

Bandit Wildland Quick Attack Ford F550 - 4x4 - Diesel - 2 Door

> Fouts Bros. 138 Roberson Mill Road Milledgeville, GA 31061 1-800-948-5045

SCOPE AND GENERAL REQUIREMENTS

It is the intent of the manufacturer to provide a new fire apparatus that will withstand the continuous use encountered in the emergency firefighting service. The apparatus shall be of the latest type, symmetrically proportioned and constructed with due consideration of the load to be sustained.

All parts not specifically mentioned herein, but which are necessary in order to furnish a complete fire apparatus, shall be furnished and shall conform to the best practices known to the fire apparatus industry.

The apparatus shall comply with all Federal, State, and local requirements pertaining to vehicles used for fire fighting, and emergency vehicles at time of <u>contract signing</u>. The unit is to be of current year manufacture, and is to be new and unused. The bid price shall not include any local, State, or Federal taxes. The Bidder shall not be liable for any State or Federally mandated tax or program after the sale of this apparatus.

These specifications shall be construed as minimum. Should the manufacturer's current published data or specifications exceed these, they shall be considered minimum and be furnished.

PRIME BIDDER, MANUFACTURER

The manufacturer shall be prime bidder and shall identify the location of their facility.

BIDDERS BACKGROUND

Bids are requested from responsible manufacturers who are engaged in the manufacture of fire apparatus. To insure reliable and complete acceptance of the apparatus, bidder shall have been in operation for a minimum of twenty (20) years in the manufacturing of fire apparatus.

The manufacturer of the apparatus must be fully owned and managed by a Parent Company, Corporation, or Individual(s) that is 100% held by United States of America based Company, Corporation, or United States citizen(s).

Proposals from any manufacturer that is fully or partially owned and/or operated by a foreign company, Corporation or Individual(s) under any type of ownership, partnership, or any similar type of agreement will be immediately rejected.

If the manufacturer of the apparatus, or if any owner, shareholder, or immediate relative of an owner or shareholder that has previously been involved in or held ownership in any company that has filed bankruptcy or any other type of reorganization plan, it must be clearly stated in the bid proposal. The statement must include details and dates of all occurrences.

FAMA COMPLIANCE

The apparatus manufacturer must be a current member of the Fire Apparatus Manufacturer's Association (FAMA) and must provide certificate of membership.

FAIR, ETHICAL AND LEGAL COMPETITION

In order to ensure fair, ethical, and legal competition the apparatus manufacturer shall have ever been fined or convicted of price fixing, bid rigging, or collusion in any domestic or international fire apparatus market.

MANUFACTURER'S DISCRETION

Materials, parts, or procedures used are subject to change at manufacturer's discretion at any time to provide equal or better products.

COOPERATIVE PURCHASING

The manufacturer shall be pleased to allow other public agencies to use the purchase agreement resulting from this invitation to bid unless the bidder expressly notes on the proposal form that prices are not available for tag-on. The condition of such use by other agencies shall be that any such agency must make and pursue contact, purchase order/contract, and all contractual remedies with the successful bidder. Such tag-ons shall be done so that the purchaser has no responsibility for performance by either the manufacturer or the agency using the contract.

PRODUCT QUALITY AND WORKMANSHIP

The components provided and workmanship performed shall be of the highest quality available for this application. Special consideration shall be given to the following areas:

- A). Accessibility to various components that require periodic maintenance or lubrication checks.
- B). Ease of vehicle and pump operation.
- C). Features beneficial to the intended operation of the apparatus.

Construction of the complete apparatus shall be designed to carry the loads intended to meet the road and terrain conditions and speed requirements desired when specified by the purchaser.

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

MANUFACTURING LOCATION

The apparatus shall be manufactured in Smyrna, Georgia.

INSURANCE REQUIREMENTS

Each bidder must submit with their bid proposal a Certificate of Insurance listing the proposed manufacturer's product liability insurance coverage. Liability insurance shall be a minimum amount of ten (10) million dollars. Submitted certificate shall name the apparatus manufacturer, insurance company, policy number, and effective dates of the insurance policy. Bids submitted without the

required certificate will be considered non responsive and automatically rejected. <u>No exceptions are allowed to the minimum insurance coverage requirement.</u>

The manufacturer shall maintain full insurance coverage on the purchaser's cab and chassis from time of first possession by the manufacturer until the apparatus is delivered and accepted by the purchaser (No Exceptions). Purchaser reserves the right to require proof of insurance from the manufacturer's insurance carrier prior to entering into a contract for the apparatus.

PAYMENT TERMS

Full payment for the apparatus shall be made at time of delivery of the completed vehicle. Due to insurance liability, the apparatus will not be left at the purchaser's location without full acceptance and payment or prior agreement between the Purchaser and Bidder.

Final delivery price shall not include any Local, State or Federal taxes. The manufacturer shall not be liable for any State or Federal mandated tax or program after sale or delivery of the apparatus.

VEHICLE ACCEPTANCE AND DELIVERY

The customer shall pickup the vehicle at the manufacturing facility and shall supply evidence of sufficient insurance coverage to transport the vehicle.

FUEL TANK FILLED AT DELIVERY

The fuel tank and DEF tank (if applicable) shall be filled upon final delivery at the factory.

ONE YEAR APPARATUS WARRANTY

The complete apparatus detailed herein shall be warranted against defects in materials and workmanship for a period of twelve (12) months, effective upon pick up or delivery of the completed apparatus to the purchaser, as detailed in the respective warranty documents. Any unauthorized alterations or modifications to the apparatus shall void this warranty.

Other warrantees, as provided by individual component manufacturers may extend beyond this warranty.

APPARATUS BODY WARRANTY, TEN YEAR

The apparatus body as detailed herein shall have a structural warranty against defects in materials and workmanship for a period of ten (10) years, effective upon final payment in full by the Purchaser, and pick up or delivery of the completed apparatus to the Purchaser. Any unauthorized alterations or modifications to the body shall void this warranty.

