



SPECIFICATIONS
ON A
LIGHT RESCUE
FOR THE
SAN JUAN COUNTY FIRE
DEPARTMENT

BIDDING INFORMATION

INFORMATION FOR CONTRACTORS

Sealed bids are requested from reputable companies who construct fire apparatus vehicles. The contractor must have a facility that will house the apparatus in an enclosed building during the construction of the unit. All bids shall include all necessary labor, equipment and material for the fire apparatus and other equipment as outlined in the following specifications.

Bids will be addressed in accordance with the instructions provided above. The type of bid, the date and the bid opening time shall be stated on the front of the bid envelope.

It is the intent of these specifications to describe a Light Rescue in sufficient detail to enable to secure bids on comparable equipment. The equipment shall be new, unused, the manufacturers latest production and that which is furnished to fire department in general.

Only manufacturers, owned, operated including all holding and subsidiaries located within the continental United States with an accomplished background in Fire Apparatus building shall be considered. Satisfactory evidence of their ability to construct Fire Apparatus, and the apparatus specified shall be stated. The location of the factory where the apparatus is manufactured shall be identified. The manufacturer shall also state the number of years they have been building fire apparatus and similar vehicles. The factory location must be located within the continental United States. No Exceptions!

Contractors must construct the entire unit, less the chassis, but including the body within their own premises. The contractor must own the rights to the respective extrusions used in the construction of the body. Bodies manufactured by other body companies will not be acceptable and be cause for rejection of bid.

This is an engineer, design, construct and deliver type specification and is not the intention of this agency to write out vendors or manufacturers of similar or equal equipment of the types specified. It should be noted however, that this specification is written around specific needs of this department. With this intent to standardize certain components, therefore in numerous places we have named specific brands of components. This has been done to establish a certain standard of quality. Other brands will be accepted providing the vendor note in the bid that the particular brand meets or exceeds the quality of the actual brand that the specifications call for.

Submit only one (1) bid that meets or exceeds the minimum specifications herewith. No substitutes, stock units, or alternates will be permissible unless such units are requested later in the specifications. If this is done, then the bidder will be automatically disqualified.

This apparatus shall conform to the National Fire Protection Association (NFPA) Pamphlet No.1901, 2009 edition.

The emergency vehicle, chassis, pump, module body, equipment, devices, and electronic equipment to be delivered under this contract shall be standard specification. The unit shall comply with all Federal Motor Vehicle Safety Standards (FMVSS), and Federal regulation

applicable or specified for the year of manufacture. The chassis, components and optional items shall be represented in the manufacturers current technical data. Materials used in the construction shall be new and not less than the quality conforming to current engineering and manufacturing practices. Materials shall be free from defects and suitable for the services intended.

All bids must be signed. Failure to do so shall cause the bid to be "No-Responsive" and rejected.

The Fire Department reserves the right to reject any or all bids, and also the right to reject the bid or bidder who, in judgment of the buying authority is not in a position to perform the duties within the contract. The competency and responsibility of the bidder will be considered in making the award. These specifications, together with any other documents required herein, shall be included in the final contract. Each bidder shall also submit a copy of his proposed contract form.

It shall be the responsibility of the bidder to assure that their proposal arrives at the proper location by time and date indicated. Late proposals, telegrams, facsimile, or telephone bids will not be considered. Bids will not be considered from firms, individuals and or same owners of separate companies submitting more than one bid. If a vendor represents more than one fire apparatus manufacturer, they will only bid the top of the line apparatus that meets purchaser's specifications.

Only prices that have been type written in numerals will be accepted by purchaser. Failure to submit a bid with type written numerals will be cause to reject the bid deemed as irregular and disqualified from consideration.

THE PURCHASER WILL NOT ACCEPT ANY BIDS FROM WHICH DO NOT MEET THESE SPECIFICATIONS, AND WILL HAVE SOLE DISCRETION TO DEEM WHICH BID IS IN THE BEST INTEREST OF THE PURCHASER.

The fire apparatus and equipment to be furnished in meeting these specifications must be the product of an established and reputable fire apparatus manufacturer of twenty (20) years or more. A list of no less than five (5) delivered units (completed apparatus) which have been built by their company. This list shall include not only the companies latest produced units, but also some of its earliest units, to determine the manufacturers reliability, credibility, and its response to service (post delivery).

The general construction of the apparatus shall give due consideration to the nature and distribution of the load to be sustained and the general character of the service to which the apparatus is to be subjected when placed in service. The general design and construction shall be of the latest modern type, remaining fully modular for the ability of body transfer to another chassis, without cutting or welding.

Each bidder must submit a detailed proposal, which accurately specifies the construction method to be used in the apparatus. The purchaser will utilize this proposal to compare the unit proposed with their specifications. To facilitate comparison, all bid proposal specifications shall be submitted in the same sequence as the advertised specification. Any Bidder who fails

to submit a set of construction specifications, or photocopies and submits another's specifications as their own construction details will not be considered.

These specifications are based on design and performance criteria, which have been developed by the fire department as a result of extensive research and careful analysis. Subsequently these specifications reflect the only type of fire apparatus that is acceptable at this time. Therefore major exceptions to the specifications will not be accepted.

Deviations from specifications, no matter how slight, shall be clearly explained on a separate cover sheet entitled "EXCEPTIONS TO SPECIFICATIONS". Exceptions and variations (any and all) to these specifications must be set forth on separate sheets, indicating or referencing the page number(s) to the purchaser's specifications. These exceptions must be submitted with bid. Bids deemed as taking total exception to these published specifications shall result in immediate rejection of the bid.

Proposals that are found to have deviations from the specifications without listing them on an "EXCEPTIONS TO THE SPECIFICATIONS" sheet will be rejected. NO EXCEPTIONS!

No prototype apparatus will be considered, and all design, operational, and material features must fully comply with the State, and Federal Motor Vehicle Safety Standards.

Each bid shall be in strict compliance with the purchaser's specifications and shall be accompanied by a detailed description of the work to be performed. Minor details of construction regarding design and material, where not otherwise specified, are to be left to the discretion of the bidder, and will be their sole responsibility. Bidder shall acknowledge receipt of all addendum with bid. The detailed specification section of the specifications shall be adhered to completely. Then it is to be certified by an officer of the manufacturing company and not a sales representative. NO EXCEPTIONS!

Organizations or individuals submitting bids must represent directly the company that will be providing the labor and materials for the construction.

All work performed by the contractor shall be guaranteed by the successful bidder to be fabricated and assembled in a first class workman like manor, and of good quality material.

Bid prices should not include tax. We shall certify tax exemption required.

The apparatus, plating, paint and all items furnished on the apparatus shall be guaranteed by the contractor for a period of one year from acceptance. It shall warrant against defective workmanship and materials at no cost to us. This covers all equipment except maintenance items such as tires, lamps, and filters.

