FREDERICK-FIRESTONE FIRE PROTECTION DISTRICT

RFP 2019-002 Tender Truck

8426 Kosmerl Place, Frederick, Colorado 80504
Office: 303-833-2742
www.fffd.us
April 2019

FREDERICK-FIRESTONE FIRE PROTECTION DISTRICT

Office of the Fire Chief
Office: (303) 833-2742
Fax: (303) 833-3736
E-Mail: jyoung@fffd.us

April 8, 2019

Dear Potential Bidder,

You are invited to submit a proposal or bid for the purchase of a 2019 2000-gallon 4x4 Tender Truck as requested by the Frederick-Firestone Fire Protection District and is identified in the below product technical specifications. This is not an order notice by Frederick-Firestone Fire Protection District.

Sealed bids must be received by Frederick-Firestone Fire Protection District no later than Tuesday, April 30, 2019 at 9:00 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 2019-002 Tender Truck'***. Please provide two (2) hard copies and one (1) digital copy of your proposal for committee review.

The Frederick-Firestone Fire Business and Education Center is located at 8426 Kosmerl Place, Frederick, Colorado 80504. Bids will not be received in any office or department, including Fire Stations, but that of the Business and Education Center, and bids sent via facsimile will not be accepted. Incomplete bids will also be rejected. Bids will be opened at 9:00 a.m. on Tuesday, April 30, 2019.

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 **Captain Josh Plank via jplank@fffd.us**

Sincerely,

Jeremy A. Young, EFO, CFO
Fire Chief

FREDERICK-FIRESTONE FIRE PROTECTION DISTRICT

Request for Proposals
Tender Truck
RFP #2019-002

Request for proposals of a Tender Truck for Frederick-Firestone Fire Protection District

The Frederick-Firestone Fire Protection District (District) is soliciting written proposals and quotes for a new Tender Truck. We are requesting completion of project by Fall of 2019. 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 any 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 9:00 am MDT on Tuesday, April 30, 2018 to:**

Frederick-Firestone Fire Protection District
Attn: Tender Truck Committee
8426 Kosmerl Place
Frederick, Colorado 80504

The bid opening process will commence on Tuesday, April 30, 2019 at 9:00 am at the Frederick-Firestone Fire Protection District's Business and Education Center located at 8426 Kosmerl Place in Frederick, Colorado 80504. If you are planning on attending the bid opening process, please respond by calling 303-833-2742 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 Captain Josh Plank via jplank@fffd.us

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 two (2) hard copies 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 90-days after the closing date.

SECTION A - BACKGROUND INFORMATION

The District currently provides fire suppression, community risk reduction, emergency medical care and transport, and administrative services from four (4) fire stations and one (1) administrative building. The District serves a 34-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 owns and operates one 3000-gallon Tender Truck. This RFP process is being conducted to replace this unit.

SECTION B - SCHEDULE FOR PROJECT SERVICES

- April 8 — RFP is released
- April 8 – 26 — Vendor Questions and Answers
- April 30 — Bids Due and Bid Opening at 9:00 am
- April 30 – May 10 — Bid Compliance Evaluation
- May 14 — Successful vendor selected & notified

SECTION C - PROPOSAL SUBMITAL – TECHNICAL SPECIFICATIONS

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

Pre-Work 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

Delivery of the finished apparatus shall occur 270 days from the receipt of order.

Tender Truck Configuration

The apparatus shall be a 2000-gallon water tender/tanker apparatus on a 4x4 heavy duty chassis. The body shall be highway ready as well as designed to withstand the rigors of off-road use and wildland urban interface situations. Specific details of the apparatus shall be as described below.

Chassis

BASE CHASSIS: Model HV507 SFA with 195.00 Wheelbase, 120.00 CA, and 75.00 Axle to Frame.

TOW HOOK, FRONT (2): Frame Mounted

AXLE CONFIGURATION: (Navistar) 4x4

FRAME RAILS: Heat Treated Alloy Steel (120,000 PSI Yield); 10.866" x 3.622" x 0.433" (276.0mm x 92.0mm x 11.1mm); 456.0" (11582mm) Maximum OAL

BUMPER, FRONT: Swept Back, Aluminum, Stainless Steel Clad, Heavy Duty

FRAME EXTENSION, FRONT: Integral, 20" In Front of Grille

WHEELBASE RANGE 181" (460cm): Through and Including 205" (520cm)

Chassis (cont.)

AXLE, FRONT DRIVING (Meritor MX-16-120): Single Reduction, 16,000-lb Capacity, with Hub Piloted Wheel Mounting

AXLE, FRONT DRIVING, LUBE (EmGard FE-75W-90): Synthetic Oil; 1 thru 29.99 Pints

SUSPENSION, FRONT, SPRING: Parabolic Taper Leaf, Shackle Type, 16,000-lb Capacity, with Shock Absorbers

BRAKE SYSTEM: AIR Dual System for Straight Truck Applications
Includes:

- BRAKE LINES: Color and Size Coded Nylon
- DRAIN VALVE: Twist-Type
- GAUGE, AIR PRESSURE (2): Air 1 and Air 2 Gauges; Located in Instrument Cluster
- PARKING BRAKE CONTROL: Yellow Knob, Located on Instrument Panel
- QUICK RELEASE VALVE: On Rear Axle for Spring Brake Release: 1 for4x2, 2for 6x4
- SLACK ADJUSTERS, FRONT: Automatic (with Air Cam Brakes)
- SLACK ADJUSTERS, REAR: Automatic (with Air Cam Brakes)
- SPRING BRAKE MODULATOR VALVE: R-7 for 4x2, SR-7 with relay valve for 6x4/8x6

BRAKES, FRONT: AIR CAM 16.5" x 6", Includes 24 Sqln Long Stroke Brake Chambers

DRAIN VALVE: (Berg) with Pull Chain, for Air Tank

BRAKE SHOES, REAR: Cast

AIR BRAKE ABS: (Bendix Antilock Brake System) Full Vehicle Wheel Control System (4-Channel)

AIR DRYER: {Bendix AO-IP} with Heater

BRAKE CHAMBERS. SPRING: Rotated Forward and Up for Maximum Ground Clearance with 4x4

BRAKE CHAMBERS, FRONT AXLE: (MGM) 24 Sqln

BRAKE CHAMBERS, REAR AXLE: (Bendix EverSure) 30/30 Spring Brake

SLACK ADJUSTERS, FRONT: (Haldex) Automatic

SLACK ADJUSTERS, REAR (Haldex) Automatic

BRAKES, REAR, AIR CAMS-Cam: 16.5" x 7.0"; Includes 30/30 Sq.In. Long Stroke Brake Chamber and Spring Actuated Parking Brake

AIR COMPRESSOR (Cummins) 18.7 CFM

AIR DRYER LOCATION: Mounted Inside Left Rail, Behind Transfer Case Mounting

AIR TANK LOCATION (2): One Mounted Under Each Frame Rail, Front of Rear Suspension, Parallel to Rail

STEERING COLUMN: Stationary

STEERING WHEEL: 4-Spoke; 18" Dia., Black

Chassis (cont.)

STEERING GEAR: (Sheppard M11O) Power

DRIVESHAFT: (Dana Spicer) SPL170XL Series in lieu of SPL140

AFTERTREATMENT COVER: Steel, Black

EXHAUST SYSTEM: Single, Horizontal Aftertreatment Device, Frame Mounted Right Side, Under Cab, for Single Horizontal Tail Pipe, Frame Mounted Right Side Back of Cab, for All-Wheel Drive

ENGINE EXHAUST BRAKE: for Cummins ISB/B6.7/ISUL9 Engine with Variable Vane Turbo Charger

ELECTRICAL SYSTEM 12-Volt: Standard Equipment

Includes:

- DATA LINK CONNECTOR: For Vehicle Programming and Diagnostics In Cab
- HAZARD SWITCH: Push On/Push Off, Located on Instrument Panel to Right of Steering Wheel
- HEADLIGHT DIMMER SWITCH: Integral with Tum Signal Lever
- PARKING LIGHT: Integral with Front Turn Signal and Rear Tait Light
- STARTER SWITCH: Electric, Key Operated
- STOP, TURN, TAIL & B/U LIGHTS: Dual, Rear, Combination with Reflector
- TURN SIGNAL SWITCH: Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change Feature
- WINDSHIELD WIPER SWITCH: 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with Tum Signal Lever
- WINDSHIELD WIPERS: Single Motor, Electric, Cowl Mounted
- WIRING, CHASSIS: Color Coded and Continuously Numbered
- HORN, ELECTRIC (2): Disc Style

ALTERNATOR: (Leece-Neville AVl160P2003) Brush Type; 12 Volt 240 Amp. Capacity, Pad Mount, with Remote Sense

BODY BUILDER WIRING: Back of Day Cab at Left Frame or Under Sleeper, Extended or Crew Cab at Left Frame; Includes Sealed Connectors for Tail/Amber Tum/Marker/ Backup/Accessory Power/Ground and Sealed Connector for Stop/Tum

BATTERY SYSTEM: (Fleetrite) Maintenance-Free, (3) 12-Volt 1980CCA Total, Top Threaded Stud

RADIO: AM/FM/WB/Clock/3.5MM Auxiliary Input

SPEAKERS {2): 6.5" Dual Cone Mounted in Doors BACK-UP ALARM Electric, 102 dBA

DATA RECORDER: Includes Display Mounted in Overhead Console

CLEARANCE/MARKER LIGHTS (5): (Truck Lite) Amber LED lights, Flush Mounted on Cab or Sunshade

STARTING MOTOR: (Delco Remy 38MT Type 300) 12 Volt; less Thermal Over-Crank Protection

INDICATOR, LOW COOLANT LEVEL: with Audible Alarm

Chassis (cont.)

INDICATOR, BATTERY WARNING: Green BATIERY ON Indicator, Mounted on Left Side of Instrument Panel, to be Used with Factory Installed or Customer Mounted Battery Disconnect Switch

CIRCUIT BREAKERS: Manual-Reset (Main Panel) SAE Type Ill with Trip Indicators, Replaces All Fuses BAITERY BOX Steel, With Aluminum Cover, 14" Wide, 2-3 Battery Capacity, Mounted Left Side Under Cab TURN SIGNALS, FRONT Includes LED Side Turn Lights Mounted on Fender

HORN, AIR: Black, Single Trumpet, with Lanyard Pull Cord

BATTERY DISCONNECT SWITCH: for Cab Power Disconnect Switch; Cab Mounted, Disconnects Power to Power Distribution Center (PDC) and Body Builder Through Solenoid, Does Not Disconnect Charging Circuits; Locks with Padlock

SWITCH, AIR HORN, PASSENGER: Fire Truck Application; Momentary Switch Located in Instrument Panel Close to Passenger, Driver Also to Activate Switch with Lanyard

FENDER EXTENSIONS: Rubber

LOGOS EXTERIOR: Model Badges

LOGOS EXTERIOR, ENGINE: Badges

GRILLE: Stationary, Chrome

FRONT END: Tilting, Fiberglass, with Three Piece Construction; for WorkStar/HV

GRILLE EMBER SCREEN: Mounted to Grille and Cowl Tray to Keep Hot Embers out of Engine and HVAC Air Intake System

PAINT SCHEMATIC, PT-1 Single Color, Design 100

Includes:

- PAINT SCHEMATIC 10 LETTERS: "WK"
- PAINT TYPE: Base Coat/Clear Coat, 1-2 Tone
- Paint color: White

CLUTCH: Omit Item (Clutch & Control)

ANTI-FREEZE: Red, Extended Life Coolant; To -40 Degrees F/ -40 Degrees C, Freeze Protection

ENGINE, DIESEL: (Cummins L9 350) EPA 2017, 350HP@ 2000 RPM, 1000 lb-ft Torque@ 1400 RPM, 2200 RPM Governed Speed, 350 Peak HP (Max)

FAN DRIVE: (Horton Drivemaster) Direct Drive Type, Two Speed with Residual Torque Device for Disengaged Fan Speed

Includes:

- FAN: Nylon

Chassis (cont.)

RADIATOR: Cross Flow, Series System; 1228 Sqln Aluminum Radiator Core with Internal Water to Oil Transmission Cooler and 1167 In Charge Air Cooler
Includes:

- DEAERATION SYSTEM: with Surge Tank
- HOSE CLAMPS, RADIATOR HOSES: Gates Shrink Band Type; Thermoplastic Coolant Hose Clamps
- RADIATOR HOSES: Premium, Rubber

AIR CLEANER: Single Element

FEDERAL EMISSIONS: (Cummins L9) EPA, OBD and GHG Certified for Calendar Year 2019

THROTTLE, HAND CONTROL: Engine Speed Control; Electronic, Stationary, Variable Speed; Mounted on Steering Wheel

EMISSION COMPLIANCE: Engine Shutdown System Exempt Vehicles, Complies with California Clean Air Regulations

ENGINE CONTROL, REMOTE MOUNTED: Provision for; Includes Wiring for Body Builder Installation of PTO Controls; with Ignition Switch Control for Cummins ISB/B6.7 or ISUL9 Engines

TRANSMISSION, AUTOMATIC: (Allison 3000 EVS) 5th Generation Controls, Close Ratio, 6-Speed with Double Overdrive, with PTO Provision, Less Retarder, Includes Oil Level Sensor

TRANSFER CASE: (Meritor T-4210 2) 2 Spd, 10000 lb-ft Total Capacity, without Provision for PTO, with Electric Over Air Control, with Lube Pump

TRANSFER CASE LUBE: (EmGard SOW) Synthetic; 1 thru 14.99 Pints

OIL COOLER, TRANSFER CASE: Remote Mounted Back of Cab

TRANSMISSION SHIFT CONTROL: for Column Mounted Stalk Shifter

TRANSMISSION OIL: Synthetic; 29 thru 42 Pints

ALLISON SPARE INPUT/OUTPUT: for Emergency Vehicle Series (EVS); Fire/Pumper, Tank, Aerial/Ladder

SHIFT CONTROL PARAMETERS: Allison 3000 or 4000 Series Transmissions, 5th Generation Controls, Performance Programming

PTO LOCATION: Dual, Customer Intends to Install PTO at Left and/or Right Side of Transmission

AXLE, REAR, SINGLE: (Dana Spicer S26-190) Single Reduction, 26,000-lb Capacity, R Wheel Ends, Gear Ratio: 6.14

SUSPENSION, REAR, SINGLE: 31,000-lb Capacity, Vari-Rate Springs, with 4500-lb Capacity Auxiliary Multileaf Springs

FUELWATER SEPARATOR: (Racor 400 Series) with Primer Pump, Includes Water-in-Fuel Sensor

Chassis (cont.)

LOCATION FUEL/WATER SEPARATOR: Mounted Inboard of 5 Gallon DEF Tank, Under Cab

FUEL TANK: Top Draw, Non-Polished Aluminum, 24" Dia, 50 US Gal (189L), Mounted Left Side, Under Cab

DEF TANK: 5 US Gal (19L) Capacity, Frame Mounted Outside Left Rail, Under Cab

CAB: Conventional, Day Cab

AIR CONDITIONER: with Integral Heater & Defroster

GAUGE CLUSTER: Base Level; English with English Speedometer and Tachometer, for Air Brake Chassis, Includes Engine Coolant Temperature, Primary and Secondary Air Pressure, Fuel and DEF Gauges, Oil Pressure Gauge, Includes 3 Inch Monochromatic Text Display

SEATBELT WARNING PREWIRE: Includes Seat Belt Switches and Seat Sensors for all Belted Positions in the Cab and a Harness Routed to the Center of the Dash for the Aftermarket Installation of the Data Recorder and Seatbelt Indicator Systems, for 1 to 3 Seat Belts

GAUGE, OIL TEMP, AUTO TRANS: for Allison Transmission

IP CLUSTER DISPLAY: On Board Diagnostics Display of Fault Codes in Gauge Cluster

SEAT, DRIVER: (National 2000) NFPA Compliant. Air Suspension, High Back with Integral Headrest, Vinyl, Isolator, 1 Chamber Lumbar, 2 Position Front Cushion Adjust, -3 to +14 Degree Back Angle Adjust

GRAB HANDLE (2): Chrome Towel Bar Type with Anti-Slip Rubber Inserts; for Cab Entry, Mounted Left and Right, Each Side at "B" Pillar

SEAT, TWO-MAN PASSENGER: (National) Fixed Back, Integrated Headrest in Both Occupant Positions, Vinyl, with Under Seat Storage Compartment

MIRRORS (2): Aero; Pedestal, Power Adjust, Heated Heads, Tum Signals, Bright Finish Heads, Black Arms, 6.3" x 13.82" Flat Glass, 6.38" x 6.18" Convex Glass Both Sides

SEAT BELT: All Red; 1 to 3

CAB INTERIOR TRIM: Classic, for Day Cab
Includes:

- CONSOLE, OVERHEAD Molded Plastic with Dual Storage Pockets, Retainer Nets and CB Radio Pocket; Located Above Driver and Passenger
- DOME LIGHT, CAB Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Overhead Console, Center Mounted
- SUN VISOR (2) Padded Vinyl; 2 Moveable (Front-to-Side) Primary Visors, Driver Side with Toll Ticket Strap

CAB REAR SUSPENSION Air Bag Type

WINDOW, Electric (2): and Electric Door Locks, Left and Right Doors

INSTRUMENT PANEL: Flat Panel

Chassis (cont.)

ACCESS, CAB: Steel, Driver & Passenger Sides, Two Steps per Door, for use with Day Cab and Extended Cab

WHEELS, FRONT: (Alcoa 82462) DISC; 22.5x12.25 Rims, Polished Aluminum, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs

WHEELS, REAR: (Accuride 29300) DUAL DISC: 22.5x9.00 Rims, Powder Coat Steel, 5-Hand Hole, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs

TIRE, FRONT (2): 3B5/65R22.5 Load Range L HTC1 (CONTINENTAL), 495 rev/mile, 68 MPH, All-Position

TIRE, REAR (4): 315180R22.5 Load Range L CITY SERVICE HA3 (CONTINENTAL), 480 rev/mile, 68 MPH. All-Position

Chassis Services Section

WARRANTY: Standard for HV507, HV60B, HV607 Models, Effective with Vehicles Built July 1, 2017 or Later. CTS-2025A

Chassis Add-On

HORN: Stuttertone Emergency Air Horn on hood.

WHEEL and TIRE TRADE-IN: Trade in stock wheels and tires. New wheels and tires to go on the truck will be 445/65R22.5 Continental HCS tires and ALCOA 22.5 wheels. (4 total)

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.

Apparatus Design and Workmanship

The apparatus design shall allow for regular maintenance and checks of common items (oil drain, oil filter, differential fluids, grease fitting, etc.) without major disassembly. These guards and shields shall be designed to prevent trapping common grasses and other small debris which may ignite.

Reasonable component protection shall be provided as manufacturer deems necessary for operations in extreme environments and conditions for easily damaged electrical components, drive line, cooling system, and/or suspension components. Intent of the shielding is to assist in the protection of the undercarriage components from impact during road less operations and to assist in the survivability of the apparatus. Skid plates and impact protection shall be capable of supporting the weight of the apparatus without complete failure, a degree of distortion is allowed. All exterior surfaces of the skid plates/impact protection shall be coated with a minimum 1-2 mm flat black powder coated finish.

General Wiring Specification

A single Original Equipment Manufacturer (OEM) battery system shall be installed consisting of matching batteries to operate both the chassis and package electrical system. A single Cole Herse on/off switch shall be supplied by the body builder. This switch labeled "BODY MASTER ON" shall mount separately or as a part of the master console. When in the "OFF" position, all electrical power to the apparatus fire package shall be off. The batteries shall be installed in an accessible location.

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. tank and pump) 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. A ground strap shall also be installed from the pump engine to the apparatus body.

Electrical Components and Ratings

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.

Antenna Leads and Bases

One (1) antenna mounts with coaxial cable shall be supplied and installed a minimum of 18.00-inches apart and centered on the chassis cab roof. The components shall consist of a brass ¾-inch New Motorola (NMO) style Antenna Mount and Double Shielded Coaxial Cable soldiered to the base. The coaxial cable shall terminate in the cab console and have a minimum of 4-feet of additional cable. The cable shall be routed from the chassis/cab headliner to the console 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 on each NMO antenna mount. Each cap shall be labeled as to the respective pre-wired set by placing a "#1" or "#2" on the rain cap itself.

Wiring for Radio(s) 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 the 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, overhead shall not be acceptable.

- One (1) Motorola 6500 mobile radio with two (2) David-Clark type headsets
  - Customer provided; builder installed

Loom and Ties

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

Seat Belt Warning

A warning label, stating: "***DANGER- Personnel Must Be Seated and Seat Belts Must Be Fastened While Vehicle Is in Motion or DEATH OR SERIOUS INJURY MAY RESULT***," shall be provided in the apparatus cab interior. This label shall be located so that it is visible from all seating positions.

Vehicle Height Warning

A warning label, listing the overall height, width, length and GVWR of the completed apparatus, shall be provided in the apparatus cab interior. This label shall be located so that it is visible from the driver's seating position.

Final Stage Manufacturer Vehicle Certification

A Final Stage Manufacturer vehicle certification label shall be provided and installed in the apparatus cab driver's door jamb.

Front Bumper Extension

There shall be a 24" front bumper extension provided at the front of the chassis. The front bumper extension shall be covered with .125" NFPA aluminum diamond plate. The front bumper extension shall be heavy duty and reinforced with structural steel.

Front Winch

A 15,000lb Heavy Duty winch shall be provided in the front bumper with 90' of wire rope.

Tank

The tank shall have a capacity of 2000 gallons manufactured UPF.

The tank shall include the following features:

- Fill tower with removable screen located at front left corner
- Sump with anti-swirl plate and drain fitting
- 4" vent and overflow pipe 1.5" refill/recirculating fitting
- 3" tank suction
- Liquid level sight gauge
- 30-gallon integral foam cell

There shall be a 2.5" direct tank fill with valve at the rear of the apparatus. The direct tank fill shall be provided with a hydrant gate valve.

The outside of the tank shall be textured black. Back of tank to be smooth poly

Mounting strips shall be molded to the bottom of the tank to allow mounting to heavy duty fire body.

There shall be an FRC Vision tank level indicator located on the pump panel and a small FRC Vision tank level indicator located on the console in the cab.

There shall be a translucent visual sight glass at rear of tank, passenger side and front of tank, driver side

The tank shall have mounting blocks located at each rear top corner for mounting of rotating red lights.

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

No Baffle Balls

Pump

The pump shall be a Hale HP275-B35 X-Stream powered by a 35 hp. Brigg 4-cycle, air cooled gas engine with the following features:

- 4.0" NPT inlet
- 3.0" NPT outlet
- Electric start
- Pump panel
- 2.5" discharge gauge
- 12-volt / 40-amp alternator
- Low oil pressure light
- Choke (EFI MAY BE COMING - IF SO, NO CHOKE WILL BE NEEDED)

12-volt ESP electric primer

The pump shall have the following performance (from draft):

- 325 GPM@50 PSI
- 250 GPM@100 PSI
- 200 GPM@135 PSI
- 150 GPM@160 PSI
- 100 GPM@175 PSI

The pump shall be located at the rear of the apparatus.

A custom heavy duty 10-gallon aluminum fuel tank shall be provided

There shall be electronic remote, start / stop, and throttle controls for the pump located at the pump panel and inside the cab on the console.

There shall be a 2.5" master discharge gauge with red LED backlight located inside the cab, located on the console.

Pump Controls

The pump controls shall be located at the rear of the apparatus. All levers and valves shall be appropriately labeled and easily accessible. Panel should have an FRC Vision tank level indicator

and 2.5” discharge pressure gauge. Panel shall have a remote start for pump. The pump panel shall have adequate lighting for night operations.

Plumbing

All plumbing shall be heavy duty (Schedule 40) welded stainless steel plumbing. When necessary, high pressure hose shall be used with stainless steel fittings. The stainless-steel plumbing shall have a 10-year warranty

A 4" square manifold shall be utilized. All discharges shall be plumbed from this manifold.

The manifold shall have one (1) 2.5" fitting for the 2.5" plumbing from the pump.

The manifold shall have one (1) 2.0" fitting for the front remote-control nozzle

The manifold shall have one (1) 1" fitting for the booster reel.

There shall be two smaller fittings for the ground sweeps

There shall be one (1) 2.5" discharge located at the rear of the apparatus. This discharge shall be provided with a chrome cap and chain.

There shall be one (1) 1.5” discharge located at the rear of the apparatus. This discharge shall be provided with a chrome cap and chain.

There shall be (1) hose lay with capacity 200’ of 1.5” hose line to be deployed out the rear.

There shall be four (4) automatic drain valves provided, two (2) for the ground sweeps, and one (1) for the front mounted remote-control nozzle and one (1) for the booster reel. These drain valves shall automatically open when pump pressure drop below 5 psi.

The entire discharge plumbing system shall be hydrostatically tested to 400 psi for two minutes prior to installation. This is to ensure that the entire plumbing system will not leak and to insure the safety of all fire department personnel.

The discharge plumbing from the pump to the manifold will be plumbed with 2.5" pipe.

All discharge valves shall be heavy duty, full flow, Akron fire service quality quarter turn ball valves.

The tank to pump line shall be plumbed with 2.5" plumbing. A wire reinforced flexible

connection shall be used to provide ease of service and to reduce vibration.

The tank to pump valve shall be a 3.0" heavy duty, full flow, fire service quality quarter turn ball valve.

There shall be a 2.5" gated suction inlet with a 2.5" chrome plated plug and chain

NOTE: Only Akron full flow quarter turn ball valve shall be used for suction and discharge lines. All valves shall have the Akron TSC handle

The 1.0" tank fill and recirculating line shall utilize a 1.0" stainless steel gate valve and will be

plumbed prior the foam injection unit so as to keep foam from entering the booster tank.

Booster Reel

A Hannay SBEF-20-30-31 heavy duty polished aluminum electric rewind booster reel will be provided with 100' of 1" 800 psi rubber booster hose and will be on left rear corner

One (1) TFT Quadra Fog adjustable gallonage nozzle with pistol grip will be provided.

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 or location to be determined by the fire department.

The booster reel shall be provided with a single chrome hose roller and spool assemblies.

A 40-amp circuit breaker will be provided for the booster reel.

TFT Tornado

A TFT Tornado with joystick control and electrically operated valve shall be located at the front of the apparatus with a 15-120 GPM adjustable gallonage nozzle.

The electrically operated valve shall be stainless steel.

The Tornado shall be plumbed with 1.5" high pressure flexible hose.

The entire plumbing system for the Tornado shall have one drain at the mid-point of the chassis. The mid-point drain shall be an automatic drain that opens when line pressure drops below 5 psi.

The joystick shall be mounted inside on the console

The nozzle shall be offset to driver side (due to tilt hood and winch)

Ground Sweep Nozzles

Located at the front the bumper, one each side shall be two (2) electrically operated ground seep nozzles. Each valve shall be individually controlled with switches located on the console in the cab.

Foam System

A Trident 1.0 ATP foam system shall be provided and will be controlled at the top mount panel.

Body

The fire body shall be constructed of entirely of heavy-duty aluminum and will have a fifteen (15) year structural warranty.

The perimeter of the body shall be constructed of a heavy duty 6061TS extrusion. The deck plate shall be stitch welded on the bottom side of the extrusion

The cross members shall be 2" x 4" 6061T6 extruded aluminum tube on 12" centers for rigidity and longevity. There shall be no less that twelve (10) aluminum 2 x 4 cross members

The sills shall be 6" steel channel.

The body sills shall be mounted to the frame utilizing a 6-point mounting system

There shall be a .125"aluminum diamond plate covering the entire upper surface of the body.

The fire body shall be 192" long, 100" wide.

There shall be headache rack at the front of the body that will also serve as a light bar mounting platform. The headache rack shall be constructed with 2" thick wall aluminum tubing and will have diamond plate cover the bottom half on front and back side and expanded aluminum on the top half.

The light bar platform shall be constructed of 1/4" aluminum plate shall be properly gusseted. The light bar platform shall be 10" x 60".

A 120" deep x 30" wide x 5" high tool compartment at rear of the apparatus with a horizontally hinged, drop down door shall be provided. Metal floor of compartment shall be a 3003H14 smooth aluminum (.187) thickness.

This under body tool compartment shall have a full-length pull-out tray for ease of storage of tools. The tray shall be constructed entirely of aluminum and will have nylon slide pads on the bottom.

A 36'W x 20"H x 24"D(approx.) under body compartment shall be provided on each side between the top mount step well ladder and the rear tires. The doors shall be drop down and have stainless steel D-ring slam latch. The entire compartment shall be constructed of aluminum diamond plate. Turtle tiles shall be provided in these compartments

The lower compartments shall have automatic door lights that shall come on when the compartment door is opened.

The lower body compartment doors shall be wired to an open-door warning light and alarm that shall be located in the cab. The open-door warning light shall be activated anytime a compartment door is open. The open-door warning light AND alarm shall be activated anytime a compartment door is opened and the parking brake is released

The rear of the body shall a flat back design.

There shall be two (2) rubber flexible steps located at the rear of the fire body provided for

accessing the rear of the fire body.

The rear bumper shall have a receiver hitch for a portable winch and wiring for winch.

All stop, turn, back up, corner, and DOT lights shall be provided. The stop, turn, and brake lights shall be LED.

Mud flaps shall be installed behind the rear wheels. The mud flaps shall say "KEEP BACK 500 FEET".

There shall be two 15,000 # (2) tow shackles provided at the rear of the apparatus.

Apparatus Battery Charging System/ Air Compressor

There shall be a Kussmaul Pump Plus 2000 apparatus battery charging / conditioning system and chassis air tank maintaining system provided on the apparatus.

The system battery status display and auto eject plug shall be provided at a location acceptable to the fire department

Back Up Camera

A back up camera shall be provided in the cab, mounted on the dash.

Folding Tank

A 2100-gallon Zico folding tank and electric folding tank rack shall be provided on the passenger side of the body. **NOTE If manufacture can engineer folding tank to fit in a slide out tray under the body that would be preferred.

Dump Valve

A Newton 10” manually operated dump valve shall be provided with a 180-degree swivel and extension chute – Location to be determined.

Emergency Lighting System

An emergency lighting system consisting of the following shall be provided.

Whelen Liberty II NFPA compliant 54" red/blue LED light bar with Take Down and Alley Lights. The Light bar shall be mounted on the fire body light bar mounting platform.

There shall be two (2) Whelen M7 LED Lights (one (1) RED, one (1) BLUE) mounted forward facing on the front bumper.

There shall be two (2) Whelen M4 LED Lights (white) mounted on the sides of the front bumper.

There shall be two (2) Whelen ION surface mount ION (one (1) RED, one (1) BLUE) mounted on the sides of the front fenders of the chassis.

There shall be two (2) Whelen ION surface mount ION (one (1) RED, one (1) BLUE) mounted on the side of the fire body.

There shall be two (2) Whelen ION surface mount ION (one (1) RED, one (1) BLUE) mounted on the rear of the apparatus.

There shall be two Whelen L31HRF beacons at the rear of the apparatus on mounting brackets located on the rear corners of the tank. (One (1) RED, one (1) BLUE)

A Whelen 295SLSA6 full function 200-watt siren / switch module shall be provided.

A Whelen SA315P 100-watt speaker shall be mounted at the front bumper.

A 97 dB back up alarm shall be provided.

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

A custom aluminum console shall be provided to house the siren/switch controls, in-cab pump controls, fire Department supplied mobile radio, and ground sweep nozzle control switches. The console top shall hinge to allow easy access to the inside of the console. The custom aluminum console shall have a black powder coated finish.

A custom aluminum console shall be provided to house the in-cab pump controls, pump controls, pressure gauge, tank level indicator, ground sweep switches, and the TFT Joystick

There will be two (2) LED work lights provided, mounted one (1) on each side of the headache rack facing the rear of the truck for night time operation and will be switched at the switch module in the cab.

There shall be two (2) LED work light located at the rear of the apparatus.

There shall be one (1) underbody ground light under each step well and two (2) LED underbody ground lights at the rear of the apparatus. These LED lights shall be automatically activated when the chassis parking brake is activated.

Scene Lights

There shall be four (4) 20" Utility combination flood/ scene lights, one (1) located centered on top of each upper compartment, one (1) on the rear top side of the tank, and one (1) mounted on the full replacement bumper.

Pre-wiring for customer installed perimeter lighting around the cab to be identified at pre-constriction meeting.

Lettering and Striping

The apparatus shall be provided with white 4" stripe around the perimeter of the apparatus as per NFPA requirements.

The rear body skirting shall have NFPA compliant red/yellow chevron striping. A picture shall be provided to the department for approval.

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

Customer Pick Up

The customer shall pick up the completed apparatus from the apparatus manufacturer facility.

The contract will include travel and boarding expenses for two (2) district representatives to attend at least a final inspection of the finished product. If the apparatus manufacturer recommends a mid-project facility visit, that should be included in the contract as well.

Training at the Manufacturer's Facility

An intensive training session, in the correct procedures and usage of the apparatus, shall be conducted at the manufacturer's facility. The training shall be conducted by manufacturer's trained personnel.

THIS COMPLETES THE TECHNICAL SPECIFICATIONS FOR THE TENDER TRUCK PROJECT

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 illegal aliens. 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 proposals will be screened by the District. Evaluation criteria for proposals shall generally 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 VI 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 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 _____ Title _____

E-mail Address _____

Authorized Signature _____ **Date** _____