Attachment B West-Mark Specifications #690454-0002

Santa Barbra County Fire



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*** GENERAL PROVISIONS ***

The following shall specifications are for a New Type III unit for the SBC Fire Department. Unit shall Stationary Pump, and Pump and Roll to the performances specified in NFPA 1906.

NFPA REQUIREMENTS:

It is the intent of these specifications to describe a Fire Apparatus to meet the standards of the 1906 National Fire Protection Association (N.F.P.A.). The apparatus shall conform to all applicable test and delivery data requirements as specified by N.F.P.A. The apparatus shall meet all Federal and State laws and regulations at the time of purchase.

QUALITY

All material and equipment shall be new and unused. All welding shall be according to A.S.M.E. Standards. All welds shall be free of slag. All workmanship shall be of the highest quality and conform to good manufacturing practices. All bolts shall conform to current S.A.E. Standards, of proper length, and strength, with self-locking threaded nut fasteners. Any original equipment manufactured, bolts (i.e., grade 8, flanged head, long- shoulder bolt) removed from the frame during fabrication shall be replaced by the same grade and type, and tightened to the manufactures torque specifications.

All brackets, braces, fittings, and other attachments shall be bolted to the frame of the chassis. If additional bolt holes are required, they shall be drilled through the web of the frame, at least twice the hole diameter distance from the start of the frame flange radius. Insulated metal loops or clips shall be used to secure air, water, fuel, and electrical looms.

An air pressure protection valve shall be installed at the air tanks to protect the integrity of the chassis' air system. All body integrated air components shall get their air supply from this pressure protected air source.

BODY WARRANTY:

The manufacturer shall warranty each new Fire Apparatus Body manufactured by it, to be free from defects in material and workmanship, while under normal use and service by the original purchaser, for a period of ONE (1) year from it's in service date.

LIMITED EXTENDED TANK WARRANTY:

A twenty year (20) limited tank warranty shall be provided.

10 YEAR EXTENDED WARRANTY:

The Fire Apparatus Body shall have an extended limited warranty to a period of (10) Ten years

INSPECTIONS:

The manufacturer shall allow for inspections specified by the department. The following inspections shall be scheduled:

- One (1) pre-construction meeting
- One (1) pre-paint inspection
- One (1) final inspection

TRAINING:

One (1) Delivery and training session on the apparatus equipment shall be provided through the manufacturer.

APPARATUS ROAD TEST:

The apparatus shall be certified to meet its applicable road test per NFPA.

DOCUMENTS:

The following items shall be delivered with the completed apparatus:

- (2) Two complete chassis manuals on CD
- (2) Two Vehicle weight certificate.
- (2) Two West-Mark manuals Printed and on CD

CAB & CHASSIS: TBD INTERNATIONAL FOUR DOOR 4-WHEEL DRIVE

Per Proposal #5515-05

Make/model:	International 2017 7400 SFA 4 X 4
Wheelbase:	187" Wheelbase
Engine:	Cummins L9 330 HP
Trans:	Allison 3000EVS_P 5th generation Controls, 5 Speed W/ Overdrive
Rear axle:	Meritor RS-23-160 Single Reduction 23,000 lb. Capacity w/Detroit Locker Rear end.
Front axle:	Meritor MX-12-120 Single Reduction 12,000 lb. Capacity
Wheels:	Aluminum
Includes bug scr	een at front grille. Chassis Frame rails to be Black.

West-Mark to correct the following items on Chassis when it arrives from factory.

Set Auto Door locks at 0 mph and interlock to unlock doors when transmission is set to Neutral. Coolant line that loops down in front of harmonic balance shall be secured to cross member. Main air supply lines going to air tanks that passes under mounting bracket shall have split loom installed. Wire AM/FM Radio Hot from Battery so will not lose Programming when the battery switch is turned off.

Cab steps are to be Powder Coated Silverdillo same as the Rear bumper sub structure.

ALCOA LUG AND HUB COVERS:

The hubs and lug nuts of the chassis shall have Alcoa chrome plated covers.

EXHAUST EXTENSION:

The exhaust shall be extended to the right side of the apparatus. The exhaust shall terminate behind the right side rear tires under the body. Exhaust shall be routed to accept a Plymovent hook up and proper bracket shall be installed at the end of the tail pipe.

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FUEL VENT PLUMBING:

The fuel tank shall have a fuel vent line extending to the rear of the chassis cab.

EMBER SCREEN FRESH AIR INTAKE:

The fresh air intake for the Chassis shall have an ember screen to prevent debris from getting lodged in the pocket of the intake. Labels shall be placed on the visor of the chassis and near the location of the screen to alert operators to clear debris from screen.

WINDOW TINTING:

All three rear windows of the unit shall be tinted with dark tint.

WHEEL BASE CHANGE:

The wheel base of the unit shall be shortened to 167" to match existing unit of Santa Barbara. All work shall be done in accordance with factory practices. Drivelines shall be re-balance and set to correct specifications.

CAB AIR NOZZLE:

The apparatus shall be supplied with one (1) cab air nozzle/s. The 1/4" airline shall tee off of existing air in the cab and be attached to a push button nozzle and have a mounting bracket in a suitable location behind seat. The airline shall be precoiled for ease of stowing in the Chassis cab. Airline shall be DOT rated. Between the Tee connection and the coiled line there shall be a 1/4 turn valve installed.

FIRE PUMP & ASSOCIATED EQUIPMENT

PUMP TEST:

Pump test for 500-gpm pump.

PUMP:

A Waterous CPK3 2-stage centrifugal pump shall be installed on the apparatus. Located between the frame rails behind the cab. The impellers wear bearings and transfer valve are constructed of bronze material. The impeller shaft seal shall be mechanical and self-adjusting. The high capacity impellers in the volume position provide 500 GPM at 150 PSI from draft. When operating in the pressure position will provide 60 GPM at 800 PSI.

PTO PUMP DRIVE AND DRIVE LINE:

PTO to be direct drive, mounted to the transmission. PTO shift to be an electrically activated hydraulic solenoid valve. Activation shall be from a control located in the cab within easy reach of the driver. A driveline shall be connected from the PTO to the pump. It shall be the proper series and type to meet pump and PTO manufactures specifications.

PRIMER:

The priming pump shall be a positive displacement, oil-less rotary vane electric motor driven pump conforming to the requirements of NFPA 1901. The pump body shall be manufactured of heat treated anodized aluminum for wear and corrosion resistance. The pump shall be capable of producing a minimum 24 Hg vacuum at 2000 feet above sea level. The electric motor shall be a 12 Volt DC totally enclosed unit. The priming pump shall not require lubrication. The priming pump shall be operated by a single push-pull control valve mounted within easy access of the operator. The control valve shall be of all bronze construction.

TRANSFER VALVE:

Rotary type, bronze valve, supported with oilite bearings, operating in a bronze renewable sleeve. Pneumatic controls for the water pump transfer valve shall be located at the pump operator's panel.