Payment terms must be included with the proposal.

A contract will not be awarded until we have satisfied ourselves that the successful bidder is familiar with this class of equipment, meets the previously described criteria, has the necessary capital, facilities and tools to manufacture the same.

Information, which is incomplete, evasive or of general nature shall be considered as grounds for rejection of the bid.

In making the award of this contract, we shall consider both the prices offered and the qualifications of the bidder, all as indicated within the proposal.

We reserve the right to waive minor informalities and reject any or all bids and/or to accept that proposal which in our opinion is deemed most advantageous from a standpoint of design, service and other special features and are not necessarily bound to accept the low bid.

Welding shall not be employed in the assembly of the apparatus in a manner that will prevent the removal of major component parts for service and/or repair. This includes, but is not limited to, individual body compartments, doors, pan braces, body subframe, body sides beavertails, etc.

To insure full dealer support for the service after the sale, the selling dealer must be capable of providing factory service when required.

The successful bidder shall maintain an established service center and parts depot capable of satisfying the warranty service requirements and parts requirements of the vehicle being purchased. The successful bidder must have 24-hour in-house service capabilities to keep down time to a minimum.

The bidder must state location of its authorized service center. This service center must have a staff of factory-trained mechanics, well versed in all aspects of service for all major components of the apparatus. The service center must be within a reasonable distance of purchaser. The successful bidder will assume all costs of any services not within reasonable distance as determined by the fire chief. The successful bidder must also maintain a separate facility at the manufacturing site, in order to satisfy the need for possible major emergency service or repair / collision work.

All bidders responding to these specifications shall submit the proper Certificate of Insurance. The Certificate shall certify that the Manufacture of the vehicle bid has, in force, Product Liability Insurance of a minimum of five million dollars (\$5,000,000.).

The bidder, if the bidders proposal is accepted by the purchasing party, they shall defend against any and all suits, assume all liability for the use of any patented process, advice, or article forming a part of any apparatus of any appliance furnished under contract.

The successful bidder will be responsible for conducting all road tests as specified by the NFPA. The successful bidder shall also conduct a pump test on the completed unit and supply proper documentation upon delivery of unit. Copies of all testing records shall be forwarded to the fire department prior to the acceptance of the apparatus. The apparatus must pass all tests in order to be considered acceptable.

Upon acceptance, a factory-trained instructor shall instruct the fire department personnel on the operation and maintenance of the unit.

Two copies of a complete operation and maintenance manual, covering the completed apparatus as delivered, including, but not limited to the chassis, pump, wiring diagrams, lubrication charts, and fire fighting equipment.

In the event that there are any questions concerning these specifications, the bidder is directed to contact, in writing.

_____(NAME)_____
_____(FIRE DEPARTMENT)_____
_____(ADDRESS)_____
_____(PHONE)_____
_____(FAX)_____

APPROVAL DRAWINGS

There shall be a complete set of drawings that are designed from the specifications and/or any change orders signed by the purchaser before construction begins. These drawings shall indicate the chassis make and model, location of lights, siren, horns, compartments and all major components of the unit. The signed drawings will become part of the contract documents. NO EXCEPTIONS.

WARRANTIES

LIMITED WARRANTY

The body manufacturer shall warrant the new apparatus for a period of twelve (12) months or 12,000 miles (whichever occurs first) from the date of delivery to the original retail purchaser. The warranty will ensure that the vehicle will be free from defects in material and workmanship that may appear under normal use and service within the warranty period.

A copy of the warranty shall be supplied with the bid.

PAINT WARRANTY

The body manufacturer shall warrant the new apparatus paint finish for a period of seven (7) years or 84,000 miles (whichever occurs first) from the date of delivery to the original retail purchaser. The warranty will ensure that the vehicle will be free from peeling, cracking, loss of gloss caused by cracking, and any paint failure caused by defective finishes as determined by the manufacturer under normal use and service within the warranty period.

A copy of the warranty shall be supplied with the bid.

ELECTRICAL WARRANTY

The body manufacturer shall warrant the new apparatus electrical system for a period of five (5) years or 60,000 miles (whichever occurs first) from the date of delivery to the original retail purchaser NO EXCEPTIONS. The warranty will ensure that the vehicle will be free from defects in the electrical harness and connections under normal use and service within the warranty period.

A copy of the warranty shall be supplied with the bid.

BODY STRUCTURAL WARRANTY

The body manufacturer shall warrant the new apparatus for structural integrity for a period of ten (10) years from the date of delivery to the original retail purchaser NO EXCEPTIONS. The warranty will ensure that the vehicle will be free all structural defects of both material and workmanship that may appear under normal use and service within the warranty period.

A copy of the warranty shall be supplied with the bid.

CHASSIS

MANUFACTURER: Ford

MODEL: F-550 Regular Cab 4x4

4X4 SD 165" WB DRW XL 1

POWERTRAIN

Powerstroke 6.7L V-8 OHV direct diesel injection 32 valve intercooled turbo diesel engine * 357 amp dual alternator * 750 amp (total) 78 amp hours (Ah) (total) battery dual batteries with run down protection * Engine block heater * 6-speed electronic SelectShift automatic transmission with overdrive, lock-up, driver selection * Part-time four-wheel drive with electronic transfer case shift, auto locking hubs * Driveline traction control * 4.10 axle ratio * Stainless steel exhaust

STEERING AND SUSPENSION

Hydraulic power-assist re-circulating ball steering * 4-wheel disc brakes with front and rear vented discs * Firm ride suspension * Mono-beam non-independent front suspension * Front anti-roll bar * Front coil springs * HD front shocks * Rigid rear axle * Rear leaf suspension * Rear anti-roll bar * HD rear leaf springs * HD rear shocks * Front and rear 19.5" x 6.00" argent steel wheels * LT225/70SR19.5 BSW AS front and rear tires

SAFETY

4-wheel anti-lock braking system * Dual airbags, seat mounted driver and passenger side-impact airbags, curtain 1st row overhead airbags * Front height adjustable seatbelts

COMFORT AND CONVENIENCE

Air conditioning* AM/FM stereo, clock, seek-scan, 2 speakers, fixed antenna * 2 12V DC power outlets, retained accessory power * Analog instrumentation display includes tachometer, oil pressure gauge, engine temperature gauge, turbo/supercharger boost gauge, transmission fluid temp gauge, engine hour meter, exterior temp, systems monitor, trip odometer * Warning indicators include oil pressure, engine temperature, battery, lights on, key, low fuel, door ajar, service interval, brake fluid * Steering wheel with tilt and telescopic adjustment * Interior lights include dome light with fade * glove box, front cupholder, instrument panel bin, driver and passenger door bins, * Upfitter switches

