Smithville Area Fire Protection District Smithville, MO Fire Chief, Dave Cline

Specifications for the Update/Refurbishment of 2004 Rescue Pumper

Bid Deadline July 9, 2021 at 2pm Bid Opening July 9, 2021 at 3pm

Published May 31, 2021

The Smithville Area Fire Protection District "District" is seeking bids for the update/refurbishment of a
 2004 Precision Rescue Pumper on a Spartan custom chassis as outlined in the attached specifications.
 The District reserves the right to reject any and all bids in the best interest of the District.

4

5 Intent of Specifications

6 It is the intent of these specifications to cover the refurbishing process herein as specified, with 7 a view towards obtaining increased safety and service life of the apparatus. These 8 specifications cover minimum requirements as to the type of repairs, construction, finish, and 9 tests to which the apparatus must conform, together with certain details as to equipment and 10 appliances to be furnished. Minor details of construction, materials, where not otherwise 11 specified, are left to the discretion of the contractor who shall conform to industry standards 12 along with applicable requirements of the current NFPA standards. Exempt are original designs 13 that remain unchanged.

14

15 Exceptions

Substitutions, deviations, clarifications, or exceptions to these specifications must be listed on a
separate page marked, "EXCEPTIONS" and must be accompanied by adequate data to allow the
Fire Chief to determine acceptability. Proposals that are found to have deviations without
listing them will be rejected.

21 Pre-Bid Inspection

22 No bid will be accepted unless the prospective bidder has thoroughly inspected the vehicle and

23 become fully knowledgeable as to the work to be performed. To allow all potential

bidders an equal opportunity to be acquainted with the apparatus and specifications, the apparatus will

- 25 be available for inspection during normal business hours, Monday June 21 through Thursday June 24,
- 26 2021 at Smithville Area Fire Protection District, Station #2, 341 Park Drive, Smithville, MO. Bids will not

27 be accepted from any vendor that does not meet this qualification.

- 28
- 29

1	Bid Identification
2	The outside of the sealed envelope must be clearly marked "Smithville Area Fire Protection District
3	Pumper Re-Furnishment" with the name of the bidder on the exterior of the envelope. It
4 5	must be addressed to the attention of Dave Cline, Smithville Area Fire Protection District, 341 Park Drive, Smithville, MO 64089.
6	
7	Bid Deadline and Opening
8	The bid must be received/delivered by July 9, 2021 at 2pm. The bids will be opened and read aloud on
9	July 9, 2021 at 3pm.
10	
11	Evaluation and Acceptance
12	The bids will be reviewed, compared for ability to meet the specifications, exceptions taken, and cost.
13	District staff will make a recommendation to the Board of Directors to consider awarding the contract at
14	their July 27 meeting. The bid shall be awarded to the lowest and best bidder by the District in
15	accordance with these specifications.
16	
17	Qualification of Bidders
18	Bids will only be considered from companies that have been in the business of emergency
19	apparatus refurbishment without interruption for a minimum period of no less than ten (10)
20	years.
21	
22	Service Requirements
23	It is the intent of the District to assure that parts and service are readily available for the apparatus
24	specified. The facility must provide access to parts and service for emergency vehicles. The facility must
25	be staffed by full time personnel who are properly qualified in the operation and repair of fire
26	apparatus, including the fire pump.
27	In addition, the facility shall have access to a complete inventory including major pump parts,
28	body components, electrical items, fire apparatus hardware, etc. The bidder must be able to conduct an
29	on-site pump test at a suitable pump-test station.

1	Emergency Vehicle Qualifications
2	Due to the highly specialized nature of fire apparatus repair, bidder shall be in well acquainted with
3	NFPA standards 1901, 1911, and 1912.
4	
5	Service Qualification Requirements
6	The bidder shall include the following information with their bid.
7	• Number of miles from the fire district's headquarters to the bidders facility, which must be owned and
8	operated by the bidder.
9	 The length of time the bidder has been in the emergency vehicle refurbishment and repair
10	business (minimum 10 years).
11	
12	Project Management
13	The bidder must employ a full-time on-site manager to oversee the project.
14	
15	Bid Response Requirements
16	• The bidder shall meet all requirements listed in this document. Bidders not meeting the qualifications
17	and specifications herein shall be rejected.
18	• The bidder shall supply the District with a list of the last five (5) fire truck refurbs done by the bidder
19	for the purpose of reference checks. The information provided by the bidder shall include contact name,
20	contact telephone number, organization name, vehicle type, and type of work performed.
21	 Each bidder must submit signed documents included in the bid specifications including:
22	- A bid for the work described in this specification. It is understood that during the inspection process
23	additional items could be discovered which the District may choose to have repaired at an additional
24	cost.
25	- An itemized list identifying any exceptions taken to these specifications.
26	- Insurance Certificate showing the Smithville Area Fire Protection District as additional insured.
27	• Each bidder shall carry and maintain proper insurance throughout the project in an amount of
28	not less than \$2,000,000.00 of aggregate coverage. An official insurance binder stating the
29	coverage amounts shall be supplied with each vendor bid and shall list the Smithville Area Fire