PLUMBING WARRANTY, TEN YEAR

A Stainless Steel Plumbing/Piping warranty shall be provided by the apparatus manufacturer for products of its manufacture to be free from defects in material and workmanship, under normal use and service, for a period of ten (10) years effective upon final payment in full by the Purchaser, and

pick up or delivery of the completed apparatus to the Purchaser. Any unauthorized alterations or modifications to the plumbing shall void this warranty.

APPARATUS ELECTRICAL WARRANTY, TWO YEAR

The apparatus electrical system as detailed herein shall have a electrical warranty against defects in materials and workmanship for a period of two (2) years, effective upon final payment in full by the Purchaser, and pick up or delivery of the completed apparatus to the Purchaser. Any unauthorized alterations or modifications to the electrical system shall void this warranty.

APPARATUS DIMENSIONS

These are standard truck dimensions. Changes in configuration or additional options may affect these dimensions. The contract specification shall contain the exact dimensions.

OVERALL HEIGHT

The overall height shall be less than 96.00".

OVERALL LENGTH

The overall length shall be no longer than 26.00'.

OVERALL WIDTH

The overall width of the body shall be 96.00" wide; chassis mirrors will extend out past this width.

ANGLE OF APPROACH

The angle of approach for the apparatus shall not be less than eight (8) degrees as specified by the current edition of NFPA 1901/ 1906.

ANGLE OF DEPARTURE

The angle of departure for the apparatus shall not be less than eight (8) degrees as specified by the current edition of NFPA 1901/ 1906.

COMPLIANCE

The fire apparatus shall be built to the purchaser's requirements in compliance to all State, Local, and Federal highway safety requirements. The vehicle is not intended to meet any or all standards of the NFPA.

CAB SAFETY SIGNS

The following safety signs shall be provided in the cab:

- One (1) FAMA 10 sign shall be visible to the driver. "Flying Object Crash Hazard. All equipment required to be used in emergency response must be securely fastened. Loose items may injure or kill during a crash."
- One (1) FAMA 07 sign shall be visible from each seat. "Crash Hazard. Occupants must be seated and belted when vehicle is in motion. Use only OEM approved belts. Unbelted occupants
- One (1) FAMA 15 sign shall be visible from each seat. "Crash Hazard. Do not wear helmet while seated. Serious head or neck injury may result from helmet use in cab. Failure to comply may injureor kill."
- One (1) FAMA 17 sign shall be visible to the driver. "Backing Hazard. Ensure that personnel are clear before driving in reverse. Always use a spotter when backing. Failure to comply may injure or kill.
- One (1) FAMA 42 sign shall be inside of the driver door. "Sirens produce loud sounds that may damage hearing. Roll up windows. Wear hearing protection. Use only for emergency response. Avoid exposure to siren sound outside of vehicle."
- "Do Not Move Apparatus When Light Is On" sign adjacent to the warning light indicating a hazard if the apparatus is moved (as described in subsequent section).

"NO RIDE" LABEL

A label shall be located on the vehicle at the rear step areas, and at any cross walkways, if they exist. The label(s) shall warn personnel that riding in or on these areas while the vehicle is in motion is prohibited.

COMMERCIAL CHASSIS SPECIFICATION

CHASSIS PROVIDER

The chassis, as detailed in these specifications, shall be ordered and supplied by the apparatus manufacturer.

CHASSIS

One (1) new FORD F-550 rear axle drive 4x4, dual rear wheels (DRW), two door XL cab and chassis.

Wheelbase: 145.30" Cab to Axle: 60.00"

GVWR: 19,500 pounds

Steering: Hydraulic power-assist re-circulating ball

Driving Front Axle and Suspension: HD front package, firm ride suspension package, mono-beam non-indenpendent front suspension, anti-roll bar, HD front shocks, HD front coil springs

Rear Axle and Suspension: wide track, rigid rear axle, HD rear suspension package, anti-roll bar, HD rear leaf springs, HD rear shocks

Braking System: four (4) wheel disc brake system with front and rear vented discs and Anti-Lock (ABS)

Transfer Case: Electronic Shift-on-the-fly cab controlled high and low range HD front package, stabilizer bar, front shocks, with auto/manual locking hubs and rotary switch on dash.

POWERTRAIN

Powerstroke 6.7L V-8 OHV direct diesel injection 32 valve intercooled turbo diesel engine.

Rated Brake Horsepower: 300 HP @ 2800 RPM

Rated Torque: 660 lb.-ft. @ 1,600 rpm

Stationary Elevated Idle Control, SEIC

Exhaust System: horizontally mounted, discharge on right side aft of wheels

Engine Block Heater

TRANSMISSION (44W)

TorgShift 6-speed automatic with SelectShift.

FIRE/ RESCUE PREP PKG w/EPA SPECIAL EMISSIONS (LPO)

Includes 7,000 lbs. max front springs/GAWR rating for configuration selected. Incomplete vehicle package - requires further manufacture and certification by a final stage manufacturer. Ford urges Fire/Rescue Vehicle manufacturers to follow the recommendations of the Ford Incomplete Vehicle Manual and the Ford Truck Body Builders Layout Book (and pertinent supplements). NOTE 1: Stationary Elevated Idle Control (SEIC) has been integrated into the engine control module. NOTE 2: Engine calibration significantly reduces the possibility of depower mode when in stationary PTO operation. NOTE 3: Operator commanded regen allowed down to 30% of DPF filter full, instead of 100%. NOTE 4: Must meet the definition of an Emergency Vehicle, an Ambulance or Fire Truck per 40 CFR 86.1803.01 in the Federal Register. NOTE 5: California Code of Regulations allows for the sale of Federally certified emergency vehicles in California.