SEATING AND INTERIOR

Seating capacity of three (3) * 40-20-40 captain front seats with adjustable head restraints, center armrest with storage * 4-way adjustable driver seat includes lumbar support * 4-way adjustable passenger seat * Vinyl faced front seats with vinyl back material * Full cloth headliner, full vinyl/rubber floor covering, plastic/rubber gear shift knob, chrome interior accents

EXTERIOR FEATURES

Side impact beams, front license plate bracket, fully galvanized steel body material * Black fender flares * Black window moldings, black front windshield molding * Black door handles * Black grille * Trailer harness * Driver and passenger black heated convex spotter folding manual extendable trailer outside mirrors * Front black bumper with front tow hooks * Additional exterior lights include cab clearance lights, underhood light, * Clearcoat monotone paint * Ambulance

WARRANTY

Basic 36 month/36,000 miles Powertrain 60 month/60,000 miles
Corrosion Perforation 60 month/unlimited mileage Roadside Assistance 60 month/60,000 miles

DIMENSIONS AND CAPACITIES

Output 300 hp @ 2,800 rpm Torque 660 lb.-ft. @ 1,600 rpm

1st gear ratio 3.110

2nd gear ratio 2.318

3rd gear ratio 1.516

4th gear ratio 1.149

5th gear ratio 0.858

6th gear ratio .0674

Reverse gear ratio 3.128

Front GAWR Weight 7,000 lbs.

Rear GAWR Weight 13,660 lbs.

Front axle capacity 7,000 lbs.

Rear axle capacity 13,660 lbs.

Front spring rating 7,000 lbs.

Rear spring rating 13,660 lbs.

Front tire/wheel capacity 7,500 lbs.

Rear tire/wheel capacity 15,000 lbs.

Towing capacity 16,000 lbs.

5th-wheel towing capacity 16,700 lbs.

Front legroom 41.1 "

Front headroom 40.7 "

Front hiproom 67.6 "

Front shoulder room 68.0 "

Body width 95.2 "

Body height 80.5 "

Wheelbase 165.0 "

Cab to axle 84.0 "

Axle to end of frame 47.6 "

Front tread 74.8 " Rear tread 74.0 "

Turning radius 26.2 '

Fuel tank 40.0 gal.

SELECTED OPTIONS 2013 FORD F-550 CHASSIS

4X4 SD 165" WB DRW XL

VEHICLE SNAPSHOT

Engine: 6.7L OHV Power Stroke Diesel V8 B20

Transmission: TorqShift 6-Speed Auto w/OD

Rear Axle Ratio: 4.10

GVWR: 18,000 lbs Payload Package

PACKAGES

473 SNOW PLOW PREP PKG -inc: pre-selected springs, HD alternator (N/A w/67H Heavy Service Suspension Pkg or 67X Extra Heavy Service Suspension Pkg) *Allows for the attachment of a winch*

41H ENGINE BLOCK HEATER *STD in AK, CO, IA, ID, ME, MI, MN, MT, ND, NH, NY, SD, VT, WI, WY*

62R TRANSMISSION PWR TAKE-OFF PROVISION

67A DUAL 160-AMP ALTERNATORS (REQ: 99T Engine)

68M PAYLOAD UPGRADE PKG -inc: upgraded frame, upgraded rear axle, upgraded springs, low deflection/high capacity, increased GVWR to 19,5000 (REQ: X8L Axle)

531 TRAILER TOW PKG -inc: trailer brake wiring kit (N/A w/52B Tow Command Integrated Trailer Brake Controller) *Trailer brake controller not included*

585 AM/FM STEREO W/CD/MP3 PLAYER -inc: aux input jack, digital clock, (4) speakers
Requires valid FIN code

525 CRUISE CONTROL *Requires valid FIN code*

EMISSIONS

425 50 STATE EMISSIONS

ENGINE

99T 6.7L OHV 32-VALVE V8 POWER STROKE DIESEL ENGINE -inc: 200-amp extra HD alternator, dual 78 amp/hr 750 CCA batteries, Intelligent Oil Life Minder, diesel exhaust fuel tank, split-shaft calibration compatibility

TRANSMISSION

44W TORQSHIFT 6-SPEED SELECTSHIFT AUTOMATIC TRANSMISSION W/OD -inc: tow/haul mode (REQ: 99T Engine)

AXLE

X8L 4.88 AXLE RATIO W/LIMITED SLIP DIFFERENTIAL (w/99T Engine REQ: 68M Payload Pkg)

660A XL SERIES ORDER CODE

TIRES

TGB 225/70R19.5G BSW TIRES -inc: (2) front max traction & (4) rear max traction tires *Not recommended for on-road use. Optional spare is traction tire*

INTERIOR COLORS FOR : PRIMARY W/XL

AS Steel OPT

PRIMARY COLORS FOR : PRIMARY W/XL

F1 RED

CHASSIS POWER GROUP

The chassis shall be equipped with the manufacturer's power group option, including power locks, windows and mirrors.

CHASSIS UPFIT

TIRE PRESSURE MONITORING SYSTEM

A tire pressure monitoring system shall be provided on the chassis. It shall monitor the tire pressure and provide a visual notification of low air pressure.

CHASSIS STEPS

here shall be a set of light duty aluminum tread brite running boards (minimum .190" thickness) installed on the light duty crew cab chassis.

The step shall be of a comfortable height for entering or leaving the cab. The steps shall be so arranged so that a firefighter wearing heavy boots and turnout gear can easily gain access to all cab doors. The boards shall be of heavy constructed and well supported and braced the entire length of the cab.

The steps shall provide anti-slip protection and shall be constructed of a NFPA approved aluminum diamond tread plate.

REAR TOW EYES

Through the rear body wall, there shall be structural steel reinforcement attached to frame rails of chassis to support tow eye assemblies. Mounted at rear center of apparatus it must be capable to withstand the requirements of towing (not lifting) the apparatus without damage.

CAB CONSOLE

Between the two front seats, a console shall be constructed of .125" aluminum coated with a rubberized coating. It shall have a 3/4 inch raised edge around all 4 sides to keep books, pens, etc. from falling off.

The top shall hinge to the rear and a binder storage area shall be provided below with two dividers. The remainder of the bottom of the console shall be open to the rear.

NFPA 1901 COMPLIANT SEATING

Front seats shall be NFPA compliant.

