>1</i>	<i>MTL</i>
00-20-2000		Plant Visits - unlimited at customer expense	1	MTL
00-20-3500		Certification for Fusion Welding of Aluminum	1	MTL
00-20-4000		Quality System registered to ISO 9001:2015	1	MTL
00-20-4500		Fire Apparatus Manufacturers' Association Membership	1	MTL
GENERAL INFORMATION				MTL
<i>10-11-0000</i>	<i>S</i>	<i>Intent</i>	<i>1</i>	<i>MTL</i>
<i>10-11-0110</i>		<i>Vehicle data recorder included with chassis</i>	<i>1</i>	<i>MTL</i>
<i>10-11-11AA</i>	<i>U</i>	<i>NFPA 1901-2016 compliance</i>	<i>1</i>	
<i>10-11-15AA</i>	<i>U</i>	<i>UL Testing - NFPA Pumper - US GPM</i>	<i>1</i>	
<i>10-11-2100</i>	<i>S</i>	<i>Maximum length - 35'-00"</i>	<i>1</i>	<i>MTL</i>
<i>10-11-2200</i>	<i>S</i>	<i>Maximum height not specified</i>	<i>1</i>	<i>MTL</i>
<i>10-11-2400</i>		<i>Overall length is 30' or more</i>	<i>1</i>	<i>MTL</i>
10-11-2500		General Construction	1	MTL
<i>10-11-2600</i>	<i>S</i>	<i>Preconstruction Meeting</i>	<i>1</i>	<i>MTL</i>
<i>10-11-3000</i>		<i>Manuals - two copies</i>	<i>1</i>	<i>MTL</i>
<i>***Two copies of manuals on USB are required</i>				

PART NO	S	DESCRIPTION	QTY	ID
10-11-3600	S	> <i>Delivery - FOB Fire Department - by New York Dealer</i>	1	MTL
10-11-4000	S	<i>Payment Terms - Chassis Net 10 days, Balance COD less holdback</i>	1	MTL
		A holdback of 15% of the body price will be paid 15 days after acceptance of the completed vehicle		
10-20-1400	S	> <i>Hose capacity exceeding ULC/NFPA requirements</i>	1	MTL
		Hose bed to be able to hold the following: 1000' of 5" 300' of 2-1/2" hose		
		Additional weight of 967 pounds based on polyester double jacket fire hose		
10-20-2000		Equipment carrying capacity - standard ULC Pumper	1	MTL
		CHASSIS INFORMATION		MTL
20-11-1001	U	<i>Chassis Spartan FC-94 MFD with 10" raised roof</i>	1	
		204" Wheelbase, 90" rear overhang		
		21,500lb front, 33,000lb rear, 54,500lb GVWR		
		Cummins L9 450hp engine, Allison 3000 EVS, 4th gear startup, Pkg 198		
		Meritor 1710 driveline		
		Midship pump location C/L suction 118" as determined by engineering		
		60 MPH max top speed to meet NFPA		
		Spartan multiplex with switches - VISTA display not available		
		Paint to match Centari N2745 Vermilion red		
		Sikkens equivalent: FLNA 3221		
		Michelin X HL Z 385/65R22.5 front tire		
		Michelin XDN2 315/80R22.5 rear tire		
		Alcoa aluminum wheels - no wheel trim included		
		One (1) antenna base		
		Interior finish to be Multi Tone Silver gray		
		Customer requests transmission mode programming to be 5th startup/5th mode - this can be done at Jensen Transmission - call ahead to be sure Danny Cruickshank is working and he will change the CMC parameter.		
		Customer requests maximum speed programmed to 65 MPH, Statement of Exceptions provided.		