*** SUCTIONS ***

The following suctions shall be provided:

SUCTION LEFT SIDE:

One (1) 2.50" suction inlet Valve, ELKHART #896-13-01-F located on the left side of the apparatus shall be provided. Inlet shall be a drop out style valve with female hose thread swivel, chrome plated adapter with screen, plug and chain. Suction valve shall have a pull type drain valve.

SUCTION LEFT SIDE:

One (1) 4.0" suction inlet located on the left side of the apparatus shall be provided. Inlet shall have a chrome-plated adapter 4" MNST X 4" FNPT with screen, chrome plated NST rocker lug cap and chain.

SUCTION RIGHT SIDE:

One (1) 2.50" suction inlet Valve, ELKHART #896-13-01-F located on the right side of the apparatus shall be provided. Inlet shall be a drop out style valve with female hose thread swivel, chrome plated adapter with screen, plug and chain. Suction valve shall have a pull type drain valve.

*** DISCHARGES ***

All valves will be manufactured by Elkhart. All 2 1/2" discharges shall have 30-degree droops, caps, and chains. All plumbing shall be constructed with stainless steel schedule 40 pipe or heavy-duty flexible hose. All discharges will drain through the master drain. Victaulic style couplings shall be used as required for ease and accessibility to perform repairs and maintenance.

DISCHARGE LEFT SIDE:

One (1) 1.50" discharge valve ELKHART #2891-02-33-F located on the left side shall be provided. Plumbing that supplies, the valve shall be 2" sch 40 stainless steel pipe. Valve shall have a chrome plated rocker lug cap and chain.

DISCHARGE LEFT SIDE:

One (1) 2.50" discharge Valve ELKHART #896-01-37-F located on the left side shall be provided. Discharge valve shall have a chrome plated drop snoot with chrome plated rocker lug cap and chain. Valve shall be supplied by sch 40 stainless steel pipe directly off the discharge manifold of the pump.

DISCHARGE RIGHT SIDE:

One (1) 1.50" discharge valve Elkhart 2891-02-33-F on the right side shall be provided. Plumbing to the discharge shall be 2" Sch 40 stainless steel pipe. A chrome plated cap and chain shall be provided with the discharge.

DISCHARGE RIGHT SIDE:

One (1) 2.50 discharge Valve Elkhart #896-01-37-F located on the right side shall be provided with a chrome-plated droop snoot with chrome plated rocker lug cap and chain. Valve shall be supplied by sch 40 stainless steel plumbing off the discharge manifold.

DISCHARGE LEFT REAR:

A 1.50" discharge valve Elkhart 289102-33-F shall be provided at the rear left side of the apparatus. Plumbing to valve shall be 2" schedule 40 T-304 stainless steel pipe. The rear discharge shall be plumbed off 2" schedule 40 stainless steel manifold. A section of 2" Aeroquip hose for body flex shall join the upper manifold plumbing with the lower plumbing. Valve shall be operated at the rear of the apparatus.

LEFT BUMPER DISCHARGE:

One (1) 1.50" discharge valve located at the left front bumper above diamond plate in board of frame rail shall be provided. Valve shall be controlled at the bumper. Front discharge plumbing manifold to valve shall be 2" schedule 40 T-304 stainless steel. The supply line to the front discharge plumbing shall be 2" Aeroquip. A pet cock drain shall be installed in the stainless steel front discharge plumbing to drain water from the line. Chicksen that sticks above the front bumper is not to be painted.

RELIEF VALVE:

Relief valve shall be made of high-strength bronze alloy and be mounted directly to the pumping system connecting the discharge side of the pump to the intake side of the pump. Relief pressure control is operated from the console in cab. It shall have a large hand knob pressure setting control, a removable pilot valve strainer accessible from the cab console. Relief On/Off selector valve allows the relief valve to close by turning off the pilot pressure that operated the relief valve. Selector valve shall be mounted integral with pressure control.

PUMP ANODE:

A pump anode shall be installed in the pump or pump manifold. Anode shall meet MIL-A-24779.

TEST PORTS:

Vacuum/Pressure connections for testing the water pump shall be provided. Connections shall be located on the pump panel.

CAB MOUNTED PRESSURE GAUGES:

A CLASS ONE back lit pressure gauge shall be provided in the cab for pump and roll capability. The gauge shall be white faced with black lettering. The gauge shall have a pressure range of 30-0-600 psi.

REMOTE HAND THROTTLE

Fire Research InfinityPRO model ET4000 series remote hand throttle shall be installed. The case and control knob shall be waterproof machined from anodized aluminum, and have dimensions not to exceed 2 1/2" diameter and 4 3/8" deep. The control knob shall be 2" in diameter with a serrated grip, no mechanical stops, and have a red idle push button in the center.

The remote throttle shall set the engine RPM to idle when the pump engaged interlock signal is recognized regardless of the control knob position. It shall use optical technology to detect the direction and speed of the control knob when it is rotated.

The remote hand throttle shall be programmed to interface with a specific engine using a FRC field-programming unit.

14" FRONT BUMPER EXTENSION:

The front bumper shall be extended approximately 14". Constructed of .188 aluminum tread plate. Includes one (1) center tray and two (2) hose trays, one located on each side of the unit. The Driver side Hose tray not to have a lid. Chassis tow loops shall be removed and West-Mark fabricated drop down loops shall be installed. All trays to have Turtle tile.

HEAT EXCHANGER:

Heat exchanger (Indirect Cooler) shall be provided and controlled at the pump panel left side (operator location). The heat exchanger improves the chassis cooling system while the engine is operating at a high rpm and the vehicle is stationary. Control shall be mounted next to the Foam Pressure release drain at the operator's panel and Labeled "AUXILARY ENGINE COOLER".

AIR OUTLET:

An air outlet with bulkhead fitting and C20 air coupler, plumbed from apparatus compressor. The outlet shall be located at pump operator's panel left side. A small ball valve to turn off the air supply shall be located behind the panel as an emergency shut off. Front panel return shall have hole cut in it to access the valve. Label for air connection to state under it "SHUT OFF BEHIND PANEL".

BACK PACK FILLER / TANK FLUSHER

A 1-1/2" backpack filler, tank Flusher shall be installed at the left pump panel area. There shall be a main shut off valve located directly off the tanks sump below the TTP (Tank to Pump) intake port. A clear PVC re-enforced line shall run to the operator's panel to a valve located behind the panel. Valve shall be controlled by means of push pull at the operator's location. Valve shall terminate with a 1-1/2 MNST adapter; a 1-1/2" FNST x 3/4" Male hose thread adapter with cap and chain shall be supplied and installed. The piping shall be spaced down so that the cap is removable and shall not extend past the outer edge of the pump module step.