VEHICLE DATA RECORDER

The chassis shall be equipped with a Vehicle Data Recorder system (VDR). The VDR system shall be designed to provide a recorded history of critical chassis operations at specified intervals, and then store the record of these operations for a set period of time. The VDR shall record the following information:

- Time
- Date
- Vehicle Speed
- Acceleration
- Deceleration
- Engine Speed
- Engine Throttle Position
- ABS Event
- Seat Occupied Status
- Seat Belt Status
- Master Optical Warning Device Switch Position

VDR shall act in accordance with NFPA 1901 guidelines and shall be retrievable by connecting a laptop computer to the VDR system.

SEAT BELT WARNING

The vehicle shall be equipped with a seat belt warning system. Each seating position shall be integrated into an on board monitoring system that shall provide visual and audible warnings when any seat is occupied (sixty pounds minimum) and the corresponding seat belt remains unfastened when the park brake is released.

Once activated, the visual and audible indicators shall remain active until all occupied seats have the seat belts fastened. The dash shall include a display indicating the occupancy of each seat.

STAINLESS STEEL WHEEL COVERS

A set of four (4) RealWheels stainless steel wheel covers shall be installed on the wheels of the unit, front and rear. Braided stainless air filler shall be installed on rear wheels.

FLUID IDENTIFICATION PLATE

A permanently engraved plate shall be installed in the cab specifying the quantity and type of fluids used in the apparatus.

FUEL TYPE PLATE

A permanently engraved plate shall be installed on or near the fuel fill to designate the chassis fuel type.

SEATING LABEL

There shall be a label located in the cab or in view of the driver, stating maximum seating capacity.

VEHICLE HEIGHT LABEL

There shall be a label located in the cab or in view of the driver, stating the overall height of the vehicle.

SEAT BELT WARNING LABEL

There shall be a label located at all seating areas, warning personnel that death or serious injury could result from not wearing seat belts while the vehicle is in motion.

RIDING ON STEP WARNING LABEL

There shall be a label located at all exterior stepping surfaces, stating "Warning: Death or serious injury may result from riding on any stepping surface when the vehicle is in motion.

HELMET WARNING LABEL

A label shall be provided in the cab made visible to everyone in the cab "warning" that "Helmets are not to be worn in cab and safely secured".

FRONT MUD FLAPS

There shall be a set of front antispray black mud flaps shall be installed in the front wheel well.

REAR MUD FLAPS

There shall be a set of rear anti-spray black mud flaps shall be installed in the rear wheel well.

CHAINED IGNITION KEY

The ignition key shall be chained to the dash.

HELMET STORAGE

To meet NFPA 1901-2009 section 14.1.8.4.1, the helmet for each riding positions shall be stored in a specified body compartment as per department request.

BODY

BODY CONSTRUCTION

Construction material shall be aluminum, fully welded, with no rivets. The roof and wall beams shall be MIG welded to body exterior panels. All dissimilar metals shall have a barrier material between them to prevent electrolysis.

The entire body is to be modular in design, it shall be fully capable of being removed and remounted on another chassis.

The overall body width shall be approximately 96" and an approximate overall body-only height of 66".

All exterior panels shall be 5052-H34 corrosion resistant aluminum. Roof and sidewall panels shall be one piece.

All welds whether seen or not shall be of good craftsmanship, pleasing appearance. Welds, which are visible, shall be either ground smooth, cleaned or power wire brushed. We are stating that we want Fire Truck quality workmanship not standard delivery practices.

All aluminum body parts are to be welded for unitized construction to give maximum strength throughout the body. The use of adhesive as a structural fastening system is not acceptable.

On all items that are bolted or fastened onto a painted surface there will be isolation strips installed between mating surfaces. This is to prevent problems associated with dissimilar metals and cutting the painted surface by sharp edge of installed items.

The overall body construction and shelf support shall be welded, **NO RIVETS SHALL BE USED NO EXCEPTIONS**. The body shall have squared corners with no tapering.

The body sides shall be .190" aluminum sheet walls. The header walls, and partitions forming and dividing the compartments, plus the compartment floors shall be of .160" aluminum of 5052-H34 alloy construction **NO EXCEPTIONS**.

Compartment floors shall be properly supported, and capable sustaining up to a five hundred (500) pound load.

The roof rails shall be a continuous formed sheet to "square up" the top of the body to enhance looks and provide a flat mounting surface for lights. Radius type roof rails will not be acceptable.

The roof sheet shall be of .125" aluminum tread brite; 3004-H14 alloy. The center section of the roof over the cargo area shall be bolted in place for future removal. Roof shall be sealed and weather-tight.

All compartments shall be of sweep-out type with no lip at bottom edge. The compartment floors shall be raised 1" above the lower sill to prevent water from entering the bottom of the opening. Each compartment shall be fitted with a drain and located in such a manner as to minimize or eliminate water from entering. **NO EXCEPTIONS!**

Compartment interiors walls shall remain unpainted aluminum finish. The aluminum finish walls shall be easier to maintain, reflect light better to allow you better visibility, and prevent the masking of questionable workmanship with interior coatings.

The heights of all shelves shall be easily adjustable by using P-1000 aluminum unistrut, welded permanently to the side bay walls, along with appropriate fasteners. The unistrut is to be continuous from the top to the bottom of the compartment opening.

The rear bumper trimmed out on top and sides with 1/8" aluminum tread brite. The bumper shall extend approximately 8" from the body, and be approximately 18 - 20" from the ground to the top of the tailboard, not exceeding the NFPA 1901 requirements outlined in latest edition of 1901

All exterior surface areas designated for stepping or standing shall be punch raised to provide slip resistance when stepping or walking on as outlined in the latest NFPA 1901.

This body channel support shall be isolated with a .125" UHMW polyethylene type 819. The isolator shall lay the full length of both sides of frame rails.

The body mounting system shall feature cross members at the front panel and at each end of the wheelbox for bolting directly to the steel frame, which straddles the frame rails. Mounting should be isolated from the steel frame by other synthetic material.

There shall be minimal clearance between cab body and box. Consideration shall be given for the presence of push-up floodlights and any other equipment placed between the cab and body.

COMPARTMENT CONFIGURATION

The compartment doors shall be of the type that roll up on themselves. The door shall have an adjustable tubular type counter balance which assures easy lifting and lowering of the compartment doors while eliminating the risk of accidental closing.

Doors shall be front roll up style to maximize upper compartment storage.

Door tracks shall be one-piece aluminum extrusions, which have no obstructions to bind the doors. Tracks shall have a replaceable side seal that shall inhibit water and dust from intruding into the compartments.

An aluminum drip rail shall be provided above each door with standard non-abrasive top seals to provide a water and dust barrier to keep compartment equipment clean and dry while maintaining shutter appearance.

Door slats shall be constructed from double wall box frame aluminum extrusion. Slat exteriors shall have a flat surface while the interior surface shall be concave to aid in preventing loose equipment from interfering with roll up operation.

Between each slat shall be a co-extruded innerseal to prevent metal-to-metal contact and to repel moisture from the joints.