20-11-1500		2013 Emission chassis modifications	1	MTL
20-11-1700	S	<i>Chassis Motor Vehicle Inspection required - by New York Dealer</i>	1	MTL
20-21-0500		<i>Fluid capacity plate</i>	1	MTL
20-21-0600		<i>Pumping test plate</i>	1	MTL
20-21-1030	S	<i>Maximum riders sign - 6 persons - Included with Spartan Chassis</i>	1	MTL
20-21-1510	S	<i>Seat belt warning labels - 4 door chassis - Included with Spartan chassis</i>	1	MTL
20-21-1520	S	<i>Helmet warning label - do not wear helmet - Included with Spartan chassis</i>	4	MTL
20-21-1560	S	<i>LED Tire Pressure Indicators - Single Axle - included with Spartan chassis</i>	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
		Shipped loose for end user install		
20-21-1600	S	Apparatus Information Label - Imperial An information label is provided in the chassis cab, visible to the driver, stating: "When manufactured, this vehicle was: ** feet and inches high ** feet and inches long ** tons GVW Changes in height since the apparatus was manufactured shall be noted on this plate by the Fire Department" Locate on driver side dash panel	1	MTL
20-21-2500	S	Shifter lock not required	1	MTL
20-21-3500		Rear step warning label	1	MTL
20-21-3810	S	Front mudflaps provided with chassis	1	MTL
20-21-4000		Rear mudflaps - Metalfab Logo	1	MTL
20-21-45AA	U	Transportation Safety Kit - Included with chassis Includes basic First Aid Kit, Safety Triangle and 2-1/2 lb Fire Extinguisher	1	
20-31-0100		Fuel tank or step covers not required	1	MTL
20-31-0200	S	Fuel fill label - "Ultra Low Sulfur Diesel Only"	1	MTL
20-31-3000	S	> Paint custom cab two tone Black on Top - L0001 spray out sent May 18-23, approved May 24 Paint line to be Spartan standard two tone paint line - same as M23-22669 Stellarton Finish to be clear coated and polished to match the red finish	1	MTL
20-31-4700		> Extend front bumper, gravshld with hosewell, cover, and lift and turn latch Bumper extension and gravel shield to match proposal drawing Existing frame to be modified to match proposal drawing 2 bins, 1 each side of bumper - capacity for 100' 1-3/4" polyester double jacket hose plus nozzle in each bin	1	MTL
20-31-7000	S	SS nut covers, hub caps and high hats - single axle	1	MTL
20-31-75AA	U	Mounting plate on doghouse for customer use, gray zolatone A mounting plate spaced from the top of the doghouse is provided ahead of the HVAC unit on the engine tunnel - 34" wide x 21" long less 9" x 18" cutout on driver's side for cab controls. Gray zolatone finish to match cab interior. Install a shelf on the rear of the doghouse, gray zolatone finish to match cab interior.	1	
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	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
		specifications.		
		Modify for plymovent connection - details to be provided from fire department _____		
		Note that exhaust is 4" diameter		
		Install customer supplied transmitter for Plymovent, wiring instructions provided by customer.		
20-41-1900	S	Battery boost terminals with chassis	1	MTL
20-41-2000		Chassis batteries remain in OEM location	1	MTL
20-41-25AA	U	Fuel Fill at LS rear fender with triple SCBA style door	1	
		Door to match SCBA storage tubes in fenderwell		
		This will be a standard fuel fill installation, no SCBA tubes required at this location		
20-41-2600		Chassis fuel tank remains in OEM location	1	MTL
20-41-5000		Rear Tow Hooks - under body	1	MTL
		*** Flat bar tow hooks under rear step (2)		
20-51-0700		Master Battery Disconnect included with chassis	1	MTL
20-51-2500		Back up alarm included with chassis	1	MTL
20-51-3400		Protection valve installed for air operated accessories	1	MTL
20-51-4000		Auto eject for air inlet - LS	1	MTL
		Install at LS cab stepwell next to the 120 volt inlet		
20-51-6200	S	> 120 volt 20 A shore line connection in chassis cab/body	10	MTL
		Standard 5-20R duplex receptacle in chassis cab/body, not fused		
		To be located minimum 12" from the floor to meet ULC		
		Mounting locations:		
		Receptacle #1 - #10 to be specified by the Fire Department :		
		1 outlet in L2, L3, L4, R3, R4, B1 and 2 outlets in R2 - one high at each end of adjustable shelf.		
		2 outlets in cab, one each side of engine tunnel below HVAC unit (between front and rear facing seats)		
20-51-6210	U	4 outlet power bar in cab	130	
		Locate on the officer's side of the doghouse below HVAC unit.		
		Includes circuit breaker		
20-51-6501	S	Kussmaul Battery Conditioner LPC 40 w/auto eject included w/chassis	1	MTL
		Change the battery status indicator to Deluxe 091-194X-IND-ST-XX		
20-51-7102	S	Electric System Manager - VMUX	1	MTL
20-51-8505	S	Engine compartment light LED - included with chassis	1	MTL
		One required to light up the complete engine compartment.		
		Switched when cab is raised.		
20-51-9001	S	Air horns included w/chassis	1	MTL
		Air horns to be relocated from original bumper to centre of new bumper outboard of Q2B as shown on the proposal drawing		
		Add a push button on the officer's side dash to operate air horn.		

