

SOUTH HAVEN AREA EMERGENCY SERVICES

FIRE APPARATUS SPECIFICATONS

RESCUE

SOUTH HAVEN AREA EMERGENCY SERVICES

One (1)

Y__N__

INTENT OF SPECIFICATIONS

It is the intent of these specifications to cover the furnishing and delivery to the **South Haven Area Emergency Services** of a complete fire apparatus equipped as hereinafter specified. With the view of obtaining the best results and the most acceptable apparatus for service, these specifications cover only the general requirements as to the type of construction and tests to which the apparatus must conform, together with certain details to furnish equipment and appliances with which the successful bidder must conform. Minor details of construction and materials, where not otherwise specified, are left to the discretion of the contractor who shall be solely responsible for the design and construction of all features. The NATIONAL FIRE PROTECTION ASSOCIATION pamphlet #1901 current edition for Motor Vehicle Apparatus, unless otherwise specified in these specifications shall prevail.

ONLY THE SPECIFIED FIREFIGHTING SUPPORT EQUIPMENT LISTED IN THESE SPECIFICATIONS SHALL BE PROVIDED.

The apparatus shall conform to all Federal motor vehicle safety standards.

Bids will only be considered from companies that have an established reputation in the field of fire and/or rescue apparatus manufacturing.

Each bid must be accompanied by a set of detailed contractors specifications consisting of a detailed description of the apparatus and equipment proposed. These specifications shall include size, location, type, and model of all component parts being furnished. Detailed information shall be provided on the materials used to construct all facets of the apparatus body. Any bidder who fails to submit detailed construction specifications shall be considered non-responsive and shall render their proposal ineligible for award.

Each bidder shall furnish a computer generated weight and balance analysis for the unit being proposed. It shall address individual and combined axle weights and include an analysis on the vehicle's center of gravity. It shall also include a figure for excess payload capacity. Any bidder who fails to submit the weight and balance analysis in this format shall be considered non-responsive and shall render their proposal ineligible for award.

Each bidder shall furnish satisfactory evidence of the ability to construct the apparatus specified, and shall state the location of the factory where the chassis and apparatus will be built. They shall also show that they are in a position to render prompt service and to furnish replacement parts for the completed apparatus chassis, body and components.

The manufacturer shall specify in his bid the number of working days and/or calendar days after acceptance of the formal contract by the manufacturer that the completed apparatus will be delivered by the purchaser. The manufacturer will not be held liable for changes arising from its failure to make or delay in making deliveries because of fire, flood, riot, major component shortage, accidents, acts of God, or any circumstances beyond their control.

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QUALITY AND WORKMANSHIP

The workmanship must be of the highest quality in its respective field. Special consideration will be given to the following points:

1. Accessibility of the various components which require periodic maintenance or monitoring
2. Ease of vehicle operation (pumping and driving)
3. Visibility for the driver
4. Symmetrical proportions

Construction must be rugged and design must be certified to carry the loads as specified and to meet the road and speed requirements as set forth under "PERFORMANCE TESTS AND REQUIREMENTS" of NFPA Pamphlet #1901 current edition.

Welding shall not be employed in the assembly of the apparatus in a manner that will prevent the removal of major components for service and/or repair.

DESIGN

The successful bidder shall be solely responsible for the design, construction and material used in the construction of the vehicle. The apparatus shall be of the latest design and type while using the most current industry construction techniques.

Each bidder shall supply with their bid a detailed drawing consisting of the driver side, passenger side and rear views of the apparatus. This drawing shall be representative of the apparatus being bid. The drawing must include but not be limited to all principle dimensions (height/width/length). Pictures or brochures are also encouraged that represent the quality of construction being proposed.

The apparatus, assemblies, component parts, etc., shall be designed and constructed with consideration to the nature and distribution of the load to be sustained and to the general character of the service to which the apparatus is to be subjected.

The apparatus shall be designed with great consideration given to overall vehicle weight and weight distribution. A computerized weight distribution calculation shall be included with the bid. A calculation shall include the chassis weight with all fluids and fuels topped off, estimated body weight, a 250-lb. allowance per seat for personnel and a 2,500 lb. distributed load allowance for equipment. Any bidder who fails to submit weight and balance calculations shall be considered non-responsive and shall render their proposal ineligible for award.

The apparatus shall be designed and constructed so component parts can be removed for service and repair with standard tools. Any special tools needed to service any component of the apparatus built or supplied by the component manufacturer shall be supplied with the apparatus. During the design and construction the apparatus manufacturer shall take into consideration the ease of access to various areas requiring lubrication, inspection, service or adjustment.

The design and materials must be of the highest quality in its respective field. Quality control inspections shall be performed at each step of the manufacturing process.

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The manufacturer shall meet the minimum requirements of NFPA Pamphlet 1901 current edition, The Underwriter's Laboratories, Inc. and all State and Federal Department of Transportation vehicle regulations at the time of the bid for this apparatus.

ROAD TEST

All road tests will be performed per NFPA Pamphlet #1901 current edition requirements.

LIABILITY

The successful bidder shall defend any and all suits and assume all liability for use of any patented process, device or article forming a part of the cab and chassis, or any appliance under the contract.

DELIVERY and/ DELIVERY DATA REQUIRED

1. The completed apparatus shall be delivered at the point of final manufacture.
2. The successful bidder's representative shall remain at the Fire Department until released by the Fire Chief or Commission during which time he shall instruct Fire Department personnel in the proper operation, care and maintenance of the complete apparatus.

Information required at time of delivery to be supplied by the manufacturer:

- A. Manufacturer's statement of origin
- B. Electrical "as built" schematic booklet
- C. Final build data sheet showing serial numbers for the following:
 1. Cab and chassis VIN
 2. Engine serial number
 3. Transmission serial number
 4. Apparatus/Body serial number
- D. One copy of a complete operations and general maintenance instructions as delivered, including but not limited to the chassis, engine, transmission, axles, lubrication charts, rescue body and appropriate accessories.
- E. The Underwriters Laboratories Incorporated test Certification shall be provided on delivery of the apparatus.
- F. The successful bidder shall supply all data required in NFPA Pamphlet #1901 current edition chapter 14 -20.

EXCEPTIONS TO SPECIFICATIONS

Each bidder response shall include a returned copy of this Request for bid with the yes/no columns checked for compliance to specifications.

All exceptions, no matter how minor must be marked in the "NO" column.

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Those exceptions shall be listed on a separate sheet and shall refer to specification page number and paragraph. It will be mandatory for any perspective bidder that deviates from the proposed specifications, to give a full description of all deviations.

Bidder and his/her manufacturer being represented will be held responsible for deviations not specifically addressed or approved by the Fire Department. Items not addressed will be considered as being bid with no exception and will be included on the apparatus in the form presented in our specifications. Non-compliance will be grounds for rejection of the completed vehicle - **NO EXCEPTION.**

Failure to follow this method will add a considerable time to the bid review process and may be cause for rejection of the bid.

The purchaser will not consider proposals or demonstrators taking total exception to the bid specifications.

Where bidder's specifications and/or construction differ in any way from the bid specification, a full and complete description in the specification will be required. Drawings will also be required to show alternative construction methods. Partial descriptions or general clarifications covering groups or sections of the specifications will be unacceptable.

CLARIFICATIONS TO SPECIFICATIONS

Clarifications shall refer to specification page number and paragraph. Any such clarification that appears vague or misleading shall be considered an exception. Complete clarifications are required describing the reason for the deviation. Apparatus will be inspected upon delivery for compliance with specifications.

CONTRACT AWARD

The purchaser reserves the right to reject any or all bid proposals and purchase the equipment it deems most suitable to its needs. Since all components and materials are commercially available these specifications shall in no way be considered proprietary.

Price shall be based on payment upon receipt of the completed apparatus by the purchaser. No discounts or prepayment schedules shall be listed on the proposal page. All bidders are required to detail any payment terms for the apparatus and these terms shall be listed on a separate page entitled **OPTIONS**. These options may or may not be considered at the discretion of the purchaser.

All bids shall remain valid for 30 days after opening.

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PAYMENT TERMS

The Purchaser agrees to purchase and pay cash for the apparatus and miscellaneous equipment pursuant to the following terms and conditions:

1. All prices shall be less any taxes.
2. The final payment for the apparatus shall be paid upon delivery and acceptance by the fire department per enclosed payment terms. An invoice shall be presented on or before delivery of the apparatus.
3. The apparatus, without exception, shall not be placed "In Fire Service" prior to full payment of apparatus.

SUBMISSION OF BIDS

Bids shall be submitted in accordance with the following instructions:

1. The bidder's proposed specifications shall be provided in full. Any deviations and clarifications shall be clearly marked.
2. The bidder's proposed specifications detailing their construction methods shall be provided. This is necessary to evaluate each bidder's actual intent of building the equipment as specified herein.

The bidder's proposed format shall be the same as these specifications to allow the customer to easily compare the bids; NO EXCEPTIONS.

Bids are to be submitted in the same order as our specifications; NO EXCEPTIONS.

3. Bids shall be returned in a sealed envelope clearly marked "BID FOR FIRE APPARATUS".
4. The purchaser reserves the right to accept or reject any and all bids, to waive irregularities and to make the award in any manner deemed to be in their best interest.

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One (1)

NFPA REQUIRED ITEMS

Y__N__

The purchaser shall be responsible for providing all equipment items required by NFPA pamphlet that are not otherwise indicated or addressed in these specifications.

One (1)

SINGLE SOURCE BODY BUILDER AND CONSTRUCTION

Y__N__

The apparatus manufacturer shall be the prime (single source) builder of this severe duty all aluminum fire apparatus quality body.

All engineering, design, fabrication, testing, paint and finish shall take place at the apparatus manufacturer's privately owned top tiered manufacturing facility.

Bodies that are mass produced from lower quality materials such as thin stamped utility style designs, bolted together designs or those that are manufactured by a third party for the apparatus manufacturer shall be considered sub-standard and shall not be acceptable for this project.

The body shall be designed and manufactured entirely from formed and welded aluminum plate and aluminum extrusions to ensure a high quality design and finish that shall provide years of uninterrupted service. Bodies that incorporate steel as structural support or that utilizes steel in any way shall be considered sub-standard and shall not be acceptable for this project. **NO EXCEPTIONS**

One (1)

CONSTRUCTION DRAWINGS

Y__N__

A basic drawing will be included with the proposal. Upon award a fully detailed drawing will be supplied to the Fire Department. The drawing shall be signed and returned to the manufacturer and kept on file for future reference.

One (1)

PRECONSTRUCTION CONFERENCE

Y__N__

The prime contractor will have a Pre-Construction Conference prior to any manufacturing. The purpose of meeting is to finalize all construction details. The location shall be at the manufacturing facility. All expenses for transportation, lodging and meals are paid for by the bidder. Trips in excess of 250 miles each way will be made by commercial air. The selling dealer and/or representative will be present at the pre-construction conference.

One (1)

INSPECTION TRIPS

Y__N__

Three (3) inspection trips for **four (4)** customer personnel will be arranged with all expense for transportation and meals paid for by the dealer. Transportation will be by motor vehicle unless otherwise indicated in the proposal. Trips in excess of 250 miles each way will be made by commercial air.

Timing of the trips shall be coordinated between the customer and selling dealer.

- Pre-Construction
- Pre-Paint/Chassis Inspection
- Final Inspection

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One (1)

Y__N__

PERIODIC APPARATUS INSPECTIONS

At any time during the build process, representatives of the department are always encouraged to visit the factory at any time during business hours to check-in on the progress of their new custom built apparatus. A factory representative will always be on site to give updates and let department members see their truck as it is being built.

Appointments are never necessary for these periodic visits, but for safety reasons we do ask that you arrive wearing appropriate clothing in order to enter the fabrication areas. Eye protection and additional safety equipment will be provided as needed.

One (1)

Y__N__

PROGRESS PICTURES

Progress pictures will be provided once body has started construction. Pictures will be provided throughout each phase of construction, paint and assembly.

One (1)

Y__N__

DELIVERY

The completed apparatus will be delivered under its own power to the customer's designated location. A factory delivery technician will accompany the apparatus.

Apparatus review will be provided by an authorized representative of the manufacturer as prescribed by the customer.

One (1)

Y__N__

SEATING CAPACITY PLATE

A permanent plate indicating seat belt use and occupancy shall be installed in a visible location.

One (1)

Y__N__

HELMET WARNING PLATE

A permanent plate stating "DO NOT WEAR HELMET" shall be installed in a visible location.

One (1)

Y__N__

FLUID CAPACITY PLATE

A permanent plate listing all fluids and capacities shall be installed in a visible location.

One (1)

Y__N__

OVERALL HEIGHT PLATE

A plate indicating overall height, overall length, overall width and the vehicle GVRW shall be installed in a location visible to driver.

One (1)

Y__N__

TAILBOARD PLATE

A permanent plate shall be installed at the rear indicating "DO NOT RIDE ON REAR STEP".

One (1)

Y__N__

TIRE PRESSURE PLATES

A permanent plate shall be installed at each tire location with the recommended PSI.