Each door slat shall have interlocking joints with folding locking flange and end shoes secured by a swage process. The interlocking end shoes provide tight fitting operation, removing any play between slats and keeping graphics (if applicable) aligned. Shoes are swaged / dimpled (never riveted) into place for easy replacement.

Nested end shoes prevent metal-to-metal contact and protect the shutters from damage as the doors move up and down in the tracks.

Doors shall have a full width lift bar (operable by one hand), shall be used as a positive latch device for securing each individual compartment door in the closed position. All doors shall be equipped with indicator switches to alert the driver that one or more doors are not fully closed. These switches may all be connected to a single flashing warning light on the dash of the cab.

Doors shall be available in an anodized satin or brush finish, or a wet paint finish.

Door Style: R.O.M. Robinson rollup doors

11' 8" Equipment Body

Body Length 140"

Body Height 73 1/8"

Body Width 96"

Cab/Axle 84"

Approximate Compartment Dimensions:

<u>Compartment Location</u>	<u>Width</u>	<u>Height</u>	<u>Depth</u>
Driver Side #1	53"	56"	23" lower, transverse upper
Driver Side #2	46"	32"	23"
Driver Side #3	29"	46"	23"
Passenger Side #1	53"	56"	23" lower, transverse upper
Passenger Side #2	46"	32"	23"
Passenger Side #3	29"	46"	23"
Rear #1	48"	40"	96"

ANGLE OF DEPARTURE

The rear of the body shall have an angle of departure of approximately 25 degrees.

ENCLOSED REAR CARGO COMPARTMENT

The rear cargo area shall be fully enclosed and weather tight to protect the contents from the elements. The rear cargo compartment shall have a roll up door of the same manufacturer and model as the side compartment roll up doors.

ROOF REINFORCEMENT

The roof over the rear cargo compartment shall be reinforced to withstand the minimum of 250 lbs.

CORROSION PROTECTION

The body and all of its components shall be comprehensively protected against corrosion and oxidation by contact between dissimilar metals. In an effort to provide the up most protection the use of gaskets, specially formulated compound and other corrosion resistant barriers shall be utilized wherever it is deemed necessary. The specially formulated compound shall be applied to all fasteners, accent plates and mounted accessories installed on the body in a fashion that will create a barrier between metals, seal out moisture and prevent paint blistering from electrolysis NO EXCEPTIONS.

Nylon washers shall be used as spacers on fasteners to prevent contact with painted surfaces where applicable NO EXCEPTIONS

ADJUSTABLE SHELF HARDWARE

The compartment(s) indicated shall have extrusions tracks mounted for adjustable shelving, tool mounting, and other purposes.

ADJUSTABLE SHELF

Shelves shall be adjustable using the Select-O-Track Adjustment System incorporated into the body partitions. System allows the shelving to be adjusted up and down the compartment properly maintaining a level surface.

All shelves shall be capable of supporting a minimum weight of two hundred fifty (250) pounds.

All shelves are to be of 3/16" smooth aluminum with press formed flanges of 2" on all four sides and have smooth aluminum finish.

Shelf dimensions shall vary to accommodate the specified compartment for which it is to be mounted.

There shall be six (6) adjustable shelves mounted in the following locations:

- One (1) in the L2 compartment
- One (1) in the R2 compartment
- Two (2) in the L3 compartment
- Two (2) in the R3 compartment

HEAVY DUTY SLIDE TRAY

There shall be one (1) heavy duty slide trays installed in the rear cargo area as directed by the fire department.

All trays are to be of 3/16" smooth aluminum with press formed flanges of 2" on all four sides.

Tray dimensions shall vary to accommodate the specified compartment for which it is to be mounted.

Tray slides shall use heavy steel rail construction, and stainless steel ball bearings. Each tray shall extend outward of the compartment 70 percent of the tray length and shall be able to support up to a 1000 lbs. of distributed weight.

DUAL DIRECTION SLIDE TRAY

There shall be one (1) full compartment length slide out tray mounted in the L1/R1 transverse compartment. Slide tray shall be accessed from either side of the apparatus.

Tray shall be constructed of 3/16" smooth aluminum with press formed flanges of 2" on all four sides. Tray dimensions shall vary to accommodate the specified compartment for which it is to be mounted.

Tray slides shall use heavy steel rail construction, and stainless steel ball bearings. Each tray shall extend outward of the compartment 70 percent of the tray length and shall be able to

support up to a 1000 lbs. of distributed weight. Tray shall extend outward of the compartment 70 percent of the tray length. Tray shall be able to support up to a 1000 Lbs of distributed weight.

STOKES / BACKBOARD STORAGE

There shall be provisions made in the L1 transverse compartment for horizontal storage of stokes basket stretcher and backboards as directed by the fire department. The stokes and backboards shall be accessible from either side of the unit.

Provisions shall be made to accompany the backboard above the stokes basket in the stokes/backboard storage compartment.

SCBA STORAGE IN WHEEL WELL

There shall be two (2) SCBA cylinder storage compartments recessed in the wheel well area. The compartment door shall be a latchable-brushed aluminum type.

FOLDING STEPS

There shall be a total of three (3) NFPA compliant folding step supplied and installed. Steps shall be installed on the rear body panel to allow for body roof top access.

GRAB RAIL

A grab rail of 1" diameter aluminum extrusion antislip grip, shall be mounted on the body roof top near the roof top access steps. Handrail shall meet or exceed the National Fire Protection Associations Pamphlet 1901.

GRAB RAIL

A grab rail of 1" diameter aluminum extrusion antislip grip, shall be mounted on the rear of the apparatus one on each side of the rear compartment. Handrail shall meet or exceed the National Fire Protection Associations Pamphlet 1901.

BODY RIGGING SYSTEM

There shall be a rigging system installed in the upper body one (1) anchor point near each of the four (4) corners for a total of four (4) rigging points.

12 VOLT WIRING

GENERAL REQUIREMENTS:

All electrical work shall be performed by persons familiar with emergency vehicle systems.

All of the emergency electrical equipment shall be served by circuits separate and distinct from the vehicle chassis circuits.

The 12-Volt DC electrical system shall be controlled by an industry proven electrical system.

Clearance and marker lights shall be installed to comply with the NFPA and all Federal standards for highway vehicles. Lights are grommet mounted shock resistant sealed marker lamps series / or sealed LED series marker lamps.

Reflectors shall be installed on the apparatus in compliance with the Federal Motor Vehicle Safety Standards and NFPA 1901.

WIRING REQUIREMENTS:

The complete 12-volt wiring system and electrical appliances shall meet NFPA 1901 minimum standards as well as standard automotive practices throughout its installation in the apparatus. The system shall comply with all the appropriate SAE recommended practices such as J1939 and/or J1708.