PART NO	S	DESCRIPTION	QTY	ID
20-52-3500	S	> Chassis steering wheel lined up by Metalfab	1	MTL
20-52-4003	U	Installation of rearview camera when supplied w/Spartan chassis Chassis is provided with a flip down monitor above the steering wheel A substantial tread plate shield to be installed around the camera to prevent damage	1	
20-60-0400		Chassis wheelbase does not change	1	MTL
20-90-16AA	U	Dual USB-C and USB-A charging port Kussmaul 091-264, one on officer's side of vehicle, two on rear of doghouse in cab Customer requests that these be powered from both the shoreline and the chassis.	3	
20-90-16BB	U	Provide power and ground to radio shelf from Kussmaul battery saver Locate at radio shelf on back of dog house for TIC and Radios Powered from Kussmaul battery saver	1	
20-99-05AA	U	Move Current Auto Eject for Battery Conditioner to LS Cab Step Area The current location will be covered with an additional intersection light	1	
20-99-10AA	U	Change front bumper to Painted Structural Steel Metalfab to fabricate bumper per 20-31-4700 Install a stainless angle on the top corner of the bumper to protect the paint and the chevron. Angle will be approximately 1" horizontal by 3/4" vertical.	1	
20-99-15AA	U	Change Battery tray and cover to Stainless Steel Left side only	1	
20-99-20AA	U	Reinforce cab roof for Command Light Mounting For 50-31-60AA Command Light	1	
20-99-25AA	U	Supply and install GPS Speedometer at officer's position Similar to https://www.amazon.ca/ELING-Universal-Speedometer-Odometer-Backlights/dp/B07KNR68D8/ 3-3/8" diameter dial type speedometer installed on RS instrument panel	1	
20-99-30AA	U	Hi Viz FT-4X6-4KIT headlights in place of original Change chassis headlights to LED Hi Viz in place of original	1	
PUMP AND PLUMBING				MTL
30-12-4000		Mechanical seals for Waterous pumps	1	MTL
30-12-6500	S	Waterous CSU single stage 2000 USGPM Short steamers required - see 30-31-4010	1	MTL
30-15-0204	S	Plumbing - Waterous manifold pump SM SS	1	MTL
30-20-0500	S	Valves and controls - side mount panel All drain valves to be 1/4 turn controls .	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
		Note - front discharge lines to be equipped with auto drains in place of 1/4 turn controls for increased ground clearance.		
30-20-1002		<i>Akron valves specified</i>	1	MTL
30-20-1600		<i>Piping stainless steel - general</i>	1	MTL
30-20-1700	S	<i>1-1/2" thread specifications - NST</i> Confirmed at precon	1	MTL
30-20-1800	S	<i>2-1/2" thread specifications - NST</i> Confirmed at precon	1	MTL
30-20-2000		<i>Piping hydrostatic test</i>	1	MTL
30-20-2500		<i>Anodes in suction and discharge piping</i> 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
30-21-5560		<i>Tank to Pump SS 3" w/ check valve manifold pump</i>	1	MTL
30-22-1520		<i>Tank Fill valve 2-1/2" SS</i>	1	MTL
30-31-4010	S	<i>Suction - 6" not gated each side manifold pump</i> To have the shorter style inlets that protrude less than two (2) inches (50mm) away from the side panels, allowing an external valve to be connected and not protrude past the apparatus body sides - 69" panels Customer advised make and model of external valves that will be installed and the pump panel rollup doors must be able to close when installed: same as Georgina: LS - TFT AP8NX-NX-PS RS - TFT AXD1SP-NX-T Confirm at precon _____	1	MTL
30-32-7535		<i>Suction - 2-1/2" left side SS, bleeder, Waterous manifold pump</i>	1	MTL
30-32-8035		<i>Suction - 2-1/2" right side SS, bleeder, Waterous manifold pump</i>	1	MTL
30-40-2040	U	<i>Price Adjustment</i>	1	
30-40-20AA	U	<i>5" right discharge SS, plumbed 3", Waterous manifold pump, special cap</i> To include 30 degree droop and bleeder Cap to include a 2-1/2" male thread and 2-1/2" chrome cap	1	
30-40-20BB	U	<i>5" rear discharge, 3" valve, 4" SS piping, 5" storz connection, bleeder, slo clos</i> Connection at rear inside compartment located right side beside ladder tube as low as possible. The piping will run throught the water tank as low as possible so that connection at rear will be as low as possible.	1	
30-41-2025		<i>2-1/2" RS discharge SS, bleeder, Waterous manifold pump</i>	1	MTL
30-41-2525		<i>2-1/2" LS discharge SS, bleeder, Waterous manifold pump</i>	2	MTL

PART NO	S	DESCRIPTION	QTY	ID
30-43-1520	S	<p>2-1/2" rear discharge SS, plumbed 2-1/2", bleeder Positioned at front of hose bed, will be plumbed through the storage area ahead of the hose bed and through the right side coffin compartment area to clear the rollup hose bed cover, will require the foam fill tower to be offset to clear. It will enter the hose bed from the right side and be equipped with a 90 degree elbow to preconnect. Bleeder will be on the pump panel. Droop will not be required. Provide a short 2-1/2" hose from the connection to the back of the hose bed for customer use.</p>	1	MTL