THERMAL RELIEF PROTECTION VALVE: Discharged to ground

A Thermal relief protection device shall be included on the pump. Valve shall monitor pump water temperature and opens to cool the pump, thereby protecting the pump from overheating caused by "deadheading". The valves automatic nature shall minimize the need for operator attention to overheating during pump operation. The TRV120 automatically dumps a controlled amount of water to the ground when the pump water temperature exceeds the preset value of the relief valve. The preset value of the relief valve shall be 120 degrees Fahrenheit or 49 degrees Celsius. The components of the thermal protection device shall be manufactured of brass and stainless steel and be compatible with most foam concentrates. The thermal protection device shall have a hydrostatic test rating of 600 PSIG (41 BAR).

MASTER DRAIN:

A manifold drain valve shall drain all points of the pump simultaneously with a single control located at the pump panel left side (operator's location). The master drain shall be designed to have isolated ports.

DIRECT TANK FILL:

One (1) 1.50 direct tank fill located at the operator's panel shall be provided. Inlet shall have a chrome-plated adapter with screen, plug, and chain.

TANK FILL:

One (1) 2" tank fill with a push/pull control shall be provided. Valve control lever shall be accessible and within easy reach of operator at pump panel.

TANK TO PUMP:

An Elkhart 2.50" tank to pump valve shall be provided. Suction line shall have a 3" ID PVC corrugated hose between the tank sump connection, and the pump suction to allow flex between the tank and the main plumbing. All other plumbing shall be Stainless steel. Check valve shall be a 2-1/2" Bronze check mounted in line to stop water from entering the tank if supplied by a pressurized source at an intake connection. Valve shall be air operated, controlled from the operators panel.

FOAM MANIFOLD:

A 2-1/2" T-304 Stainless steel foam manifold discharge shall be provided. The manifold shall supply foam to all 1" and 1-1/2" discharges. The flow rate indicator installed in the manifold shall be rated to match the foam proportioning system selected.

FOAM MANIFOLD DRAIN:

A Class One 1/4 turn drain valve shall be installed at the operators pump panel to release pressure trapped in the foam manifold after pumping.

FOAM SYSTEM:

FOAM-PRO Model 2001 with a 2" NPT/2-1/2" HYPRO FLOWMETER TEE Model 2660-0032. FOAM-PRO GPM/Totalizer display along with the foam on/off switch and foam concentrate tank low level light, shall be mounted in the master gauge panel. A check valve shall be provided in the discharge line to isolate the foam from the rest of the water plumbing. Foam discharge line shall be equipped with a 3/4", brass drain valve.

Maximum foam concentrate capacity at 150 psi Maximum operating pressure 2.6 GPM 400 psi

Accurate Proportioning percentage range from 0.1 to 3.0 plus Push button control

Maximum Water flow capacities at different percentage settings, water flows are dependent upon water pump selection.

0.2 percent, 1300 GPM 0.5 percent, 520 GPM 1.0 percent, 260 GPM 3.0 percent, 85 GPM

Unit shall be preset to .1 percent as the default ILO .5 from factory default.

FOAM SYSTEM ON/OFF SWITCH:

A remote mounted switch to turn Foam Pro on and off from inside of cab shall be provided. Switch shall be mounted in the center console. The unit shall be designed as to allow the pump operator to turn system on and off from the driver's position during pump and roll operations. The switch shall be compatible with 12 volt circuits and shall include a switch, an instruction label and indicator light.

FOAM TANK:

A 16-gallon stainless steel foam tank. Foam tank shall have a 6" fill with removable screen.

CONTROL CONSOLE:

A cab control console shall be installed in the cab between the front seats.

MAP BOX FOR CONSOLE:

The map box shall be recessed in the right top portion of the console shall have no dividers.

MAP BOX AND HAND RADIO MOUNT EXTERNAL FOR CONSOLE:

Map box shall be located off the front of the console and large enough to hold two (2) large 3 ring binders with lid and latch. Box shall be fabricated of .125 Alum sheet and be designed so that binders can be easily removed. Hand radio Mount shall be (8) Eight pocket design located directly behind the center console full width. Dividers shall be placed so that 4 hand held radios and 4 replacement batteries can be housed in mount. A drawing for Sign off shall be supplied to department before production begins.

CONSOLE CUBBY:

A removable cubby shall be installed in the front extension of the console. Cup holders shall be shipped loose for customer to install.

CUP HOLDERS:

Two (2) Cup holders shall be supplied and shipped loose for customer installation.

*** GAUGES & CONTROLS: ***

The following gauges shall be mounted on the Unit. All gauges and controls shall be clearly identified with color-coded marker plates.

WATER TANK VOLUME INDICATOR:

Fire Research TankVision model WLA 300-A00 tank volume indicator kit shall be installed. The kit shall include an electronic indicator module, a pressure sensor, and a 12' sensor cable. The indicator shall show the volume of water in the tank on nine (9) easy to see super bright LEDs. A wide view lens over the LEDs shall provide for a viewing angle of 180 degrees. The indicator case shall be waterproof, manufactured of aluminum, and have a distinctive blue label.

The program features shall be accessed from the front of the indicator module. The program shall support self-diagnostics capabilities, self-calibration, and a data link to connect remote indicators. Low water warnings shall include flashing LEDs at 1/4 tank, down chasing LEDs when the tank is almost empty, and an output for an audio alarm.

The indicator shall receive an input signal from an electronic pressure sensor. The sensor shall be mounted on the outside of the water tank near the bottom probe shall place on the interior of the tank. Wiring shall be weather resistant and have automotive type plug-in connectors.

CLASS A FOAM TANK VOLUME INDICATOR:

Fire Research TankVision model WLA360-A00 tank volume indicator kit shall be installed. The kit shall include an electronic indicator module, a pressure sensor, a 12' sensor cable and a tank vent. The indicator shall show the volume of Class A foam concentrate in the tank on nine (9) easy to see super bright LEDs. A wide view lens over the LEDs shall provide for a viewing angle of 180 degrees. The indicator case shall be waterproof, manufactured of aluminum, and have a distinctive green label.

The program features shall be accessed from the front of the indicator module. The program shall support self-diagnostics capabilities, self-calibration, and a data link to connect remote indicators. Low foam warnings shall include flashing LEDs at 1/4 tank, down chasing LEDs when the tank is almost empty, and an output for an audio alarm.

The indicator shall receive an input signal from an electronic pressure sensor. The sensor shall be mounted on the outside of the foam tank near the bottom probe shall place on the interior of the tank. Wiring shall be weather resistant and have automotive type plug-in connectors.

*** WATER TANK ***

TANK:

To be a minimum of 500-gallon capacity. Removable lids shall be provided. The tank lids shall be installed utilizing stainless steel 5/16" studs on approx. 3" centers. Studs shall not protrude into the water tank. Sealing gasket to be provided. Sealing compound shall be a non-hardening type. Baffles shall be provided to minimize water movement within the tank. A strainer, sand trap and drain shall be installed at the low point of the tank bottom. A drain shall be provided in tank suction line. The suction is to be as close to the center of the tank bottom as the truck frame members and driveline allow. Tank shall have 1/4" wheel wells for rock protection made of T-304L grade stainless steel.