All required DC power conducting wiring shall be of GXL stranded copper wire of adequate gauge for the function served so as to ensure voltage drop of less than one volt at the appliance under full amperage load.

Body wiring shall be color and function coded, grease, oil and moisture resistant, routed in protective loom through protected locations, neatly and securely fastened, and all apertures properly grommited for passing wiring. Solderless insulated connectors shall be provided where required. Primary wiring harnesses shall be bench assembled. Where crimp connections are necessary, the connections shall be made using approved connectors with heat shrink insulators. Any wiring routed within proximity of any exhaust components or other high temperature components shall be given special consideration and shielded for best protection.

Any required signal conductors shall be shielded twisted pairs rated by the system manufacturer to carry the multiplex command signals from the switch panel to the control modules.

ELECTRICAL MANAGEMENT SYSTEM:

The system installed shall be easily re-programmable and reconfigurable. Most factory authorized service centers or technicians will have on hand all required diagnostic hardware and software required for maintenance of the installed system.

EMI/RFI PROTECTION

The electrical system proposed shall include means to control undesired electromagnetic and radio frequency emissions. State of the art electrical system design and components will be used to insure radiated and conducted EMI (electromagnetic interference) and RFI (radio frequency interference) emissions are suppressed at their source.

The unit proposed will have the ability to operate in the electromagnetic environment typically found in fire ground operations. The contractor will be able to demonstrate the EMI and RFI testing has been done and meets SAE J551 requirements. Harness and cable routing be given careful attention to minimize the potential for conducting and radiated EMI/RFI susceptibility.

CONTROLS & FUNCTIONS

A switch panel controlling electrical devices and equipment installed on the chassis and body shall be located in the cab within easy access to the driver or centrally located convenient to the driver and/or officer positions. The panel shall include switches arranged in the most convenient and practical manner that is possible. The siren head shall control all warning lights. The chassis auxillary switching shall control the scene lights.

12V DC VOLTAGE OUTPUT TESTING & DOCUMENTATION

The low voltage system of the completed apparatus shall be tested and certified by the manufacturer prior to delivery. A copy of the testing and successful completion will be provided to the purchaser with the in the Owners Manual. Any failures to these tests will require corrective actions to be taken and re-tested before delivery.

RESERVE CAPACITY TEST:

The engine shall be started and run until all engine and engine compartment temperatures are stabilized and the battery system is fully charged. The engine shall be shut off and the minimum continuous electrical load shall be activated for ten (10) minutes. All electrical loads shall be shut down. The battery system shall then be capable of restarting the engine.

ALTERNATOR PERFORMANCE TEST AT IDLE:

Minimum continuous electrical load shall be activated while the unit is at idle speed. The engine and engine compartment temperatures are stabilized. The battery system shall be tested to detect the presence of battery discharge current. The detection of battery discharge current shall be considered a test failure.

ALTERNATOR PERFORMANCE TEST AT FULL LOAD:

The total continuous electrical load shall be activated with the engine running up to the manufacturer's governed speed. The test duration shall be a minimum of two (2) hours. Activation of the load management system shall be permitted during the test. If however, an alarm sounded by excessive battery discharge, as detected by the system, or a voltage of less than 11.7 volts DC for a 12-volt nominal system for more than 120 seconds, it shall be considered a test failure.

LOW VOLTAGE ALARM TEST:

The engine shall be shut off and the total continuous electrical load shall be activated and continue to be applied until the excessive battery discharge alarm is activated. The battery voltage measured at the battery terminals with the load still applied must be above 11.7 volts or the test shall be considered a failure and corrective actions employed.

DOCUMENTATION:

At the time of delivery an Amp Draw Report Section 13-15 will be completed and provided to the purchaser with the Owners Manual. Documentation shall include:

1. Copy of electrical system performance test complying with NFPA 1901,
2. Written load analysis with the following information:
 - a. Nameplate rating of the alternator
 - b. The alternator rating under the conditions specified NFPA 1901, section 13.3.2.
 - c. The minimum continuous load of each component specified per NFPA 1901 section 13.3.2
 - d. Additional electrical loads that, when added to the minimum continuous electrical load, determine the total electrical load.
 - e. Each individual intermittent electrical load

BATTERY DISCONNECT SWITCH

A solenoid operated battery disconnect switch shall be installed on the chassis to disconnect the body electric from the chassis batteries. Switch shall be engaged by the use of ignition switch. When the ignition switch is switched to off position, the solenoid shall separate the body and equipment from the batteries.

BATTERY LIGHT

A green "battery on" pilot light that is visible from the driver's position shall be provided.

BRAKE / TURN / BACKUP LIGHTS

New NFPA compliant stop, tail, and back-up lights shall be installed. The type used shall be 4"x 6" rectangular LED lights, consisting of the following.

Two (2) K60-STR0-1 Red LED Stop/ Taillights.
Two (2) K60-AAT0-1 Amber LED Arrow Turn lights
Two (2) K60-WBU0-1 Clear Back-Up lights

Each light shall be installed separately on the rear of the apparatus with a chrome flange and gasket.

BACKUP ALARM

An Ecco brand backup alarm shall be installed and shall be activated when the unit is placed in reverse gear.

COMPARTMENT LIGHTS

The body compartments shall be equipped with low voltage, light emitting diode (LED) strip style lighting. Each light strip shall consist of a multiple LEDs placed every 16" in a durable and impact resistant translucent shield to protect the diodes from inadvertent contact or collision which may result in damage. The lights shall be mounted vertically in each compartment where they will not interfere with adjustment or accessibility of any shelving or equipment.

Each light shall be sized accordingly to illuminate the compartment adequately.

There shall be one (1) light strip per compartment.

COMPARTMENT OPEN LIGHT

A large red light shall be mounted in the cab visible from the driver's and officer's seat.

Each compartment door shall be equipped with a door open indicator switch. When contact is broken at these switches, it shall activate the compartment open light in the cab.

ENGINE COMPARTMENT LIGHT

There shall be one (1) light installed in the engine compartment to illuminate the engine area. There shall be a switch located adjacent to or on the light.

LED GROUND AREA LIGHTING

There shall be eight (8) high intensity water resistant LED lights mounted under the unit to provide proper ground area illumination in areas designed for the personnel to climb onto or descend from the apparatus.

LOW VOLTAGE ALARM

There shall be one (1) low voltage alarm installed on the unit. There shall be an audio and visual indicator installed in the cab.

BATTERY CONDITIONER

There shall be a Kussmaul Auto Charge Super kit installed on the chassis. It shall consist of an Auto Charge1000 120 volt AC battery conditioner with a Super Auto Eject, and remote bar graph.

