

# FREDERICK-FIRESTONE FIRE PROTECTION DISTRICT RFP 2023-04 TYPE III AMBULANCE

8426 Kosmerl Place, Frederick, Colorado 80504 Office: 303-833-2742 www.fffd.us June 2023 FREDERICK-FIRESTONE FIRE PROTECTION DISTRICT Leading Together, By Serving Together



Office of the Fire Chief Office: 303.833.2742 Fax: 303.833.3736 Email: jyoung@fffd.us

June 26, 2023

Dear Potential Bidder,

You are invited to submit a proposal or bid for the purchase of a 2024 or 2025 Type III Ambulance as requested by the Frederick-Firestone Fire Protection District as identified in the below product technical specifications. This is <u>NOT</u> an order notice by Frederick-Firestone Fire Protection District.

Sealed bids must be received by Frederick-Firestone Fire Protection District no later than Wednesday, August 9, 2023, at 11:00 a.m. (our clock), MST, in order to be considered. If you wish to bid, please submit your sealed submittal in a mailing container or envelope, which is plainly marked on the outside with the notation: *'Sealed Bid – RFP 2023-04 Type III Ambulance'*. Please provide one (1) hard copy and one (1) digital copy of your proposal for committee review.

The Frederick-Firestone Fire Administration office is located at 8426 Kosmerl Place, Frederick, Colorado 80504. Bids will <u>NOT</u> be received at any office or department, including Fire Stations, but that of Administration, and bids sent via facsimile will not be accepted. Incomplete bids will also be rejected. Bids will be opened at 11:00 a.m. on Wednesday, August 9, 2023.

The enclosed specification is not brand name specific but may have brand specific descriptions. Frederick-Firestone Fire Protection District reserve the right to waive informalities in bids, and to reject any, all, or portions of bids for any reason, it also reserves the right to select the bid most advantageous for fire district's mission and operations.

All communication, correspondence, questions, or requests for clarification shall be directed to **Asst. Chief Doug Prunk via <u>dprunk@fffd.us</u>** 

Sincerely,

Jeremy A. Young, EFO, CFO Fire Chief

## FREDERICK-FIRESTONE FIRE PROTECTION DISTRICT Leading Together, By Serving Together



REQUEST FOR PROPOSAL #2023-04 TYPE III AMBULANCE JUNE 2023

#### Request for proposals of a Type III Ambulance for Frederick-Firestone Fire Protection District

The Frederick-Firestone Fire Protection District (District) is soliciting written proposals and quotes for a new Type III Ambulance. We are requesting completion of the project by Spring of 2025. This is a Guaranteed Maximum Price (GMP) request for proposal and bid request. The Fire District is conducting a Specifications and Qualifications Based Selection process. The qualified vendor will be able to meet the specification as written and timelines requested. The services provided by the selected vendor will include the following: preparation of proposal and bid, list of specifications unable to meet with reasoning, complete budget to include the GMP without change orders, and timeline of completion. Sealed proposals responsive to this Request for Proposals ("RFP") must be submitted by providing the information requested in this RFP by 11:00 am MDT on Wednesday, August 9, 2023, to:

> Frederick-Firestone Fire Protection District Attn: Jeremy A. Young, Fire Chief 8426 Kosmerl Place Frederick, Colorado 80504

The bid opening process will commence on Wednesday, August 9, 2023, at 11:00 am at the Frederick- Firestone Fire Protection District's Administration Office located at 8426 Kosmerl Place in Frederick, Colorado 80504. If you are planning on attending the bid opening process, please respond by emailing dprunk@fffd.us and letting us know of your expected attendance.

## During the quote preparation process, all communication, correspondence, questions, or requests for clarification shall be directed to Asst. Chief Doug Prunk via <u>dprunk@fffd.us</u>

General questions may be communicated by phone; however, specific requests for clarifications must be e-mailed. Failure to comply with this requirement may result in disqualification. Questions and answers may be shared with other vendors to provide a fair and consistent proposal and bidding process. Submitting vendors shall mail or hand-deliver one (1) hard copy and one (1) digital copy in Microsoft Word or Adobe PDF format of the proposal to the above stated address. Mailed

proposals must be received by the District by the above stated submittal deadline.

A proposal may be withdrawn at any time before the deadline for submitting proposals by notifying the District in writing of the intent to withdrawal. The notice must be signed by the representative of the vendor who submitted the quote. The vendor may thereafter submit a new or modified quote, provided that it is received at the District no later than the deadline. Modification offered in any other manner, oral or written, will not be considered. Quotes cannot be changed after the submission deadline unless the District requests clarification.

If a vendor discovers any ambiguity, conflict, discrepancy, omission, or other error in the RFP, the vendor must immediately provide the District with written notice of the problem and request that the RFP be clarified or modified. Without disclosing the source of the request, the District may modify the RFP before the proposal submission deadline by issuing an addendum to all potential bidders to whom the RFP was sent.

If, before the proposal submission deadline, a vendor knows of or should have known of an error in the RFP but fails to notify the District of the error, the vendor shall submit a proposal at its own risk, and if, awarded the project, shall not be entitled to additional compensation or time by reason of the error or its later correction.

All materials submitted in response to this RFP will become the property of the District. All proposals submitted to the District shall constitute public records within the meaning of the Colorado Public (Open) Records Act (CORA) and may be subject to inspection and disclosure to the public in accordance with CORA. A vendor that desires any aspect of its proposal to remain confidential must specifically identify the confidential portion of the proposal and the grounds for claiming confidentiality. Further, the confidential portion must be easily segregated from the rest of the proposal.

This RFP is a solicitation for quotes and proposals and not an offer to contract. The District reserves the right to accept or reject any or all proposals. The District further reserves the right to issue clarifications and other directives concerning this RFP, to require clarification or further information with respect to any proposal, and to determine the final terms of any contract for services. All costs incurred by a vendor for proposal preparation, interviews and contract negotiations are the sole responsibility of the proposing vendor. All prices submitted in the quote shall be binding and valid for a minimum of <u>90-days</u> after the closing date.