30-44-0720	S	<p>1-1/2" speedlay (each) front of pumphouse SS, plumbed 2" Capacity in each lay to be minimum 200' x 1-3/4" polyester double jacket hose and nozzle To be equipped with removable tray sliding on UHMW plastic, outlet to be close to the end of the speedlay for easy connection. Include a lynch pin at the driver's side of each sliding tray to secure it in place.</p>	2	MTL
30-44-1020	S	<p>> 1-1/2" front trash line SS, plumbed 2", hosewell Capacity in each hose lay to be minimum 100' x 1-3/4" polyester double jacket hose and nozzle Webbing mesh to be used to hold hose in place, equipped with shock cord and hooks. Colour of mesh to be RED.</p>	2	MTL
30-44-3520	S	<p>2-1/2" speedlay SS, plumbed 2-1/2", bleeder Capacity in hose lay to be minimum 200' x 2-1/2" hose and nozzle To be equipped with removable tray sliding on UHMW plastic, outlet to be close to the end of the speedlay for easy connection.</p>	1	MTL
30-44-6520	S	<p>Piping for monitor SS, plumbed 3", bleeder Monitor piping will be terminate with 3" victaulic connection for XGA Extend a Gun riser and will have a Metalfab supplied TFT Hurricane RC Monitor installed (80-99-25AA) Stored monitor to be even or just below the top of the pump house storage Include a partition around the stowed monitor to prevent interference with other stored equipment.</p>	1	MTL
30-51-0510	U	<p>Pump Shift-Midship air ***Includes "Pump Engaged" and "OK to Pump" indicator lights in cab ***Includes "Throttle Ready" indicator light on Pump operating panel Metalfab to provide as existing chassis does not include pump shift</p>	1	

PART NO	S	DESCRIPTION	QTY	ID
30-51-0700		Pump Gearbox mounted manual over ride for pump shift	1	MTL
30-51-6640		Class One "TPG Plus" Governor/Throttle To be programmed in PSI unless otherwise specified	1	MTL
30-51-7000		Suction side relief V/V, manifold pump	1	MTL
30-51-7711		Trident Air Primer 3 barrel 1 location	1	MTL
30-51-7720	S	Additional air tank for air primer system An additional air tank is provided to improve air primer capacity	1	MTL
30-51-8100		Heat exchanger included with chassis	1	MTL
30-51-8500		Pump cooler with control valve, check valve Plumb to tank fill tower, control on pump panel	1	MTL
30-51-90AA	U	Waterous Thermal Relief Valve - Overheat Protection Manager Indicator light/test button located on left side pump operators panel SOPT#844 Will be ordered with the pump and will discharge below the pump when activated	1	
30-52-1000		Master drain V/V, 12 port	1	MTL
30-52-2000		Drain valve for foam system header	1	MTL
30-52-5515	U	Foam System-Hypro FoamPro 2001 Single Tank Foam system is plumbed to both 1-1/2" speedlays, the 2-1/2" speedlay and both front bumper 1-1/2" discharges.	1	
30-52-8100		Electric foam fill pump with panel pickup Pump will be used to refill the foam cell 40-12-5000. The suction hose will be stored inside the pump house and will be accessible through the right side pump access door 70-11-5500	1	MTL
30-52-9100		Foam concentrate label at foam tank fill	1	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
40-11-4500	S	Tank capacity 750 US Gallons	1	MTL
40-12-4700	S	Foam cell - 35 US gallon	1	MTL
40-13-0100	S	> Through the tank tunnel - for ladder storage 60-40-9000 The ladder tube 60-40-9000 will be stored in the water tank	1	MTL
40-21-0500		3" tank to pump connection	1	MTL
40-22-1000	S	2-1/2" tank fill connection	1	MTL
40-23-0500	S	3/4" water level gauge connection	1	MTL
40-23-1000	S	3/4" foam level gauge connection	1	MTL
40-30-0400		3" plug in sump box The drain will be a plug	1	MTL
40-30-1000		Water Fill Box front left corner	1	MTL
40-31-0400	S	Rear dump valve not requested	1	MTL
40-31-6050	S	Rear fill not requested	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
		ELECTRICAL		MTL
50-11-0400		Base electrical system - Spartan multiplex Vista Screens to be added per 50-99-35AA	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
50-11-1400	S	Siren and speaker included w/Spartan chassis	1	MTL
50-11-2010	S	Federal Q2B mechanical siren - through front bumper ***Controlled by foot switch at both driver and officer positions. Center front bumper Current pedestal mount siren to be returned to parts and a flush mount siren ordered Include two siren brake momentary switches, one accessible to driver and one accessible to officer. Include a master disconnect for the siren under the front bumper. Interlock siren switches so active only when MASTER WARNING switch is active.	1	MTL
50-11-2600		Siren to be accessible to driver and officer	1	MTL
50-11-5990	U	Whelen light bar Whelen Freedom 72" per WECAD attached	1	
50-11-66AA	U	Rear LED Traffic Advisor warning lights - split style - flush mount 1571000 TA4437M2 These will be flush mounted in the back of the body each side of the hose bed Includes TACTL5 controller, mounted in the cab centre instrument panel	1	
50-12-8521		Front flashers, intersection lights included with chassis, Whelen 600 Red LED with red lens	1	MTL
50-12-85AA	U	Replace chassis warning lights with Whelen 6RBR Rota Beam Remove Whelen LED 600 series lights provided with chassis and replace with Whelen Rota Beam red with red lens. Whelen LED 600 can be returned to stock. Flash Pattern to be side to side	4	