- Dual Extra Heavy-Duty Alternators (Total 377-Amps)
- Operator Commanded Regeneration (OCR) Includes active regeneration inhibit.

FUEL TANK

40 gallon aft-axle with auxiliary fuel tap, to provide fuel to an auxiliary truck body mounted diesel engine (if applicable).

REAR AXLE RATIO

The ratio of the rear axle shall be 4.88 limited slip.

CAB TYPE

Conventional, engine forward, two (2) door regular cab

Construction: Welded steel

Accessories:

- Solar Tinted glass in all windows
- Dual sun visors
- Electric windshield washer
- Dome light
- Fresh air heater and defroster
- Dual electric horns
- Driver and passenger air bags
- Gray Vinyl Upholstery
- Roof Clearance Lights
- Black vinyl full floor covering
- 12V Auxiliary Power Point
- Black Fender Moldings

Headlamps: dual beam jewel effect

Climate Controls: controls for heat, defroster, and air conditioning

Mirrors: black manually telescope fold-away in/out for view adjustment.

Instrumentation:

- Tachometer
- Speedometer
- Turbo boost (diesel only)
- Oil pressure
- Coolant temperature
- Fuel gauge
- Transmission temperature gauge
- Indicator lights & Message Center/odometer, trip odometer, engine hour meter & warning messages.

POWER EQUIPMENT GROUP

The electrical power equipment group shall be provided on the chassis. The option package shall include power door locks, power side windows and a momentary down driver's window.

CAB SEATING

The front seating shall consist of a heavy duty vinyl 40/20/40 split front bench seat w/center armrest, cup holder, storage and manual driver-side lumbar support

XL VALUE PACKAGE

4.2" center stack screen
AM/FM stereo MP3 player w/ six speakers
Chrome front bumper
Cruise control
Ford SYNC

WHEELS

Six (6), 10-hole Disc, 19.50" x 6.00" RW Steel

TIRES

Six (6) 225/70Rx19.5G black side wall traction tires shall come supplied from ford with the chassis.

FORD SUPERDUTY WARRANTY

Description	Months/Distance
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
Diesel Engine	60 month/100,000 miles

CHASSIS PAINT COLOR

The cab shall be painted a single color by the chassis manufacturer.

Color: Ford Race Red

Paint Number: PQ

CHASSIS MODIFICATIONS

The following modifications and installations shall be performed on the chassis upon delivery to the apparatus manufacturer:

STEP BARS

One (1) set of black powder coated steel step bars shall be mounted to each side of the chassis. There shall be a slip resistant step pad located bellow each chassis door.

FRONT MOUNTED WINCH

A WARN model M12000 electric winch with 12,000 pound (5,440 kg) rated line pull shall be installed in the brush guard. The winch shall be equipped with 125.00' of 3/8" diameter wire rope, clevis hook and a 4-way roller fairlead. The winch shall be operated through a 12.00' pendant with a hand held control. The winch shall include an automatic mechanical cone brake. It shall feature an easy to use free-spooling rotating ring gear clutch.

The installation shall maintain access to the winch controls.

FRONT BUMPER REPLACEMENT

The factory bumper shall be removed and replaced with a custom fabricated, heavy duty steel bumper with a grille guard protection assembly.

The bumper shall be powder coated black. FORD OPTION: Super Single, Buckstop

FRONT AND REAR SUPER SINGLE TIRES AND WHEELS

The front and rear tires will be Continental MPT81 20.00" 335/80R20, severe service radial all terrain tread. Wheels for the front and rear axles will be 20.00" x 11.00" steel disc, ten (10)-hole pattern special order for Military/Government off road application.

LIFT KIT

Chassis lift, there shall be a 3.50" suspension lift installed on the chassis to accommodate the super single tires and wheels.

FENDER FLARES

Extended fender flares shall be added to the chassis factory fender flares to accommodate the debris from the oversized tires.

TIRE PRESSURE MANAGEMENT

There will be a RealWheels LED AirSecure™ tire alert pressure management system provided, that will monitor each tire's pressure. A sensor will be provided on the valve stem of each tire for a total of six (6) tires.

The sensor will calibrate to the tire pressure when installed on the valve stem for pressures between 10 and 200 psi. The sensor will activate an integral battery operated LED when the pressure of that tire drops 5 to 8 psi.

Removing the cap from the sensor will indicate the functionality of the sensor and battery. If the sensor and battery are in working condition, the LED will immediately start to flash.

FRONT MUD FLAPS

A pair of black rubber mud flaps shall be provided as detailed in the chassis specifications.

REAR MUD FLAPS

A pair of black rubber mud flaps, with the Manufacturer's logo, shall be provided and installed behind the rear wheels.

ELECTRICAL SYSTEM (CHASSIS OEM)

The commercial chassis electrical system shall be furnished and installed by the chassis manufacturer and shall not be altered in any way so as to void or diminish the manufacturer's warranty responsibilities. Body builder wiring interface harnesses shall be specific to the chassis being utilized.

CENTER CONSOLE

A center console fabricated from aluminum shall be furnished and shall be located between the driver and officer's seats.

The forward area of the console shall have a mounting surface for emergency lighting switch panels and/or electronic siren control boxes within reach of the driver or officer.

SEATING MODIFICATION

The center portion of the 40/20/40 split bench seat shall be removed to accommodate the installation of the specified console.

ROCKER SWITCH PANEL - SIX (6) POSITION

A lighted six (6) position rocker type switch panel shall be installed to provide the ability to de-activate individual lighting units. The switches shall be Carling Contura II series rocker switches.

A rocker switch with a blank legend installed directly below shall be provided for any position without a switch and legend designated by a specific option. The non-specified switches shall be two-position, black switches with a green indicator light. Each blank switch legend can be custom ordered by the department once the apparatus is in service. All switch legends shall have backlighting provided.