The battery conditioner (charger) system shall be wired to the chassis batteries and will recharge them to required levels. Conditioner shall provide a full 15 amps of output as well as supplying up to 3 amps for loads connected directly to the battery such as radio memory, etc. System shall be connected through a 110 volt shoreline inlet or receptacle located on the cab. A 10 element LED charge indicator shall be mounted on the driver's side of the cab near the shoreline inlet.

The shoreline inlet shall be a Kussmaul Super Auto-Eject input connector with a weather proof, sealed box and cover. Auto Eject is designed to connect a 120-volt AC source to the vehicle. Unit shall automatically disconnect 120 volt AC power source by ejecting plug from the receptacle when vehicle-starting system has been energized. Super eject shall be installed in location to be determined by the fire department.

EMERGENCY WARNING SYSTEMS

LIGHT BAR

A Whelen model FN55LED 55" L.E.D. light bar shall be installed on the cab roof of the unit. There shall be two (2) red corner linear12 L.E.D light heads located on the left side of the unit, two (2) blue corner linear12 L.E.D light heads located on the right side of the unit, four (4) front linear8 L.E.D light heads. One (1) red, one (1) blue and two (2) white L.E.D's.

There shall be two modes of operation, calling for the right-of-way and blocking the right-of-way. When the master optical; warning system switch is closed, and the parking brake is released or the automatic transmission is not in park, the warning devices signaling the call for right-of-way shall be energized. When the master optical warning system switch is closed, and the parking brake is on or the automatic transmission is in park, the warning devices signaling the blockage of the right-of-way shall be energized.

LOWER ZONE WARNING LIGHTS

A Whelen NFPA 1901 L.E.D. lower zone warning light package shall be installed on the unit.

There shall be a total of four (4) 600 series Super L.E.D. surface mount lights mounted on the unit. Each light shall be equipped with a chrome 6E series flange. Lights shall be mounted as follows:

- One (1) red 600 series lights mounted on the left side in the lower half of the unit in the rear wheel well (zones D lower)
- One (1) blue 600 series lights mounted on the right side in the lower half of the unit in the rear wheel well (zones B lower)
- One (1) red 60R02FRR lights shall be mounted on the left rear lower half of the unit (zone C lower)
- One (1) blue 60R02FRR lights shall be mounted on the right rear lower half of the unit (zone C lower)

There shall be a total of six (6) Whelen M2 series L.E.D. surface mount lights mounted on the unit. Each light shall be equipped with a chrome flange. Lights shall be mounted as follows:

- Two (2) red lights mounted on left side of the grill (lower zone A)
- Two (2) blue lights mounted on right side of the grill (lower zone A)
- One (1) red light mounted on the front left fender side (lower zone D)
- One (1) blue light mounted on the front right fender side (lower zone B)

UPPER ZONE WARNING LIGHTS

A Whelen NFPA 1901 L.E.D. upper zone warning light package shall be installed on the unit.

There shall be a total of four (4) 600 series L.E.D provided on the body. Each light shall be equipped with a chrome flange. Lights shall be mounted as follows:

- One (1) red 600 series light mounted on the left side in the upper half of the body (zones D upper)
- One (1) blue 600 series light mounted on the right side in the upper half of the body (zones B upper)

There shall be a total of two (2) 900 series L.E.D provided on the body. Each light shall be equipped with a chrome flange. Lights shall be mounted as follows:

- One (1) red 90R00FRR surface mount lights mounted on the unit in the left rear upper half of the unit (zone C upper).
- One (1) blue 90R00FRR surface mount lights mounted on the unit in the right rear upper half of the unit (zone C upper).

WARNING LIGHT LENS

All warning light lens are to be clear

WARNING LIGHT COLOR

All warning lights located in the "B" zone shall be blue in color.

All warning lights located in the "D" zone shall be red in color.

ELECTRONIC SIREN

There shall be a one (1) Whelen model 295HFSA5 electronic siren with noise canceling microphone shall be installed in the cab area.

Siren head shall have the capabilities of controlling the emergency warning lights.

SPEAKER

There shall be one (1) Federal siren speaker model MS100 Dynamax installed on the front bumper of chassis.

8KW LIGHT RESCUE SERIES HYDRAULIC GENERATOR

Smart Power, model LR-8, fully enclosed 8000 watt hydraulic generator shall be provided. The generator may be installed in a compartment or on top of the vehicle, as per the customer-specified location.

The generator system shall come with a standard 2 year/2,000 hour fully transferable warranty from the manufacturer.

The unit shall come equipped with: enclosed generator tray assembly (which includes the generator, hydraulic motor, cooler, fan, electronics package, 10 micron spin-on fluid filter and internal reservoir), hydraulic gear pump with complete installation kit (including PTO for F-Series installations, or engine mounting bracket/clutch kit for other applications), and Command and Control Center (CCC) display with all required wiring harnesses. The CCC shall be an interactive operator control center, equipped with smart touch solid state buttons, with displays for voltage, frequency, amperage, hour meter, service reminders, operator warnings, system faults and diagnostics. Standard electronics package shall include smart start engagement to reduce mechanical stress, precise voltage and frequency control, cold start system, automatic load and temperature compensation, integrated diagnostics system, and other automated control features to protect system, vehicle and operator.

The hydraulic motor, generator, fan, cooler, reservoir and other necessary hydraulic components shall be mounted in a rugged stainless steel case.

The body of the generator tray assembly shall be 30.25" long x 15.75" wide x 13.75" high and weigh approximately 185 pounds. The reservoir shall be mounted internally.

Ratings and Capacity

Rating:	9000 watts peak 8000 watts continuous
Volts:	120/240 volts
Phase:	Single, 4 wire
Frequency:	60 Hz
Amperage:	66 amps @ 120 volts or 33 amps @ 240 volts
Engine Operation range:	1200-1600 RPM (stationary operation only)

Testing

The generator shall be tested in accordance with all current N.F.P.A. 1901 standards.

Notes

*All ratings and capacities shall be derived utilizing current NFPA 1901 test parameters.

GENERATOR DUNNAGE AREA

There shall be a recessed generator dunnage area in the front top area of the body, above the L1/R1 compartment NO EXCEPTIONS.

120 VOLT & 240 VOLT

Since the apparatus is equipped with a 120/240-volt electrical system, the wiring and associated equipment shall be tested.

The wiring and associated receptacles shall be subjected to a 1-min, 900-V dielectric voltage withstand test with any switches in the circuit(s) closed between live parts, including neutral and the vehicle frame. This test shall be conducted after all bodywork has been completed.

Electrical polarity checks shall be made of permanently wired equipment and receptacles to determine that connections have been properly made.

An operational test shall be conducted to ensure that any equipment that is permanently attached to the electrical system is properly connected and in working order.