Water tank shall be constructed of 10 gauge T-304L Grade Stainless steel materials. An anode shall be placed in each quadrant of the tank. Anodes shall be Alum MIL-A-24779 part number E3-8600090 per Customers request.

Fill tower: located at the front of tank with integral overflow to discharge behind rear wheels, and a removable screen. The fill tower assembly shall be bolted to the top of the tank utilizing stainless steel 5/16" studs on approx. 3" centers.

Sump: A sump located near the center with a stainless steel screen. Sump sediment catch depth shall be 2". The Screen

in the sump shall have no Holes in this portion so that sand is not pulled into the TTP outlet.

Tank under-structure and crossmembers shall be a stainless steel hat section design. Main rails shall be 7 ga. T-304L grade and cross-members shall be 10 ga. T-304L grade stainless steel.

The two main rails shall be welded to bottom of tank from front to rear of cabinetry, to help support the attached cabinetry. The rails shall have 1/2" x 2 1/2" vulcanized rubber sills. The rubber sills will be used as a cushion between the chassis rails and the water tank. The entire assembly shall be mounted to truck chassis using four (4) spring-loaded dual spring shock assemblies with SAE Grade 8 bolts and nylock nuts. The springs shall 4" free length.

PUMP PANEL:

Roadside pump panel shall consist of the following items:

A. One (1) lower 12-gauge stainless steel step panel, approximately 20-1/4"W, 26-1/4"H, 7-1/2"D, with two (2) 12-gauge stainless steel formed sided support gussets. The entire step panel to be mounted directly to two (2) 2" square tubing operator stand outriggers. The step shall have stainless steel grip grating.

B. One (1) Stainless steel gauge panel. This panel to be removable for ease of service and mounted to the upper portion of the operator's area.

C. Three (3) 14 gauge #4 stainless steel valve trim plates. Mounting to be removable for ease of maintenance of valves.

Curbside pump panel shall consist of the following items:

A. One (1) 12 gauge stainless steel upper panel, 20-1/4"W, 15-1/4"H, to be removable and mounted at the bottom, to the operator compartment.

B. Two (2) 14 gauge #4 stainless steel valve trim plates mounting to be removable for ease of maintenance of valves.

PUMP MODULE:

The apparatus body and pump module shall not be fastened together in any manner. The pump module shall be constructed using all carbon steel material. The pump module shall be bolted directly to the chassis frame rail.

COMPARTMENT, RIGHT SIDE PUMP PANEL:

Compartment with vent. Fabricated from 14 gauge T-304 #4 Stainless steel. Located on the right side, under operator stand and shall consist of: One (1) compartment 20"W, 18-1/2"H, 17"D.

One (1) steel body bracket with steel support angles for upper support. Compartment steps shall be formed as part of compartment floor with side support gussets. Compartment door to be "flush" style with recessed flanges. Constructed from 12 gauge T-304 Stainless steel sheet. Door to have weather tight seal. Hinge to be heavy-duty stainless steel. Door latch to be a large stainless steel locking "D" Ring handle.

PUMP PANEL LIGHTS:

Pump panel lights shall be installed on the left & right side pump panels.

UNDER CAB COMPARTMENT:

One (1) compartment shall be installed under the cab rear door. The compartment shall be constructed of #4 brushed stainless steel. A stainless steel door with a slam latch, D-ring handle and stainless steel hinge shall be provided. Compartment shall match as closely as possible to last units Built by West-Mark for SBC.

BRASS FITTINGS COMPARTMENT:

Compartment shall be fabricated from 14 GA. Brushed Stainless steel with sweep out floor. Compartment to be located left side under cab. Dimensions of compartment shall be approximately 25"W x 17"H x 23.5"D. Compartment door shall be fabricated from stainless steel, with a full pan. Door latch to be a large stainless steel locking "D" Ring handle. Door hinge to be heavy-duty stainless steel continuous type hinge with 1/4" pins and 1" joint length. Door to have a weather tight seal. Compartment shall be vented. Compartment shall have a slide-out .125 aluminum tray, mounted to Grant sliders. Fittings tray to be 18"W x 20"D, with 5-1/2" flanges on sides. A gas prop shall be used to secure the tray in the open or closed position.

Tool holders shall consist of Six (6) 5/8" radius x 1" wide formed .125" aluminum J-hook style tool holders. To be shipped loose. Wrenches are not include in build-up.

Note compartment dimensions will alter slightly due to DEF tank placement, every effort shall be made to keep dimensions as close as possible to last units built.

BODY-GENERAL:

MAIN BODY:

All compartments shall be fabricated of 14-gauge zinc coated steel with sweep out floors. Compartments shall be vented and the approximate sizes listed below.

Compartments to be located as specified:

A.) Left side compartments:

One (1) behind rear axle, 21"W X 35"H X 23"D.

B.) Right side compartments:

One (1) behind rear axle, 21"W X 35"H X 23"D.

C.) Rear compartments:

Two (2) compartments, one each side 27"W X 33"H X 14"D. One (1) in the center, split by one (1) removable shelf. Top section, 38"W X 23"H X 36"D. Bottom section, 24"W X 10"H X 27"D.

LONG TOOL COMPARTMENTS:

One (1) above left rear axle, 78"W O.D. X 16"H X 14"D. One (1) above right rear axle, 78"W O.D.X 16"H X 14"D.

LIFT-UP WILDLAND STYLE COMPARTMENT DOORS:

Doors shall be Overlap lift-up (double pan) style. Door outer panel shall be constructed of 14-gauge carbon steel. Door inner panel shall be constructed of 14-gauge carbon steel. Door to have a seal around the perimeter of the door opening providing a weather tight seal. Hinges to be heavy-duty stainless steel continuous-type with 1/4" pins and 1" joint lengths. Door latches to be Eberhard 3-206U "SlamType" with adjustable bronze strikers and stainless steel locking "D" ring handles. Door shocks shall be gas door holders with ball studs and clips.

SINGLE WILDLAND STYLE COMPARTMENT DOORS:

Doors shall be flush double pan style. Door pans to be constructed of 14 gauge carbon steel sheet. Door outer panel shall be constructed of 12-gauge carbon steel. Door to have a seal around the perimeter of the door opening providing a weather tight seal. Hinges to be heavy-duty stainless steel continuous-type with 1/4" pins and 1" joint lengths. Door latches to be "Slam Type" with adjustable bronze strikers and stainless steel locking "D" ring handles. All doors shall have Hansen #5 door retainers.

COMPARTMENT SHELVES:

Four (4) adjustable shelves to be constructed of .188 aluminum with a 1-1/2", 90 degree break on four sides. Shelf corners shall have aluminum angle mounting brackets bolted to channels to allow adjustment of shelf height. All angle brackets to be mounted with angle pointing up.