MASTER WARNING SWITCH

A master switch shall be included in the main rocker switch panel. The switch shall have a red light indicator and be labeled "Master" for identification. The switch shall feature control over all devices wired through it. Any warning device switch left in the "ON" position shall automatically power up when the master switch is activated.

BATTERY SYSTEM

The battery system shall be supplied with the chassis.

MASTER BODY DISCONNECT SWITCH

A master body disconnect on/off switch shall be provided in the cab, near the driver's door. The switch shall disconnect the power to the apparatus body when the ignition switch is in the off position.

One (1) reset breaker shall be installed between the solenoid output and any electrical load.

One (1) indicator light shall be provided to indicate the apparatus 12-volt system is on. The light shall be located in the chassis cab and be visible from the driver's positions. The light shall be green in color and labeled "Master Battery".

BACK-UP ALARM

One (1) 97 DB back up alarm shall be provided and installed at the rear of the unit. It shall be wired to activate when the transmission is placed in reverse.

REAR PUMP "DROP IN"

The pump shall be mounted at the apparatus rear, mounted in the open rear cavity of the body.

ELECTRIC START WIRING TO CHASSIS

The 12 volt positive and negative cables shall be provided from the chassis battery to the fire pump area, wired through the master disconnect solenoid system.

PORTABLE PUMP, GASOLINE

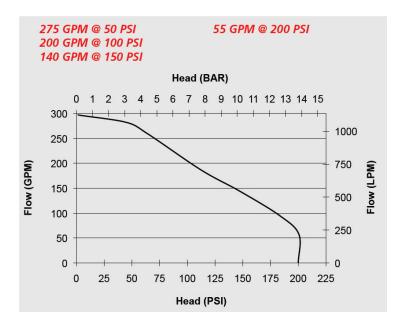
The pump shall be a CET DI-PFP-20hpHND-MR single stage centrifugal pump, bolted directly to the engine, with a 2.50" Victaulic suction inlet, and a 1.50" flange discharge outlet.

The volute and pump head shall be a lightweight, high strength, seawater resistant, aluminum alloy. The impeller shall be a bronze enclosed type for maximum efficiency, fully machined and balanced. The engine crankshaft shall serve as the pump shaft, with the impeller mounted directly on the crankshaft. The shaft seal shall be self-adjusting, self-lubricating, and mechanical type.

The pump piping shall be flexible to prevent any breakage caused by vibration.

The pump shall be capable of a maximum discharge volume of 275 GPM. at 50 PSI, and a maximum discharge pressure of 200 PSI while pumping 55 GPM.

The performances are based on a maximum altitude of 500ft and any higher elevation will lower the pump performance. The standard engine performance drops 3% for every 1000 ft.



PUMP ENGINE

The pump shall be driven by a 4-stroke Honda gasoline powered, 20 horsepower engine. The engine shall be air-cooled, 12-volt electric start.

THREE YEAR FIRE PUMP WARRANTY

A three (3) year warranty for the CET fire pump shall be provided.

REMOTE FUEL TANK

The pump engine shall be supplied by an external 3.00 gallon fuel tank. It will be large enough to run the pump motor for one (1) hour at its rated capacity and pressure as per NFPA 1906, 8.10.1. Tank will be mounted with ease of filling in mind.

PRIMER-EXHAUST

The pump engine shall be equipped with an quieter exhaust venturi type primer capable of 15.00' – 20.00' lift for fast positive priming. The control for the primer shall be capable of being operated by a person operating controls at the primary pump operator's position.

PUMP CONTROLS

A control panel shall be supplied and installed on the pump. The controls shall consist at a start switch, throttle and choke cable controls, hour meter, 2.50" diameter discharge pressure gauge and a work light.

HOSE THREADS

All hose threads shall be NST on all base threads on the apparatus intake and discharges, unless otherwise specified.

LABELS

All controls, inlets, and discharges shall be clearly labeled. The labels shall comply with applicable NFPA standards.

SUCTION PIPING

All piping on the suction side shall be made of stainless steel (welded joints), painted red. The suction piping, the pump and the discharge shall be tested to 400 PSI.

The suction piping shall consist of a 2.50" tank to pump line with a 2.50" flexible rubber hump hose to minimize flex and vibration between the pump and the tank.

RIGID PIPING SHALL NOT BE ACCEPTABLE.

Between the tank and the pump there shall be a 2.50" industrial valve. This valve shall remain open to pump from the tank.

This pipe shall have a tee into the suction side of the pump and shall continue to the rear of the truck for overboard suction where there shall be an additional 2.50" Industrial Valve.

To draft, the tank to pump valve shall be closed, a suction hose connected to the overboard suction connection and placed in a static water supply, and the primer activated.

The overboard suction connection shall have a 2.50" NST male adapter and a 2.50" NSTF cap with retaining cable.

DISCHARGE PIPING

All piping shall be stainless-steel piping or high-pressure flexible hose. A 2.50" X 2.50" square stainless-steel manifold shall be piped directly to the discharge outlet of the pump. Attached to this discharge manifold, by means of welded stainless-steel pipe nipples, shall be all the discharge valves. All piping shall be painted red to match the pump.

The discharge shall be equipped with a drain valve at the lowest point.

TANK FILL

There shall be a 1.00" valve piped from the discharge manifold as a means for refilling the tank. The valve shall be an industrial quarter turn valve handle and 1.00" NPT threads, and shall be connected to the tank fill port by 1.00" high pressure flexible hose.

One (1) 2.50" DISCHARGE TO REAR

There shall be One (1) 2.50" valve piped from the discharge manifold to the rear of the truck for connection of forestry hose. Each valve shall be an industrial valve with handle and terminate with a 2.50" male NST threads. Each valve shall be furnished with a 2.50" NST cap and chain.

One (1) 1.50" DISCHARGE TO REAR

There shall be One (1) 1.50" valve piped from the discharge manifold to the rear of the truck for connection of forestry hose. Each valve shall be an industrial valve with handle and terminate with a 1.50" male NST threads. Each valve shall be furnished with a 1.50" NST cap and chain.