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One (1)

Y__N__

FREIGHTLINER COMMERCIAL CHASSIS

Description	Weight Front	Weight Rear
Price Level		
M2 PRL-20M (EFF:04/30/19)		
Data Version		
SPECPRO21 DATA RELEASE VER 014		
Vehicle Configuration		
M2 106 CONVENTIONAL CHASSIS	5,709	3,503
2020 MODEL YEAR SPECIFIED		
SET BACK AXLE - TRUCK		
STRAIGHT TRUCK PROVISION		
LH PRIMARY STEERING LOCATION		
General Service		
TRUCK CONFIGURATION		
DOMICILED, USA (EXCLUDING CALIFORNIA AND CARB OPT-IN STATES)		
RESCUE AND EMERGENCY SERVICE		
GOVERNMENT BUSINESS SEGMENT		
FIXED LOAD COMMODITY		
TERRAIN/DUTY: 100% (ALL) OF THE TIME, IN TRANSIT, IS SPENT ON PAVED ROADS		
MAXIMUM 8% EXPECTED GRADE		
SMOOTH CONCRETE OR ASPHALT PAVEMENT - MOST SEVERE IN-TRANSIT (BETWEEN SITES) ROAD SURFACE		
MEDIUM TRUCK WARRANTY		
EXPECTED FRONT AXLE(S) LOAD : 14000.0 lbs		
EXPECTED REAR DRIVE AXLE(S) LOAD : 26000.0 lbs		
EXPECTED GROSS VEHICLE WEIGHT CAPACITY : 40000.0 lbs		
Truck Service		
AMBULANCE BODY		
EXPECTED TRUCK BODY LENGTH : 0.0 ft		
EXPECTED BODY/PAYLOAD CG HEIGHT ABOVE FRAME "XX" INCHES : 32.0 in		
Engine		
* DD8 7.7L 6 CYL DUAL STAGE 375 HP @ 2200 RPM, 2600 GOV RPM, 1050 LB/FT @ 1200 RPM	450	30
Electronic Parameters		
72 MPH ROAD SPEED LIMIT		

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Description	Weight Front	Weight Rear
CRUISE CONTROL SPEED LIMIT SAME AS ROAD SPEED LIMIT		
PTO RPM WITH CRUISE SET SWITCH - 1200 RPM		
PTO RPM WITH CRUISE RESUME SWITCH - 1200 RPM		
PTO MODE CANCEL VEHICLE SPEED - 5 MPH		
PTO GOVERNOR RAMP RATE - 250 RPM PER SECOND		
PTO SPEED 1 SETTING - 1200 RPM		
ENABLE AUTO ENGINE RPM ELEVATE FOR EXTENDED IDLE		
Engine Equipment		
2016-2019 ONBOARD DIAGNOSTICS/2010 EPA/CARB/FINAL GHG17 CONFIGURATION		
2008 CARB EMISSION CERTIFICATION - CLEAN IDLE (INCLUDES 6X4 INCH LABEL ON LOWER FORWARD CORNER OF DRIVER DOOR)		
STANDARD OIL PAN		
ENGINE MOUNTED OIL CHECK AND FILL		
ONE PIECE VALVE COVER		
SIDE OF HOOD AIR INTAKE WITH FIREWALL MOUNTED DONALDSON AIR CLEANER		
DR 12V 160 AMP 28-SI QUADRAMOUNT PAD ALTERNATOR WITH REMOTE BATTERY VOLT SENSE		
(2) DTNA GENUINE, FLOODED STARTING, MIN 2000CCA, 370RC, THREADED STUD BATTERIES	10	
BATTERY BOX FRAME MOUNTED		
STANDARD BATTERY JUMPERS		
SINGLE BATTERY BOX FRAME MOUNTED LH SIDE UNDER CAB		
WIRE GROUND RETURN FOR BATTERY CABLES WITH ADDITIONAL FRAME GROUND RETURN		
NON-POLISHED BATTERY BOX COVER		
CAB AUXILIARY POWER CABLE	5	
AUXILIARY POWER NET DISTRIBUTION BLOCK FOR BODY BUILDER USE	5	
POSITIVE LOAD DISCONNECT WITH CAB MOUNTED CONTROL SWITCH MOUNTED OUTBOARD DRIVER SEAT	8	
WABCO 20.0 CFM SINGLE CYLINDER AIR COMPRESSOR		
STANDARD MECHANICAL AIR COMPRESSOR GOVERNOR		
AIR COMPRESSOR DISCHARGE LINE		

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Description	Weight Front	Weight Rear
GVG, FIRE AND EMERGENCY SERVICE VEHICLES ENGINE WARNING		
DETROIT MD COMPRESSION BRAKE WITH ON/OFF SWITCH		
RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL AFTERTREATMENT SYSTEM ASSEMBLY WITH RH B-PILLAR MOUNTED VERTICAL TAILPIPE	30	25
ENGINE AFTERTREATMENT DEVICE, AUTOMATIC OVER THE ROAD REGENERATION AND DASH MOUNTED REGENERATION REQUEST SWITCH		
11 FOOT 06 INCH (138 INCH+0/-5.9 INCH) EXHAUST SYSTEM HEIGHT		
RH CURVED VERTICAL TAILPIPE B-PILLAR MOUNTED ROUTED FROM STEP		
6 GALLON DIESEL EXHAUST FLUID TANK		
100 PERCENT DIESEL EXHAUST FLUID FILL		
LH MEDIUM DUTY STANDARD DIESEL EXHAUST FLUID TANK LOCATION		
STANDARD DIESEL EXHAUST FLUID PUMP MOUNTING		
STANDARD DIESEL EXHAUST FLUID TANK CAP		
STAINLESS STEEL AFTERTREATMENT DEVICE/MUFFLER/TAILPIPE SHIELD		
AIR POWERED ON/OFF ENGINE FAN CLUTCH		
AUTOMATIC FAN CONTROL WITH DASH SWITCH AND INDICATOR LIGHT, NON ENGINE MOUNTED		
DETROIT ENGINE MOUNTED FUEL/WATER SEPARATOR WITH WATER-IN-FUEL SENSOR AND ESOC		
FULL FLOW OIL FILTER		
1100 SQUARE INCH ALUMINUM RADIATOR	70	
ANTIFREEZE TO -34F, OAT (NITRITE AND SILICATE FREE) EXTENDED LIFE COOLANT		
GATES BLUE STRIPE COOLANT HOSES OR EQUIVALENT		
CONSTANT TENSION HOSE CLAMPS FOR COOLANT HOSES		
RADIATOR DRAIN VALVE		
LOWER RADIATOR GUARD		
ALUMINUM FLYWHEEL HOUSING		
DELCO 12V 35MT STARTER WITH INTEGRATED MAGNETIC SWITCH AND SOLENOID	10	
Transmission		
ALLISON 3000 EVS AUTOMATIC TRANSMISSION WITH PTO PROVISION	200	60

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Description	Weight Front	Weight Rear
Transmission Equipment		
ALLISON VOCATIONAL PACKAGE 198 - AVAILABLE ON 3000/4000 PRODUCT FAMILIES WITH VOCATIONAL MODEL EVS		
ALLISON VOCATIONAL RATING FOR FIRE TRUCK/EMERGENCY VEHICLE APPLICATIONS AVAILABLE WITH ALL PRODUCT FAMILIES		
PRIMARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY		
SECONDARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY		
PRIMARY SHIFT SCHEDULE RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE		
SECONDARY SHIFT SCHEDULE RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE		
PRIMARY SHIFT SPEED RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE		
SECONDARY SHIFT SPEED RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE		
ENGINE BRAKE RANGE PRESELECT RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE		
ENGINE BRAKE RANGE ALTERNATE PRESELECT RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE		
FUEL SENSE 2.0 DISABLED - PERFORMANCE - TABLE BASED		
DRIVER SWITCH INPUT - DEFAULT - NO SWITCHES		
MARKER LAMP CONNECTION FOR BODY BUILDERS		
(2) CUSTOMER INSTALLED CHELSEA 280 SERIES PTO'S		
PTO MOUNTING, LH AND RH SIDES OF MAIN TRANSMISSION		
MAGNETIC PLUGS, ENGINE DRAIN, TRANSMISSION DRAIN, AXLE(S) FILL AND DRAIN		
PUSH BUTTON ELECTRONIC SHIFT CONTROL, DASH MOUNTED		
TRANSMISSION PROGNOSTICS - ENABLED 2013		
WATER TO OIL TRANSMISSION COOLER, IN RADIATOR END TANK		

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Description	Weight Front	Weight Rear
TRANSMISSION OIL CHECK AND FILL WITH CROSSOVER TO CLEAR LH PTO AND DIRECT MOUNT PUMP SYNTHETIC TRANSMISSION FLUID (TES-295 COMPLIANT)		
Front Axle and Equipment		
DETROIT DA-F-14.7-3 14,700# FF1 71.5 KPI/3.74 DROP SINGLE FRONT AXLE		
MERITOR 16.5X5 Q+ CAST SPIDER CAM FRONT BRAKES, DOUBLE ANCHOR, FABRICATED SHOES		
FIRE AND EMERGENCY SEVERE SERVICE, NON-ASBESTOS FRONT LINING		
CAST IRON OUTBOARD FRONT BRAKE DRUMS		
FRONT OIL SEALS		
VENTED FRONT HUB CAPS WITH WINDOW, CENTER AND SIDE PLUGS - OIL		
STANDARD SPINDLE NUTS FOR ALL AXLES		
MERITOR AUTOMATIC FRONT SLACK ADJUSTERS		
TRW TAS-85 POWER STEERING	40	
POWER STEERING PUMP		
2 QUART SEE THROUGH POWER STEERING RESERVOIR		
SYNTHETIC 75W-90 FRONT AXLE LUBE		
Front Suspension		
14,600# TAPERLEAF FRONT SUSPENSION	170	
MAINTENANCE FREE RUBBER BUSHINGS - FRONT SUSPENSION		
FRONT SHOCK ABSORBERS		
Rear Axle and Equipment		
RS-25-160 27,000# R-SERIES FIRE/EMERGENCY SERVICE SINGLE REAR AXLE		230
5.63 REAR AXLE RATIO		
IRON REAR AXLE CARRIER WITH STANDARD AXLE HOUSING		
MXL 17T MERITOR EXTENDED LUBE MAIN DRIVELINE WITH HALF ROUND YOKES	20	20
MERITOR 16.5X7 P CAST SPIDER CAM REAR BRAKES, DOUBLE ANCHOR, CAST SHOES		20
FIRE AND EMERGENCY SEVERE SERVICE NON-ASBESTOS REAR BRAKE LINING		
STANDARD BRAKE CHAMBER LOCATION		
WEBB HEAVY WEIGHT CAST IRON REAR BRAKE DRUMS		80
REAR OIL SEALS		

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Description	Weight Front	Weight Rear
WABCO TRISTOP D LONGSTROKE 1-DRIVE AXLE SPRING PARKING CHAMBERS HALDEX AUTOMATIC REAR SLACK ADJUSTERS SYNTHETIC 75W-90 REAR AXLE LUBE		
Rear Suspension		
HENDRICKSON PRIMAAX EX 26,000# REAR AIR SUSPENSION		320
HENDRICKSON PRIMAAX 10.00" RIDE HEIGHT AXLE CLAMPING GROUP MANUAL DUMP VALVE FOR AIR SUSPENSION WITHOUT GAUGE INDICATOR LIGHT FOR EACH REAR SUSPENSION CONTROL SWITCH DUAL AIR REAR SUSPENSION LEVELING VALVES TRANSVERSE CONTROL RODS REAR SHOCK ABSORBERS - ONE AXLE (AIR RIDE SUSPENSION)		
Brake System		
AIR BRAKE PACKAGE WABCO 4S/4M ABS REINFORCED NYLON, FABRIC BRAID AND WIRE BRAID CHASSIS AIR LINES FIBER BRAID PARKING BRAKE HOSE STANDARD BRAKE SYSTEM VALVES STANDARD AIR SYSTEM PRESSURE PROTECTION SYSTEM STD U.S. FRONT BRAKE VALVE RELAY VALVE WITH 5-8 PSI CRACK PRESSURE, NO REAR PROPORTIONING VALVE WABCO SYSTEM SAVER HP WITH INTEGRAL AIR GOVERNOR AND HEATER AIR DRYER MOUNTED UNDER HOOD STEEL AIR TANKS MOUNTED AFT INSIDE AND/OR BELOW FRAME JUST FORWARD OF REAR SUSPENSION, NO TRIPLE OR TORPEDO TANKS CLEAR FRAME RAILS FROM BACK OF CAB TO FRONT REAR SUSPENSION BRACKET, BOTH RAILS OUTBOARD BW DV-2 AUTO DRAIN VALVE WITH HEATER - WET TANK		
Trailer Connections		
UPGRADED CHASSIS MULTIPLEXING UNIT UPGRADED BULKHEAD MULTIPLEXING UNIT		

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Description	Weight Front	Weight Rear
2-WAY HEAVY DUTY 150 AMP RECEPTACLE WIRED HOT, MOUNTED END OF FRAME		
Wheelbase & Frame		
5250MM (207 INCH) WHEELBASE		
11/32X3-1/2X10-3/16 INCH STEEL FRAME (8.73MMX258.8MM/0.344X10.19 INCH) 120KSI	150	80
2125MM (84 INCH) REAR FRAME OVERHANG		
FRAME OVERHANG RANGE: 81 INCH TO 90 INCH	-30	130
8 INCH BOLT ON FRONT FRAME EXTENSION		
CALC'D BACK OF CAB TO REAR SUSP C/L (CA) : 141.15 in	55	
CALCULATED EFFECTIVE BACK OF CAB TO REAR SUSPENSION C/L (CA) : 138.15 in		
CALC'D FRAME LENGTH - OVERALL : 319.79		
CALCULATED FRAME SPACE LH SIDE : 105.99 in		
CALCULATED FRAME SPACE RH SIDE : 211.04 in		
CALC'D SPACE AVAILABLE FOR DECKPLATE : 141.45 in		
SQUARE END OF FRAME		
FRONT CLOSING CROSSMEMBER		
STANDARD WEIGHT ENGINE CROSSMEMBER		
STANDARD CROSSMEMBER BACK OF TRANSMISSION		
STANDARD MIDSHIP #1 CROSSMEMBER(S)		
STANDARD REARMOST CROSSMEMBER		
HEAVY DUTY SUSPENSION CROSSMEMBER		30
Chassis Equipment		
THREE-PIECE 14 INCH CHROMED STEEL BUMPER WITH COLLAPSIBLE ENDS	30	
FRONT TOW HOOKS - FRAME MOUNTED	15	
BUMPER MOUNTING FOR SINGLE LICENSE PLATE		
PRE-WIRE FOR LIGHTED SIGHT RODS, NO SIGHT RODS		
FENDER AND FRONT OF HOOD MOUNTED FRONT MUDFLAPS		
GRADE 8 THREADED HEX HEADED FRAME FASTENERS		
N	CUSTOMER REQUESTS (1) COPY STANDARD BODY BUILDER DIAGRAM 2D DXF/PDF FORMAT ELECTRONICALLY TRANSMITTED	
Fuel Tanks		
50 GALLON/189 LITER SHORT RECTANGULAR ALUMINUM FUEL TANK - LH	20	