1	Protection District on the policy.	
2	• The facility shall maintain a complete inventory of major parts, body components, electrical	
3	items and hardware suitable for the emergency repair of the fire apparatus.	
4	• Upon completion of the work and before acceptance by the Fire District; the vehicle will be inspected	
5	using this document. Each item and paragraph of this document will be checked for compliance. No	
6	deviation from this specification will be permitted unless the vendor has submitted such proposed	
7	deviation in writing with the final bid document and such exceptions are accepted by the District.	
8		
9	Information/Contact	
10	Questions regarding this bid should be directed to the Fire Chief, Dave Cline	
11		
12	Rule for Award	
13	The contract will be awarded to the bidder offering the lowest and best total price for the specified	
14	work. No award will be made to any bidder who cannot satisfy the District that the bidder has sufficient	
15	ability and experience in this work and sufficient resources to enable the bidder to complete the work	
16	successfully within the time allowed. The District's decision or judgment on these matters will be final,	
17	conclusive, and binding.	
18		
19	The District may make such investigations as the District deems necessary and the bidder shall furnish to	
20	the District all such information and data for this purpose as the District may request.	
21	The contract will be awarded within sixty days after the bid opening unless the time for the award is	
22	extended by mutual consent of the parties.	
23		
24	District's Right to Reject Bids	
25	The District reserves the right to reject any or all bids, if it is in the public interest to do so.	
26	The District may consider informal any bid not prepared and submitted in accordance with the	
27	provisions hereof and may waive any informality or reject any and all bids, should the District	
28	deem it to be in the public interest.	
29	The District may also reject bids, which in its sole judgment are incomplete, conditional, obscure,	

- 1 or not responsive; or which contain additional items not called for, erasures not properly initialed,
- 2 alterations or similar irregularities. The District may waive such omissions, conditions, or
- 3 irregularities, if considered minor. In these matters, the District's decision shall be final, conclusive, and
- 4 binding.
- 5

6 **SPECIFICATIONS**

- 7 1.0 EVALUATIONS, SERVICES, AND TESTING
- 8 1.01 Pre-Refurb Inspection
- 9 Prior to the start of the refurbishing process, the successful bidder shall perform a complete
- 10 and thorough inspection of the apparatus by a qualified technician.
- 11 The inspection shall include checks on the chassis and pump to confirm proper function and to
- 12 disclose any possible wear and or damage. Also, a visual structural inspection shall be
- 13 performed on the apparatus cab, pump enclosure, body, and water tank sub-frame as access
- allows. The department shall be notified along with any associated cost(s) should any repairs be
- 15 required that fall outside the scope of these specifications. No additional repairs shall be
- 16 performed without proper authorization by the department.
- 17

18 1.02 Pump Testing

- 19 The fire pump shall have a service test performed. After successful completion of
- 20 the service test, a test shall be performed with the apparatus flowing full capacity
- of the fire pump at 165 psi for five minutes. Any accessories of the fire pump shall also be
- 22 tested to confirm proper operation. This shall include, pump
- 23 governor, pressure relief valves, pump shift, or similar accessory as equipped.
- 24 Repair and or adjust the primer operation and assure pump vacuum test.
- 25 The department shall be notified along with any associated cost(s) should any repairs be
- 26 required that fall outside the scope of these specifications. No additional repairs shall be
- 27 performed without proper authorization by the department. NOTE: A second full pump test
- 28 shall be performed at the completion of the refurbishment and prior to delivery to confirm
- 29 proper component performance and operation. A test placard shall be installed on the pump panel. A

- 1 pump test report shall be provided to the District for their service records.
- 2

3 **1.03 Suspension, Steering, and Brake Inspection**

The apparatus' suspension, steering, and braking systems shall be thoroughly inspected by a qualified
third-party specialist. The department shall be notified along with any associated cost(s) should any
repairs be required that fall outside the scope of these specifications. No additional repairs shall be
performed without proper authorization by the department.

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9 **1.04 Steam Clean Apparatus**

10 The apparatus' cab, chassis, powertrain, fire pump, body, and related components shall be

11 thoroughly steam cleaned.

12

13 1.05 Evaluate 12VDC Electrical Systems

14 The components of the apparatus' DC electrical systems and shoreline charger shall be

15 inspected to confirm proper condition and performance. The inspections shall include a test of

16 the alternator for its rated voltage and amperage. The systems cable ends and or wiring

17 junctions shall be inspected for signs of corrosion and or overheating. Proper grounding of the

18 system shall be checked and confirmed. The department shall be notified along with any

19 associated cost(s) should any repairs be required that fall outside the scope of these

20 specifications. No additional repairs shall be performed without proper authorization by the

21 department.