One (1) 1.00" DISCHARGE TO REAR

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GARDEN HOSE DISCHARGE

There shall be a standard garden hose valve piped from the manifold of the pump. The valve shall be an industrial quarter turn valve with handle and 0.75" threads.

DISCHARGE TO BOOSTER REEL

There shall be a 1.00" valve piped from the discharge manifold to the booster reel. The valve shall be an industrial, quarter turn valve handle and 1.00" NPT threads, and shall be connected to the reel by 1.00" high pressure flexible hose.

BOOSTER REEL

One (1) HANNAY moel EF16.5-30-31-LT painted steel booster reel with electric rewind shall be supplied and mounted. The reel shall be capable of carrying 125.00' of 1.00" hard coat booster hose, and 150.00' of 1.00" Mercedes

The reel shall have a 1.00" Female NPT inlet connection with a 90 degree ball bearing swivel joint. The reel shall have a 1.00" Male NST outlet.

The reel shall have an auxiliary gear-driven crank rewind that shall be easily accessible.

REEL LOCATION

The booster hose reel mounted on the right hand side rear corner of the flatbed body.

One (1) high mounted polished stainless steel roller guide assembly shall be installed on the booster reel, allowing the booster hose to be deployed to the rear of the apparatus.

BOOSTER REEL HOSE

The booster reel shall be supplied with 100.00' of 1.00" NST <u>yellow</u> Mercedes BoostLite fabric-type lightweight booster hose. The hose shall have a minimum service test pressure of 400 PSIG.

NOZZLE MOUNT

The hose reel discharge shall have a PAC Jumbo Lok bracket installed to hold the nozzle in place.

200 GPM REMOTE CONTROL MONITOR

One (1) Task Force Tips EF1 RC electric remote controlled monitor shall be installed on the front of the apparatus.

The monitor shall be rated to 200 gpm with a maximum operating pressure of 200 psi. The monitor shall have electric remote control of rotation and elevation angle. The monitor shall have an electronically operated 270° horizontal rotational travel, user installed travel limit stops, stainless steel worm gear drive, and grease zerk fittings for easy service and lubrication. The discharge elbow shall include an integral stream straightener

The monitor shall be configured with a 1.50" female NPT inlet and 1.50" male NH outlet. The unit shall be covered by a five-year warranty.

One (1) 1.50" front bumper discharge piping shall be piped to the front bumper area. Flexible 1.50" Class1 high pressure hose shall be provided from the pump to the monitor with low point drains where necessary. A TFT 1.50" electric valve shall be supplied for the font bumper discharge.

REMOTE ELECTRIC NOZZLE TIP

One (1) Task Force Tips Ultimatic 125, model # B-TOS-ERP adjustable nozzle with electrically operated pattern control shall be provided. The nozzle design shall allow for straight stream through dense wide fog patterns and be able to be flushed without shutting down. The nozzle shall be suitable for foam solution application.

Nozzle stream shaper actuator shall have position encoder for smooth transition between straight stream and fog pattern with fine stream adjustment. Nozzle stream shaper shall stop and pause at full fog position. A second electrical actuation of the stream shaper shall move the shaper to the flush position for removing debris from the nozzle.

The nozzle shall have a 1.50" female NH swivel rocker lug coupling and a user adjustable flow range of 15-120 GPM at 100 PSI. The nozzle shall be designed to accept the TFT FJ-U or FJ-UMX FoamJet low expansion air aspirating attachments

REMOTE MONITOR JOYSTICK CONTROL

One (1) Task Force Tips model # Y4E-JS-GT joystick style control station for the remote control monitor shall be installed. The joystick shall be mounted in an enclosure and control horizontal rotation, vertical elevation and nozzle stream pattern and have a momentary trigger button that can control an optional Task Force Tips valve with interface box by squeezing if desired. The monitor speed is proportional to the joystick movement. A sliding switch shall allow for flow control by adjusting the Task Force Tips gateable valve operation.

MONITOR MOUNTING

The monitor shall be installed on a custom mount located in the center of the replacement front bumper.

FOAM SYSTEM - CLASS A

There shall be a Scotty model 4171 around the pump foam eductor / mixer installed integral to the pump. The eductor shall be plumbed from the foam cell with 0.50" flexible reinforced tubing to throughout he eductor to a suction fitting on the pump impeller housing. The eductor shall be calibrated to educt foam concentrate of 0% to 3.75% at flow rates from 15 to 125 at 100 psi.

BOOSTER TANK

The tank shall have a capacity of 300 US gallons / 249 Imperial gallons / 1136 liters.

The tank shall be manufactured by CET.

WATER TANK

The water tank shall be constructed of 0.50" thick polypropylene sheet. The material shall be of a certified, high quality, non-corrosive, stress relieved thermos plastic, black in colour with a textured finish, and UV stabilized for maximum protection. The skid type booster tank shall be of a standard configuration and shall be so designed to have complete modular slide in capability. All joints and seams are to be fully welded and electronically tested for maximum strength. The unit shall incorporate transverse partitions manufactured for 0.50" polypropylene which shall interlock with a series of longitudinal partitions constructed of 0.50" polypropylene. All swash partitions shall be so designed to allow for maximum water and air flow between compartments and are fully welded to each other as well as to the inside of the tank.

The passenger side rear wall of the tank shall have a standard built in sight gauge 2.00" in width, and 70% transparent.

Tank will be baffles in accordance with NFPA bulletin 1906 requirements, latest version.