One (1) shelf shall be located in each of the following compartments: Left side of unit rear compartment. (Shelf to terminate at body step and have 8" down brake) Right side of unit rear compartment Rear left side compartment Rear right side compartment

FENDER MOLDINGS:

Rear fenders to have black rubber fender moldings. All Studs shall use acorn nuts.

SIGNAL LIGHTS:

A set of 4" LED S/T/T lights shall be installed on the rear of the apparatus. One (1) amber LED turn signal shall be installed on the left and right rear side of the apparatus. One (1) red LED driving/stop light shall be installed on the left and right rear side of the apparatus.

One (1) clear LED backup light shall be installed on the left and right rear side of the apparatus.

REFLECTORS:

Red reflectors and LED clearance lights shall be provided.

COMPARTMENT LIGHTS:

A minimum of one compartment interior light, centrally located shall be provided in each compartment.

CHOCK BLOCKS:

Two (2) Zico AC-32 wheel blocks with NFPA Wildland compliant base plates shall be provided. Chocks shall be mounted with slide in brackets and safety latches shall be provided.

Installed below the rear cabinetry behind the rear wheels one on each side of unit.

STORAGE BOXES ABOVE COMPARTMENT "A":

Two storage compartments shall be fabricated of .125 Aluminum Diamond plate. Storage boxes shall be approximately 14" Deep x 19" Tall x 78" Long. Boxes shall have Aluminum lids with gas props to hold them in the open position with a positive latching mechanism. The curbside unit a storage compartment accessible from the rear of the unit to house the Tree trimmer power unit and its extensions.

BATTERY BOX:

A battery box that has a capacity for 3 batteries shall be provided. Box shall be located behind the Engineers compartment and be fabricated so that it shall tip down for service. A removable panel shall be installed so that if Batteries need to be removed it allows easier access to them.

ALUMINUM DIAMOND PLATE:

Aluminum diamond plate shall be provided to protect the following areas. Front of the body each side next to module.

BACKBOARD COMPARTMENT:

The backboard compartment shall be constructed of .125 aluminum sheet. It shall be a formed compartment designed to mount to the underside of the right hose bed lid.

REMOVABLE HOSEBED SHELF:

A removable hose bed shelf shall be fabricated from 1/4" aluminum and installed on the roadside hose bed. Shelf shall be fabricated so that when not in use may be stowed on the underside of the corresponding hose bed lid.

HOSEBED COVER:

Two (2) hose bed storage covers shall be provided. The covers shall be constructed from .125 aluminum tread plate. Fulllength stainless steel hinges shall be provided on each cover. Stainless steel handles and handrails shall be installed to assist in opening the covers. Covers to be made of NFPA tread plate, and hinge in towards hose ladder storage compartment.

HOSEBED END COVERS:

Two (2) hose bed end covers shall be provided made from 20 oz. vinyl. End covers to have straps and strap hooks with spring-loaded tension catches. Straps shall be sew in as far to the outer edges as possible and 3/8" stainless steel round bars shall be sewn into the bottom cuff for weights.

Color to be **BLUE**.

HOSEBED DIVIDER LEFT SIDE:

An aluminum hose bed divider shall be installed on the left side of the hose bed. Divider shall be used as a partition for the 1.50" rear discharge for storage of 150 feet of 1-3/4" DJ hose. The partition shall be free standing at the rear of the hose bed.

STAINLESS STEEL TRIM PACKAGE:

Stainless steel trim shall be installed on the apparatus in the following locations:

Rear of the hose bed, bottom of all compartment floor edges, on the left and right side of the apparatus and under the hose reels. Piece under reels shall have a section that will cover front of tank.

ALUMINUM CHASSIS FUEL TANK COVER:

Aluminum tread plate trim on fuel tank wrap cover shall be installed on the left side of the cab. The cover shall also extend to cover the DEF tank as well. The DEF tank shall have a brush deflector that covers the bottom of the tank.

DISCHARGE CROSSLAY:

One (1) 1.50" crosslay preconnect (live line) shall be plumbed to the hose compartment above the pump panels. Hose compartment to hold 200 feet of 1-3/4" DJ hose. The crosslay preconnect shall be equipped with a inline ball type, 1 1/ 2" full flow discharge valve with 2" schedule 40 T-304 Stainless steel plumbing and full flow swivel elbow outlet. The crosslay shall be controlled from the left and right side. Crosslay hose storage assembly shall be pushed back to allow 2 more inches of clearance between the cab and the crosslay panels.

CROSSLAY STORAGE:

Storage shall be provided for one crosslay live line to accommodate up to 200 ft. Of 1-3/4", Double jacket hose. Crosslay cover shall be able to support the weight of 500 lbs.

CROSSLAY END COVER:

Two (2) 20 oz. Vinyl hose compartment Custom end covers with retaining straps. Quick deployment hooks shall be fasten to the tarps straps. Footman loops shall be secured to the body to secure the covers in place. Color to be **BLUE**

HOSEBED SLATS:

Main hose beds and crosslay shall have removable aluminum slatted floors, with a minimum thickness of 3/4".

COMPARTMENT FOR SUCTION HOSE & LADDER:

A suction hose and ladder compartment shall be fabricated from a .125 aluminum, installed in the center of the hose bed. Compartment to act as hose bed cover supports. Upper Suction hose compartment shall accommodate three hoses, (2)

7' and (1) 5' lengths of 3" or 2-1/2" suction hose with rocker lug type couplings. Litter compartment on the roadside shall house department standard litter for Wildlands. Ladder compartment on the curbside shall accommodate a Duo-Safety 912 series 16 foot 3 section extension ladder. Ladder storage area shall have Teflon wear plates installed in the compartment, one on the floor and one on the side to protect the ladder from galling while being stowed and removed. Compartment shall also accommodate one (1) 6 foot fiberglass pike pole holder and one digger bar mount. Aluminum diamond plate top to be fabricated from NFPA Tread Plate.

HOSEBED LIGHTS:

Two compartment interior clear lights shall be installed at the front and rear, inside of the hose bed. Lights to be installed and activated by a switch located on the left pump panel.

EXTENSION LADDER:

A Duo-Safety series 912-86 16' 3-section aluminum extension ladder shall be installed on the apparatus. The ladder shall be 86" closed and open to 16 feet in length weight shall be 65#. The series 912 ladder is fabricated of 3-1/4" channel rail, 750 lb. duty rated.

REAR STEP & TOW LOOPS:

The rear step shall be min nine inches wide with removable West-Mark Perforated Stainless steel Tread running the full width of the unit. The center portion of the bumper/step shall have a swing down Stainless step for easier access to rear of the unit. Swing down step shall extend beyond the upper step by three inches to create a more accessible stepping surface. The complete assembly shall be bolted directly to the chassis frame rails. There shall be two (2) each 3/4" plate fabricated tow loops bolted directly to the Chassis frame rails and cross member of the bumper. Entire Under assembly shall be powder coated silver.

FRONT BUMPER:

A Stainless steel front bumper shall be installed on the front of the apparatus.