50-12-86AA	U	Rear LED flashers (pr)-Whelen LED 900 - Upper - RED/BLUE Upper rear LED, left side BLUE with blue lens, right side RED with red lens	1	
50-12-8810	S	Body side inter lts (pr)-Whelan red LED 600 with integral flasher - Lower Red LED with red lens One pair in rear fender well, one pair above chassis front wheels	2	MTL

PART NO	S	DESCRIPTION	QTY	ID
		to cover the hole from the relocated auto eject		
50-12-8820	S	Body side inter lts (pr)-Whelan red LED 900 with integral flasher - Upper Red LED with red lens	2	MTL
50-21-5100	S	> Compartment lighting - LED tube lights in each compartment (rollup doors) Order with doors	1	MTL
50-21-5500	S	Door Ajar warning light - with chassis Show on the VISTA display and chassis door ajar warning light Warning label in cab to read: "Do Not Move Apparatus when Light is on" Includes hose bed covers (60-33-5000) and coffin compartment doors (60-91-0900)	1	MTL
50-21-5550	S	Equipment not stowed warning light - with chassis To be wired to warn when the light tower is not stowed. Show on the VISTA display and chassis door ajar warning light Warning label in cab to read: "Do Not Move Apparatus when Light is on" for Light tower (50-31-60AA)	1	MTL
50-21-82AA	U	Step lights for chassis steps - LED - w/chassis Switched with park brake	1	
50-21-83AA	U	Price Adjustment	1	
50-21-83BB	U	Price Adjustment	1	
50-21-8600		LED clearance lts and reflectors	1	MTL
50-21-8605	U	Polished aluminum license plated holder w/LED lighting Install on Left Side of rear door	1	
50-21-8800		LED intermediate turn signal/clearance/reflector length >30'	1	MTL
50-22-0750		Whelan 64 LED CAST 4V tail/brake-turn-backup-warning module (pr)	1	MTL
50-31-6015	U	Whelan 900 LED Scene Lights (pr) - Right side Located in upper front and rear corners of RS body side Switched in cab on VISTA These lights can be managed to shed	1	
50-31-6016	U	Whelan 900 LED Scene Lights (pr) - Left side Located in upper front and rear corners of LS body side Switched in cab on VISTA These lights can be managed to shed	1	
50-31-6017	U	Whelan 900 LED Scene Lights (pr) - Rear Located in upper corners rear of body below the flashing lights Switched in cab on VISTA These lights cannot be managed to shed Wired to switch in cab, when vehicle is in reverse, and with a switch at the rear of the truck. The switch at the rear will be cancelled when the park brake is released	1	

PART NO	S	DESCRIPTION	QTY	ID
50-31-60AA	U	Command Light KL415-FX- 4 Spectra MAX LED heads, 12 Volt DC Located on top of the cab at the rear. Control will be umbilical type and located on the left side wall of the L1 compartment. Light tower does not include back lighting SOPT#1223 - truck specific Wired to VISTA equipment not stowed warning light and chassis door ajar light Mounted on chassis Roof - Reinforcement required	1	
50-31-60BB	U	Shroud (Painted Plate) around Command Light Painted black plus clear coat and polish to match cab upper paint To include 90 degree bends top and bottom for rigidity Include drain holes in rear lower corners	1	
50-31-60DD	U	Whelen 900LED Scene Lights (pr) - one each side of cab Located in upper portion of cab between front and rear doors, one each side Switched in cab with body scene lights on VISTA, and when a door on the corresponding side of the truck is opened. These lights can be managed to shed	1	
50-31-6505	S	Ground lighting included with chassis Switched with park brake, respective cab door and Switch	1	MTL
50-31-658A	U	Ground lighting (20" LED Lumabar) - side mount body Switched with park brake. Include 20" Lumabars under the pump house rollup doors each side as well as under the L1, L3, R1, and R3 compartments.	1	
50-35-10AA	U	Provision for customer radio Fabricate new centre dash panel to accommodate customer Motorola XTL 1500 radio at the top centre - move the traffic advisor and siren down as necessary to accomplish this. Provide a power wire for the radio and label it behind the panel.	1	
50-99-10AA	U	Hose bed cover lights - 40" lumabars Switched with park brake.	1	
50-99-30AA	U	Hi-Vis front Brow Light - FT-B-72 similar to Georgina, to be switched as below: The front scene lighting shall be activated by a virtual button on the vehicle display and control screen. The virtual button shall be a multi-level button to toggle through the front scene lighting activation levels. The button shall toggle through and display the state as "Off", "Spot", "Flood", "Scene", "Off" and then repeat that cycle. With each level of activation the previous state is maintained, so that "Flood" is both "Spot" and "Flood" modes together, while "Scene" is all three (3) levels activated simultaneously.	1	

PART NO	S	DESCRIPTION	QTY	ID
50-99-35AA	U	Vista Screens w/ Push Buttons for VMUX System Locate one each driver's and officer's side	2	