FILL TOWER & TANK COVER

The tank shall be equipped with a combination vent/overflow and manual fill tower. The fill tower shall be an 8.00" round by 6.00" high with a moulded drop-on type cover. The cover shall be fastened to the tower with a tether to prevent loss. The tower shall be located in the right rear corner of the tank. There shall be a vent / overflow installed inside and to the extreme rear of the tower approximately 2.00" down from the top. This vent / overflow shall be of a standard schedule 40 polypropylene pipe with minimum ID of 3.00". The vent / overflow shall be piped internally and exit out at the passenger side tank wall with a 1.00" extension past the wall.

The tank cover shall be constructed of 0.50" thick polypropylene, black in color, UV stabilized.

SUMP

The floor of the tank shall be manufactured from 0.75" polypropylene. There shall be one (1) sump as standard per tank. The sump shall be integral to the tank floor and be a minimum of 0.625" deep recessed into the floor. The sump shall not be visible from or protrude through the bottom of the tank.

TANK OUTLETS

There shall be two standard tank outlets located in the same vertical plane on the driver side rear wall of the tank. One (1) 2.50" female NPT tank to pump suction fitting and one (1) 1.50" female NPT tank fill fitting with flow deflector

1.00" TANK DRAIN

There shall be a 1.00" tank drain to the rear side of the tank with a plug.

TANK MOUNTING BLOCKS

The cover shall incorporate two (2) booster reel mounting blocks that shall be to accommodate two (2) each sliding nut fasteners. These mounting blocks shall be welded to the covers running from the rear edge of the tank forward.

SKID BASE

There shall be a full width skid base manufactured of 0.75" polypropylene welded to the tank. This base shall be 48.00" wide by 96.00" long and shall extend 34.00" past the tank in the rear to allow for pump mounting. The pump mounting area shall be supported by 0.50" polypropylene gussets 15.00" high by 32.00" long. The gussets shall be equipped with 2.00" holes to assist in lifting the unit.

CET WATER TANK WARRANTY LIMITED LIFETIME

CET Fire Pumps, Mfg. warrants each CET water and/or foam tank to be from manufacturing defects in material and workmanship for the service life of the original vehicle. Every CET tank shall be thoroughly inspected and tested for leaks before leaving our facility and must be installed in accordance with the CET Fire Pumps, Mfg. installation guidelines.

CET will repair or, at its option, replace the tank with a new tank. CET will cover customary and reasonable costs to remove and install the tank. This warranty will not cover the tanks that have been improperly installed, misused, or abused. The serial number must not have been altered, defaced or removed. CET will not cover any unauthorized third party repairs or alterations. Any of these actions may void the warranty.

There are no warranties, expressed or implied, which extend beyond the description of the face, hereof. There is no express or implied warranty of merchantability or a warranty of fitness for a particular purpose. Additionally, this warranty is in lieu of all other obligations or liabilities on the part of CET Fire Pumps, Mfg.

This warranty contains the entire warranty. It is the sole warranty and price agreements or representation, whether oral or written, are either merged herein or expressly canceled. CET Fire Pumps, Mfg. neither authorizes any person supposing to act on its behalf to change, nor assume for it, any warranty or liability concerning its product.

In no event will CET Fire Pumps, Mfg. be liable for an amount in excess of the currently published retail price plus installation and removal cost of the tank, for any loss or damage, whether direct or indirect, incidental, consequential, or otherwise arising out of failure of its product.

This warranty gives you the specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow exclusion or limitation of incidental or consequential damage, so the above limitation or exclusion may not apply to you. Since some states do not allow limitations on the length of an implied warranty, the above limitation may not apply to you.

The warranty is transferable within the United States and Canada at the discretion of CET Fire Pumps, Mfg. by notifying CET Fire Pumps, Mfg. within thirty (30) days of the vehicle transfer date. At that time, CET will, at it discretion, provide a transfer of ownership form.

FOAM TANK - 10 US GALLONS - CLASS A

A foam tank shall be installed inside the main water tank. The foam tank shall have a capacity of <u>10</u> U.S. gallons for Class A foam.

ALUMINUM FLATBED

One (1) custom fire application aluminum flat bed body, 110.00" long x 94.625" wide. The aluminum plate used in construction is .100" 3003-H22 polished aluminum alloy treadplate.

The body sub-frame shall be made from 6061-T6 aluminum tubes and channels. Sub-frame crossmembers shall be installed every 16.00". The channel is 1.50" wide x 3.00" high x 0.1875" thick. The body crossmembers shall extend the full width to support the compartment framing and shall be welded to the sub-frame main members.

The body sub-frame main members shall consist of 6061-T6 aluminum square tubing of 2.00" wide x 6.00" high x 0.1875" thick.

The perimeter shall be made with 0.125" thick forged 3003H14 aluminum. Forged aluminium brings a strong design that was specially made to embed emergency lighting & designed to fit properly a 4.00" reflective stripping.

The body shall be attached to the chassis rails with a minimum of four (4) heavy duty "U" bolts. The body shall be separated from the chassis by 0.375" Teflon.

Attachment of the body and sub-frame will allow the body to resist from all distortion and off road operational condition.

The body is a modular design to allow removal from the chassis for major repair or mounting on a new chassis. Isolating material shall be installed between the body and the chassis.

All welding shall be done electrically using 5356 aluminum welding wire.

An angle of approach and an angle of departure of at least 20 degrees shall be maintained at the front and the rear of the vehicle when it is loaded.

This will be no exception to the body specifications. Pre-built commercial flatbed bodies are not acceptable.

There shall be a fuel fill cap provided on the left (driver) side of the flatbed. The fill shall be piped to the chassis fuel tank.

COMPARTMENTS

All compartments shall be made with 0.125" tread plate aluminum sheet.

All compartments shall have a minimum of one (1) louvered panel bolted into a wall to provide the proper airflow inside the compartment.

All compartments shall be of sweep-out type with no lip at bottom edge for easy cleaning.

LEFT (DRIVER) SIDE COMPARTMENT

One (1) 72.00" long x 30.00" high x 22'.00' deep compartment behind the chassis, located at the left (driver) side of the water tank.