ELECTRICAL:

All applicable electrical testing in accordance per NFPA shall be performed on the unit prior to delivery. A copy of these test forms shall be present with-in the truck manual.

ELECTRICAL SYSTEM INTEGRATION:

The body electrical system shall be designed to utilize the International Diamond Logic Electrical System. The Electrical system shall be installed by factory certified level three facility. The integrated electrical system will be comprised of the vehicles (ESC) Electrical System Controller, Power modules and engineered harnesses system. These components interface to the apparatus components through the J1939 data link. The use of Advanced Logic Integration shall link all vital electrical functions of the buildup together. Including but not limited to the PTO controls, Emergency lighting, Work lighting and Compartment lighting.

(ESC) Electrical System Controller:

The ESC communicates with the switch packs on the switch data link, controllers from other features on the power train link and remote power modules on the body builder data link. It also receives inputs from various sensors and hard-wired inputs throughout the apparatus. The ESC converts these inputs, in accordance with the programmed "rules", into data to be transmitted on the data links. It is also the power source for circuits that feed the components, controlled by the multiplexed switches, inside and outside of the cab.

(RPM) Remote Power Module:

Remote Power Modules provide a method of distributing and controlling power to various device loads on the apparatus, outside the cab, without running high current wires from in-cab switches to the loads or splicing into existing wiring. The

RPMs are connected to the ESC via the Body Builders J1939 data link. The only wires connected to the RPMs are battery power for driving the loads, the data link cable and connections to the load devices being operated by the RPM. Power is fed to the RPM through a fusible link to the battery source. Because the RPM is connected to the ESC via the data link, it also serves as an "integration gateway" to the ESC and the vehicles electrical system. The use of this system allows information from body accessories and the chassis to communicate and process for interlocks, operator warnings and etc.

WIRING HARNESSES:

Separate wiring harnesses shall be provided for the left and right side of the body, pump panel and the cab. Wiring to be circuit function imprinting. Wiring shall be installed in a loom. Harnesses where connected to the chassis' electrical system shall be equipped with Deutsch type contacts/connectors.

All wiring used by Body builder shall be type GXL cross-link wire.

The complete body electrical system shall be documented and contain independent circuit diagrams with point wiring information, as well as a general component diagrams.

MAP LIGHT:

One (1) gooseneck type map light shall be installed in cab on the right side, passenger location. A red lens shall be provided with the map light.

LICENSE PLATE:

Rear license plate light LED and bracket shall be provided.

BACK-UP ALARM:

POLLAK #41-820 or equal back-up alarm shall be wired into the backup light circuit. Alarm shall meet SAE J994 Type D standards.

ELECTRICAL LOAD MANAGER:

The apparatus shall be programmed with an Electrical Load Manager (ELM) for performing electrical voltage load management through the Electrical System Controller (ESC) of the Chassis. The ELM shall be a programmed part of the International Diamond Logic Electrical System. The ESC of the unit shall monitor and control the electrical loads per the ELM programming through Multiplexing of the Data Links. The ELM programming shall be set to control (6) Six loads according to the voltages, which are present. A flashing warning light for low voltage and battery discharge shall be at the pump panel and be activated by the ESC when voltage drops below 11.9 volts. Specific electrical outputs shall be shed (turned off) or loaded (turned on) per the following sequential order:

- 1) Ground illumination
- 2) Compartment lights
- 3) Low voltage alarm
- 4) Left work lights
- 5) Right work lights
- 6) Rear work lights

Voltage must drop below the shed point for 60 seconds before a load will shed. Voltage must be above the shed point for 300 seconds before a shed load will unshed. A cycle of the key state shall reset the ELM to all on. An RED dash indicator labeled LOW VOLTS shall illuminate once the ground illumination has been shed. The same dash indicator shall flash slow once the compartment lights are shed and shall flash fast once the low voltage alarm is active.

HEADLIGHT FLASHER:

A Headlight Flasher shall be provided and controlled from the position 3 of the slide bar. The head light flasher shall be an integral part of the chassis. No mechanical relays or flashers shall be used to accomplish the alternating headlight function. The head light flasher shall be automatically activated when the siren control head is in position three and the parking brake is released. The head light flasher function when activated shall automatically shut down when a request for high beams is present with the headlights on or the parking brake set.

SCENE LIGHTS:

Three (3) scene lights shall be installed on the apparatus. Lights shall be Rigid Industries LED lights Model # D2-Wide Family: D-Series Optics: Specter - Wide LED Color: White Finish: Black Mounting Type: Surface with rotating base and replaceable lamp. One (1) light shall be installed on the cab mounted on the rear, mounted so it is FLUSH WITH TOP OF CAB, and wired to a RPM. Two (2) lights shall be installed at the rear of the apparatus wired to a RPM located at the rear of the unit. Lights shall be activated by switch in the cab dash (REAR SCENE). All lights shall be integrate with chassis multiplexing system and load managed. Switch shall have its own indicator light that shall illuminate when the lights has been activated. The indicator of the lights when requested on but shed due to the load manager shall flash slow if the light has been shed due to low voltage. Switch light shall flash fast if there is a fault on the circuit of the corresponding light. The (2) two rear lights mounted at the back of the body shall be activated automatically when the chassis transmission is put in reverse and the parking brake is released.

SPEAKER:

Two (2) 100-watt siren speaker/s shall be mounted in the front area of the unit. Units shall be Mounted Side by Side in the center front bumper cut out.

AIR HORN:

A Grover Model #1510, chrome plated brass, stuttertone air horn shall be supplied. Air horn shall have an electrically activated air solenoid valve, activated from foot switches located in the cab, one (1) within easy reach of the driver and one (1) for the passenger.

Driver's foot switch shall be active at all times when engine is running and Captains shall be active only when slide bar is in position 3 located on the siren control head. Air Horn to be mounted behind front bumper pointing forward.

12 POWER POINT:

There shall be Five (5) 12 Volt DC universal lighter/ power supply provided inside the cab and shall be wired "Hot" with individual breakers. Three shall be located on the center console directly to the rear of the relief valve controls all in a row evenly spaced. The other two shall be located under the radio charging station rack one on the left side and one on the right side all wired into the charge guard.

CODE 3 NFPA LED LIGHTING PACKAGE LESS LIGHT BAR:

A Code 3 lighting package shall be install on the apparatus. The following lights shall be provided all set to double flash when supplied with power.

Lower Zone "A"

2 EA Model 65BZR single red LED lights in polished aluminum housings with red outer lens. UHMW blocks shall be installed to keep light optics perpendicular.

Lower Zone "B"

2 EA. Model 65BZR single red LED lights in polished aluminum housings with red outer lens.

Upper Zone "B"

1 EA. Model 65BZR single red LED light in polished aluminum housings with red outer lens. (Mount at upper rear driver's corner)

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Upper Zone "C"

2 EA. Model 65BZR single red LED lights in polished aluminum housings with red outer lens. Do not install aluminum housing on "C" zone.