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Description	Weight Front	Weight Rear
RECTANGULAR FUEL TANK(S) PLAIN ALUMINUM/PAINTED STEEL FUEL/HYDRAULIC TANK(S) WITH PAINTED BANDS FUEL TANK(S) FORWARD PLAIN STEP FINISH FUEL TANK CAP(S) DETROIT FUEL/WATER SEPARATOR WITH BYPASS EQUIFLO INBOARD FUEL SYSTEM NO NATURAL GAS VEHICLE FUEL TANK VENT LINE/STACK AUXILIARY FUEL SUPPLY AND RETURN PORTS LOCATED ON LH FUEL TANK HIGH TEMPERATURE REINFORCED NYLON FUEL LINE	-5	
Tires		
* GOODYEAR G289 WHA DURASEAL 315/80R22.5 20 PLY RADIAL FRONT TIRES	94	
* GOODYEAR G182 12R22.5 16 PLY RADIAL REAR TIRES		112
Hubs		
CONMET PRESET PLUS PREMIUM IRON FRONT HUBS CONMET PRESET PLUS PREMIUM IRON REAR HUBS		
Wheels		
ALCOA ULTRA ONE 89U64X 22.5X9.00 10-HUB PILOT 5.99 INSET ALUMINUM FRONT WHEELS	-28	
ALCOA LVL ONE 88367X 22.5X8.25 10-HUB PILOT ALUMINUM DISC REAR WHEELS POLISHED FRONT WHEELS; OUTSIDE ONLY POLISHED REAR WHEELS; OUTSIDE OF OUTER WHEELS ONLY FRONT WHEEL MOUNTING NUTS REAR WHEEL MOUNTING NUTS INNER WHEEL EXTENSIONS, OUTBOARD AIRING, ALUMINUM OUTER WHEELS WITH RUBBER STABILIZERS		-100
Cab Exterior		
106 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB AIR CAB MOUNTING CAB ROOF REINFORCEMENTS FOR ROOF MOUNTED COMPONENTS NONREMOVABLE BUGSCREEN MOUNTED BEHIND GRILLE	2	

SOUTH HAVEN AREA EMERGENCY SERVICES

Description	Weight Front	Weight Rear
LH AND RH EXTERIOR GRAB HANDLES WITH SINGLE RUBBER INSERT		
HOOD MOUNTED CHROMED PLASTIC GRILLE		
CHROME HOOD MOUNTED AIR INTAKE GRILLE		
FIBERGLASS HOOD		
DUAL 25 INCH ROUND STUTTER TONE HOOD MOUNTED AIR HORNS WITH DUAL LANYARDS	8	
SINGLE ELECTRIC HORN		
DUAL HORN SHIELDS		
DOOR LOCKS AND IGNITION SWITCH KEYED THE SAME		
REAR LICENSE PLATE MOUNT END OF FRAME		
INTEGRAL HEADLIGHT/MARKER ASSEMBLY WITH CHROME BEZEL		
LED AERODYNAMIC MARKER LIGHTS		
OMIT STOP/TAIL/BACKUP LIGHTS AND PROVIDE WIRING WITH SEPARATE STOP/TURN WIRES TO 4 FEET BEYOND END OF FRAME		-5
STANDARD FRONT TURN SIGNAL LAMPS		
NO WORK LIGHT		
SWITCH, INDICATOR LIGHT AND APPROXIMATELY 10 FEET OF WIRE ON CHASSIS RH BACK OF CAB FOR CUSTOMER FURNISHED UTILITY LIGHT(S)		
DUAL WEST COAST BRIGHT FINISH HEATED MIRRORS WITH LH AND RH REMOTE		
DOOR MOUNTED MIRRORS		
102 INCH EQUIPMENT WIDTH		
LH AND RH 8 INCH BRIGHT FINISH CONVEX MIRRORS MOUNTED UNDER PRIMARY MIRRORS		
STANDARD SIDE/REAR REFLECTORS		
63X14 INCH TINTED REAR WINDOW		
TINTED DOOR GLASS LH AND RH WITH TINTED NON-OPERATING WING WINDOWS		
RH AND LH ELECTRIC POWERED WINDOWS, PASSENGER SWITCHES ON DOOR(S)	4	
TINTED WINDSHIELD		
2 GALLON WINDSHIELD WASHER RESERVOIR WITHOUT FLUID LEVEL INDICATOR, FRAME MOUNTED		
Cab Interior		
OPAL GRAY VINYL INTERIOR		
MOLDED PLASTIC DOOR PANEL		
MOLDED PLASTIC DOOR PANEL		
BLACK MATS WITH SINGLE INSULATION		

SOUTH HAVEN AREA EMERGENCY SERVICES

Description	Weight Front	Weight Rear
DASH MOUNTED ASH TRAY(S) WITHOUT LIGHTER		
FORWARD ROOF MOUNTED CONSOLE WITH UPPER STORAGE COMPARTMENTS WITHOUT NETTING		
IN DASH STORAGE BIN		
* PLASTIC MANIFEST BOX - LH AND RH DOORS		
(2) CUP HOLDERS LH AND RH DASH		
GRAY/CHARCOAL FLAT DASH		
SMART SWITCH EXPANSION MODULE		
HEATER, DEFROSTER AND AIR CONDITIONER		
STANDARD HVAC DUCTING		
MAIN HVAC CONTROLS WITH RECIRCULATION SWITCH		
STANDARD HEATER PLUMBING WITH BALL SHUTOFF VALVES AT SUPPLY LINES ONLY		
VALEO HEAVY DUTY A/C REFRIGERANT COMPRESSOR		
BINARY CONTROL, R-134A		
STANDARD INSULATION		
SOLID-STATE CIRCUIT PROTECTION AND FUSES		
12V NEGATIVE GROUND ELECTRICAL SYSTEM		
DOME LIGHT WITH 3-WAY SWITCH ACTIVATED BY LH AND RH DOORS		
LH AND RH ELECTRIC DOOR LOCKS		
(1) 12V POWER SUPPLY (1) DUAL 2.1 AMP USB CHARGER IN DASH		
SEATS INC 911 UNIVERSAL SERIES HIGH BACK AIR SUSPENSION DRIVER SEAT WITH NFPA 1901-2009/2016 COMPLIANT SEAT SENSOR	50	
SEATS INC 911 UNIVERSAL SERIES HIGH BACK NON SUSPENSION PASSENGER SEAT WITH UNDERSEAT STORAGE AND NFPA 1901-2009/2016 COMPLIANT SEAT SENSOR	25	10
LH AND RH INTEGRAL DOOR PANEL ARMRESTS		
VINYL WITH VINYL INSERT DRIVER SEAT		
VINYL WITH VINYL INSERT PASSENGER SEAT		
NFPA 1901-2009 HIGH VISIBILITY ORANGE SEAT BELTS		
ADJUSTABLE TILT AND TELESCOPING STEERING COLUMN	10	
4-SPOKE 18 INCH (450MM) STEERING WHEEL		
DRIVER AND PASSENGER INTERIOR SUN VISORS		
NO ENTRY/ACCESS/STEP WIRING		

SOUTH HAVEN AREA EMERGENCY SERVICES

Description	Weight Front	Weight Rear
Instruments & Controls		
GRAY DRIVER INSTRUMENT PANEL		
GRAY CENTER INSTRUMENT PANEL		
ENGINE REMOTE INTERFACE WITH PARK BRAKE INTERLOCK		
BLACK GAUGE BEZELS		
LOW AIR PRESSURE INDICATOR LIGHT AND AUDIBLE ALARM		
2 INCH PRIMARY AND SECONDARY AIR PRESSURE GAUGES		
INTAKE MOUNTED AIR RESTRICTION INDICATOR WITHOUT GRADUATIONS		
97 DB BACKUP ALARM		3
ELECTRONIC CRUISE CONTROL WITH SWITCHES IN LH SWITCH PANEL		
KEY OPERATED IGNITION SWITCH AND INTEGRAL START POSITION; 4 POSITION OFF/RUN/START/ACCESSORY WITH ECM STARTER LOCKOUT		
ICU3S, 132X48 DISPLAY WITH DIAGNOSTICS, 28 LED WARNING LAMPS AND DATA LINKED		
HEAVY DUTY ONBOARD DIAGNOSTICS INTERFACE CONNECTOR LOCATED BELOW LH DASH		
2 INCH ELECTRIC FUEL GAUGE		
ENGINE REMOTE INTERFACE NOT CONFIGURED		
ENGINE REMOTE INTERFACE CONNECTOR AT BACK OF CAB		
ELECTRICAL ENGINE COOLANT TEMPERATURE GAUGE		
2 INCH TRANSMISSION OIL TEMPERATURE GAUGE		
ENGINE AND TRIP HOUR METERS INTEGRAL WITHIN DRIVER DISPLAY		
CUSTOMER FURNISHED AND INSTALLED PTO CONTROLS		
ELECTRIC ENGINE OIL PRESSURE GAUGE		
NFPA VEHICLE DATA RECORDER AND SEATBELT DISPLAY		
AM/FM/WB WORLD TUNER RADIO WITH AUXILIARY INPUT, J1939	10	
DASH MOUNTED RADIO		
(2) RADIO SPEAKERS IN CAB		
AM/FM ANTENNA MOUNTED ON FORWARD LH ROOF		
ELECTRONIC MPH SPEEDOMETER WITH SECONDARY KPH SCALE, WITHOUT ODOMETER		
STANDARD VEHICLE SPEED SENSOR		

SOUTH HAVEN AREA EMERGENCY SERVICES

Description	Weight Front	Weight Rear
ELECTRONIC 3000 RPM TACHOMETER		
VT-HU CONNECTIVITY PLATFORM HARDWARE		
3 YEARS DETROIT CONNECT BASE PACKAGE (VIRTUAL TECHNICIAN, DETROIT CONNECT PORTAL ACCESS) FOR VT-HU CONNECTIVITY PLATFORM		
IGNITION SWITCH CONTROLLED ENGINE STOP		
TWO ON/OFF ROCKER SWITCHES IN THE DASH WITH INDICATOR LIGHTS AND WIRE ROUTED TO CHASSIS AT BACK OF CAB, LABEL OPT		
(2) OVERHEAD MOUNTED LANYARD CONTROLS: (1) OFFICER AIR HORN AND (1) DRIVER AIR HORN		
DIGITAL VOLTAGE DISPLAY INTEGRAL WITH DRIVER DISPLAY		
SINGLE ELECTRIC WINDSHIELD WIPER MOTOR WITH DELAY		
MARKER LIGHT SWITCH INTEGRAL WITH HEADLIGHT SWITCH		
ALTERNATING FLASHING HEADLAMP SYSTEM WITH BODY BUILDER CONTROLLED ENGAGEMENT		
ONE VALVE PARKING BRAKE SYSTEM WITH WARNING INDICATOR		
SELF CANCELING TURN SIGNAL SWITCH WITH DIMMER, WASHER/WIPER AND HAZARD IN HANDLE		
INTEGRAL ELECTRONIC TURN SIGNAL FLASHER WITH HAZARD LAMPS OVERRIDING STOP LAMPS		
Design		
TWO COLOR CUSTOM PAINT		
Color		
CAB COLOR A: L2745EB VERMILLION ELITEBC		
CAB COLOR B: L0006EB WHITE ELITE BC		
BLACK, HIGH SOLIDS POLYURETHANE CHASSIS PAINT		
STANDARD E COAT/UNDERCOATING		
Certification / Compliance		
U.S. FMVSS CERTIFICATION		
Raw Performance Data		
CALC'D FRAME LENGTH - OVERALL : 319.79		
CALCULATED EFFECTIVE BACK OF CAB TO REAR SUSPENSION C/L (CA) : 138.15 in		
CALC'D SPACE AVAILABLE FOR DECKPLATE : 141.45 in		

SOUTH HAVEN AREA EMERGENCY SERVICES

One (1) Y__N__

EXHAUST MODIFICATION

The chassis exhaust pipe and muffler shall be extended to the front of the right rear wheel and shall be pointed out. Any heat shields required to protect body and/or compartments from heat shall be installed.

One (1) Y__N__

CHASSIS SETUP

The chassis shall have adjustments made to insure the proper configuration for accepting pumps and/or bodies. This shall include the repositioning air tanks, frame cross members, step adjustments, etc.

One (1) Y__N__

CAB TO BODY PASS THROUGH

The cab rear window shall be removed to allow communication access to the front of the body. The front of the body shall include a hole approximately the size of the cab window. An accordion style gasket shall be installed around the opening.

One (1) Y__N__

CHASSIS TRIM PACKAGE WITH ROLL-OUT BATTERY TRAY

The following accessories will be covered with 1/8" (.125) diamondplate aluminum covers, attached so as to be easily removed for service or replacement:

- Fuel tank with step provision
- Chassis step
- Battery Box with removable access cover - The batteries shall be mounted to a slide out tray for ease of service.

NOTE: ANY STEP SURFACE SHALL BE COMPLIANT WITH THE LATEST NFPA STANDARD.

One (1) Y__N__

WHEEL TRIM PACKAGE

Chrome plated hub and nut covers will be provided and installed on all exterior wheels. The trim will consist of:

- Individual nut covers "acorn" style
- Front hub covers, open center
- "High Hat" style rear axle covers

One (1) Y__N__

TIRE PRESSURE MONITORING SYSTEM:

A six (6) wheel tire monitoring system shall be installed on the chassis. LED valve caps shall be installed on each tire valve stem. The LED cap is self-calibrating during initial installation. The valve cap starts flashing red if the tire pressure drops more than 8 psi. Ultra-bright LED allow for visual checks in daylight.