The overlap aluminum compartment doors shall be securely attached to the body with a full stainless steel hinge. Door openings shall be fitted with solid neoprene weather strip completely sealing the perimeter of the compartment door opening. Lift up doors shall be installed with gas hold open struts. The 0.125" compartment doors are latched with recessed, polished stainless steel "D" ring handles and locks.

There shall be a set of tracks for future installation of adjustable shelf(s) in each compartment. These tracks shall be installed vertically on the walls of the compartment(s) and shall offer a multitude of height adjustment possibilities.

The compartments shall be equipped with the following:

COMPARTMENT LIGHT

One (1) 12.00" LED strip light(s) shall be installed inside the compartment.

AUTOMATIC COMPARTMENT DOOR LIGHT SWITCH

The light(s) shall function independently of other compartments by an automatic "On-Off" switch located on each compartment door.

RIGHT (PASSENGER) SIDE COMPARTMENT

One (1) 72.00" long x 30.00" high x 22'.00' deep compartment behind the chassis, located at the right (passenger) side of the water tank.

The overlap aluminum compartment doors shall be securely attached to the body with a full stainless steel hinge. Door openings shall be fitted with solid neoprene weather strip completely sealing the perimeter of the compartment door opening. Lift up doors shall be installed with gas hold open struts. The 0.125" compartment doors are latched with recessed, polished stainless steel "D" ring handles and locks.

There shall be a set of tracks for future installation of adjustable shelf(s) in each compartment. These tracks shall be installed vertically on the walls of the compartment(s) and shall offer a multitude of height adjustment possibilities.

The compartment floor will be covered with Plastic Tiles. The tiles shall be black with yellow angled leading edges.

The compartments shall be equipped with the following:

COMPARTMENT LIGHT

One (1) 12.00" LED strip light(s) shall be installed inside the compartment.

AUTOMATIC COMPARTMENT DOOR LIGHT SWITCH

The light(s) shall function independently of other compartments by an automatic "On-Off" switch located on each compartment door.

REAR STORAGE COMPARTMENT

One (1) integrated to the platform compartment approximately 5.00" high x 24.00" wide x 104.00" long for suction hose storage and folding ladders or pike poles. A flip down horizontally hinges door is furnished at the rear. The interior compartment shall be made from polished 3003-H14 alloy smooth plate.

REAR LIGHT APRON

The rear vertical skirt shall be made from 0.125" 3003-H22 polished aluminum alloy treadplate. The rear skirt shall include signal, brake, reverse lights, D.O.T., license plate & NFPA steps.

REAR TOW EYES

Two (2) heavy duty tow eyes shall be installed. The tow eyes will be fastened directly to each rear chassis frame rail.

FOLDING STEPS-REAR BODY

The rear of the flat bed shall have two (2) Cast Products model SP6610-1CH-NL large folding steps for access to pump and controls. The rear steps shall be made of high strength die cast aluminum, with a textured chrome plate finish, minimum of 42 in² surface, conforming to NFPA-1901/ 1906 requirements.

12 VOLT ELECTRICAL SYSTEM

The truck shall have a 12-Volt electrical system. All wiring will be run in convoluted high temperature plastic loom. The wiring shall be color-coded, numbered, and function imprinted for permanent identification. All wiring devices shall be rated to carry 125% of the maximum ampere load for which the circuit is protected. All added electrical equipment shall be served by circuits separate and distinct from the chassis circuits. All solenoids, relays, and terminal blocks will be located in an easily accessible area. All circuits provided shall have properly rated low voltage over current protective devices. All electrical will be accordance with modern automotive wiring standards. All under side terminal junctions shall be fully enclosed in sealed plastic weather proof boxes.

ELECTRICAL SYSTEM (CHASSIS OEM)

The commercial chassis electrical system shall be furnished and installed by the chassis manufacturer and shall not be altered in any way so as to void or diminish the manufacturer's warranty responsibilities. Body builder wiring interface harnesses shall be specific to the chassis being utilized and the apparatus specifications with all such harnesses, circuits and connections being documented by the body builder and made part of the electrical schematics provided with the completed apparatus.

ELECTROMAGNETIC INTERFERENCE PROTECTION

The apparatus shall incorporate modern electrical system design, installation procedures, grounding techniques and wave generating components to provide the highest level of protection against electromagnetic (EMI) and radio wave frequency (RFI) interferences.

The apparatus shall be designed to operate and correctly function in congested municipal environments as well as industrial or concentrated commercial scenes without adverse effects from either EMI or RFI. Communications equipment installed after the apparatus is delivered shall be immediately tested by the installer for reception and transmission signal quality.

DOOR AJAR LIGHT

One (1) Whelen model # 0SR00FCR flashing red LED light, located in the driving compartment, the light shall be illuminated automatically whenever any compartment door is ajar.

The warning light shall be interlocked to the parking brake and shall only alert the driver when the parking brake is released.

CHASSIS GROUND LIGHTS

LED ground lights with outward facing angle brackets shall be installed, one (1) under each chassis door.

FRONT OF BODY GROUND LIGHTS

Two (2) LED ground lights with outward facing angle brackets shall be installed under the front of the body. One (1) light shall be located on the driver side and one (1) light shall be located on the officer side of the apparatus.

REAR STEP GROUND LIGHTS

Two (2) LED ground lights with outward facing angle brackets shall be installed under the rear step of the apparatus, one (1) each side.

GROUND LIGHT SWITCHING

The cab and body ground lights shall activate by engaging the parking brake.

LICENSE PLATE LIGHT

A license plate bracket with LED light shall be provided and installed on the rear of the body. The license plate light shall be an TecNiq Eon light with a stainless steel polished case that has a light output equivalent to a 10 watt halogen lamp. Eon lights have a 50,000 hr LED life. It shall be wired to come on with the headlights.