51-31-4500		Dielectric strength test for line voltage system BODY	1	MTL
60-10-1400	S	Single axle extruded aluminum body - full width hose bed	1	MTL
60-10-15SS	U	1" drop on lower edge of compartment floor - sweep out type There will be 1" drop at the compartment floor edge to create a sweep out style compartment	1	
60-10-4100		No "beavertail" rear step supports	1	MTL
60-10-4600	S	Painted fender surround	1	MTL
60-10-47AA	U	Black Rubber Fender Extensions There shall be black rubber bolt on fender extensions installed over the rear wheels, to match cab.	1	
60-10-5400		> Diamondback pumphouse steps Solid non slip inserts are provided at bottom of each pump panel	1	MTL
60-10-54AA	U	9" inset rear step Include folding steps with integral LED lighting each side of inset step for access to top of vehicle, four each side	1	
60-10-6500	S	Bolt on extruded aluminum rub rail w/red and white reflective	1	MTL
60-11-0300	S	> Front left side compartments full height	1	MTL
60-11-0700	S	> Front right side compartments full height	1	MTL
60-11-1000	S	> Rear left side compartments full height	1	MTL
60-11-1400	S	> Rear right side compartments full height Confirm rear side compartment width at precon - the 60" width requested and the 10.5 degree angle of departure shown on the proposal drawing cannot be achieved unless an auxiliary rear step is provided to achieve the required rear step height	1	MTL
60-11-2000		> High side compartment (over 18") each	2	MTL
60-11-3200	S	> Full Height Rear compartment	1	MTL
60-11-56AA	U	Rollup door - painted job color - standard height Painted to match body Includes magnetic door switch, LED tube lights, rubber bumpers to prevent pinch point Top gutter, side rails and sills are to be natural finish	2	
60-11-56BB	U	Rollup door - painted job color - full height Painted to match body Includes magnetic door switch, LED tube lights, rubber bumpers to prevent pinch point Top gutter, side rails and sills are to be natural finish	7	
60-11-56CC	U	Dtrip trays for all compartments with rollup doors Order with doors if available Drain to be clear plastic tubing routed to the outside of the apparatus	1	

PART NO	S	DESCRIPTION	QTY	ID
		This feature will reduce the useable space in the compartment by 2".		
60-11-56DD	U	Rollup door pull straps all full height compartments These will be for the rollup doors for both pump panels, L1, L3, R1, R3 and B1 The locations of the straps will be: Pump panel - opposite of the speedlays L1 - L3 compartment - left side wall as shown on approval drawing R1 - R3 compartment - right side wall as shown on approval drawing	1	
60-31-4100		Extruded aluminum handrails Minimum 2" clearance from handrail to any surface	1	MTL
60-31-55AA	U	Manual 24" pull out step under rear step Ziamatic MPOS-24 manual pull out step Install to maintain the 10.5 degree angle of departure and achieve the maximum 24" rear step height Include a switch to warn when step is deployed and park brake is released with an indication on the VISTA display	1	
60-31-6500	S	Compartment matting - black plastic Interlocking tile	1	MTL
60-31-7900	U	Vertical unistrut tracking for all compts - dual tracks on front and rear wall All compartments to include dual tracks on the front and rear walls (standard unistrut tracking) for the mounting of shelving, trays, tool boards or other equipment, as required. Tracking will be left off walls that include vertical pull-out tool boards (60-31-8200) The tracking will be shorter than standard to allow space for the Amdor Drip Trays (60-11-5645)	7	
60-31-8004		BA bottle compartment (ea) - fender well - triple tube type with SS door Right Side Fender well	2	MTL
60-31-8201	U	Sliding vertical toolboard - open/close latch L3 compartment, full height, adjustable from side to side, mount 8" from right hand door rail White reflective stripe is applied on the exposed edge for visibility when the tool board is deployed. Both sides of the tool board will be covered with PAC-Track (60-31-821A). The tool board will be shorter than standard to allow space for the Amdor Drip Trays (60-11-5645).	1	
60-31-821A	U	Pac-Track on the tool boards and compartment Pac Trac is installed horizontally on both side of the tool board (60-31-8200). There will a 24" piece high installed the full width of the L1 compartment - upper portion of the compartment. The floor of the floor mounted trays in R1 and R3 will be Pac Track	4	

PART NO	S	DESCRIPTION	QTY	ID
60-31-8400	U	<i>Fixed vertical partition</i> Full height - Left of Tool board in the L3 compartment - Approximately 16" from right hand door rail (so there is 8" each side of tool board 60-31-8200)	1	
60-31-84AA	U	<i>Rolled hose and extinguisher storage in L1 compartment</i> The 600lb 100% extension Slidemaster tray in the L1 compartment will have four rolled hose slots 4" wide each and a plate in the center of the remaining area where the customer will mount extinguishers on either side after the delivery. Partitions for rolled hose are to be adjustable. A layout drawing is to be approved by the customer prior to fabrication. Extinguishers to be held in place with Velcro straps with footman loops.	1	