22

23 1.06 Air conditioning

- 24 The air conditioning system's refrigerant shall be evacuated and then recharged as required.
- 25 Then the system shall be tested for proper function and checked for refrigerant leaks. No additional
- repairs shall be performed without proper authorization by the department.
- 27

28 1.07 Generator service

29 The apparatus hydraulic generator shall have the filter changed and the fluid inspected. The

1 output of the generator shall be tested against the models' specifications and adjusted as required.

2

3 2.0 CHASSIS

4 2.01 Chassis Frame

- 5 The chassis and related components shall be thoroughly steam cleaned.
- 6 All accessible areas of surface corrosion on the chassis crossmembers and frame rail extensions shall be
- 7 blasted as required, prepared, and then refinished with black POR15 chassis protectant or equivalent.
- 8 Care is to be taken as to not damage sensitive chassis mounted components during this process.
- 9

10 2.02 Chassis Air System

- 11 The chassis air system shall be checked for condition and loss of air. The system protection
- 12 valve(s) shall also be tested for proper operation. Air tanks, fittings, valves, and straps shall be inspected

13 and replaced as necessary.

14

15 2.03 Battery Brackets and Trays

The battery trays, hold downs and covers shall be inspected and replaced as required. The batteries shall be load tested and the battery cable ends shall be cleaned and terminal protectant shall be applied to all exposed connections.

19

20 2.04 Suspension

21 The suspension components shall be inspected for proper condition. The department shall be notified

- along with any associated cost(s) should any repairs be required that fall outside the scope of these
- 23 specifications. No additional repairs shall be performed without proper authorization by the
- 24 department.
- 25
- 26 3.0 CAB / BODY
- 27 **3.01 Cab Doors**
- 28 The door components shall be inspected, including hinges, latches, mechanisms, and window

3	with any associated cost. No additional repairs shall be performed without proper authorization by the
4	department.
5	
6	3.02 Driver's seat
7	Replace bottom cushion and cover of driver's seat.
8	
9	3.03 Roll-up Compartment Doors
10	All roll-up compartment doors shall be inspected for proper operation, adjusted as needed, and
11	lubricated per manufacturer recommendations.
12	
13	3.04 Compartment reconfigurations
14	Compartment L2
15	Reconfigure Compartment L2 the following;
16 17 18	Remove SCBA filling equipment; to include the bank of 4 bottles mounted between the cab and body, the fill station located in compartment L2, and all air lines and assemblies related to the equipment. After removal, the District will take possession of the fill station and high pressure bottles.
19	Fill or cover any penetrations as required to make compartment watertight.
20	Build into compartment L2 the following;
21 22 23 24 25	 Install a fixed rigid divider vertically in the compartment. This will form an open area on the right approximately 32 inches wide and separate the right side from the existing SCBA bottle storage rack on the left side of the compartment. On the right side, a pull-out tray shall be attached to the floor of the compartment. Tray
26 27 28 29 30 31 32 33	shall have a capacity of supporting at least 500 pounds. Tray shall be full width of the compartment, made of aluminum, and the sides shall be formed to provide a height of 2 inches. The left, rear, and right sides of the tray shall have an additional sheet of aluminum attached which will prevent items stored on the tray (in this instance duffle bags of water rescue equipment) from falling off the back of the tray when it is pulled out. This additional sheet shall create an overall height of the left, rear, and right sides to be 18 inches tall. Install new rigid rubber decking material in tray.
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assemblies, for condition and proper operation. Parts shall be adjusted and lubricated as necessary.

The department shall be notified should repairs be required beyond the scope of this specification along

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- 1 3- On the right side, in the upper portion of compartment L2 shall be 2 adjustable shelves. 2 Sides of the shelves shall be formed to provide a 2-inch lip. The shelves shall be mounted to 3 c-channels attached to the left and right sides of the compartment. Install new rigid rubber 4 decking material in shelves. 5 **Compartment R4** 6 Reconfigure Compartment R4 the following; 7 1- Remove the 3 existing hydraulic hose reels. After removal, the District will take possession of the 8 hose reel assemblies. 9 2- Properly terminate the electrical connections and fill or cover any penetrations as required to 10 make compartment watertight. 3- Remove the existing floor mounted pull-out tray. 11 12 4- Build necessary structure to raise the pull-out tray 18 inches above the floor of the 13 compartment. This shall create a storage space between the floor of the compartment and the 14 bottom of the pull-out tray. 15 5- Supply and install new pull-out tilt-down tray on the structure described in #3 above. Tray shall 16 have a capacity of supporting at least 1,000 pounds. Tray shall be full width of the compartment, 17 made of aluminum, and the sides shall be formed to provide a height of 2 inches. Install new 18 rigid rubber decking material in tray. 19 6- In the upper portion of compartment R4 shall be 1 full-width adjustable shelf. Sides of the shelf 20 shall be formed to provide a 2-inch lip. The shelf shall be mounted to c-channels attached to the 21 left and right sides of the compartment. Install new rigid rubber decking material in shelf. 22 23 3.05 Body Rubrail lights 24 The existing rubrail marker lights and turn signals shall be replaced with LED lights and tested for proper 25 operation. 26 27 3.06 D-ring handles 28 The various D-ring handles on the apparatus access doors shall be cleaned, inspected for proper
- 29 operation, adjusted as needed, and relubricated.