Lower Zone "C"

2 EA. Model 65BZR single red LED lights in polished aluminum housings with red outer lens. Do not install aluminum housing on "C" zone.

Lower Zone "D"

2 EA. Model 65BZR single red LED lights in polished aluminum housings with red outer lens.

Upper Zone "D"

1 EA. Model 65BZR single red LED light in polished aluminum housings with red outer lens. (Mount at upper rear passenger's corner)

Note extra lights in rear of light bar shall count as part of the upper zone "C" Lighting.

LIGHT BAR LED:

One (1) CODE 3 LED 21IF69NFPA series light bar 69" long, mounted on cab roof with permanent mounting brackets shall be provided. All the lights in the light bar shall be Red and bar shall have Red lens all the way around. Front left light just off center shall be set to Steady RED. Two additional lights shall be mounted in the rear of the light bar to provide lighting to the upper "C" zone at the rear of the unit.

SIREN:

Siren control shall be a Touchmaster Delta Series. Features include a totally enclosed siren /light control operation. Six rubberized, durable 20 amperes push button auxiliary switches. Five unique, distinctive Unitrol emergency warning tones. Effective Override/Sweep intersection management tone functions. Advanced TEST, ACP (Automatic Component Protection). LED indicators and adjustable backlit face plate. Accessible Radio/PA adjustable volume control. Low operating, zero standby current. Siren shall be mounted in the center overhead console of the Chassis.

LIGHT BOX:

One (1) pre-wired SL40 orange light box with charger shall be installed. One Mounted to back of center console below hand held radio tray. Light to be removable from the passenger's side rear door. Light to be wired off the backside of the onboard Battery charger to only charge when plugged in to shore power.

SIDE SCENE LIGHTS:

TWO (2) FRC Spectra/Load lights model SPA900-Q70 shall be installed on the apparatus. One (1) light shall be installed on each side of the apparatus located close to the pump module area on the side of the coffin boxes. Each light shall be wired to a RPM and controlled by separate switches on the cab dash. Switches shall be labeled (LEFT SCENE and RIGHT SCENE) Lights shall be integrate with chassis multiplexing system and load managed. Each switch shall have its own indicator light that shall illuminate when the corresponding light has been activated. The indicator of the lights when requested on but shed due to the load manager shall flash slow if the light has been shed due to low voltage. Switch light shall flash fast if there is a fault on the circuit of the corresponding light. All wiring to lights shall be protected so that dunnage gear does not damaged it while loading and unloading.

HAND-HELD SPOTLIGHT:

A hand-held spotlight with a momentary switch shall be provided. Light shall be a Mobile Patrol Light Series 2150-1 (110,000 candlepower-Coil cord - 100 watts).

GROUND ILLUMINATION LIGHTS:

Seven (7) Ground illumination lights shall be provided and located per NFPA. The Ground illumination lights shall be controlled by the ESC and have a park brake interlock. The lights below the cab doors and on each side of the pump

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panel area shall illuminate when any cab door is open and the park brake is set. All ground illumination lights shall illuminate when the park brake is set and the park lights are activated with any door open. There shall be a ground illumination light over-ride on the dash of the cab. The over-ride Switch shall allow the ground illumination light over-ride on the dash of the cab.

illumination lights to be on when requested ignoring the state of the park brake or the cab doors. A cycle of the park brake shall reset the Ground illumination control to the default setting.

MDT MOUNT:

A Havis Laptop mount consisting of the Docking station, adjustable pole, Flat floor plate and 6" Articulating Arm shall be supplied mounted in the apparatus. The Antenna Plus shall be mounted on Cab roof and routed to the laptop mount and connected. Appropriate power shall be supplied to the laptop docking station directly from the battery. The Antenna and Power cables shall be long enough to rotate the mount 270 degrees without pinching or pulling cables.

CHARGE GUARD:

A Havis Charge Guard Model CG-X shall be installed in the console to control power to the MDT mount. Unit shall be wired directly to Hot side of batteries and monitor the voltage being supplied to the MDT mount. Unit shall be installed in such a manner that if voltage exceeds 18 Volt is shall disconnect or if voltage drops below 11 volts it shall disconnect.

CAMERA VEHICLE REVERSING SYSTEM:

A collision avoidance camera system shall be installed. The rugged system eliminates blind spots giving a clearer view of the area behind the apparatus and helping to avoid unnecessary accidents. Monitor shall be a compact 7-inch wide screen format for optimal viewing. Flat screen monitor shall take minimal space while providing a clear view of vulnerable areas. System shall be installed with one camera but have the ability to support up to four cameras.

KUSSMAUL AUTO CHARGE SUPER KIT:

The Kussmaul Auto Charge 1000 Super Kit is an automatic battery charger for a single battery system and a Super Auto Eject 20 amp automatic power line disconnect. A remote bar graph indicator shall be provided. *An engine block heater shall be wired into circuit if applicable. The cover shall be White. Auto eject shall be mounted off bracket on front side of pump module driver's side.

CHARGER: Model 091-56-12 18 AMPS Total output Built-in 3 AMP Battery saver No water boil off

AUTO EJECT: Model 091-55-20-120 (WHITE) Plug 120v, 20amp NEMA 5-20P

*** PAINT, STRIPING & LETTERING ***

PAINT BODY:

All exposed ferrous metal surfaces that are not chrome plated or stainless steel shall be thoroughly cleaned, prepped and painted with Acrylic Urethane paint. Application shall be in strict accordance with paint manufacturer's instructions, including number of coats and dry mill thickness. Body shall be painted to match Chassis cab. Compartment interiors shall have a "cobweb" splatter style finish. The color shall be white with black "cobwebbing".

CHASSIS CAB PAINT:

The cab paint shall be one single color as it comes from the chassis mfg. Paint shall be of uniform thickness and quality.

STRIPING:

6" wide BLUE reflective stripe shall be provided. Stripe to run the full length of the apparatus, starting Bottom of the cab door. Stripe is to be broken for the operators stand continuing the body full-length. There shall be a portion of stripe across the front of the unit. Striping to match department's last units.

CHEVRON SAFETY STRIPING:

NONE.

LETTERING:

Department provided logos shall be installed on the doors of the chassis. Lettering and numbering specified by the department shall be install by the manufacturer as directed by the fire department. The stripe below the County logo shall be broken and have the lettering "FIRE DEPT." in blue, same color as stripe on the front doors, same as last unit built for customer. The words "Santa Barbara County Fire Dept." shall be on the Rear Center door of the Body below the stripe. Garage numbers shall be installed on the Rear right door bottom (same as other units). Unit numbers located same as last units, 2 rear cab doors, rear Center Body door.

Unit number shall be XXX and Garage number shall be XXXX

*** ON BOARD EQUIPMENT ***

TURTLE TILE:

Turtle tile from Turtle Plastics shall be installed in all compartments and on shelves. Tiles shall be UV resistant.