60-31-8800	S	> <i>Sliding tray (ea) - 600 pound capacity AM2 70% extension</i> ***Hardware requires 3-1/2" of compartment height Reflective stripe is applied on the exposed edge for visibility when the compartment door is open Location: Tray #1 - R3 compartment Tray #2 - B1 compartment	2	MTL
60-31-88AA	U	<i>Sliding tray (ea) - 600 pound capacity AM3 - 100% extension</i> White reflective stripe is applied on the exposed edge for visibility when the compartment door is open. Tray #1 - R1 compartment Tray #2 - L1 compartment with partitions for hose storage per 60-31-84AA	2	
60-31-90AA	U	<i>Tip down tray - 30 degree, 200 pound capacity - aluminum hardware</i> The tray will be 200 lb capacity with aluminum hardware Locate in L1 compartment on unistruts so adjustable in height	1	
60-31-9600	S	> <i>Adjustable shelf (ea)</i> Reflective stripe is applied on the exposed edge for visibility when the compartment door is open Locations: Shelf #1 - Adjustable in R1 compartment Shelf #2 - Adjustable in R1 compartment Shelf #3 - Fixed in L1 compartment to support vertical divider (60-31-8400) - not required with the final configuration of the compartment Shelf #4 - Left of vertical divider in L3 compartment - full depth Shelf #5 - Left of vertical divider in L3 compartment - full depth Shelf #6 - R3 compartment Shelf #7 - Upper portion of the R3 compartment	7	MTL
60-32-3550		<i>Two adjustable hose divider (each)</i> Hand hold required in end Two adjustable	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
60-32-7500	S	Hose bed - aluminum To be reinforced where cover overlaps edge of water tank as noted at final inspection. Add continuous buffed aluminum plates to vertical sides of hose bed, to be even with top of body and even with rear the hose bed cover, then vertical tread plates from the hose bed cover to the rear of the body. Add horizontal tread plate panels between the inset step and the back of the body.	1	MTL
60-33-0100	S	Paint exterior - Imron Elite and clearcoat *** Paint code and colour red to match cab	1	MTL
60-33-0200	S	Undercoat vehicle with KROWN rust protection include chassis frame rails	1	MTL
60-33-0600	S	Chassis wheels not painted - wheels are polished aluminum	1	MTL
60-33-1000		Paint pump and plumbing job colour	1	MTL
60-33-1500		Buffed finish compartment interior	1	MTL
60-33-2000	S	Lettering - no lettering provided	1	MTL
60-33-3200	S	Reflective stripe - 1" - 4" -1" black Black reflective striping to match photos in: O:,NY M23-22947Photos 3M Scotchlite material. Layout drawing approved November 15	1	MTL
60-33-3310	S	Reflective stripe - red and black chevron at rear only - Diamond grade material Minimum 50% of rear vertical surface - note that the rear door will not require chevron. Diamond grade will be printed red and black on diamond grade material Layout drawing approved November 15	1	MTL
60-33-33AA	U	Reflective Chevrons Front Bumper - Red/Black Diamond grade will be printed red and black on diamond grade material Layout drawing approved November 15	1	
60-33-4700	S	No crosslay preconnects on vehicle	1	MTL
60-33-50AA	U	Gortite manual steelflex roll-up cover for hose bed The end tarps will be BLACK webbing mesh type with velcro straps and footman loops Switch for door ajar required Will stop 8" short at the rear of the hose bed for the landing step surface, be full width of the hose bed, will not cover the water fill / foam fill area Provide an information label at lift bar location specifying the weight capacity of the cover.	1	
60-40-5500	S	Suction hose tube (each) with door Located under the hose bed To store the 6' x 10 long suction hoses 80-11-5000.	2	MTL

PART NO	S	DESCRIPTION	QTY	ID
		<p>Tubes will be fully enclosed with a single rear access door. Door ajar switch required.</p>		
60-40-9000	S	<p>> Tube mount for ladders through water tank The ladder tube will be through the water tank under the hose bed (60-32-7500), accessed from inside the back compartment. To store the 24' Duo Safety two section extension ladder 80-14-2510, 14' Duo Safety roof ladder 80-14-5510, 10' Duo Safety folding attic 80-14-8510, 10' pike pole 80-13-2500 and the 12' pike pole 80-13-25AA. Tubes will be fully enclosed with webbing mesh with velcro straps and footman loops. Colour of mesh to be RED. Ladders to be stored vertically on their side as shown on the proposal drawing and separated so they can be deployed individually</p>	1	MTL
60-41-1000	S	<p>Pike Pole tube in ladder mount for ladders Refer to 60-40-9000</p>	2	MTL
60-41-1500	S	<p>Attic ladder tube in tube mount for ladders Refer to 60-40-9000</p>	1	MTL
60-91-0700	S	<p>< Wheel chock storage compartment in rear body fender (ea) - treadplate door Left side wheel well forward, note that this is a single compartment designed to carry both wheel chocks Include a stainless trim ring to match triple SCBA cylinder tubes</p>	2	MTL