The results of the test shall be recorded and provided to the purchaser at the time of delivery.

BREAKER BOX

The main breaker box shall be a Square D with ten (10) circuit breaker rated to wire size and load demand. The circuit breaker panel shall be equipped with standard circuit breakers. Circuit breaker panel shall be installed on the front (left) wall of compartment over the rear wheels. An engraved label shall be furnished next to breaker box to indicate switches and circuits.

ELECTRIC REEL

Two (2) Hannay Model ECR-1616-17-18, 240-volt electric cord reels capable of holding 200 feet of 10/3 wire. Each reel shall be equipped with a 12-volt electric motor with a sealed push button momentary switch located near that reel in the same compartment. The reel shall also be supplied with 200 feet of 10/3 wire, color to be black. Reel(s) shall be located in a department specified location.

JUNCTION BOX

A Daniel Woodhead model 3085 outlet box with weather resistant covers or equivalent junction box shall be provided for each reel. Each box shall contain two receptacles with a spring loaded snap cover. Plug configuration shall be specified by the fire department.

OUTLETS

Two (2) double duplex outlets shall be installed one the rear of the apparatus, one (1) each side (left/right) per the fire department request. The outlets shall be recessed in the body and be protected by a weather proof cover. All outlets are to be of the plug configuration used by the Fire Department.

SCENE LIGHTING

SCENE LIGHTS

The unit shall be equipped with three (3) 7" x 3" NFPA compliant LED scene lights model K70-SW00-1 installed on the unit. Scene lights shall have a chrome trim ring and gasket installed on each light.

Scene lights shall be installed in the following locations:

- One (1) in the center right upper body side header
- One (1) in the center left upper body side header
- One (1) in the center rear upper body side header

Lights shall be controlled by the chassis auxiliary switches, properly labeled.

TELESCOPIC LED FLOODLIGHT

Two (2) Fire Research Evolution LED model FCA530-V08 side mount push up telescopic light shall be installed. The light pole shall be anodized aluminum and have a knurled twist lock mechanism to secure the extension pole in position. The extension pole shall rotate 360 degrees. The outer pole shall be a grooved aluminum extrusion and qualify as an NFPA compliant handrail. The pole mounting brackets shall have a 3 1/2" offset. Wiring shall extend from the pole bottom with a 4' retractile cord.

The lamphead shall have four (4) ultra-bright white LEDs. It shall operate at 12/24 volts DC, draw 7.5/3.75 amps, and generate 8,000 lumens. The lamphead shall direct 50 percent of the light onto the action area while providing 50 percent to illuminate the working area. 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 incorporate heat-dissipating fins and be no more than 5 3/16" deep by 3 5/16" high by 7 5/8" wide. The lamphead and mounting arm shall be powder coated white. The floodlight shall be for fire service use.

Push up lights shall be installed on the front of the body, one (1) each side (left/right).

LED TRIPOD SCENE LIGHT

Fire Research Spectra LED Scene Light model SPA656-K20 tripod telescopic light shall be provided. The light pole 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.

Tripod lights shall be mounted on the rear of the apparatus, one (1) each side (left/right).

PAINTING / STRIPING

PAINTING

The body exterior shall have no mounted components prior to painting to assure full coverage of metal treatments. Compartment doors will be painted separately to assure proper paint coverage on body, doorjambs and door edges.

All painted surfaces shall follow the following procedure to insure a lasting finish.

Metal surfaces shall be sanded to remove all burrs and imperfections in aluminum, before etching and treatment.

A wax & grease solvent shall be used to clean and prep the aluminum surface. The surface shall then be rinsed with freshwater. This step removes wax, grease and other surface contaminants, thus leaving a bright, clean and conditioned surface.

A self-etching, aluminum primer shall be applied next. The self-etching primer shall fill all of the minor imperfections, scratches, etc. in the metal. This step produces a corrosion resisting conversion coating that fends off oxidation and other surface contaminants leaving a surface that gives excellent paint adhesion.

A sandable primer shall be sprayed on the metal that seals the surface for the polyurethane paint. A minimum coating thickness of 2 mil shall be applied. Primer is then sanded smooth leaving the best surface for topcoat.

The apparatus body shall then be painted with a minimum of three (3) coats of high luster final finish PPG brand polyurethane paint NO EXCEPTIONS.

These steps are followed as recommended by the paint manufacturer to provide a lasting and high quality gloss finish. All paint products shall be provided by the same manufacture as the topcoat finish.

The body shall be painted to match the (PAINT COLOR & CODE) provided by the fire department.

CARGO AREA COATING

The rear cargo area shall have a gray rubberized coating applied to the floor and sidewalls of the compartment to protect against damage.

BODY COMPARTMENT COATING

Each body compartment shall have a rubberized coating applied to the floor and sidewalls of the compartment to protect against damage.

NFPA STRIPE

There shall be a 4" wide, white Scotchlite stripe located no higher than 48" from the ground installed on the apparatus cab and body. The stripe shall cover a minimum of fifty percent (50%) of perimeter of each side of the apparatus and twenty-five (25%) of the perimeter of the front of the apparatus.

The department shall specify the exact location of the stripe.

CONSPICUITY STRIPING

3M Conspicuity highly reflective prismatic striping shall be installed along the lower portion of the apparatus body. Vehicle markings are made for application to sides and rear of emergency vehicles to meet and exceed all US DOT and NHTSA and NFPA requirements.

CAB DOOR REFLECTIVE STRIPING

The completed apparatus shall be equipped with reflective material on the interior of each cab door in accordance with the current standards of NFPA.

ALTERNATING "CHEVRON" STYLE STRIPE (FULL COVERAGE)

The rear of the apparatus, including the rear roll up door shall be overlaid with alternating red and (amber / green) reflective 6" stripes. Stripes to be configured to resemble in a "Chevron" style lay out where the stripes come in from the sides at an upward 45 degree angle converging in the center to provide an upward point.

LOOSE EQUIPMENT

WHEEL CHOCK

There shall be two (2) Worden model EZ1901 Gripper, 1901 compliant wheel chocks supplied with the unit.

ASSORTED FASTENERS

One (1) bag of assorted stainless steel, and chrome fasteners used in the assembly of the apparatus shall be provided with the delivery of the apparatus.

WIRING SCHEMATICS

A complete set of detailed electrical wiring schematics shall be provided with the completed unit. The schematic shall clearly labeled and describe all electrical circuits for an accurate reference.

SERVICE MANUAL AND PARTS LIST

A service manual shall be provided with the completed unit. Manual shall include equipment and component information as well as warranty and service information.

NFPA REQUIRED EQUIPMENT

Any NFPA required equipment not specified in this document shall be the responsibility of the fire department to supply and install.