#### **SECTION A - BACKGROUND INFORMATION**

The District currently provides fire suppression, community risk reduction, ALS emergency medical care and transport, and administrative services from four (4) fire stations and one (1) administrative building. The District serves a 36-square mile area in the Town of Frederick, the Town of Firestone, and unincorporated areas of southwest Weld County. The District has suburban and rural response areas to include mutual and automatic aid within Weld County, Colorado. The District currently owns and operates five (5) ALS Ambulances (one Type I, four Type III). This RFP process is being conducted to replace the oldest unit in the current fleet.

## SECTION B - SCHEDULE FOR PROJECT SERVICES

- June 26, 2023 RFP is released
- June 26 July 27 Vendor Questions and Answers
- August 9
  Bids Due and Bid Opening at 11:00 am
- Aug 9 Aug 31 Bid Compliance Evaluation
- September 12, 2023 Successful vendor selected & notified

#### SECTION C - PROPOSAL SUBMITAL – TECHNICAL SPECIFICATIONS

The proposals shall adhere to the following contents, specifications, and scope of work:

#### EXCEPTIONS

All exceptions to the bid specifications shall be stated, no matter how minor. Any exceptions not stated shall be deemed by the District to be included in the bid, regardless of the cost to the vendor.

#### **REFERENCE DRAWING**

A drawing of the proposed apparatus shall be provided for review. This drawing shall indicate the major components, including but not limited to, the chassis, make and model, body configuration and door style, and the location of the lights, siren, horns, compartments, major components, etc. **A drawing shall be submitted with the bid packet. (No Exceptions)** 

#### PRE-CONSTRUCTION CONFERENCE

A pre-work conference shall be held prior to construction to review contract specifications, materials requirements, delivery schedule, and payment procedures. The conference, which may be accomplished by conference call, shall include the Department representative(s) and the manufacturer representative(s), including the primary engineer working on this project. The date and time of the meeting, or conference call, will be scheduled by the Department representative(s) in consultation with manufacturer representatives and any/all other needed parties.

#### **DELIVERY**

An estimated date of Delivery of the finished apparatus shall be identified in the vendor proposal. Due to current reported build times, the District is financially planning for a 2025 delivery date, however, can move this date up if availability is provided.

#### **TYPE III AMBULANCE CONFIGURATION**

The apparatus shall be a heavy-duty cutaway van chassis with a gas motor. The patient care compartment (body) shall be a new construction unit **approximately 171**" **long or closest to the awarded vender's specification**.

Specific details of the apparatus shall be as described below. The apparatus shall be designed with due consideration to distribution of load between the front and rear axles. Weight balance and distribution shall be in accordance with the manufacture's recommendations and national ambulance safety standards.

#### <u>CHASSIS</u>

Vendor shall provide a new:

2024-25 model year Ford E450 cutaway van with a 7.3 L V-8 gas engine

OR

2024-25 model year Chevrolet/GMC G4500 cutaway van with a Vortec 6.0L V-8 gas engine

Chassis shall be equipped with the following options, at a minimum:

- Ambulance Prep package
- All OEM warranties intact
- Duel real wheels
- 2X4 Drive
- Power windows
- Power locks with three (3) remote key fobs
- Electric bucket seats
- A/C
- Engine Block heater attached to shore power system
- AM/FM/CD Radio
- Telescopic trailer tow mirrors with electric adjustment
- 55 Gallon OEM fuel tank.

Vendors shall provide the proposed cost for the chassis. The chassis shall be designed and manufactured for heavy-duty service, with adequate strength and capacity for the intended load to be sustained and the type of service required.

#### TRANSMISSION

A 6-speed automatic rear wheel drive transmission shall be provided.

The transmission shall be equipped with prognostics to monitor oil life, filter life, and transmission health.

#### DUAL REAR WHEELS AND SUSPENSION

The chassis shall be equipped with dual rear wheels. Mud flaps shall be installed on the apparatus body aft of the rear wheels.

#### **BATTERIES**

Two (2) OEM chassis batteries shall be removed and shipped loose. Two aftermarket group 31 batteries shall be installed in the curbside forward exterior Compartment #6 on a battery tray and will be interconnected to provide maximum cold cranking amps and reserve capacity at all times.

#### **ALTERNATORS**

OEM dual heavy-duty, 397 amps total to cover the estimated full amp load of the chassis and patient module plus 25%

#### **HIGH IDLE, ENGINE SPEED CONTROL**

An NFPA 1906 compliant Engine Speed Control Device shall be installed to allow an increase in engine speed while the vehicle is parked.

A high idle switch shall be provided, inside the cab, on the instrument panel, that shall automatically maintain a preset engine rpm. A switch shall be installed, at the cab instrument panel, for activation/deactivation.

The high idle shall be operational only when the parking brake is on, and the truck transmission is in park. A green indicator light shall be provided, adjacent to the switch. The light shall illuminate when the above conditions are met. The light shall be labeled "OK to Engage High Idle".

#### <u>AXLES</u>

GVWR – 14,500 lbs, Gross Combined Weight Rating 20,000 Front: 5,000 lb. Independent with coil springs, shock absorbers and stabilizer bar.

Rear: 9,450 lb. leaf springs

Unit will be re-aligned postproduction, pre-delivery to assure still within manufactures specifications. An alignment report will be produced at pre-delivery inspection.

#### WHEELS AND TIRES

Seven (7) OEM LT225/75R16E all-season steel belted radials. Seven OEM 16" painted white steel wheels. The valve stem extensions are to be steel braided lines that are held in place with stainless steel brackets. These brackets are to be located in such a way as to provide easy access to both the inside and outside rear tires valve stems for the checking of tire pressure and for the addition of air when required.

Chrome plated steel lug nut covers will be provided.

One (1) pair of stainless wheel covers shall be furnished on the front wheels

One (1) pair of stainless steel wheel liners with oval cutouts shall be provided on the rear wheels including a full hub cover.

#### ANTI-LOCK BRAKE SYSTEM

The vehicle shall be equipped with an anti-lock braking system. ABS brakes with front and rear disc.

#### AUTOMATIC TRACTION CONTROL

An anti-slip feature shall be included with the ABS. The Automatic Traction Control, or approved substitution, shall be used for traction in poor road and weather conditions.

#### **INTERIOR TRIM**

Trim Package, Color keyed door trim with map pockets, rubber floor mat, padded sun visors, courtesy and dual dome lights, AM/FM Stereo Radio & Clock w/ dual cab speakers. Power door locks, cruise control, tilt steering wheel.

Remote Entry & anti-theft alarm with three (3) remote key FOBs shall be included.

Auxiliary lights shall be provided in the cab and consisting of:

• One (1) Clear Dome Light: Located in the center, controlled by automatic door switches.

There shall be one (1) map box with three (3) bins, open at top. The location required shall be determined at pre-construction meeting. The map box shall be divided into three (3) bins. The map box shall be constructed of .125" aluminum and shall be painted to match the cab interior.

#### EXTERIOR TRIM

Trim Package with the following OEM supplied exterior hardware included:

- Front fender vents
- Chrome plated grille
- Chrome front bumper
- License plate bracket
- Halogen headlights
- 3-blink lane change signal
- Roof clearance lights
- Solar tinted glass
- Black door handles
- Under hood service light
- Heavy-duty aluminum Diamond Plate running boards will be installed from the back of the front wheel opening to the front of the module box. They will include mudguards to protect the chassis and module. Rubber mud flaps will be installed behind the dual rear wheels.

All Exterior Module cabinets and entry doors shall have electric door locks.

There shall be an exterior hidden button/switch installed which activates all exterior doors and cabinets. The location of the button/switch will be determined during the pre-construction meeting.

#### **GENERAL WIRING SPECIFICATION**

The apparatus electrical system shall remain independent of the OEM system unless there is authorization from the OEM chassis manufacturer.

The apparatus body, modules of the apparatus body (i.e. patient compartment) and chassis shall

be individually wired as independent modules and connected as a completed unit at the final assembly via waterproof electrical connectors located in the electrical compartment. The intent of this is to be able to remove portions of the completed apparatus for major service and repair without requiring the electrical system to be cut. Seals shall be provided on each individual wire and the assembly. All GXL/SXL wiring for the apparatus body shall be within a temperature resistant harness rated at a minimum of 280 degrees. All wires in each harness shall be color and function coded. Wiring shall be run along structural rails and tied in a neat and orderly manner. Wiring passing through compartments shall be protected from tears, abrasions, and cuts caused by loose items moving in the compartment space. Wiring shall comply with OEM / component manufacturers recommendations and standards.

The completed body shall be grounded to the chassis with a minimum "0" gauge wire with crimped and soldered lugs. The lug shall be bolted to the chassis after the removal of all paints, rust, etc. Additionally, a minimum 3/4 inches braided ground strap shall be furnished between the body and chassis. The ground strap shall have soldered tabs on each end and attached to the chassis as above except that stainless steel star washers shall be used between the ground strap tab and bolt. After attachment, all ground connection points shall be sprayed (soaked) with non-hardening battery terminal sealer.

#### **ELECTRICAL COMPONENTS**

All electrical components such as solenoids, speakers, motors, etc. shall be environmentally rated to a minimum of IP67 and shall be MIL-STD 810 compliant for temperature, humidity, vibration, altitude, shock, sand and dust, immersion, contamination by fluids, humidity, and solar radiation.

#### WIRE GRADE

GXL or SXL Grade Rated from 60-260° F.

#### **CONNECTIONS TERMINATIONS**

Connections shall be environmentally sealed to prevent corrosion or degradation.

#### LOOM AND TIES

All wire loom and wire ties shall be rated to a minimum of 260° F.

#### WARNING DISPLAYS

A digital display and audible alarm will be integrated into the cab console and programed to provide visual and audible indications for

- Outside storage compartment "Door Open" warnings
- Module Curbside and Rear "Door Open" Warning
- Low voltage alarm
- System Voltage
- System Errors

#### **CONTROL PANEL BUTTONS**

A console panel will be mounted in the cab and a rear panel will be mounted in the access door to the electrical service cabinet in the action area. The buttons will control all Emergency Warning functions as well as being able to control the Patient Compartment lighting and module heat/AC functions.

#### MODULE POWER BUTTON

A module power button for the electrical system will be provided on the Front Console Panel.

#### **EMERGENCY MASTER BUTTON**

A single emergency master button will be supplied for activating all the emergency warning lights and will be provided on the front console panel. The emergency master button will activate the module power automatically.

#### **FLASHER**

The flasher system will be provided within the electrical system.

#### BACKUP ALARM OVERRIDE

The Front Console Panel will have a button to disable the backup alarm. This override will automatically reset to "Enabled" when the vehicle is removed from Reverse.

#### CURBSIDE SCENE LIGHTS "ON" WITH CURBSIDE DOOR

Six Truck-Lite #6060C LED ground lights with brackets shall be installed:

- One under each cab running board
- One under Compartment #1
- One under the curbside passage door
- Two under the rear bumper

Outboard Lights shall be controlled to illuminate when ignition is on, transmission is in park, and a switch labeled "GROUND LIGHTS" in the driver's console is in the on position

## **REAR SCENE LIGHTS "ON" WITH REAR DOORS OPEN**

The rear scene lights will be programmed to activate when the rear doors are in an open position.

## **REAR SCENES "ON" IN REVERSE**

The system will be programmed to provide activation for the rear scene lights, and the rear side scene lights, when the transmission selector lever is placed into the "reverse" position.

## **ELECTRICAL WIRING**

All of the vehicle's electrical equipment will be served by circuits separate and distinct from the chassis electrical system. All circuits shall be rated to carry 125% of their maximum load. All electrical wiring will be run in grease, oil, heat, and moisture resistant looming. Harnesses will be fastened with vinyl-clad clamps and grommeted at any area they contact a metal edge.

Every load carrying wire will be a minimum of 14-gauge and will be color-coded and heat embossed with its function every 6 inches. There will be at least a 6-inch service loop of wire at the point of attachment to each component. All electrical connections will be machine crimped; the use of Scotch-locks is strictly prohibited.

## **GROUNDING SYSTEM**

Due to the fact that most electrical problems in all 12-volt systems, but especially in emergency vehicles are due to problems with bad grounds, the body will be grounded to the chassis frame with 2 heavy duty braided grounding straps. In addition, there will be grounding straps from the engine block to the body and frame. There is to be a Major Ground Buss Bar in the electrical panel that is connected to the ground straps and frame, and then each individual circuit will have its own ground wire run to that ground buss bar. This will greatly improve the grounding of all circuits in the vehicle and insure less electrical problems.

The Weldon HC NODES shall be ground directly to the chassis batteries to eliminate any interference or possible loss of ground which would result in the shutdown of the entire NODE.

#### **ELECTRICAL SERVICE CABINET**

The electrical service panel will be mounted in the electrical service cabinet above the action area and will be easily accessible by activating a single latch. This cabinet must be solely for the electrical system components with a large enough door opening to perform work on the systems completely without removing them from the cabinet. Located in the electrical service cabinet two (2) 8 gauge terminals, one ignition and battery direct, will be installed for radio and Cradle Point power supply.

## 12V DC OUTLETS and PREWIRES

Four (4) 12VDC, 15-amp lighter-style power point receptacles shall be installed:

- One (1) in the Action Area
- Two (2) in interior module cabinets determined during the pre-construction meeting.
- One (1) in the driver's console forward wall

Three (3) Kussmaul 091-264-023 dual USB A and C switch style shall be installed:

- Two (2) in the driver's console
- One (1) in the Action Area

One (1) 20-amp 12VDC prewires shall be installed:

• One (1) in exterior compartment, Driver side rear

All 12VDC power point receptacles, USB charge ports, 12VDC charging circuits, powered cot shall be powered from a 12VDC auxiliary bus (except for the battery hot prewire in the driver's console). An InPower LVD20-100-SPC540 low voltage disconnect switch shall deliver power to the auxiliary bus only when the supply voltage to the vehicle batteries is at or above 13.0 VDC.

## **110V AC SYSTEM**

There shall be a Kussmaul 20amp Super Auto Eject Shoreline located on the front left corner of the module body for incoming 110-volt power. This receptacle shall be labeled. It shall be wired through one 15-amp circuit breaker. The circuit shall include four (4) 110-volt interior receptacles, one located in the action wall area, one in the ALS area, one located in the telemetry area, and one located in the cab console.

There shall be a Samlex Pure Sine, 1200-watt, 60-amp inverter/charger installed in the vehicle cab behind the passenger seat.

## **EXTERIOR LIGHTING, EMERGENCY**

The unit shall be equipped with a minimum of the following warning lights:

Fifteen (15) Whelen M9 series LED lights as follows:

Six (6) Facing forward

Five (5) Facing rearward - (Two (2) installed rearward top right and left, Two (2) installed rearward mid box right and left, One (1) installed top center rearward) Two (2) Facing right

- Two (2) Facing left
- One (1) Whelen M9 Series clear LED light installed top center forward.
- One (1) Whelen M7 red LED lights mounted in the Front Fenders.
- One (2) Whelen WIONSMR Red/Blue LED in Chrome Housings in the Grill.
- One (1) Whelen WIONSMR Red/Clear LED in Chrome Housings in the Grill Driver side.
- One (1) Whelen WIONSMR Blue/Clear LED in Chrome Housings in the Grill Passenger side.

There shall be a flush mount GTT #794H OptiCom traffic device mounted on the front of the module.

Circuit shall have a dual mode switch. "Primary" shall flash all lights. "Secondary" shall flash top corner lights & amber lights only.

Exact locations will be identified during the pre-construction meeting.

#### SCENE LIGHTS

At minimum the following scene lights shall be required.

Four (4) Whelen M9LCZ scene lights with chrome flange shall be installed - two (2) each on the curbside and streetside of the module in the upper corners, inboard of the flashers. The curbside passage door shall activate the curbside scene lights. The scene lights shall also be controlled by the respective switches on the driver's console.

Two (2) Whelen M9LCZ scene lights with chrome flanges shall be installed over the rear passage

doors. The scene lights shall be activated by the rear passage doors or when the vehicle is placed in reverse. The scene lights shall also be controlled by the "REAR SCENE" switch on the driver's console. Three (3) Whelen Pioneer #PCPSM2C surface mount dual panel combination spot/flood lights with chrome flanges shall be installed, one each on the streetside, curbside, and front of the module. The combination spot/flood lights shall be controlled by individual switches on the driver's console.

## **DOOR SWITCHES**

Magnetic Door Switches shall be installed to activate Door Open, Compartment Open, Dome and Scene Lights.

#### SIREN AND SPEAKERS

Siren shall be a Whelen Dual Amp. Dual Cast Products Siren Speakers shall be mounted outboard in the face of the Chrome Front Bumper, below the Headlights, in cast aluminum housings. This system shall include a HOWLER type low frequency tone siren.

## BACKUP AND MODULAR CAMERA

A camera system will be installed with an OEM in-dash display. This system will be separate from any data recording and only utilized for user safety.

One (1) camera will be located in the interior of the patient module, above the rear doors facing the bulkhead. This camera view will be the default view when the vehicle is not placed in reverse gear.

One (1) camera will be located on the exterior of the module, above the rear doors which will engage automatically when the vehicle is placed in reverse gear or if the driver toggle selects.

#### LIGHTS, PATIENT COMPARTMENT

The ceiling headliner shall contain eight (8) Whelen High - Low intensity LED dome lights. The left and right banks of lights shall be switched separately. In addition, the left bank high mode can be switched from the drivers switch panel and will be activated by opening of the side or rear entry doors. There shall be a timer switch installed in the right wall at the head of the squad bench. The timer switch will allow the left bank of Dome Lights to turn on even when the master switch is in the off position. Location can be determined during the pre-construction meeting.

In addition, a 10" LED light shall be in the action area.

There shall be Stop and Turn indicators over the rear doors.

#### CLOCK, PATIENT COMPARTMENT

A battery-powered Atomic Digital Clock w/Indoor Temp. & Date. 12/24 Hour display, Automatic updates for time (including DST), month, day, date Calendar.

#### **SUCTION - ON BOARD**

An SSCOR/Board On-Board suction system with an Impact E-12 Suction Pump shall be provided and mounted on the back wall above the action area countertop just forward of the CPR Seat.

## VENTILATION

A 138-CFM exhaust fan shall be mounted near the ceiling in the left rear of the patient compartment and shall be activated by a switch on the action wall.

#### LOW VOLTAGE ALARM

A Low Voltage Alarm shall sound when the voltage drops below 11.8 volts for more than 120 seconds.

#### CAB CONSOLE

The cab shall be equipped with an angled front, form-fitted control console located between the front driver's and officer's seats. This console shall be sized to accommodate the installation of a switch panel for the control of the emergency and general illumination lighting, siren controller, and customer-mounted radios. The switch panel shall consist of a fourteen (14) switch configuration with lighted switches. The switch module shall have back-lit identification plates on a non-glare panel surface. The switch panel shall be illuminated whenever the master switch is in the "ON" position. The cab console shall be fabricated from steel, and powder coated with a black finish.

The following controls and switches shall be positioned from forward to rear on the center console as follows:

- One (1) faceplate for customer specified radio
- An Innovative Products, Inc. Magnetic Mic base for each of the department's radios
- One (1) microphone hanger for the electronic siren microphone
- One (1) switch panel with fourteen (14) switches
- One (1) electronic siren controller
- Two (2) cup holders
- Two (2) adjustable arm rests
- Two (2) 12-volt aftermarket power outlets
- Four (4) 12-volt USB outlets
- One (1) storage compartment for 3 boxes of medical Gloves and map books

The specific console layout shall be discussed/determined during the pre-work conference and a drawing of the layout shall be provided to the department for approval.

Suggested switch configuration and labeling:

- 1. Module Disc.
- 2. Emerg. Master
- 3. Pri/Sec
- 4. Backup Disable
- 5. Left Scene
- 6. Right Scene
- 7. Rear Scene
- 8. Left Flood
- 9. Right Flood
- 10. Forward Flood
- 11. Ground Lights
- 12. Dome
- 13. Module Camera
- 14. Howler

#### SWITCH CONSOLE, PATIENT COMPARTMENT

The following switches shall be in the rear control panel, which shall be hinged for easy access to components. They shall be mounted in a row at an angle facing the center of the cot and the squad bench. Exact locations and labels will be determined during the pre-construction meeting:

Right Dome (Hi-Lo) / Left Dome (Hi-Lo) / Vent/ O2 Light / Attendant Light/ Cabinet Lights/Elec.O2

#### **ANTENNA LEADS AND BASES**

One (1) antenna mount with coaxial cable shall be supplied and installed on the chassis cab roof. The components shall consist of a brass <sup>3</sup>/<sub>4</sub>- inch New Motorola (NMO) style Antenna Mount and Double Shielded Coaxial Cable soldiered to the base. The coaxial cable shall terminate in the module electrical cabinet and have a minimum of 4-feet of additional cable. The cable shall be routed from the chassis/cab headliner to the module in a concealed manner. All cables shall be labeled as to where they are installed on the roof. A protective rain cap shall be installed for delivery.

One (1) Communication Antenna mount for a CradlePoint MiMo Sharkfin LTE/Wifi/GPS antenna will be installed on the chasses cab roof. The cable shall terminate in the module electrical cabinet and have a minimum of 4-feet of additional cable.

#### WIRING FOR RADIO INSTALLATION

The chassis cab interior shall be wired with one (1) wiring bundle for a Motorola 6500 mobile radio. The bundle shall be separate from each other and terminate in Deutsch brand connectors. The antenna wire shall remain separate from the connector. A pigtail shall be included for each bundle for connecting the agency radio into the wiring harness. Each bundle including antenna wires shall be labeled RADIO 1 In addition, the individual wires in each pigtail shall be labeled (Battery Power, Ground, PA Input, etc.). The pig tails and antenna wires shall be a minimum of 3 feet or as long as required for installation of the radios. All connections shall be made to the battery. Blade style fuse holders, using the same size fuses as the chassis, shall be installed in the pigtails for constant power, but no fuses shall be installed. The location for the radio installation and radio wiring bundles shall be determined in conjunction with the NFEP.

#### FLOOR, PATIENT COMPARTMENT

The subfloor shall be Genome (#TFM2702) Altro Transflor Meta Slip-Retardant Sheet flooring providing durability, ease of maintenance and stain resistance. It shall contain a high concentration of microscopic aluminum oxide particles and colored quartz crystals suspended throughout the thickness with silicon carbide grains in the entire wear surface for slip-retardant performance. It shall have an overall thickness of 0.11" nominal. Flooring shall be manufactured for Wear Resistance to meet ASTM C 501, indentation resistance in accordance with ASTM F 1303 and ASTM F 970, Grade 1 standards, shall meet ASTM D 2047 Slip Retardant, ASTM F 970 Static Load, ASTM E648, CMVSS, FMVSS 302, CAN ULC S102.2 Fire Data Tests.

Floor covering material shall be seamless and coved up the side walls a minimum of 5" as a seal.

#### SQUAD BENCH

The squad bench base shall be constructed of .075" gauge stainless steel for strength and ruggedness. The lid shall be split into two sections. Each lid will have a gas strut hold open device and paddle style latches. The interior shall be lined with white Wilsonart laminate.

- There shall be a cabinet over the squad bench with flip up Lexan doors.
- There shall be three (3) glove holder storage over the curbside door.
- There shall be a Cargo Net at the head of the squad bench.
- There shall be a small IV supply storage along the squad bench.

#### SEAT, EMT / ATTENDANT

An attendant seat shall be located at the head of the primary cot. It shall be a high back deluxe seamless vinyl captain's chair with child seat mounted on a base as approved by the seat manufacturer with a 3-point seat belt for attendant safety.

#### SEAT, CPR

A sidewall seat will be mounted in the center of the left wall with lift up seat for storage below. This seat will be comprised of three molded/contoured seamless vacuum formed vinyl cushions. A seat belt shall be provided for attendant safety. Cushions shall be vacuum-formed seamless. One-inch cushions shall be installed on three sides of Head area.

#### **UPHOLSTERY**

All door panels, seat cushions, and protective pads shall be constructed of fire-retardant foam, covered with minimum 40-ounce vinyl. All seat and back cushions in the patient compartment shall be vacuum-formed seamless.

#### **HEADLINER**

The headliner shall be constructed of padded white vinyl in three sections, with the center section being removable to gain access to wiring.

#### I.V. HOLDERS

There shall be two recessed, swing-up dual I.V. bag holders mounted in patient compartment headliner.

#### PANELING, INTERIOR

Exposed surfaces shall be mar, dent, and scratch resistant. Walls shall be covered with high pressure Wilsonart laminate material.

#### **GRAB RAIL, OVERHEAD**

A full-length stainless-steel handicap style 1 1/2" diameter grab rail shall be installed on patient This rail shall be capable of supporting a minimum of 300 pounds. This Rail shall be treated with Agion Anti-Bacterial Coating.

#### **GRAB HANDLES, DOORS**

All entry doors will have a matching heavy-duty stainless-steel handicap style 1 1/2" "V" bar grab handle that will be securely mounted slightly below the window. These Bars shall be treated with Agion Anti-Bacterial Coating.

#### **STAINLESS STEEL WALL**

The lower left aisle wall shall be .060 stainless steel at minimum from action shelf down to the floor.

#### COT MOUNT

A customer-supplied Stryker Power-LOAD #6390 cot fastener system shall be installed by the vendor. The Power-LOAD anchor assembly shall be installed to position the aft end of the cot 11" forward of the rear doors. To allow use of non-Power-LOAD, X-frame cots with the Power-LOAD system, a floor plate with plastic cover shall be provided and installed for mounting a vendor provided Stryker mass casualty rear rail clamp, which shall be shipped loose (Section 8.01 related). A vedor provided safety hook shall be installed in the Power-LOAD floor plate.

#### **INSULATION**

The entire patient compartment, walls, and ceiling shall be blanketed with two layers of reflectix insulation. In between the two layers of reflectix insulation shall be a 2" polystyrene insulation to provide exceptional insulation and sound deadening qualities. To make certain the insulation stays in place, all insulation in the vertical walls is to be glued in place. Alternate insulations methods based on vendor specifications will be entertained.

All exterior compartment and patient compartment entry doors shall be insulated with a single layer of R-14.5 reflectix insulation. Additionally, there shall be a single layer of 2" polystyrene insulation installed in each door.

Alternate insulations methods based on vendor specifications will be entertained.

#### **CLIMATE CONTROL**

Rear climate control shall be bulkhead mounted in the center of the bulkhead cabinet to shorten refrigerant and anti-freeze hoses and eliminate vertical circulation. Condensation from high humid conditions shall drain directly through the floor. Air intake shall be at floor level; output shall be at ceiling level with return air at floor level for increased airflow. Return air shall be filtered. The unit shall have a minimum of 40,000 BTU cooling capacity and a 35,000 BTU heating capacity. The blower motor shall have permanent magnets and be capable of delivering 630 CFM of airflow. It must be removable without removing the entire heat/cool unit and without disconnection of any coolant lines.

A thermostat shall control both heating and cooling with 3-speed manual fan control. The thermostat shall be located on the action wall.

#### **SHARPS and TRASH CONTAINER**

Sharps and trash containers shall be located and recessed in the forward section of the squad bench.

#### **OXYGEN OUTLETS**

The entire oxygen system to be assembled with certified oxygen hose (1000 PSI burst strength) with brass fittings, pressure tested, and certified. The electric oxygen system shall be controlled through an electric solenoid with manual bypass, have an LED content display, and audible low pressure alarm. A 50 PSI regulator shall be included, and one oxygen tank wrench shall be

attached to the Compartment #1 wall with hook-and-loop tape. Three Ohio-type outlets shall be installed: – Two (2) in Action Area – One (1) above the light switch timer on the street side wall. switch labeled "ELECT. 02" shall be installed in the Action Area attendant panel to turn on/off the electric oxygen system

## **MODULE INTERIOR CABINETS**

Shall be securely welded or mounted to the structural framing. All interior adjustable shelves shall be mounted on 1" wide aluminum track with select cabinets having tip-out hardware for ease of cleaning and equipment stocking. All cabinet dimensions are approximant for reference with final size determination during the pre-construction meeting.

#### CABINET #1

Dimensions – 8"W x 8"H x 20"D Location – Streetside, upper forward Door(s) – Forward-hinged, painted aluminum, with Simplex type lock Lighting – None Additional Instructions – This cabinet shall provide locking Medicine storage with manual button combination lock.

#### CABINET #2

Dimensions - 43"W x 14.5"H x 15.75"D

Location – Streetside, upper forward

Shelving – Two adjustable shelves, one fore and aft of divider

Door(s) – Sliding clear 0.25" polycarbonate with felt-lined anodized aluminum track,

interlocking aluminum trim, and full extruded aluminum door pulls with integral door latch. Tip-out hardware for ease of access.

Lighting – LED under-cabinet strip light; Two in-cabinet vertical Blue LED strip lights Additional Instructions –This cabinet shall be divided in the center by a vertical fixed divider.

## CABINET #3

Dimensions – 43"W x 14.5"H x 15.75"D

Location – Streetside, upper aft

Shelving – One adjustable

Door(s) – Sliding clear 0.25" polycarbonate with felt-lined anodized aluminum track,

interlocking aluminum trim, and full extruded aluminum door pulls with integral door latch. Tipout hardware for ease of access.

Lighting – Two in-cabinet Blue LED strip lights.

Additional Instructions – A fluid warmer with a 4" surround, and 120VAC GFCI duplex receptacle shall be installed in the lower forward section of this cabinet.

## CABINET #4

Dimensions – 25.5"W x 14.5"H x 20"D Location – Streetside, upper aft Shelving – One adjustable Door(s) – Sliding clear 0.25" polycarbonate with felt-lined anodized aluminum track, interlocking aluminum trim, and full extruded aluminum door pulls with integral door latch. Tipout hardware for ease of access. Lighting – Two in-cabinet Blue LED strip lights (Section 6.13X, and 6.14X related) Additional Instructions – None

## CABINET #5

Dimensions – 25.5"W x 14.5"H x 20"D Location – Streetside, aft Shelving – One adjustable Door(s) – Sliding clear 0.25" polycarbonate with felt-lined anodized aluminum track, interlocking aluminum trim, and full extruded aluminum door pulls with integral door latch. Tip-out hardware for ease of access. Lighting – Two in-cabinet Blue LED strip lights. Additional Instructions – None

## CABINET #6 - Action Area

Dimensions - 31.75"W x 30.625"H x 20"D

Location – Streetside

Additional Instructions –

1. The following items shall be installed on the back wall:

- a. An O2 LED content display with Manual Bypass
- b. Two oxygen outlets
- c. SSCOR suction regulator with wall-mount collector bracket
- d. Digital thermostat
- e. Eight Switch Attendant Panel
- f. 120VAC GFCI duplex receptacle
- g. 12VDC receptacle
- h. Dual Kussmaul 091-264-023 USB-A and USB-Charging port
- i. Inverter status panel

2. A Wilsonart "Northern Melange" 9195MLA speckled gray acrylic full depth solid surface countertop with a 0.5" retaining lip and a 2"H backsplash shall be installed.

## CABINET #7

Dimensions – 12"W x 24.125"H x 10"D Location – Streetside, forward in Action Area Shelving – One adjustable Door(s) – Aft-hinged clear 0.25" polycarbonate with a SouthCo M1 non-locking flush pull latch and full extruded aluminum door pulls Lighting – Two in-cabinet Blue LED strip lights Additional Instructions – None

## CABINET #8

Dimensions – 25.5"W x 14.5"H x 20"D Location – Streetside, aft Shelving – One adjustable Door(s) – Sliding clear 0.25" polycarbonate with felt-lined anodized aluminum track, interlocking aluminum trim, and full extruded aluminum door pulls with integral door latch. Lighting – Two in-cabinet Blue LED strip lights Additional Instructions – None

CABINET #9 (This cabinet may be deleted if possible to increase the height of Exterior Compartment #3) Dimensions – 25.5"W x 14.5"H x 20"D Location – Streetside, aft Shelving – One adjustable Door(s) – Sliding clear 0.25" polycarbonate with felt-lined anodized aluminum track, interlocking aluminum trim, and full extruded aluminum door pulls with integral door latch. Lighting – Two in-cabinet Blue LED strip lights Additional Instructions – None

## CABINET #10 – TIP-OUT STORAGE

Dimensions – 21.375"W x 15.5"H x 20"D Location – Streetside, lower aft Shelving – None Door(s) – Tip-out bottom-hinged painted aluminum door with a Southco C2 latch and nylon travel stop strap Lighting – None Additional Instructions – None

#### CABINET #11 – CPR Seat

Dimensions – Bench: 26"W x 18.75"H x 20"D Storage: 26"W x 7.625"H x 20"D Location – Streetside Door(s) – Hinged bench lid, with high-density foam padding covered with seamless vinyl shall provide access to the storage area. Lid shall have a 1.5" overhang, and one automatic hold-open device. The pad shall be removable. Additional Instructions –

1. The CPR seat back and/or head pads shall have high density foam padding covered with seamless vinyl.

2. The seat base shall be formed from securely anchored to subfloor. The bottom and sides of the storage area shall be sprayed with textured gray polyurea thermoplastic elastomer and painted white with gray splatter.

3. One four-point single-buckle energy-absorbing seatbelt with below-the-bench retractors shall be installed on the seat.

#### CABINET #12

Door Dimensions – 11"W x 25"H x 20" D

Location – Curbside, Aisle facing wall

Door(s) – Forward-hinged clear 0.25" polycarbonate with a twist/slam latch and full extruded aluminum door pulls.

Lighting – See Exterior Compartment #4

Additional Instructions –

1. This cabinet shall share inside/outside access with Exterior Compartment #4.

#### **REAR WHEEL WELL TRIM**

The rear wheel wells shall be trimmed with polished Stainless Steel Fenderettes that shall be attached to the body with stainless steel fasteners. There shall be a gasket placed between the aluminum body and the stainless steel fenderette for isolation of the dissimilar metals.

#### RUB RAILS

Bright finished extruded aluminum rub rails of a C-channel design shall be installed along the lower streetside and curbside edges of the module. 0.25" thick aluminum rub rails which are 2.5"H x 2"D shall be installed, with a 1"H red/white conspicuity reflective tape installed in the insert area. Six Whelen Strip-Lite Duo Red/Blue #PSJ02FCR Flashers with Chrome Flanges shall be installed in the rub rails, both streetside and curbside, two forward of the wheel well and one aft of the wheel

#### BUMPER, REAR STEP

The rear step assembly shall be constructed of  $1 \frac{3}{4}$ " X 1 3/4" tubular steel frame bolted to the chassis frame. The center section shall be non-skid grip strut aluminum and shall "Flip-Up" to allow adequate clearance of the Cot Wheels while Cot is being loaded. The ends shall be constructed of diamond plate end caps with 18" X 4" X 4" heavy-duty rubber dock bumpers.

#### **REAR LICENSE PLATE**

A recessed license plate holder with dual incandescent lights shall be installed in the rear kick panel, centered below rear doors. A hidden unlock switch and two spacers shall be installed behind the license plate.

#### **DOORSTEP, SIDE**

The side doorstep shall be formed of aluminum diamond tread and shall be flush sweep out style. Antiskid tape, 2 inches wide, is to be laid the full width of the step just inside the entry door. Additionally, there shall be a formed 3-inch, full-width stainless steel floor protection strip installed over the flooring at the top of the step. An LED step well light is to be installed on the forward vertical wall of the step well with the wiring to be pulled through the backside of the step well. The Lower Side of the step well shall be covered with Hush Mat to reduce road noise.

#### **STONE SHIELDS**

Diamond plate stone shields shall be installed on the front edge of the module body directly behind the cab at skirt level. These shields shall extend up the front of the box approximately 16 inches.

#### **EXTERIOR COMPARTMENT CONFIGURATION**

NOTE: The body compartment and cabinet layout should closely match the District's current fleet. Exact dimensions will be based on module configurations agreeable during the pre-construction meeting. Current ambulance fleet Information is available upon request.

All exterior compartments will have

Install Dri-Deck or similar product in all exterior Compartments.

#### **#1 OXYGEN / BACKBOARD COMPARTMENT**

The left front (street side) exterior compartment #1 shall have a welded bracket, painted to match the compartment, and three ratcheting straps with UHMW stiffeners set up for storage of a customer-supplied-and installed H or M-size cylinder.

There shall be an interior access door to allow the attendant to turn the oxygen tank valve on/off from the patient compartment. A separate O2 compartment light shall be provided for the purpose of viewing the tank O2 gauge and be switched on/off from the action panel.

This compartment shall have an aluminum divider located between the O2 tank and the storage side of the compartment. Two (2) shelves are to be installed from the divider to the compartment aft wall above the O2 bottle.

On the forward wall of the compartment, there shall be a removable panel approximately 8"square in size located opposite of the shoreline plug. This panel, when removed, provides access to the shoreline plug when service or replacement is required.

## **#2 GENERAL STORAGE COMPARTMENT**

This compartment shall be located street side between the #1 compartment and the left side drive wheels and is to be used for general storage. There is to be a double door on this compartment.

There shall one (1) full width, full depth aluminum "pan" style storage shelf installed in the compartment. The shelf is to be mounted on two (2) sets of infinitely adjustable uni-strut tracks at each end of the shelf with rubber matting covering the top side of the shelf.

## **#3 GENERAL STORAGE COMPARTMENT**

The left rear street side exterior compartment shall be for general storage. There shall be one (1) adjustable shelf in this compartment. The shelf is to be full depth. There is to be a double door for this compartment. This compartment shall have a 12 Volt 20 amp and ground coiled in the lower portion. Wired Ignition and Shoreline Hot.

## #4 BACKBOARD STORAGE COMPARTMENT

The right rear curbside exterior compartment is to be located at the right rear corner of the body. This compartment is to provide exterior storage for Backboards. This compartment shall have an aluminum vertical divider located in the center. With one shelf that is accessible from the inside/out.

A slide-out tool board with 20" slides, grab flange, gas shock, bracket and strap shall be installed by the vendor in Compartment #4 for storage of a customer-supplied-and-installed Stryker stair chair.

## **#5 GENERAL STORAGE COMPARTMENT**

This compartment is to provide exterior storage for miscellaneous equipment under the rear portion of the squad bench.

There shall be a full width, full depth aluminum "pan" style storage shelf installed in the compartment. The shelf is to be mounted on two (2) sets of infinitely adjustable uni-strut tracks

at each end of the shelf with rubber matting covering the topside of the shelf.

#### **#6 ALS IN/OUT ACCESS**

There shall be a single full-length door located at the right front (curbside) allowing for In/Out access to the ALS interior cabinet.

#### DECALS, NO SMOKING & OXYGEN EQUIPPED

There shall be two NO SMOKING and two OXYGEN EQUIPPED signs, one each in the cab and one each in the patient compartment.

#### WIRING SCHEMATIC

There shall be a complete **SPECIFIC** wiring schematic showing all circuits, including optional equipment included in the owner's manual.

#### **APPARATUS FINISH**

#### **Apparatus Body Color**

The color of the apparatus body shall match the color of the chassis cab exterior. The chassis cab shall not be repainted.

#### **Apparatus Body Finish**

The exterior finish of the apparatus body shall gel coated to match the chassis cab. All aluminum and stainless steel shall remain unpainted. Any unpainted steel used in the fabrication of the mounting system shall be prepared for painting following the paint manufacturers recommendations for the preparation of the surface. Paint for all steel parts shall be gloss black acrylic automotive grade enamel.

The color of the chassis cab exterior and body shall be **Oxford White (Z1).** 

#### **Graphics/Striping**

The unit will have chevroned styled striping places on the rear of the module excluding the double doors.

The apparatus shall be decaled by Frederick-Firestone Fire Protection District independent of this apparatus contract.

#### **CUSTOMER PICK UP**

The completed apparatus shall be delivered from the apparatus manufacturer facility to the District. Prior to final approval the contract will include travel, meals, and boarding expenses for three (3) district representatives to attend at least a final inspection of the finished product at the manufacturer's facility. If the apparatus manufacturer recommends a mid-project facility visit, that should be included in the contract as well.

#### THIS COMPLETES THE TECHNICAL SPECIFICATIONS FOR THE TYPE III AMBULANCE.

## **SECTION E - CONTRACT AND COMPENSATION**

A written contract agreement will be required between the District and the selected vendor, which will be in the form and substance required by the District. The contract shall contain a Guaranteed Maximum Price (GMP) for the total cost; the final GMP set forth in the contract agreement may be different from the good faith estimated GMP set forth in the vendor's original proposal and quote based on the concept plans and alternatives developed by the vendor and the District.

The contract shall include insurance requirements for both general liability and errors and omissions. The contract shall include certification concerning employment of undocumented immigrants. The contract will designate the selected vendor as the Warranty Administrator, which shall be responsible for coordinating and processing any and all warranty claims and work that apply to the labor performed and materials installed on the project. Prior to execution of the contract, the selected vendor shall provide evidence of licensure and good standing for team members where applicable.

If the parties have not signed a professional services agreement acceptable to the District within thirty (30) days of the District notifying the selected vendor, the District may, in its sole discretion, select a different vendor or terminate the RFP process.

#### **SECTION F - EVALUATION CRITERIA**

The District will screen all the proposals. Evaluation criteria for proposals shall include the following factors:

- 1. Adherence to the District's specifications and bid documents.
- 2. Strength of qualifications of the vendor.
- 3. Strength of recent, relevant Type III builds and projects.
- 4. Longevity and durability of products built by the vendor in the past.
- 5. Customer service during bid process, build and after from reference checks.
- 6. Good faith estimated Guaranteed Maximum Price for the total project.

The District is not obligated to accept the lowest cost proposal. The District is not obligated to accept any proposal and will make its determination based on the best interests and mission of the District. The District retains the right to abandon or terminate the RFP process at its discretion at any time for any reason.

## VENDOR CONTACT INFORMATION PAGE

Name of Company			FEIN	
Street Address	Mailing Address / P.O. Box			
City		State	Zip Code	
Phone	Fax			
Project Representative		Title		
E-mail Address				
Alternate Project Representative		Tit	le	
E-mail Address				
Authorized Signature		Date		