60-99-05AA	U	<p>Upper Coffin Compartments w/Covers To have drains and vents - drains to extend below side compartments Preliminary dimensions for compartments = 87" L x 21" W x 22" deep Each compartment equipped with a cover with two D handle latches, two gas struts, and a handrail as shown on the proposal drawing. Sides of compartment are raised so the bent lips of the cover extend over them to reduce water infiltration. Bottom of compartment is provided with black interlocking plastic tile. Add reinforcing channels in the centre of the covers, parallel with hinge - 1/8" channels approximately 4" wide to fit between D handle and gas strut brackets. Provide yellow reflective delineation on covers around the outer edge except at the back of the truck - this delineation to be even with deck plate landing zone at rear of hose bed.</p>	2	
		INSTRUMENTATION		
70-11-0000		<p>Warning Label on Pump Operator's Panel</p>	1	MTL
70-11-0501	S	<p>Side mount instrument panel with rollup door LS and RS 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

PART NO	S	DESCRIPTION	QTY	ID
70-11-1500	S	<i>Stainless steel instrument panels</i> 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 Engineering to provide drawing for approval prior to fabrication	1	MTL
70-11-2200	U	<i>Floating storage trays in pump house running board, velcro straps</i> Drop in storage trays for 5" supply line, approximately 8-1/2" wide x 36" x 8" deep Each side of vehicle, velcro straps provided to secure hose	2	
70-11-3200	S	<i>Colour coded tags - Vision Mark Tags</i> Engineering to provide drawing for approval prior to ordering Change tags at control and bumper to say "1-3/4" FRONT OFFICER SIDE" and "1-3/4" FRONT DRIVER SIDE", colours remain the same	1	MTL
70-11-5100		<i>Open storage at rear top of pump house</i> Drain holes required, plumbed to below frame rails. Black plastic interlocking tile install on floor Illuminated by Lumabar to be activated with park brake	1	MTL
70-11-5500	S	<i>Right side brushed aluminum access door with thumb latches</i> The door will be brushed aluminum finish with thumb latches	1	MTL
70-11-7500	S	<i>Heat pan-aluminum - extreme weather</i> To be in 2-halves - removable from each side Fully enclosed front and rear	1	MTL
70-11-8000		<i>Heater in pump compartment</i> Switch for heater located on left side pump operators panel Label to indicate "Pump House Heater"	1	MTL
70-11-8200	U	<i>Rubber seal around suction and discharge openings on panel</i>	1	
70-20-11AA	U	<i>4-1/2" compound gauge -30-0-400 PSI only</i> To be within 8" of each other - edge to edge	2	
70-20-21AA	U	<i>2-1/2" pressure gauge 0-400 PSI only</i>	11	
70-20-2500	S	<i>Primer control - Trident</i>	1	MTL
70-20-3100		<i>Class One Governor Control</i> Throttle can be no lower than 42" and no higher than 72" from operator's standing position.	1	MTL
70-20-3611	S <	<i>Remote PSTANK2 water level indicators each side, rear with driver</i> Locate high and forward on the pump house.	1	MTL
70-20-3670	U	<i>FRC WLA300-A00 Water level gauge - Left side pump panel</i>	1	

PART NO	S	DESCRIPTION	QTY	ID
70-20-6500		Test gauge panel Mount below the compound gauges for proper draining	1	MTL
70-20-7500		<i>Heat exchanger control valve</i>	1	MTL
70-20-7600		<i>Pump cooler control valve</i>	1	MTL
70-21-1650	U	<i>FRC WLA360-A00 Foam level gauge - Left side pump panel</i>	1	
71-21-3500	S	<i>Headset compartment</i> The Headset compartment will be mounted on the left side pump panel unless otherwise specified No wiring required	1	MTL
ACCESSORIES				MTL
80-11-5000		<i>6" x 10' lightweight suction hose (ea)</i> Tube mounted	2	MTL
80-12-2500		<i>6" barrel strainer</i> Shipped loose, not mounted.	1	MTL
80-13-0500		<i>Rubber mallet</i> Shipped loose, not mounted.	1	MTL
80-13-25AA	U	<i>Pike pole - I beam fibreglass handle - 10' long</i> Tube mounted	1	
80-13-25BB	U	<i>Pike pole, I beam fibreglass handle - 12' long</i> Tube mounted	1	
80-14-0505	S <	<i>24' 2 section extension ladder - Duo Safety 900-A</i> Tube mounted	1	MTL
80-14-5510	U	<i>Duo Safety 14' roof ladder</i> Tube mounted	1	
80-14-8510	U	<i>Duo Safety 10' attic ladder</i> Tube mounted	1	
80-19-0500	S	<i>Large folding wheel chock - aluminum (ea)</i> Ship loose	2	MTL
80-99-10AA	U	<i>TFT Jumbo BIV short 6.0" NHM rigid x 6.0" NHF</i> TFT AP8NX-NX-PS installed on LS 6" suction	1	
80-99-15AA	U	<i>TFT Ball Intake Valve 5.0" Storz rigid x 6" NHF</i> Add a Left Side panel mounted control for an electric valve with a harness to the right side. An electric valve will be shipped directly to the Fire Department (AXD1SP-NX-RC @\$US 5500) and the existing manual valve (TFT AXD1ST-NX-F @ \$US 2850) will be removed and a long handle cap installed on the intake.	1	
80-99-25AA	U	<i>TFT Hurricane RC Monitor, stacked tips w/XGA Extenda gun riser</i> There will be Hurricane Remote Control monitor with stacked	1	