REAR ROAD LIGHTING

Two (2) sets of Grote LED stop, turn, and back-up lights shall be recessed mounted into rear aluminum skirt area of body per FMVSS 108 and CMVSS 108 requirements. The lights shall be LED oval with chromed housings.

MARKER LIGHTS

Two (2) LED amber marker/ clearance lights with chrome housing and clear lens shall be installed on the front side of the bed, one (1) each side. Two (2) LED red marker/clearance lights with chrome housing and clear lens shall be installed on the rear side of the bed, one (1) each side. Three (3) LED red marker/clearance lights with chrome housing and clear lens shall be installed at the rear center of the bed. Amber & red reflectors shall be installed around the perimeter of the bed as per DOT requirement.

WORK LIGHT, PUMP AREA, 12V

One (1) 12V adjustable 4.00" round LED work light shall be mounted at the rear of the skid unit to provide light during nighttime operations. The light(s) shall have a black housing with a black rear cover. The light(s) shall have six (6) ultra-bright white LEDs, and shall operate at 12 volts DC, draw 0.60 amps, and generate 700 lumens.

WORK LIGHT SWITCH

The pump area work light shall be wired to the electric start on the pump.

NFPA AUDIBLE AND LIGHTING WARNING PACKAGE

The following warning light package shall include all of the minimum warning light and actuation requirements for the current revision of the NFPA 1906. The lighting as specified shall meet the

requirements for both "Clearing Right of Way" and "Blocking Right of Way" which includes disabling all white warning lights when the apparatus is in "Blocking Right of Way" mode.

WARNING LIGHT FLASH PATTERN

All of the perimeter warning lights shall be set to the default NFPA flash pattern as provided by the warning light manufacturer.

WARNING PACKAGE ACTUATION CONTROLS

The entire warning light package shall be actuated with a single warning light switch located on the cab switch panel. The wiring for the warning light package shall engage all of the lights required for "Clearing Right of Way" mode when the vehicle parking brake is not engaged. An automatic control system shall be provided to switch the warning lights to the "Blocking Right of Way" mode when the vehicle parking brake is engaged.

LIGHTBAR

One (1) WHELEN model JE2NFPA 56.00" LED lightbar shall be supplied and mounted. The lightbar shall have clear lenses and contain the following modules:

Four (4) RED LIN6 LED modules, two (2) on each corner.

Four (4) RED CON3 LED modules, across the front

Two (2) WHITE CON3 LED modules, on the front

The forward facing white lights shall be automatically disabled for the "Blocking Right of Way" mode.

LIGHT BAR SWITCHING

The light bar shall be controlled by the master warning switch.

LIGHT BAR MOUNTING

The light bar shall be mounted to the headache rack on the body.

LOWER FRONT WARNING LIGHTS

One (1) pair of Whelen model M4 Series LED warning lights shall be installed, one (1) each side one the front of the chassis cab.

The driver side warning light shall be a Whelen Model M4R red LED with red lens.

The officer side warning light shall be a Whelen Model M4R red LED with red lens.

Each light shall be mounted with a Whelen Model M4FC chrome flange.

INTERSECTION WARNING LIGHTS

One (1) pair of Whelen model M4 LED warning lights shall be installed, one (1) each side of the chassis cab.

The driver side warning light shall be a Whelen Model M4R red LED with red lens.

The officer side warning light shall be a Whelen Model M4R red LED with red lens.

Each light shall be mounted with a Whelen Model M4FC chrome flange.

LOWER MID-BODY WARNING LIGHTS

One (1) pair of Whelen model M4 Series LED warning lights shall be installed, one (1) each side of the apparatus, mid-body.

The driver side warning light shall be a Whelen Model M4R <u>red</u> LED with <u>red</u> lens.

The officer side warning light shall be a Whelen Model M4R <u>red</u> LED with <u>red</u> lens.

Each light shall be mounted with a Whelen Model M4FC <u>chrome</u> flange.

LOWER REAR WARNING LIGHTS

One (1) pair of Whelen model M4 Series LED warning lights shall be installed, one (1) each side of the lower rear of the apparatus body.

The driver side warning light shall be a Whelen Model M4R <u>red</u> LED with <u>red</u> lens.

The officer side warning light shall be a Whelen Model M4R red LED with red lens.

Each light shall be mounted with a Whelen Model M4FC chrome flange.

WARNING LIGHT SWITCHING

The warning lights shall be controlled by the master warning switch.

ELECTRIC SIREN AND CONTROL

One (1) Whelen model #295SLSA1 electronic siren shall be mounted in the cab. This unit shall feature an electronic air horn, wail, yelp, hi-lo and shall have a hard wired PA microphone.

ELECTRONIC SIREN SPEAKER

One (1) Whelen model # SA315P 100 watt speaker shall be provided. The speaker shall produce a minimum sound output of 120 dB at 10 feet to meet current NFPA 1901/1906 requirements.

The speaker shall be mounted in the left (driver) side wing of the replacement front bumper.

PAINT, STRIPING, AND LETTERING SECTION

CHASSIS PAINT

The chassis shall be painted by the OEM Chassis Manufacturer.

COMPARTMENT INTERIORS

The side compartment interiors shall be unpainted and in their natural finish.

WHEEL RIMS

The chassis wheels shall be as furnished by the chassis OEM. No additional finishes shall be provided by apparatus manufacturer.

BODY FINISH

The flatbed aluminum body shall remain unpainted.

REFLECTIVE LETTERING - PURCHASER SUPPLIED

Reflective lettering shall be installed by the purchaser.

CHEVRON STRIPING

There shall be alternating chevron striping located on the rear skirt of the apparatus. The striping shall consist of Red and Florescent Yellow-Green alternating 6.00" stripe in an inverted Chevron pattern.

LOOSE EQUIPMENT

The following items shall be provided and shipped loose with the completed apparatus at the time of delivery: