

SANIBEL FIRE & RESCUE DISTRICT – Brush Truck Specification requirements

RFP 23-001

Attachment #1 – Amended on 11/2/2023

CHASSIS

2023-24 Ford F550
4 x 4
Super Cab
Race Red
XL Trim with Fire / Rescue / Ambulance Package
CA 60”
WB 168”
7.3L V-8 GAS Engine
10-speed auto transmission
Vinyl 40/20/40 front seat (center console will be removed)
AM/FM/ MP3 / Clock Radio
Air Conditioning
Power Windows
Power Door Locks
Cruise Control
Interior grey or black
19,500 GVWR
4.88 LS rear end
240-amp alternator
Dual Battery
Heavy duty cab entry steps.
6” Suspension lift and steering stabilizer

WHEELS AND TIRES

The factory wheels and tires shall be removed and replaced with a Single Rear Tire conversion package. The package shall consist of the following:
Five (5) Continental MPT 81 41” 335/80R20 tires
Five (5) custom steel wheels
All wheels to have a Black Powder Coat or paint finish
All Tires / Wheels to be match mounted and dynamically balanced.
Factory Ford fender flares will be replaced with Buckstop brand or equivalent.
Spare tire/wheel to be provided loose with the apparatus.

IN CAB:

A custom console shall be provided to house the emergency lights switches, siren/switch controls, left, right, and rear floodlight switches, underbody light switches, 800mhz radio mounting location, LED

water tank level indicator, and dual cup holder. The console top shall allow easy access to the inside of the console. The console shall include a storage compartment at the rear for map/book storage and medical gloves storage. The custom console shall have a black finish.

BACK UP CAMERA

There shall be a backup camera system. The backup camera shall be provided with a minimum 6.0" screen and mounted within easy view of the driver.

FIRECOM

A two-person wireless FireCom communication system shall be provided.

FireCom headsets are to be push to talk radio transmit.

FRONT BUMPER

There shall be a Heavy-Duty full-size replacement front end bumper with brush / grill guard provided on the apparatus with mounting location for a winch

The bumper shall have an integral 2.0" receiver tube.

The bumper shall have a black textured Powder Coat or Line X style finish.

The front bumper shall be provided with Two (2) Heavy Duty black tow eyes.

WINCH

There shall be a WARN 16,500lb winch mounted in the heavy-duty front bumper. The winch will be installed and wired per the manufacturer's instructions.

FIRE ATTACK BODY

The fire body shall be constructed entirely of heavy duty extruded aluminum and will have a minimum 5-year structural warranty.

The perimeter of the body shall be constructed of heavy-duty aluminum. There shall be aluminum diamond plate covering the entire upper surface of the body. The fire body shall be 108"- 116" long, 96" wide.

The headache rack shall be constructed of 2.0" x 2.0" extruded aluminum tubing and will have aluminum diamond plate covering the bottom half on the front.

~~The tank, compartment and storage tray shall be mounted approximately 18" - 20" from the edge of each bulkhead, to allow space for installation of the front whip lines.~~

~~There will be opening doors and a step to allow firefighters access to the 18" - 20" space between bulkhead and front of tank. Where whip lines are located.~~

The light bar platform shall be constructed of 1/4" aluminum plate shall be properly gusseted. The light bar platform shall be properly sized to securely mount the lightbar.

There shall be a rear pull out tray of lightweight aluminum construction for long tool and hose storage in the underbody. It will have a horizontally hinged drop-down door.

There shall be one (1) sweep-out style compartment with lift up doors located on the driver side of the fire body. Dimensions for the driver side compartment shall be 60"W x 30"H x 20"D with an aluminum bulkhead divider and two (2) lift up doors. The L-1 compartment shall have an adjustable shelf. The body of the compartments shall be constructed of aluminum diamond plate. The compartment doors shall be aluminum diamond plate. The compartment door latches shall be D style paddle slam latches. All compartment floors and adjustable shelves shall be provided with Dri-Dek tiles or equivalent. Each upper body compartment shall have LED compartment lights that shall automatically come on when the compartment door is opened. The upper body compartment doors shall be wired to an open-door warning light that shall be located inside the cab. The open-door warning light shall be activated anytime a compartment door is open. There shall be a 72" W x 20" D x 14" H .125" aluminum diamond plate storage box mounted on the passenger side of the fire body in place of the passenger compartment. This open storage compartment shall have a hinged re-enforced diamond plate cover with pneumatic assist. All stop, turn, back up, corner, and DOT lights shall be provided. All lighting shall be LED. The body will have folding steps or steps on sides and rear to access upper areas of body and work area. The rear of the bed shall have a pull-out tray/drawer that can hold longer tools and extra fire hose. Mud flaps shall be installed behind the rear wheels.

ELECTRICAL

The entire wiring system shall be entirely composed of high-grade commercial quality wiring harnesses that shall be color coded and function coded throughout. A wiring diagram shall be provided with the apparatus. There shall be a master disconnect switch located on the floor by the driver's side. All stop, turn, back up, corner, and DOT lights shall be provided. All lighting shall be LED. The electrical system shall have a five (5) year warranty.

APPARATUS CHARGING SYSTEM

There shall be a Kussmaul Auto Charge 1000 with Super Auto Eject plug and battery status indicator provided on the apparatus. The battery status indicator and auto eject plug shall be provided. The Kussmaul super auto eject shall be mounted near the front driver side in the fire body extrusion.

TANK

The water tank shall have a capacity of 300 gallons.
There will be NO foam tank.
The tank shall include the following features:
Fill tower with removable screen
Sump with anti-swirl plate and drain fitting
3.0" vent and overflow pipe
1.5" refill fitting

3.0" tank suction

Liquid level sight gauge.

The outside of the tank shall be black.

~~The tank shall be mounted to allow for a 18"–20" area for firefighters work area between the front of the water tank and the headache rack.~~

Mounting brackets shall be at the front and rear of the tank to allow mounting to the deck surface.

The tank shall have a lifetime warranty. A copy of the warranty shall be provided with the apparatus.

PUMP

The fire pump shall be rated to flow at least 150 gpm at 100 psi.

The fire pump will be powered by a Honda gasoline engine with the following features:

Electric start.

The pump shall be mounted on the rear corner of the fire attack body.

The pump motor shall be plumbed to the chassis fuel system with an electronic fuel pump.

PLUMBING

All plumbing shall be heavy-duty stainless-steel plumbing.

When necessary, high-pressure hose shall be used with stainless steel fittings. The stainless-steel plumbing shall have a minimum 5-year warranty.

The plumbing will include:

~~(2)–1" Whip lines plumbed to front of tank area with a shut off valve to each one.~~

3" Tank to pump.

Pump to tank recirculation with a shut off valve.

2.5" Tank fill with shut off valve.

Pump to hose reel with shut off valve.

There will be 2" plumbing from the pump to the passenger side storage box with a shut off valve for the preconnected line 1-3/4" x 200' hose in the storage box.

Pump to 2.5" discharge gated valve at rear of bed.

2.5" tank fill at rear of bed with shutoff valve

The entire discharge plumbing system shall be hydrostatically tested. This is to ensure that the entire plumbing system will not leak and to ensure the safety of all fire department personnel.

Full flow quarter turn ball valve shall be used for suction and discharge lines.

WHIPLINES

~~There shall be two (2) 1.0" forestry whip line discharges provided at the front of the tank behind the headache rack, one (1) on the driver side and one (1) on passenger side. The whip lines shall include a TFT nozzle with pistol grip and nozzle clip or holder. The nozzle clips shall be mounted on the backside of the headache rack on the lower half.~~

~~Whip lines are to be 1" x 10'.~~

REAR MOUNT PUMP CONTROLS

Pump panel will include:

2.5" master gauge

Start / Stop control

Throttle control

Electric primer

Low oil pressure light

LED water level gauge

All pump controls shall be provided at the rear of the apparatus and able to reach from ground level.

REAR BOOSTER REEL

A heavy-duty polished aluminum electric rewind booster reel will be provided with 200' of 1.0" lightweight durable booster hose with low profile powder coated aluminum couplings.

The booster reel shall be located at the rear corner of the fire body.

One (1) TFT nozzle with pistol grip will be provided with a secure mounting location.

The booster reel shall be plumbed with high pressure hose with stainless steel fittings.

The booster reel will be provided with one (1) rewind switch located at the booster reel.

REAR STEP BUMPER

There shall be full width rear bumper.

The bumper will have steps or fold down steps to access upper levels of rear fire body.

This shall contain the rear receiver hitch and (2) 15,000lb tow shackles.

There shall be a 7-pin trailer plug.

EMERGENCY LIGHTING SYSTEM

An emergency lighting system consisting of the following shall be provided. Mounting locations to be determined at pre-build meeting.

NFPA compliant full size RED/WHITE LED light bar with WHITE Take Down and Alley Lights. The Light bar shall be mounted on the fire body light bar mounting platform.

There shall be two NFPA compliant LED surface mount lights (RED) mounted on the sides of the front bumper, for intersection protection.

Four (4) NFPA compliant LED surface mount lights (RED) mounted on the front of the bumper grille.

Two (2) NFPA compliant LED surface mount lights (RED), one (1) mounted on each side of the front fenders of the chassis.

Four (4) NFPA compliant LED surface mount lights (RED), two (2) mounted on each side of the fire body.

Two (2) NFPA compliant LED surface mount lights (RED) two (2) mounted on the rear of the apparatus.

A full function 100/200 watt siren / switch module shall be provided.

One (1) 100 watt speaker shall be mounted at the front bumper.

A back up alarm shall be provided.

All emergency lights shall be controlled from the siren / switch module located inside the cab on the center console.

UNDERBODY AND WORK LIGHTS

There shall be six (6) underbody ground lights provided, located one (1) LED light under each corner of the fire body and one (1) LED light under each cab door.

These lights shall be automatically activated when the chassis' transmission is shifted into park and shall automatically de-activate when the chassis' transmission is shifted out of park. They will also have a switch so they can manually be turned on/off.

There will be three (3) LED flood lights provided, mounted one (1) on each side and one facing the rear of the truck for night time operation and will be switched at the switch module in the cab.

LETTERING AND STRIPING

The apparatus shall be provided with a 4.0" White reflective on the chassis and body compartments as per NFPA requirements.

There shall also be a Red reflective stripe installed within the perimeter fire body extrusion.

Gold (not gold brushed) Reflective Lettering on both cab doors and roof: SANIBEL FIRE/RESCUE, BRUSH 171.

BRUSH 171 will be in white reflective lettering on the cab roof. To be easily seen from support aircraft.

There shall be red / yellow reflective chevron on the rear of the body.

Graphics / Lettering will be supplied by the District. Proof and approval shall be obtained from the District prior to installing.