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One (1)

AUTOMATIC TIRE CHAINS

Onspot brand six (6) strand automatic ice chains shall be installed on the rear axle of the chassis to provide instant traction while traveling on ice and snow at speeds below 35 MPH.

Controls shall be located in the cab. A secondary "kill switch" shall be installed in the center console for seasonal operation.

Y__N__

One (1)

FRONT BUMPER EXTENSION

There shall be one (1) **28"** extended front bumper.

Y__N__

One (1)

ALUMINUM GRAVEL SHIELD

An aluminum diamondplate gravel shield will be installed on the front bumper extension. The sides will be mated to the bumper for aesthetic consideration. The shield will be reinforced to allow its use as a platform for speakers or sirens.

The length of the bumper shall be long enough to accommodate any hose wells, mounted equipment or a length pre-determined by the customer.

Y__N__

One (1)

FRONT BUMPER COMPARTMENT RH

The bumper shall include a compartment in the front bumper located on the right hand side outboard of the frame rail which may be used for a cord reel. The compartment shall be constructed of aluminum. The compartment shall include a cover constructed of embossed aluminum tread plate.

Y__N__

One (1)

FRONT BUMPER COMPARTMENT CENTER

The front bumper shall include a storage compartment in the bumper apron located in the center. The compartment shall be constructed of aluminum and shall include drain holes in the bottom corners to allow excess moisture to escape. The compartment shall include a raised cover constructed of embossed aluminum tread plate.

The front bumper compartment shall include a 7.00 inch stainless lift handle at the top center of the raised compartment cover. The raised cover shall be held in the closed position via two (2) pull to release rubber "T" style hold down handles, located one (1) at each end of the cover. Gas cylinder stays shall hold the cover open.

The compartment shall hold three (3) battery powered extrication tools.

- Cutter, spreader, ram

Y__N__

One (1)

HIGH IDLE

Variable high idle shall be controlled by the vehicles' cruise control system or a switch on the dash/console. An interlock shall be installed to prevent operation unless parking brake is engaged and transmission is in neutral.

Y__N__

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One (1) Y__N__

BATTERY CONDITIONER

A Pro-Power PRO-1 single battery conditioner will be installed in a dry, protected area of the apparatus. The maximum output will be 15 amperes, supplied as required to the battery system. When fully charged, the conditioner will shut down.

- The conditioner will be wired to the 120-V shore power inlet.

One (1) Y__N__

BATTERY CONDITIONER GAUGE

An LED waterproof charge display shall be installed adjacent to the shore power inlet.

One (1) Y__N__

AIR LINE RECEPTACLE

A Kussmaul automatic air line disconnect shall be installed and connected to chassis air system. The air line coupler shall automatically disconnect when the vehicle's engine is started. The receptacle shall come with a weather-proof cover.

Location: Driver side step area

One (1) Y__N__

WEATHER PROOF COVER

The cover for the air-eject shall be Yellow in color.

One (1) Y__N__

SHORE POWER RECEPTACLE

A KUSSMAUL 20-amp super auto-eject type receptacle shall be provided. This receptacle shall eject the male shore line from the apparatus when the engine starter switch is energized. The receptacle will be provided with a weather-proof cover. An appropriate end shall be provided.

Location: Driver side step area

One (1) Y__N__

WEATHER PROOF COVER

The cover for the shore power receptacle shall be Yellow in color.

One (1) Y__N__

BACKUP ALARM

There shall be an electronic beeper that sounds when the truck is placed in reverse. The beeper shall be heard over all engine noise to warn persons on or near the truck.

One (1) Y__N__

CONSOLE / STORAGE BOX

A painted aluminum box will be installed between the driver and officer seats of the commercial chassis. There shall be a storage area towards the back of the top face for books and binders. The bottom portion of the storage area will be removable for access to the apparatus wiring block.

The apparatus switch box, siren and other accessories will be installed on the top face of the box. The console exterior shall be painted to match the cab interior.

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One (1)

FRONT WINCH RECEIVER

A two inch receiver shall be installed on the front of the apparatus. The receiver tube shall be bolted directly to one of the chassis frame rails. There shall be a 12V power point supplied with weatherproof cover.

Y__N__

One (1)

SIDE WINCH RECEIVER

Two (2), two inch receivers shall be installed on the side of the body, one (1) each side. The receiver shall be part of a element that is bolted directly to the chassis frame rails. The receiver shall be under the body behind the back tire. There shall be a 12V whip supplied to reach the side access points from the rear power supply.

Y__N__

One (1)

TRAILER HITCH

There shall be a Class III trailer hitch securely installed to the rear frame rails. There shall be a 12V power point supplied with weatherproof cover.

Y__N__

One (1)

REAR TOW EYES

There shall be two (2) rear tow eyes below the body that will be attached to the rear of the chassis frame.

Y__N__

One (1)

MULTI-MOUNT WINCH

A 10,000 pound electric winch shall be supplied with the apparatus. The winch shall be a Warn Zeon 10-S with Multi Mount kit. The winch shall be mounted in a frame that plugs into a 2" Class III hitch. The winch shall include 100 feet of synthetic rope, a 175 amp quick connect weatherproof power lead and a 5/8" hitch pin.

Y__N__

One (1)

EXTRUDED ALUMINUM BODY SUPERSTRUCTURE

The body subframe is to be entirely welded, constructed of 6061-T6 extruded aluminum tubing with **minimum** dimensions of 3"x3"x3/8", 2"x3"x1/4" and 1"x3" solid. All vertical components are to be reinforced to the substructure with 2"x3"x1/4" 6061-T6 TUBULAR gussets at strategic points to assure structural integrity.

Y__N__

The body sides are to be constructed from 2"x3"x1/4" 6061-T6 structural aluminum tubing welded to form a continuous support matrix for the hose body and compartments. The interior components will be welded along perimeter and along each side for additional support.

The upper body side panels shall be constructed with a single sheet to present a seamless construction and maximum corrosion protection.

Fender liners will be independent from the compartment sides to provide maximum corrosion and impact protection. Wheelwell fastening support angles shall be welded and be made from 1" x 1" x 1/4" angle.

The apparatus body shall be entirely independent from the chassis frame. It is to be attached to the frame over 1/2" x 3" 60# rubber pads running the full length of body. The

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unit is to be designed so as to be removable from the chassis in the event of future chassis replacement.

One (1)

Y___N___

EXTRUDED ALUMINUM APPARATUS BODY

The apparatus body compartments are to be constructed from 1/8"-3/16" aluminum alloy. All compartments are to be formed and welded to the substructure and sidewalls. Lower compartment floors are to be fitted with hat section supports to allow for loading of heavy equipment.

COMPARTMENTATION:

Each compartment shall be "sweep-out" style. The compartments shall not share a common wall and shall be individually vented.

An extruded aluminum drip rail is to be installed above each compartment and the walk-in compartment entrance.

All standing, stepping, and walking surfaces will meet the NFPA 1901 requirements for slip resistance. All aluminum treadplate will be Alcoa No-Slip type.

The body top is to be covered with 1/8" (.125) diamondplate aluminum tread plate material where applicable.

The compartments shall be divided as follows:

SIDE:

There shall be four (4) compartments ahead of the rear wheels, two (2) each side. The forward driver side compartment shall be approximately **56" wide x 24" high x 26" deep**. The forward passenger side compartment shall be approximately **22" wide x 24" high x 26" deep**. The rearward compartments shall be approximately **43" wide x 70" high x transverse/26" deep**.

There shall be two (2) compartments over the rear wheels, one (1) each side. The compartments will be approximately **58" wide x 35" high x transverse deep**.

There shall be two (2) compartments behind the rear wheels, one (1) each side. The compartments shall be approximately **50" wide x 70" high x 26" deep**.

RESCUE COMPARTMENT

There shall be one (1) walk in compartment in the front of the apparatus body with a vertically hinged door on the passenger side. The compartment door shall be approximately **31" wide x 80" high** and include a stepwell. The door shall be equipped with two (2) non-opening windows, one top, one bottom, approximately **16" wide x 14" tall**. The exterior door handle shall be flush style Eberhard and the door shall have a gas shock that holds the door open at 90 degrees. There shall be a grab handle installed on the inside of the door for assisting when entering and exiting the vehicle.

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The walk-in area is to be approximately **95" wide x 80" high x 60" deep**. The driver side area shall be equipped with one (1) non-opening window approximately **41" wide x 16" tall**.

INTERIOR

The floor of the rescue box shall be covered with a multi-layer mat consisting of 0.25 inch thick sound absorbing closed cell foam with a 0.06 inch thick non-slip vinyl surface with a pebble grain finish. The covering shall be held in place by a pressure sensitive adhesive and aluminum trim molding. All exposed seams shall be sealed with silicone caulk matching the color of the floor mat to reduce the chance of moisture and debris retention.

The interior cabinets and seat boxes shall be constructed from aluminum.

EMS COMPARTMENT

The rear upper portion of the rescue box interior shall include an EMS compartment with sliding clear doors. The compartment shall be recessed into the area above the L2/R2 body compartments and approximately **58" wide x 16" tall x 36" deep**. An LED light shall be installed in the compartment.

COMMAND DESK

A folding desk top shall be provided and installed in the front upper portion. When not in use the desk shall be latched in the vertical position.

BENCH SEAT AND SEATBELTS

A full width bench seat with storage below shall be mounted on the rear floor of the compartment. The seat box shall be approximately **90" wide x 18" tall x 20" deep**. A hinged aluminum lid with a padded seat and hydraulic lift cylinders shall be included. There shall be four (4) seat belts mounted for crew members.

FRONT CAB COMMUNICATIONS ACCESS

A communications pass through area to the cab shall be installed in the front portion of the compartment.

OVERHEAD ESCAPE HOLE

An overhead manhole escape with sealed hinged lid shall be provided and installed in the roof portion of the rescue compartment.

One (1)

Y__N__

SUPERSTRUCTURE AND BODY WARRANTY - LIFETIME

The manufacturer shall warrant to the original purchaser that the apparatus superstructure and body is structurally sound and free of all structural defects of workmanship and material and further warrants that it will maintain its structural integrity for the life of the apparatus. This warranty shall not pertain to issues of paint finish, hardware, moldings or accessories. The warranty shall terminate upon transfer of possession or ownership by the original purchaser.

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One (1) **L1 COMPARTMENT** Y__N__

- *The following is a description of items included with the compartment.*

One (1) **DRAWER AND DOOR** Y__N__

The L1 compartment shall be a full width and depth drawer style compartment. The compartment door is to be constructed from 3/16" (.190) aluminum plate material and be attached to the drawer. The door is to be exterior overlap type, with a continuous rubber seal of closed cell neoprene.

The door handle shall be a Hansen D-ring with slam latch mechanisms. The drawer will include two heavy duty drawer slides and utilize gas springs.

One (1) **LED COMPARTMENT LIGHT** Y__N__

One (1) extruded aluminum LED strip light installed in the compartment.

One (1) **CRIBBING DRAWER** Y__N__

A cribbing pull-out storage compartment shall be installed below the L1 body compartment. The compartment shall be approximately 57" wide x 8" tall x 26" deep. A diamondplate door with pull handle shall be installed.

One (1) **L2 COMPARTMENT** Y__N__

- *The following is a description of items included with the compartment.*

One (1) **ROLL UP DOOR - BRUSHED** Y__N__

ROM series 4 roll-up door will be installed in this compartment. The shutters will be constructed from extruded aluminum with a brushed finish. Internally sealed for weather resistance and quiet operation. Rubber seals will be installed on the vertical components. The door will close/lock with a combination handle/locking bar on the exterior at the bottom.

The door will roll-up in the top of the compartment to allow for maximum use of the compartment interior.

Lighting will be located on the vertical compartment walls for maximum effectiveness.

One (1) **ROLL UP DOOR SILLS** Y__N__

An extruded aluminum door sill shall be provided for each roll up door.

One (1) **ROLL UP DOOR PAN** Y__N__

An aluminum roll-up door guard or drip pan shall be installed in this compartment. The fabricated guard prevents equipment from rubbing on the door and deflects accumulated moisture out of the compartments.

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One (1) **DOOR STRAP** Y__N__

An elastic door strap shall be installed on this compartment door to assist in lowering the door.

One (1) **ROLL OUT TRAY - FLOOR MOUNTED** Y__N__

A Slide-Master aluminum heavy duty roll-out tray with a minimum capacity of 700# shall be provided and installed on the compartment floor. The tray shall be constructed of 3/16" aluminum with a 2" lip on each side. The roll-out mechanism shall include a push/pull spring lock for the full open and closed positions.

One (1) **TRANSVERSE ROLL OUT TRAY** Y__N__

A Slide-Master 1000# aluminum heavy duty roll-out tray will be fabricated and installed in the transverse compartment as follows:

They will be constructed so as to roll out approximately 75% of their total length from either side. Rubber pads will be provided to prevent accidental damage to the compartment door interiors.

The tray will be constructed from 3/16" aluminum smooth plate formed to a tray with closed ends on the left and right. They will roll smoothly on steel bearing supports encased in a slide device attached to the bottom of the tray lip and the side of the apparatus compartment interior.

Latches will be provided on each side to allow locking in the "open" position to prevent accidental retraction into the compartment.

One (1) **VERTICAL COMPARTMENT DIVIDER ON TRANSVERSE ROLL OUT TRAY** Y__N__

A bolt in vertical compartment divider fabricated from 3/16" aluminum shall be provided and installed on the compartment transverse roll-out tray.

The divider will be mounted to adjustable tracking to allow for side to side adjustment.

One (1) **LED COMPARTMENT LIGHTS** Y__N__

Two (2) extruded aluminum LED strip lights shall be installed in the compartment. The strip lights shall be installed in a vertical position and run the full height of the compartment, one (1) each side.

One (1) **L3 COMPARTMENT** Y__N__

The following is a description of items included with the compartment.

One (1) **ROLL UP DOOR - BRUSHED** Y__N__

ROM series 4 roll-up door will be installed in this compartment. The shutters will be constructed from extruded aluminum with a brushed finish. Internally sealed for weather resistance and quiet operation. Rubber seals will be installed on the vertical

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components. The door will close/lock with a combination handle/locking bar on the exterior at the bottom.

The door will roll-up in the top of the compartment to allow for maximum use of the compartment interior.

Lighting will be located on the vertical compartment walls for maximum effectiveness.

One (1)

Y__N__

ROLL UP DOOR SILLS

An extruded aluminum door sill shall be provided for each roll up door.

One (1)

Y__N__

ROLL UP DOOR PAN

An aluminum roll-up door guard or drip pan shall be installed in this compartment. The fabricated guard prevents equipment from rubbing on the door and deflects accumulated moisture out of the compartments.

One (1)

Y__N__

DOOR STRAP

An elastic door strap shall be installed on this compartment door to assist in lowering the door.

One (1)

Y__N__

TRANSVERSE ROLL OUT TRAY

A Slide-Master 1000# aluminum heavy duty roll-out tray will be fabricated and installed in the transverse compartment as follows:

They will be constructed so as to roll out approximately 75% of their total length from either side. Rubber pads will be provided to prevent accidental damage to the compartment door interiors.

The tray will be constructed from 3/16" aluminum smooth plate formed to a tray with closed ends on the left and right. They will roll smoothly on steel bearing supports encased in a slide device attached to the bottom of the tray lip and the side of the apparatus compartment interior.

Latches will be provided on each side to allow locking in the "open" position to prevent accidental retraction into the compartment.

One (1)

Y__N__

VERTICAL COMPARTMENT DIVIDER ON ROLL OUT TRAY- TRANSVERSE

A bolt in vertical compartment divider fabricated from 3/16" aluminum shall be provided and installed on the compartment roll-out tray.

The divider will be mounted to adjustable tracking to allow for side to side adjustment.

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One (1) **STOKES BASKET STORAGE** Y__N__

The compartment shall be equipped with a stokes basket storage compartment configured through the transverse area.

Access to the compartment shall be a roll-up style door, located at each side of the apparatus.

One (1) **LITTLE GIANT STORAGE** Y__N__

The compartment shall be equipped with a little giant storage compartment configured through the transverse area.

Access to the compartment shall be a roll-up style door, located at each side of the apparatus.

One (1) **PIKE POLE STORAGE** Y__N__

The compartment shall be equipped with eight (8) pike pole storage compartments configured through the transverse area.

Access to the compartment shall be a roll-up style door, located at each side of the apparatus.

One (1) **LED COMPARTMENT LIGHTS** Y__N__

Two (2) extruded aluminum LED strip lights shall be installed in the compartment. The strip lights shall be installed in a vertical position and run the full height of the compartment, one (1) each side.

One (1) **L4 COMPARTMENT** Y__N__

The following is a description of items included with the compartment.

One (1) **ROLL UP DOOR - BRUSHED** Y__N__

ROM series 4 roll-up door will be installed in this compartment. The shutters will be constructed from extruded aluminum with a brushed finish. Internally sealed for weather resistance and quiet operation. Rubber seals will be installed on the vertical components. The door will close/lock with a combination handle/locking bar on the exterior at the bottom.

The door will roll-up in the top of the compartment to allow for maximum use of the compartment interior.

Lighting will be located on the vertical compartment walls for maximum effectiveness.

One (1) **ROLL UP DOOR SILLS** Y__N__

An extruded aluminum door sill shall be provided for each roll up door.

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- One (1) **ROLL UP DOOR PAN** Y__N__
An aluminum roll-up door guard or drip pan shall be installed in this compartment. The fabricated guard prevents equipment from rubbing on the door and deflects accumulated moisture out of the compartments.
- One (1) **DOOR STRAP** Y__N__
An elastic door strap shall be installed on this compartment door to assist in lowering the door.
- One (1) **VERTICAL TOOL BOARD TRACKING** Y__N__
There shall be tracking installed in one (1) compartment to accommodate the installation of vertical tool boards. The tracks shall be installed horizontally on the floor and ceiling of the compartment.
- One (1) **VERTICAL ROLL-OUT TOOLBOARDS** Y__N__
Two (2) vertical roll-out toolboards will be installed on the adjustable tracking. The vertical partitions shall be made from 3/4" thick co-polymer material with a Slide Master heavy duty slide roller installed at top and bottom.
- One (1) **LED COMPARTMENT LIGHTS** Y__N__
Two (2) extruded aluminum LED strip lights shall be installed in the compartment. The strip lights shall be installed in a vertical position and run the full height of the compartment, one (1) each side.
- One (1) **REAR COMPARTMENT** Y__N__
The following is a description of items included with the compartment.
- One (1) **ROLL UP DOOR - BRUSHED** Y__N__
ROM series 4 roll-up door will be installed in this compartment. The shutters will be constructed from extruded aluminum with a brushed finish. Internally sealed for weather resistance and quiet operation. Rubber seals will be installed on the vertical components. The door will close/lock with a combination handle/locking bar on the exterior at the bottom.
The door will roll-up in the top of the compartment to allow for maximum use of the compartment interior.
Lighting will be located on the vertical compartment walls for maximum effectiveness.
- One (1) **ROLL UP DOOR SILLS** Y__N__
An extruded aluminum door sill shall be provided for each roll up door.

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One (1)	<u>ROLL UP DOOR PAN</u> An aluminum roll-up door guard or drip pan shall be installed in this compartment. The fabricated guard prevents equipment from rubbing on the door and deflects accumulated moisture out of the compartments.	Y__N__
One (1)	<u>DOOR STRAP</u> An elastic door strap shall be installed on this compartment door to assist in lowering the door.	Y__N__
One (1)	<u>ROLL OUT TRAY - FLOOR MOUNTED</u> A Slide-Master aluminum heavy duty roll-out tray with a minimum capacity of 700# shall be provided and installed on the compartment floor. The tray shall be constructed of 3/16" aluminum with a 2" lip on each side. The roll-out mechanism shall include a push/pull spring lock for the full open and closed positions.	Y__N__
One (1)	<u>VERTICAL COMPARTMENT DIVIDER ON ROLL OUT TRAY</u> A bolt in vertical compartment divider fabricated from 3/16" aluminum shall be provided and installed on the compartment roll-out tray. The divider will be mounted to adjustable tracking to allow for side to side adjustment.	Y__N__
One (1)	<u>ACCESS PANEL</u> A removable access panel shall be installed in the rear compartment for access to the body mounted four (4) cascade bottles.	Y__N__
One (1)	<u>LED COMPARTMENT LIGHTS</u> Two (2) extruded aluminum LED strip lights shall be installed in the compartment. The strip lights shall be installed in a vertical position and run the full height of the compartment, one (1) each side.	Y__N__
One (1)	<u>R1 COMPARTMENT</u> • <i>The following is a description of items included with the compartment.</i>	Y__N__
One (1)	<u>DRAWER AND DOOR</u> The L1 compartment shall be a full width and depth drawer style compartment. The compartment door is to be constructed from 3/16" (.190) aluminum plate material and be attached to the drawer. The door is to be exterior overlap type, with a continuous rubber seal of closed cell neoprene. The door handle shall be a Hansen D-ring with slam latch mechanisms. The drawer will include two heavy duty drawer slides and utilize gas springs.	Y__N__

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One (1) **LED COMPARTMENT LIGHT** Y__N__

One (1) extruded aluminum LED strip light installed in the compartment.

One (1) **CRIBBING DRAWER** Y__N__

A cribbing pull-out storage compartment shall be installed below the R1 and R2 body compartments. The compartment shall be approximately 69" wide x 8" tall x 26" deep. A diaomondplate door with pull handle shall be installed.

One (1) **R2 COMPARTMENT** Y__N__

• *The following is a description of items included with the compartment.*

One (1) **ROLL UP DOOR - BRUSHED** Y__N__

ROM series 4 roll-up door will be installed in this compartment. The shutters will be constructed from extruded aluminum with a brushed finish. Internally sealed for weather resistance and quiet operation. Rubber seals will be installed on the vertical components. The door will close/lock with a combination handle/locking bar on the exterior at the bottom.

The door will roll-up in the top of the compartment to allow for maximum use of the compartment interior.

Lighting will be located on the vertical compartment walls for maximum effectiveness.

One (1) **ROLL UP DOOR SILLS** Y__N__

An extruded aluminum door sill shall be provided for each roll up door.

One (1) **ROLL UP DOOR PAN** Y__N__

An aluminum roll-up door guard or drip pan shall be installed in this compartment. The fabricated guard prevents equipment from rubbing on the door and deflects accumulated moisture out of the compartments.

One (1) **DOOR STRAP** Y__N__

An elastic door strap shall be installed on this compartment door to assist in lowering the door.

One (1) **TOOLBOX- FLOOR MOUNTED** Y__N__

A toolbox shall be supplied and installed on the lower compartment floor.
Montezuma Tool Box - 36" x 18" x 23" 8-Drawer Top Chest

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One (1)

Y__N__

TRANSVERSE ROLL OUT TRAY

A Slide-Master 1000# aluminum heavy duty roll-out tray will be fabricated and installed in the transverse compartment as follows:

They will be constructed so as to roll out approximately 75% of their total length from either side. Rubber pads will be provided to prevent accidental damage to the compartment door interiors.

The tray will be constructed from 3/16" aluminum smooth plate formed to a tray with closed ends on the left and right. They will roll smoothly on steel bearing supports encased in a slide device attached to the bottom of the tray lip and the side of the apparatus compartment interior.

Latches will be provided on each side to allow locking in the "open" position to prevent accidental retraction into the compartment.

One (1)

Y__N__

VERTICAL COMPARTMENT DIVIDER ON TRANSVERSE ROLL OUT TRAY

A bolt in vertical compartment divider fabricated from 3/16" aluminum shall be provided and installed on the compartment transverse roll-out tray.

The divider will be mounted to adjustable tracking to allow for side to side adjustment.

One (1)

Y__N__

LED COMPARTMENT LIGHTS

Two (2) extruded aluminum LED strip lights shall be installed in the compartment. The strip lights shall be installed in a vertical position and run the full height of the compartment, one (1) each side.

One (1)

Y__N__

R3 COMPARTMENT

The following is a description of items included with the compartment.

One (1)

Y__N__

ROLL UP DOOR - BRUSHED

ROM series 4 roll-up door will be installed in this compartment. The shutters will be constructed from extruded aluminum with a brushed finish. Internally sealed for weather resistance and quiet operation. Rubber seals will be installed on the vertical components. The door will close/lock with a combination handle/locking bar on the exterior at the bottom.

The door will roll-up in the top of the compartment to allow for maximum use of the compartment interior.

Lighting will be located on the vertical compartment walls for maximum effectiveness.

One (1)

Y__N__

ROLL UP DOOR SILLS

An extruded aluminum door sill shall be provided for each roll up door.

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One (1)

ROLL UP DOOR PAN

Y__N__

An aluminum roll-up door guard or drip pan shall be installed in this compartment. The fabricated guard prevents equipment from rubbing on the door and deflects accumulated moisture out of the compartments.

One (1)

DOOR STRAP

Y__N__

An elastic door strap shall be installed on this compartment door to assist in lowering the door.

One (1)

TRANSVERSE ROLL OUT TRAY

Y__N__

A Slide-Master 1000# aluminum heavy duty roll-out tray will be fabricated and installed in the transverse compartment as follows:

They will be constructed so as to roll out approximately 75% of their total length from either side. Rubber pads will be provided to prevent accidental damage to the compartment door interiors.

The tray will be constructed from 3/16" aluminum smooth plate formed to a tray with closed ends on the left and right. They will roll smoothly on steel bearing supports encased in a slide device attached to the bottom of the tray lip and the side of the apparatus compartment interior.

Latches will be provided on each side to allow locking in the "open" position to prevent accidental retraction into the compartment.

One (1)

VERTICAL COMPARTMENT DIVIDER ON ROLL OUT TRAY - TRANSVERSE

Y__N__

A bolt in vertical compartment divider fabricated from 3/16" aluminum shall be provided and installed on the compartment roll-out tray.

The divider will be mounted to adjustable tracking to allow for side to side adjustment.

One (1)

STOKES BASKET STORAGE

Y__N__

The compartment shall be equipped with a stokes basket storage compartment configured through the transverse area.

Access to the compartment shall be a roll-up style door, located at each side of the apparatus.

One (1)

LITTLE GIANT STORAGE

Y__N__

The compartment shall be equipped with a little giant storage compartment configured through the transverse area.

Access to the compartment shall be a roll-up style door, located at each side of the apparatus.

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One (1) Y__N__

PIKE POLE STORAGE

The compartment shall be equipped with eight (8) pike pole storage compartments configured through the transverse area.

Access to the compartment shall be a roll-up style door, located at each side of the apparatus.

One (1) Y__N__

LED COMPARTMENT LIGHTS

Two (2) extruded aluminum LED strip lights shall be installed in the compartment. The strip lights shall be installed in a vertical position and run the full height of the compartment, one (1) each side.

One (1) Y__N__

R4 COMPARTMENT

The following is a description of items included with the compartment.

One (1) Y__N__

ROLL UP DOOR - BRUSHED

ROM series 4 roll-up door will be installed in this compartment. The shutters will be constructed from extruded aluminum with a brushed finish. Internally sealed for weather resistance and quiet operation. Rubber seals will be installed on the vertical components. The door will close/lock with a combination handle/locking bar on the exterior at the bottom.

The door will roll-up in the top of the compartment to allow for maximum use of the compartment interior.

Lighting will be located on the vertical compartment walls for maximum effectiveness.

One (1) Y__N__

ROLL UP DOOR SILLS

An extruded aluminum door sill shall be provided for each roll up door.

One (1) Y__N__

ROLL UP DOOR PAN

An aluminum roll-up door guard or drip pan shall be installed in this compartment. The fabricated guard prevents equipment from rubbing on the door and deflects accumulated moisture out of the compartments.

One (1) Y__N__

DOOR STRAP

An elastic door strap shall be installed on this compartment door to assist in lowering the door.

One (1) Y__N__

SCBA BRACKET

Two (2) Ziamatic model #UN-6-30-2-SFPHS air pack brackets shall be supplied and mounted in the compartment.

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One (1)

SCBA CYLINDER STORAGE MODULES

Y__N__

Nine (9) Performance Advantage model #CM6000 Cylinder Mate SCBA storage units shall be provided and installed in the compartment. The enclosure shall be constructed entirely from non-corrosive materials and be designed to automatically adjust to contain cylinders with either 30 or 45 minute ratings. The storage units shall be designed for installation in either a horizontal or vertical fashion and are pre-drilled for installation in either configuration. The Cylinder Mate shall be designed to avoid friction and damage to high pressure cylinders, allow for quick viewing of cylinder pressure gauges and include a high strength elastomer "push to release" retention strap to securely contain the cylinder.

One (1)

LED COMPARTMENT LIGHTS

Y__N__

Two (2) extruded aluminum LED strip lights shall be installed in the compartment. The strip lights shall be installed in a vertical position and run the full height of the compartment, one (1) each side.

One (1)

UPPER BODY STORAGE COMPARTMENTS

Y__N__

Four (4) upper compartments shall be installed on the outer edge of the body. The compartments shall have top opening doors with pneumatic assist lift cylinders.

An aluminum handle will be provided for each compartment.

The passenger side two (2) compartments shall be approximately **56" wide x 26" high x 42" deep**. The passenger side doors shall be designed to not interfere with the ladder storage. The driver side forward compartment shall be **78" wide x 26" high x 18" deep**. The driver side rear compartment shall be used as an oil-dri hopper.

The compartment interiors shall be aluminum. Drain holes are to be installed at the front corners of the floor. The door will be fabricated from bright diamond plate aluminum.

One (1)

DRI-DECK MATTING - UPPER BODY STORAGE COMPARTMENTS

Y__N__

The surface of four (4) upper body storage compartment floors shall be covered with black Dri-Deck mat.

Four (4)

LED COMPARTMENT LIGHTS - UPPER STORAGE

Y__N__

One (1) LED strip light with a clear cover shall be installed in each upper compartment as directed. The strip light shall be installed in a horizontal position as best fits the application.

One (1)

ROLL-UP DOOR WARRANTY - SEVEN YEARS

Y__N__

ROM series 4 doors and parts shall be warranted for a period of seven (7) years.

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One (1)

COMPARTMENT INTERIOR FINISH

Y__N__

All exterior compartments of the pumper/rescue apparatus will be constructed from fire apparatus quality aluminum material. All exterior seams will be welded and sealed from weather and dust. The interior compartment seams will all be carefully caulked with a gray sealant for further protection and cosmetics.

One (1)

The apparatus compartment interiors will be polished aluminum diamondplate.

Y__N__

RUBRAILS

Poly rub rails shall be provided along the lower edge of the apparatus body. The rub rail assemblies shall be spaced-out and isolated from the body with non-metallic materials. Each rub rail shall be a minimum of 1" thick and tapered at each end.

One (1)

BODY FACE PACKAGE

Y__N__

The front face of the apparatus body will be trimmed with 1/8" polished diamondplate aluminum. Body support extrusions will be drilled and tapped for application of stainless steel fasteners to hold the panels in place. The panels are to be easily removable for service.

The rear face of the body will be trimmed with 1/8" smooth plate aluminum to allow easy application of chevron material.

All exterior edges will be sanded and rounded to prevent the catching of equipment or any injuries. The exterior seams shall be carefully caulked for water prevention and cosmetics.

One (1)

REAR TAILBOARD

Y__N__

An 11" rear tailboard step will be provided. The step will be constructed from 1-1/2" extruded aluminum. Extrusion shall have a non-slip surface with punched holes. Tailboard shall be supported by heavy 2" x 2" x 3/8" angles welded directly to the body superstructure.

One (1)

REAR WHEELWELL TRIM

Y__N__

The area around the rear wheel openings shall be constructed from aluminum diamondplate. The wheelwells shall be completely removable for ease of service and replacement.

One (1)

RUBBER FENDERETTES

Y__N__

Rubber fenderettes shall be installed on the rear wheelwells. They shall be bolted so as to be easily removable for service and/or replacement.

One (1)

MUDFLAPS

Y__N__

Mud flaps shall be made from black hard rubber and shall be installed on the cab fenders, behind the front tires and on the body fenders, behind the rear tires.

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One (1)

MISCELLANEOUS HARDWARE

Y__N__

One bag of miscellaneous hardware shall be supplied with the finished apparatus. This hardware shall consist of nuts, bolts, screws, washers, etc. used in the manufacture of the apparatus.

One (1)

EXTINGUISHER STORAGE - SINGLE

Y__N__

Four (4) single 2.5 gallon water extinguisher storage compartments shall be located in the rear wheel wells. The compartment doors shall be a brushed stainless steel door secured by a positive latch.

One (1)

OIL DRI DISPENSER - UPPER COMPARTMENT MOUNTED

Y__N__

There shall be an oil dri hopper with a 200-lb capacity located in an upper (coffin) compartment. The bin shall be fabricated from poly or aluminum and shall be designed to gravity feed oil-dri to the discharge line. The bin shall have plumbing and a valve in the L4 lower compartment and shall discharge below the apparatus body.

One (1)

LADDER BRACKETS

Y__N__

Ladder brackets with a spring operated holding device shall be mounted on the top of the apparatus body, passenger side. The ladders shall not stick past any side of the apparatus body. The brackets shall hold a 28' 2 section extension ladder and a 16' roof ladder with hooks. Attic ladder brackets shall be supplied and mounted separately.

One (1)

HIGH ANGLE EYELETS

Y__N__

Two (2) high angle eyelets shall be supplied and mounted to the rear of the body, one (1) each side.

One (1)

POWER AWNING

Y__N__

A Carefree Mirage power awning shall be provided and installed on the passenger side of the body above the compartments. The awning shall be approximately 14' long with a 10' projection. The case color shall be white. LED lighting option shall be provided with the awning. Controls shall be located inside the rescue compartment.

One (1)

REAR BODY ACCESS LADDER

Y__N__

A rear access ladder shall be made of 100% stainless steel and poly. The ladder will be installed on the back of the apparatus for access to the upper body walkway or hose bed. The ladder shall swing out and fold down for a natural climbing angle. The ladder folds up and stores against the body. The handrails are 1-1/2" poly with NFPA slip resistant testing.

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One (1)

INTERMEDIATE REAR STEP WITH GRAB HANDLES

Y__N__

An intermediate rear step will be provided at the rear of the apparatus for easy access to the top of the body. The step will be constructed from an open grip strut aluminum material or NFPA compliant diamondplate aluminum and bolted to extrusions in the structure of the apparatus body.

The intermediate rear step shall include laser cut hand holes to assist in climbing. The holes shall be large enough for a gloved hand and be located on each side of the step.

One (1)

REAR BODY HANDRAILS

Y__N__

There shall be two (2) 30" long handrails manufactured from 1-1/4" diameter extruded aluminum with chrome end stanchions. They shall be mounted vertically at the rear of the apparatus body.

In the event there is telescoping scene light, ladder or folding step installed in the same location(s), these items may be substituted in an effort to conserve mounting space on the body.

One (1)

REAR TOP BODY HANDRAIL

Y__N__

There shall be one (1) 1-1/4" diameter extruded aluminum handrail installed at the top of the apparatus body to assist in entering and exiting the hosebed. The hand rail shall be supported with chrome stanchions.

In the event there is telescoping scene light, ladder or folding step installed in the same location(s), these items may be substituted in an effort to conserve mounting space on the body.

One (1)

SIDE OF BODY HANDRAIL

Y__N__

There shall be a handrail manufactured from 1-1/4" diameter extruded aluminum with chrome end stanchions. The handrail shall be mounted vertically rear of the side body access door.

One (1)

ALUMINUM BODY PAINT FINISH

Y__N__

All paintable surfaces shall conform to the following procedure, ensuring a durable finish:

- Aluminum body exterior shall not have components mounted to paintable surfaces prior to application of protective anti-corrosion and topcoat refinish materials.
- All paintable aluminum surfaces shall be sanded/ground to remove all burrs, rough edges and other imperfections from the fabrication process.
- All paintable metal surfaces shall have an anti-corrosion coating and an epoxy-based primer applied to them before the application of body fillers.

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- After application and finishing of all filler work, any bare metal areas shall be recoated with an anti-corrosion coating and an epoxy-based primer before continuing the refinish process.
- The unit shall be sprayed with a high quality urethane primer-surfacer. The primer-surfacer shall be sanded to provide a smooth appearing surface that will facilitate adhesion of a urethane-based sealer. The urethane-based sealer shall be applied in such a manner to provide a uniform surface for the application of subsequent topcoats. The apparatus body shall be top-coated with Sikkens Autocoat BT basecoat/clear coat polyurethane paint system. The finished paint surface shall have a high gloss->85 using a 60° gloss meter.
- Any location where aluminum is penetrated after the refinish process has been completed, shall be treated with a corrosion inhibiting compounds.

Color/Code:

One (1)

Y__N__

PAINT WARRANTY - TEN YEARS

The paint performance guarantee will cover the areas of the vehicle finished with the specified product for a period of ten (10) years beginning the day the vehicle is delivered to the purchaser.

The areas as outlined on the Guarantee Certificate will be covered for the following paint failures:

GUARANTEE INCLUSIONS:

FULL APPARATUS BODY MANUFACTURED AND PAINTED BY THE MANUFACTURER:

- Peeling or de lamination of the topcoat and/or other layers of paint.
- Cracking or checking.
- Loss of gloss caused by cracking, checking, or hazing.
- Any paint failure caused by defective finishes which are covered by this guarantee.

All guarantee exclusions, limitations, and methods of claims are covered in the full certificate provided to the original purchaser.

The paint warranty is a full term (non-prorated) warranty.

One (1)

Y__N__

TOUCH UP PAINT

A container with touch-up paint shall be provided with each truck. The container shall have a small touch-up brush that is attached to the top of the container.

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One (1)

DISSIMILAR METALS

Y__N__

The body and components shall be thoroughly protected against corrosion and/or oxidation caused by contact between dissimilar metals. These areas shall be protected by the use of corrosion resistant primers, gaskets and "ECK" (electrolic corrosion material) or any equivalent material.

One (1)

BODY UNDERCOATING

Y__N__

Undercoating of the apparatus body shall conform to the following;

- The rubberized undercoating shall be black in color and uniform in texture.
- The underside (chassis frame rails downward) of the apparatus body shall be sprayed with rubberized undercoating.
- The wheel well sections of the apparatus will be undercoated completely (above and below the chassis frame rail).
- The undercoating shall have corrosion-preventative properties.
- The undercoating material shall contain no asbestos.

One (1)

LETTERING

Y__N__

Lettering will be provided by the manufacturer as follows:

Lettering shall be provided on the cab doors and/or body, Scotchlite material shaded in black.

Cab Doors:

SOUTH HAVEN (arched)
AREA
FIRE-RESCUE
EMS

Body Sides: Two sets of truck numbers each side

Body Rear: Large truck number

One (1)

NFPA BODY STRIPE

Y__N__

Reflective striping is to be furnished around the entire apparatus with the exception of the wheel wells, pump panels, grille and rear of the apparatus over the chevron material. Straight pattern chassis and body

3/4" gold
3/4" blue
3/4" gap (red paint)
3" white
3/4" gap
3/4" blue
3/4" gold

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One (1)

CHEVRON STRIPING - REAR

Y__N__

Chevron striping shall be applied to the entire rear wall of the apparatus body. The chevrons shall consist of 6" wide Diamond Grade reflective striping at 45 degree angles from the tailboard in an inverted "V" pattern. The stripes shall alternate red reflective, lime reflective, red reflective, etc.

One (1)

CAB DOOR REFLECTIVE

Y__N__

The interior of each door shall include high visibility reflective tape. A white reflective tape that measures 1" in width shall be provided vertically along the outer rear edge of the door.

One (1)

CASCADE SYSTEM

Y__N__

A cascade system shall be installed. The bottles and fill station shall be customer supplied. The cost shall include the removal from the existing apparatus and installation in the new apparatus.

A new control panel with new valves, gauges, plumbing and fittings shall be supplied. The control panel shall include a fill valve for the bottles.

Fill Station and Control Panel Location: R4 body compartment

Four (4) Bottle Location: Forward of rear compartment below L3/R3 compartments

New hose leads will be provided from the bottles to the fill station.

One (1)

WELDON VMUX MULTIPLEXED ELECTRICAL SYSTEM

Y__N__

The apparatus body will be a Weldon VMUX electrical system that accommodates the needs of the apparatus as presented in the chassis section of our proposal.

All electrical equipment installed by the apparatus builder shall conform to current automotive electrical system standards and the latest standards as outlined in NFPA #1901.

All electrical wire installed by the apparatus builder shall be rated to carry 125 percent of the maximum current for which the circuit is protected. A high-temp automotive primary wire that is insulated with chemically cross-linked Polyethylene and withstands prolonged temperatures of up to 350 degrees F. without melting or fusing shall be used. Wire shall be highly resistant to grease, oil, acids, brake fluid and abrasion. Wire shall meet or exceed S.A.E. specifications J1127.

Electrical connections in exposed areas outside of the cab shall be made using heat shrink or weather-proof connections. All connections shall have a corrosion preventative compound applied to them. All weather exposed lights shall have the sockets coated with this same compound.

Wire shall be individually color coded and be labeled every six (6") inches on the insulation. Wiring installed by body builder shall be run in a heat protective loom that is

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held in place with a rubber coated bracket that is fastened in place with stainless steel screws.

There will be nodes that will be used as test points and for service. The location of these points will be in the apparatus cab and in an enclosed box recessed into the side or back wall of a rear compartment. All wire connections shall be protected to promote a lasting, corrosion-free connection. All exterior terminal blocks will be installed in a weather resistant box. All wire harnesses will be easily accessible and replaceable.

One (1)

Y__N__

CAB MOUNTED SWITCH PANEL

A Weldon Vista switch panel, designed for the specified chassis and body will be provided and mounted in the center console.

Each switch label will be specifically identified.

One (1)

Y__N__

12-V NFPA TEST

The following NFPA 9-14 test requirements shall be performed:

- Reserve capacity test
- Alternator test at idle
- Alternator test at full load
- Low voltage alarm test

One (1)

Y__N__

CLEARANCE LIGHTS AND REFLECTORS

Clearance lights and reflectors shall be installed to meet current DOT standards and include:

- Two (2) Red LED marker lights
- Four (4) Red reflectors
- Two (2) Amber reflectors
- One (1) Red LED three-light cluster under the rear step.

One (1)

Y__N__

AUXILIARY TURN / RUNNING LIGHT

Two (2) auxiliary LED amber marker/turn lights shall be mounted just forward of rear axle, in the rear wheel well area. The lights shall be wired into the chassis light system and shall be flush mounted within a rubber grommet.

One (1)

Y__N__

STOP/TAIL, TURN AND BACKUP LIGHTS

Whelen 600 series lights shall be installed at the rear of the apparatus as follows:

- Red LED stop/tail light, one (1) each side
- Amber LED turn light, one (1) each side
- Clear LED backup light, one (1) each side

Each shall be installed inside a one-piece housing, one each side. The lower rear warning light shall be included in the 4 light housing.

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One (1)	<u>REAR LOWER LIGHTS BEZEL COLOR</u>	Y__N__
	The surface mounted lower stop/tail/turn and back up lights shall include chrome bezels.	
One (1)	<u>LICENSE LIGHT AND BRACKET</u>	Y__N__
	A polished aluminum LED license plate light and bracket shall be installed on the rear of the vehicle.	
One (1)	<u>LED CAB GROUND LIGHTS (2)</u>	Y__N__
	Under body lighting will be provided for the apparatus cab doors. Two (2) LED strip lights with clear lenses will be mounted below the apparatus cab, one (1) under each cab door. The lights will be controlled by the parking brake switch.	
One (1)	<u>LED REAR TAILBOARD / BUMPER GROUND LIGHTS (2)</u>	Y__N__
	Under tailboard/bumper lighting will be provided for the rear of the apparatus. Two (2) LED strip lights with clear lenses will be angle mounted below the rear tailboard/bumper. The lights will be controlled by the parking brake switch.	
One (1)	<u>RECESSED STEP LIGHTS - LED</u>	Y__N__
	There shall be LED recessed step lights mounted in such a manner as to light the area around the upper walkway and tailboard.	
One (1)	<u>ACCESS LADDER STEP LIGHTS - LED</u>	Y__N__
	There shall be three (3) Whelen LED step lights mounted in such a manner as to light the area around the access ladder. The light shall be recess mounted in a rubber grommet or surface mounted in a chrome bezel.	
One (1)	<u>INTERIOR RESCUE COMPARTMENT LIGHTS</u>	Y__N__
	There shall be four (4) overhead ceiling mounted White/Red LED lights with clear lenses mounted inside the rescue compartment to provide sufficient lighting.	
	The lights shall be activated by a switch located inside the access door.	
One (1)	<u>ENGINE SERVICE LIGHT</u>	Y__N__
	There shall be a LED light with clear lens mounted inside the engine compartment to provide sufficient lighting.	
One (1)	<u>COMPARTMENT DOOR SWITCHES</u>	Y__N__
	All exterior compartment doors will be provided with a door switch that shall activate the "Door Ajar" indicator light.. The switch shall be installed not to interfere with loading or unloading the equipment stored within the compartment.	

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One (1)

Y__N__

DOOR AJAR INDICATOR

There shall be a red flashing door-ajar indicator located on the cab in easy view of the driver. The light shall be illuminated automatically whenever the apparatus parking brake is released and the following conditions exist:

- Any passenger or equipment door is open.
- Any ladder or equipment rack is not in the stowed position.
- The aerial stabilizer system not in its stowed position.
- Powered light tower is extended.
- Any other device is opened, extended or deployed that creates a hazard, or is likely to cause damage to the apparatus if it is moved.

One (1)

Y__N__

FRONT SCENE LIGHT

The front of the cab shall include one (1) Fire Tech Hi-Viz model FT-MB-12-TR-FT-W scene light installed on the cab. The light housing shall be white.

Wattage: 60

of LEDs: 12

Voltage Range: 9-32v DC

Total Amperage @ 12V DC: 5

RAW Lumens: 6336

Effective Lumens: 4435

Location: Brow

One (1)

Y__N__

SIDE SCENE LIGHTS

The mid upper body sides shall include two (2) Fire Research Spectra SPA260-Q20 model scene lights, one (1) each side, which shall be surface mounted.

The light shall be mounted with four (4) screws to a flat surface. It shall be no more than 5 7/8" high by 14 1/2" wide and have a profile of less than 1 3/4" beyond the mounting surface. Wiring shall extend from a weatherproof strain relief at the rear of the lamphead.

The lamphead shall have sixty (60) ultra-bright white LEDs, 56 for flood lighting and 4 to provide a spot light beam pattern. It shall operate at 12/24 volts DC, draw 13.8/6.9 amps, and generate 20,000 lumens of light. The lamphead shall have a unique lens that directs flood lighting onto the work area and focuses the spot light beam into the distance.

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One (1)

REAR SCENE LIGHTS

The rear of the body shall include (2) Fire Research model LED900-Q70 surface mount lights, one (1) each side. Each light shall be 6.75 inches high X 9.00 inches wide and have a profile of less than 1.75 inches beyond the mounting surface. Wiring shall extend from a weatherproof strain relief at the rear of the light.

Each lamp head shall have twenty-four (24) white LEDs that generate a rated 7000 lumens at 12 or 24 volts DC. The lens shall redirect the light along the vehicle and out onto the working area.

Y__N__

One (1)

SCENE LIGHTING BEZEL COLOR

The surface mounted scene lights shall include chrome bezels.

Y__N__

One (1)

SCENE LIGHTING SWITCHING

The body and/or cab mounted scene lights shall include switches in the cab. Each side of the apparatus will include its own switch if applicable.

Y__N__

One (1)

LED TRIPOD SCENE LIGHTS

Two (2) Fire Research Spectra LED Scene Light model SPA656-K20 tripod telescopic lights shall be provided. The light poles shall be anodized aluminum and have a knurled twist lock mechanism to secure the extension pole in position. The extension pole shall extend 28" and rotate 360 degrees. An internal brake shall slow the extension pole during lowering. The outer pole shall be a grooved aluminum extrusion. The folding legs shall be anodized aluminum tubing with plastic endcaps. The fully extended tripod system shall exceed a height of 8' and be less than 5' when collapsed. Wiring shall extend from the pole bottom with a 4' retractile cord.

The lamphead shall have sixty (60) ultra-bright white LEDs, 48 for flood lighting and 12 to provide a spot light beam pattern. It shall operate at 120 volts AC, draw 2 amps, and generate 20,000 lumens of light. The lamphead shall have a unique lens that directs flood lighting onto the work area and focuses the spot light beam into the distance. The lamphead angle of elevation shall be adjustable at a pivot in the mounting arm and the position locked with a round knurled locking knob. The lamphead shall be no more than 5 3/8" high by 14" wide by 3 3/4" deep and have a heat resistant handle. The lamphead and mounting arm shall be powder coated. The LED scene light shall be for fire service use.

Y__N__

One (1)

REAR TELESCOPING SCENE LIGHTING LOCATION

The apparatus mounted telescoping scene lights shall be located on the rear of the body, passenger side.

Y__N__

One (1)

TELESCOPING SCENE LIGHTING HEAD COLOR

The apparatus mounted telescoping scene lights shall include white heads.

Y__N__

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One (1)

SCENELIGHT BACKUP RELAY

Y__N__

A relay will be provided in the rear scene light circuit to allow automatic use of the lights when the vehicle is placed in reverse.

One (1)

LIGHT TOWER

Y__N__

A Knight2, manufactured by Command Light, part number KL415A-FS light tower shall be provided for installation on the apparatus. The location of the light tower and its controls shall be installed according to instructions given by the customer and the requirements of the light tower manufacturer.

The light tower shall extend 87.5" above the mounting surface and shall extend to full upright position in less than 15 seconds. The overall size of nested light tower shall be approximately 47" wide x 35" long x 14" high and weigh approximately 165 pounds. Light tower Construction and design The light tower assembly shall be of aluminum construction, with stainless steel shafts and bronze bushings for long life and low maintenance.

The electrically controlled unit shall not require usage of the vehicle's air supply for operation, thereby eliminating the chance for air leaks in the vehicle braking system. Hydraulic or pneumatic type floodlights are not acceptable alternatives to the specified all electric light tower.

The light tower shall be tested to in wind conditions of 90 mph (150 kph) minimum. Other type floodlights that have not been tested to these conditions are not acceptable.

The light tower shall be capable of overhanging the side or back of the vehicle to provide maximum illumination to the vicinity adjacent to the vehicle for the safety of emergency personnel in high traffic conditions. Any tower that is only capable of rotations at the top of a pole is not an acceptable alternative to the specified tower. Light tower electrical system The light tower shall be a two-stage articulating device with a lighting bank on top of the second stage capable of continuous 360 degree rotation. The light shall be elevated by electric linear actuators, one (1) actuator shall elevate the lower stage and one (1) actuator shall adjust the light bank angle from 0 to 110 degrees. Power for the light bank shall be supplied through power collecting rings thus allowing continuous 360 degree rotation in either direction.

The tower base shall have a light that illuminates the envelope of motion during any movement of the light tower mast as required by NFPA1901. Light tower Controls The light tower shall be controlled with a hand-held 15 foot umbilical line remote control. The storage station for the remote control unit shall be equipped with a button to activate the "Auto-Park" automatic nesting feature. The controls on the remote box shall be:

Three (3) switches, one (1) for each light bank. One (1) light bank rotation switch. One (1) switch for elevating upper stage. One (1) switch for elevating lower stage. One (1)

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indicator light to indicate when light bank is out of roof nest position. One (1) indicator light to indicate when light bank is rotated to proper nest position. One (1) back light rotation switch. (For optional Backlighting) One (1) on/off switch for the top mounted strobe. (For optional strobe) Configuration The light heads shall be mounted three (3) on each side of the light tower, giving two (2) vertical lines of three (3) when the lights are in the upright position.

HxWxD (Nested): 14" x 47" x 35" - 355mm x 1195mm x 890mm

HxWxD (Fully Upright): 87.5" x 52" x 35" - 2225mm x 1320mm x 890mm

Weight: 165 lbs - 75 kg

Power Requirements: 115 or 230V AC - 1.5kw

Lighting: (6) FRC Spectra (LED) - 220w

Output (per light): 20,000 lumens

Total Watts: 1320 watts

Total Output: 120,000 lumens

One (1)

LIGHT TOWER INSTALLATION

Y__N__

The light tower shall be recess mounted in the body roof.

One (1)

20-AMP GFI BREAKER

Y__N__

There shall be one (1) 20-Amp/120-volt AC, single pole ground fault interrupter (GFI) circuit breaker, provided in lieu of the standard 20-AMP breaker. The GFI breaker will be wired to only one (1) electric receptacle or electric cord reel.

One (1)

HYDRAULIC GENERATOR

Y__N__

A PTO hydraulic driven generator shall be installed. System shall consist of pump, reservoir/filter, and motor/generator/cooler tray assembly. System shall be driven from a PTO mounted on the side of transmission. Model shall be a SMART/POWER HR-8 8000-watt.

One (1)

GENERATOR LOCATION

Y__N__

The generator will be recess mounted in the body roof.

One (1)

CHELSEA PTO

Y__N__

A Chelsea PTO shall be installed on the side of chassis transmission for powering a hydraulic generator.

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One (1)

Y__N__

120-240-V NFPA TEST

The following tests shall be performed on the 110-Volt line voltage system.

Electrical polarity verification shall be made of all permanently wired equipment and receptacles.

THE FOLLOWING SHALL BE RECORDED:

Cranking time until the prime mover starts and runs, if applicable.

Voltage, frequency, and amperes at continuous full rated load.

Prime mover oil pressure, water temp., transmission temp., hydraulic temp., and the battery charge rate, as applicable.

Ambient temperature and altitude.

OPERATIONS TEST

The power source shall be operated at 100% of its nameplate voltage for a minimum of Two (2) hours. This test can be performed during the pumping test if applicable.

One (1)

Y__N__

BREAKER PANEL

An 8-position breaker panel shall be supplied as directed by the customer as follows:

A main disconnect shall be included in the breaker panel.

Location: L2 front wall

One (1)

Y__N__

AUTOMATIC TRANSFER SWITCH

An automatic transfer switch shall be installed on the apparatus. The unit automatically transfers power from the shoreline to generator. The switch is limited to 20 Amps.

Ten (10)

Y__N__

HOUSEHOLD DUPLEX RECEPTACLE- TRANSFER SWITCH

There shall be ten (10) 120-volt/20 amp household duplex receptacle(s) mounted as directed by the Fire Department. A hinged weatherproof cover shall be installed over any exterior mounted receptacle(s).

Location(s): Two (2) at folding desk, Two (2) in EMS compartment, L2, L3, L4, R2, R3, R4

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Two (2) Y__N__

TWIST LOCK RECEPTACLES - GENERATOR

There shall be two (2) 120-volt/20 amp twist-lock receptacle(s) mounted as directed by the Fire Department. A hinged weatherproof cover shall be installed over any exterior mounted receptacle(s).

Location(s): Rear of body, one (1) next to each tripod light

Two (2) Y__N__

20-AMP GFI BREAKER

There shall be one (1) 20-Amp/120-volt AC, single pole ground fault interrupter (GFI) circuit breaker, provided in lieu of the standard 20-AMP breaker. The GFI breaker will be wired to only one (1) electric receptacle or electric cord reel.

One (1) Y__N__

ELECTRIC CORD REEL

An electric rewind cord reel shall be supplied with 200' of 12-3 wire cord. The reel will be wired to a dedicated breaker in the main power box. A push button switch for rewind shall be located in a convenient location.

A roller guide and ball stop will be provided.

Location: Upper portion of rear body compartment

One (1) Y__N__

20-AMP GFI BREAKER

There shall be one (1) 20-Amp/120-volt AC, single pole ground fault interrupter (GFI) circuit breaker, provided in lieu of the standard 20-AMP breaker. The GFI breaker will be wired to only one (1) electric receptacle or electric cord reel.

One (1) Y__N__

CORD REEL ROLLERS

There shall be a captive roller system furnished for the mounted cord reel. The rollers shall be installed to guide the cord on and off the reel assembly.

One (1) Y__N__

ELECTRICAL JUNCTION BOX

A four-way electrical junction box with indicator light and pigtail cord shall be supplied. The junction box will be independent from the cord reel.

Receptacles will be as follows:

Position 1: 15 amp twist lock Position 2: 15 amp twist lock
Position 3: 20 amp household Position 4: 20 amp household

One (1) Y__N__

ELECTRICAL JUNCTION BOX HOLDER

An aluminum junction box holder shall be supplied. The box shall be stored in the vertical position.

Location: Rear body compartment

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One (1) Y__N__

ELECTRIC CORD REEL

An electric rewind cord reel shall be supplied with 100' of 12-3 wire cord. The reel will be wired to a dedicated breaker in the main power box. A push button switch for rewind shall be located in a convenient location.

A roller guide and ball stop will be provided.

Location: Front bumper compartment

One (1) Y__N__

20-AMP GFI BREAKER

There shall be one (1) 20-Amp/120-volt AC, single pole ground fault interrupter (GFI) circuit breaker, provided in lieu of the standard 20-AMP breaker. The GFI breaker will be wired to only one (1) electric receptacle or electric cord reel.

One (1) Y__N__

CORD REEL ROLLERS

There shall be a captive roller system furnished for the mounted cord reel. The rollers shall be installed to guide the cord on and off the reel assembly.

One (1) Y__N__

AC/HEATER

An AC and Heater system shall be provided in the rescue compartment interior. The controls shall be from the cab AC and Heat system.

One (1) Y__N__

RADIO POWER AND GROUND STUDS

An auxiliary set of power and ground studs with a 40-Amp breaker shall be provided and installed in the console. The studs shall be .375 inch diameter and capable of carrying up to a 40 amp load switched with the master power switch.

One (1) Y__N__

WALK-IN RESCUE RADIO WIRING

An auxiliary set of power and ground studs shall be provided and installed in the walk-in area with a 40 amp breaker. The studs shall be .375 inch diameter and capable of carrying up to a 40 amp load switched with the master power switch.

- Location at pre-construction

One (1) Y__N__

RADIO INSTALLATION (4)

The apparatus shall have four (4) customer supplied single head radios installed as directed. Programming of the radio is not included.

Locations: Two (2) cab console, two (2) walk-in rescue area

One (1) Y__N__

RADIO BRACKETS

Two (2) flush mount radio brackets shall be supplied and installed in the center console/dash.

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One (1)

ANTENNA WIRING (4)

The apparatus shall have four (4) antenna bases and cables supplied and installed on the cab roof / rescue body. The whip shall be customer supplied.

Two (2) antenna cables shall be ran to the cab console.

Two (2) antenna cables shall be ran to the walk-in portion of the rescue body, under driver side window.

Y__N__

Five (5)

12-V POWER POINT - USB - CONSTANT POWER

There shall be five (5) 12-volt constant power plug-in DUAL (USB) style receptacle(s) installed as directed by the Fire Department.

Location(s): Two (2) at folding desk, Two (2) in EMS compartment, One (1) cab console

Y__N__

Four (4)

12-V POWER POINT - CONSTANT POWER

There shall be four (4) 12-volt constant power plug-in (cigar lighter) style receptacle(s) installed as directed by the Fire Department.

Location(s): Three (3) in EMS compartment, One (1) in cab console

Y__N__

One (1)

BACKUP CAMERA

A back-up camera with color monitor shall be installed on the apparatus. The monitor shall be a minimum 7" color LCD display and be on the dash, center console or in place of the rear view mirror. A waterproof I/R camera shall be mounted on the rear of the apparatus. The camera shall provide not less than 270 pixel resolution. The system shall automatically activate when the vehicle is placed in reverse. An on/automatic selector switch shall be mounted on the chassis dash.

Y__N__

One (1)

NFPA WARNING LIGHTS

The optical warning system on the fire apparatus shall be capable of two separate signaling modes during emergency operations. One mode shall signal that the apparatus is responding to an emergency and is calling for the right of way. The other mode shall signal that the apparatus is stopped and is blocking the right of way.

Y__N__

One (1)

The switching for the two different modes shall be through switches and relays that sense the position of the parking brake.

CAB FRONT LIGHTBAR

The lightbar provisions shall be for one (1) Whelen brand Freedom F4N0QLED lightbar mounted centered on the front of the cab roof. The lightbar shall be 60.00 inches in length. The lightbar shall feature six (6) red LED lights and two (2) clear LED lights. The clear lights shall be disabled with park brake engaged. The cable shall exit the lightbar on the right side of the cab.

Y__N__

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One (1)

Y__N__

INBOARD FRONT WARNING LIGHTS

The front grille shall include two (2) Whelen 600 series Super LED warning lights, one (1) on each side. The lights shall feature multiple flash patterns including steady burn. The lights shall be mounted to the front grille module within a bezel.

The warning lights shall be red.

One (1)

Y__N__

INTERSECTION WARNING LIGHTS

The front bumper tail or the corner of a commercial cab hood shall include two (2) Whelen 600 series Super LED warning lights, one (1) on each side. The lights shall feature multiple flash patterns including steady burn for solid colors and multiple flash patterns for split colors. The lights shall be mounted to the sides of the apparatus within a bezel.

The warning lights shall be red.

One (1)

Y__N__

REAR WHEEL WELL WARNING LIGHTS

The rear wheel wells shall include two (2) Whelen 500 Series TIR6™ Super LED warning lights, one (1) on each side. The lights shall feature multiple flash patterns including steady burn. The lights shall be recess mounted within a rubber grommet kit.

The warning lights shall be red.

One (1)

Y__N__

REAR TAILBOARD SIDE WARNING LIGHTS

The rear tailboard shall include two (2) Whelen 600 series Super LED warning lights, one (1) on each side. The lights shall feature multiple flash patterns including steady burn. The lights shall be mounted within a cast housing located on the top of the tailboard sides.

The warning lights shall be red.

One (1)

Y__N__

FRONT UPPER BODY SIDE WARNING LIGHTS

The front upper body sides shall include two (2) Whelen 900 series Super LED warning lights, one (1) on each side. The lights shall feature multiple flash patterns including steady burn for solid colors and multiple flash patterns for split colors. The lights shall be mounted to the sides of the apparatus within a bezel.

The warning lights shall be red.

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One (1)

REAR UPPER BODY SIDE WARNING LIGHTS

Y__N__

The rear upper body sides shall include two (2) Whelen 900 series Super LED warning lights, one (1) on each side. The lights shall feature multiple flash patterns including steady burn for solid colors and multiple flash patterns for split colors. The lights shall be mounted to the sides of the apparatus within a bezel.

The warning lights shall be red.

One (1)

UPPER REAR WARNING LIGHTS

Y__N__

The upper rear of the apparatus shall include two (2) Whelen 900 series Super LED warning lights, one (1) on each side. The lights shall feature multiple flash patterns including steady burn for solid colors and multiple flash patterns for split colors. The lights shall be mounted to the apparatus within a bezel.

The warning lights shall be red.

One (1)

UPPER CENTER REAR WARNING LIGHT

Y__N__

The middle upper of the apparatus rear shall include one (1) Whelen 900 series Super LED warning light. The light shall feature multiple flash patterns including steady burn for solid colors and multiple flash patterns for split colors. The light shall be mounted to the apparatus within a bezel.

The warning light shall be Green.

One (1)

LOWER REAR WARNING LIGHTS

Y__N__

The lower rear of the apparatus shall include two (2) Whelen 600 series Super LED warning lights, one (1) on each side. The lights shall feature multiple flash patterns including steady burn for solid colors and multiple flash patterns for split colors. The lights shall be mounted to the apparatus within a bezel.

The warning lights shall be red.

One (1)

WARNING LIGHTING BEZEL COLOR

Y__N__

The body and/or cab surface mounted warning lights shall include chrome bezels.

One (1)

WARNING LIGHTING LENS COLOR

Y__N__

The body and/or cab surface mounted warning lights shall include colored lenses to match the warning light color.

One (1)

WARNING LIGHTING SWITCHING

Y__N__

The body and/or cab mounted warning lights shall include switches in the cab. Each side of the apparatus will include its own switch if applicable.

A master warning light switch shall also be included.

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- One (1) **TRAFFIC ADVISOR** Y__N__
- A Whelen TAL65 LED traffic advisor shall be installed on the rear of the apparatus, as high as is practical. The light is a six (6) head LED bar and includes a Whelen control head.
- One (1) The light shall be mounted within and protected by an intermediate step. Y__N__
- CONTROLLER BRACKET**
- A flush mount traffic advisor controller bracket shall be supplied and installed in the center console/dash.
- One (1) Y__N__
- SIREN CONTROL HEAD**
- A Whelen Siren Amplifier model # 295SLSC1 shall be provided. The siren amplifier shall incorporate a 12V/200W siren installed on an aluminum alloy chassis covered by a black polycarbonate powder coated housing for maximum protection. The 295SLSC1 shall have the ability for either 100 or 200 watt output. The front overlay shall be made of velvet Lexan™ with a matte finish. The lettering and artwork on the overlay shall be illuminated with adjustable backlighting of soft LED non-glaring green. The operating controls will consist of a power switch, manual button, PA volume switch, horn button, and rotary switch. The 295SLSC1 PC board shall have input polarity protection, output short circuit protection. The siren amplifier shall include a 20A/32V fuse. The solid state siren speaker amplifier shall be vibration resistant. The microphone shall be removable to the 295SLSC1.
- One (1) Y__N__
- CONTROLLER BRACKET**
- A flush mount siren controller bracket shall be supplied and installed in the center console/dash.
- One (1) Y__N__
- ELECTRONIC SIREN SPEAKER**
- The bumper shall include one (1) Whelen Engineering Inc. model SA315P, 100 watt speaker which shall be mounted within the bumper fascia.
- One (1) Y__N__
- FEDERAL Q2B SIREN**
- A chrome plated Federal Q2B siren shall be pedestal mounted on the front bumper. The siren control and electric brake shall be installed in the cab.
- One (1) Y__N__
- SIREN SWITCH - FLOOR MOUNTED (2)**
- There shall be two (2) floor mounted foot siren switches to operate the mechanical siren. The switches shall be mounted on the cab floor, one (1) driver side and one (1) passenger side. There shall be a switch located on the switch console for the mechanical siren brake control.

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One (1) Y__N__

ROAD SAFETY KIT

One (1) 2-1/2# ABC DOT approved fire extinguisher shall be provided. It shall be mounted in a accessible location to the driver.

One (1) set of DOT approved hazard triangles shall be supplied with the chassis. They shall be stored in a case and shipped loose with the apparatus.

One (1) Y__N__

APPARATUS WARRANTY - ONE YEAR

The completed apparatus shall be warranted to be free from defects in workmanship and materials under normal use and service for a period of one (1) year from the date of delivery to the Fire Department. This warranty shall cover the costs for parts and labor for this period of time.

One (1) Y__N__

COMBINATION LADDER

One (1) Little Giant Ladder Model 13, combination aluminum extension ladder shall be provided on the apparatus. The ladder shall meet or exceed all the latest NFPA standards.

One (1) Y__N__

WHEEL CHOCKS

One (1) pair of Worden model HWG Grip-Lock aluminum wheel chocks shall be mounted on the apparatus. They shall be mounted in model U815 slide-out brackets.

One (1) Y__N__

WHEEL CHOCKS LOCATION

The wheel chocks shall be mounted fore of the rear axle on bottom side of the lower compartments.

One (1) Y__N__

STREAMLIGHT FLASHLIGHTS

Wiring and mounting shall be supplied for four (4) customer supplied Streamlight flashlight(s)

Location(s): Bench seat box

Four (4) Y__N__

SCBA BRACKET

Four (4) Ziamatic model #UN-6-30-2-SFPHS air pack brackets shall be supplied and mounted in the rescue compartment above the bench seat.

One (1) Y__N__

LOOSE EQUIPMENT ALLOWANCE

A \$40,000.00 loose equipment allowance shall be included in the price of the apparatus.

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One (1)

Y__N__

PURCHASER'S RESPONSIBILITY

These specifications are as complete, accurate and up to date as possible; however, it is the purchaser's responsibility for the safe, legal operation and maintenance of this apparatus and equipment.

One (1)

Y__N__

DELIVERY PREP

The apparatus shall be detailed and cleaned prior to delivery.

All metal edges shall be carefully sanded and rounded. All compartment and exterior sheeting seams shall be carefully caulked.

Any loose equipment shall be stored on the truck.