MUD-FLAPS:

A pair of rubber mud flaps shall be provided and installed on the left and right rear of the wheel wells. Provisions shall be made so that the mud flap on the side where the Exhaust exits from under body the mud flap will not fly in the wind and rest on the Tail Pipe. Mud flap height to be minimum meeting the SAE Standard for height.

SCBA QUIC HOLD BRACKET:

Two (2) Zico model # MWAB-03-6 positive locking mechanical brackets shall be installed on the apparatus. Brackets meet NFPA-1901-09 9G dynamic requirements for cylinder restraint system for use in crew compartments. Brackets shall be mounted in apparatus.

LEFT HOSE REELS:

One (1) Hannay model CDFSBEPF 22-21-22 hose reel with electric rewind and brake shall be provided. The reel shall be located on the left side of the apparatus above the pump. Equipped with 150' of 3/4" 800# test hard rubber hose, in 50' lengths with 1" I.P. Lightweight, depressed eye couplings. Rollers and spools are to be provided and mounted on the outside of hose reel.

HOSE REEL DISCHARGE:

A (1") discharge valve ELKHART #890-01-01-E shall be provided for the left side hose reel. Plumbing to the valve shall be off the 2" stainless steel upper discharge manifold and be GH series Aeroquip hose. Valve shall be controlled at the hose reel.

MASTER GAUGES:

Two (2) Back lit dry gauges, pump discharge and intake shall be provided. The gauges shall be 3.50 inches in diameter with white face and black lettering. Gauges range shall be 30-0-600.

RIGHT HOSE REELS:

One (1) Hannay model CDFSBEPF 22-21-22 hose reel with electric rewind and brake shall be provided. The reel shall be located on the right side of the apparatus above the pump. Equipped with 150' of 3/4" 800# test hard rubber hose, in 50' lengths with 1" I.P. lightweight, depressed eye couplings. Rollers and spools are to be provided and mounted on the outside of hose reel.

HOSE REEL DISCHARGE:

A (1") discharge valve Elkhart 890-01-01-E shall be provided for the right side hose reel. Controlled at the reel.

WILDLAND 3" PVC SUCTION HOSE KIT:

The following items shall be supplied on the unit in the ladder, hose storage compartment.

One (1) Ea. 2-1/2" X 5.50' long PVC suction hose shall be provided with 2-1/2" FNST rocker lug coupling on one end and a 2-1/2" MNST rocker lug coupling on the other end.

Two (2) Ea. 2-1/2" X 7' long PVC suction hoses shall be provided with 2-1/2" FNST rocker lug couplings on one end and 2-1/2" MNST rocker lug couplings on the other end.

One (1) Barrel suction strainer shall be provided. The strainer shall have a 2-1/2" FNST rocker lug-coupling base.

ON BOARD EQUIPMENT, PORTABLE PUMP AND ADAPTERS:

The following items shall be supplied with the new apparatus shipped loose.

- 1 each Coupling, 1.5" National Hose double male
- 2 each Coupling, 1.5" National Hose double Female
- 1 each Foot valve, 1.5" National Hose Strainer
- 2 each Bottle, Aluminum Fuel 1 Liter
- 2 each Spanner, Pocket Spanner wrench KGR
- 2 each Adapter, 1.5" NPSH Female to 1.5" NH Male

The following items shall have specific storage on the unit.

- 1 each Water Pump Wick 100-4H Honda (front of Roadside hose bed)
- 1 each KM 130 R KOMBISYSTEM LOOP HANDLE #12214 (Curbside top box)
- 1 each HT SHAFT EXTENSION CARBON #12222 (Curbside top box)
- 1 each HT KM PRUNER ATACH. #12225 (Curbside top box)

HELMET HOLDER:

Four (4) Helmet holder shall be supplied with apparatus and installed in the cab. Holder shall Weather Guard model 8875.

CENTER PANEL REAR SEAT BRACKET:

A bracket shall be formed of aluminum sheet and mounted vertically between the two rear seats. Bracket shall have gussets from the base to stabilize the upright portion that rests against the back wall. Vertical portion shall in no way be attached to the cab roof.

DEPLOYMENT HOOKS:

Two (2) Deployment hooks shall be mounted at the rear of body. Hooks shall be designed same as Last units supplied to Santa Barbara county. Mounting shall be supplied for the removable hooks to store in the Rear roadside compartment on the back wall.

ANTENNA MOUNTING:

Mount one (1) antenna/s on cab roof and route cable to console. Antenna mount shall have dust cover.

TOOL HOLDERS AND SOFT SUCTION HOSE TRAY:

The following tool holders and equipment shall be supplied with the apparatus:

Shipped loose.

Two (2) long handled MOD 14/15 style rubber holders

Two (2) corner handle brackets.

One (1) mounting bracket with dividers, MOD 14/15 style

Two (2) tool holder U-brackets, MOD 14/15 style.

One (1) soft suction hose tray, MOD 14/15 style with strap.

Two (2) nozzle cups holders.

One (1) hose roller bracket.

MOUNT TOOL HOLDERS:

All tool holders to be mounted in the Left side, long tool compartment. Soft suction hose tray to be mounted in location on Driver side of unit. Department to Supply Photos and measurements for locations of mounting tools.

DRIP TORCH MOUNTED:

Two (2) Drip torches with brackets shall be mounted on the curbside of the unit between pump panel and under cab compartment. Torches and brackets to be the following brand no exceptions.

Forestry Supplier, Inc.

Torch: SKU 85022 Sure-Seal Double-Bottom Drip Torch Bracket: SKU: 85051 Truck/ATV Drip Torch Mounting Bracket

SEATING FOUR CREW MEMBERS:

The (2) two front seats supplied with the chassis shall be removed and 2 full size Sierra HBRX high back seats shall be mounted in their place. The (2) two rear seats shall be Full size Sierra HBRX high back seats mounted to a full width seat base. Seating shall provide occupant comfort with an armrest to the inboard side and shall reclining as much as possible. Seats shall be grey vinyl in color. The rear seat base shall have sliding trays, one mounted on each side of the unit; base shall be gray in color. The base shall have hinged diamond plate door panels with thumb latch. Seats shall have 1/4" Alum doubler plates attached internally where sliding seat mount attaches to the seat base.

SAFETY TRIANGLE KIT:

One (1) each emergency warning triangle kit (includes 3 safety triangles) shall be supplied with apparatus.

TRAFFIC SAFTEY CONES:

A set of Five (5) 28" Collapsible Orange Traffic Safety cones shall be provided with the unit. Cones shall meet the requirements of NFPA 1901, made of waterproof nylon with internal LED light with 2 settings: Steady burn and flashing. Light shall operate on 2 AAA batteries to endure 100,000 flashes or 36 hours of steady burn.

F.O.B.:

Santa Barbara County 4568 Calle Real Bldg. A Santa Barbara, CA 93110

INSPECTION AND ACCEPTANCE:

West-Mark (CAGE: 1HJ27) 581 Industry Way Atwater, CA 95301.