30

- 31 **3.07 Hose Bed Reconfigure**
- 32 The aluminum hose bed cover will be totally removed, including the hinge assemblies.
- 33 Supply and install a D&S Brand vinyl hose bed cover, black in color, with "SAFD" in white reflective
- 34 letters on the rear flap.

35

1	3.08 Door and Tray Hold Open Struts
2	Replace hold-open struts on rear pump access door and slide-out trays in compartments R1 and R2.
3	
4	4.0 ELECTRICAL
5	4.01 Front Warning Lightbar
6	Remove existing lightbar on the roof of the cab. Supply and install (1) 72-inch Whelen Freedom IV light
7	bar on the roof of the cab. Colors shall be red and blue, no ally lights nor take-down lights. The new light
8	shall be wired to power and controlled as original.
9	
10	4.02 Cab Brow Lights
11	Remove existing brow light on front of the cab. Supply and install (1) 65-inch Fire-Tech LED 12-volt brow
12	light bar on the front of the cab. Brow light shall be installed at or below the lightbar and in a position as
13	to not block the lightbar. The new light shall be wired to power and controlled as original.
14	
15	4.03 Headlights
16	Supply and install 4 new FireTech brand LED headlights
17	
18	4.04 Q2B
19	The operation of the Federal Signal Q2B mechanical siren and brake shall be tested. The solenoid
20	inspected for corrosion.
21	
22	4.05 Roto-Ray
23	Inspect light for proper function and correct power draw.
24	
25	4.06 Rear Warning Lights and Scene Lights
26	Remove existing warning light/scene light combo assemblies on the left and right upper corners on the
27	rear of the apparatus. Supply and install 2 Whelen model M9V2RC combination warning light and scene
28	light assemblies. The light on the left shall be red, the light on the right shall be blue. Install trim as
29	needed to cover area from previous light assembly.

1 4.07 Step Lighting and Ground Lighting

- 2 Any existing incandescent cab step lights or ground shall be replaced with new TecNiq LED
- 3 replacements. The new LED lights shall be wired and controlled as original.

4

5 4.08 Auto-eject

6 The operation of the apparatus auto-eject inlets shall be tested for proper function. Both covers shall be7 replaced.

8

9 4.09 12-volt outlet

The 12-volt outlet on the driver's side shall be inspected for proper power supply and a new coverinstalled.

12

13 5.0 PUMP & PLUMBING RELATED

14 5.01 Pump Plumbing Inspection

- 15 Other than the pump body itself and parts there-in; all portions of the plumbing, couplings, valves,
- 16 discharges, drains shall be inspected.
- 17 It is known that the front bumper discharge and the main drain on the pump are currently inoperable.
- 18 If additional deficiencies are discovered, they are to be reported to the fire district point of contact. The
- 19 fire district will make the determination if the repairs will be made. After repairs, the fire pump shall be
- 20 pressure and vacuum tested to confirm a proper repair.

21

22 5.02 Pull Rods

- 23 The pull rods for valves shall be cleaned of corrosion, adjusted or replaced as needed, and
- refinished to insure proper protection and longevity. The clevis pins for the pull rods shall be
- 25 replaced and lubricated as required.

26

27 5.03 Tags and Labels

28 If missing, damaged, or incorrect, the various tags and labels shall be replaced as needed to properly

29 label all discharges, valves, etc.

1 6.0 MISCELLANEC

2 6.01 Pick-up and Delivery

3	The District shall deliver the apparatus to the bidder's shop. The bidder shall be responsible for
4	delivering the apparatus to the District after final inspection and detailing.
5	
6	6.02 Final Inspection
7	Before delivery, upon completion of the work. the District shall perform a final inspection of the
8	apparatus at the bidder's shop. Travel costs shall be the responsibility of the District.
9	
10	6.03 Final Cleaning / Detailing
11	Upon completion of all repairs and prior to delivery, the apparatus shall be thoroughly cleaned
12	and detailed. This shall include the cab interior and apparatus exterior.
13	
14	6.04 Fluids Check/Lubricate Components
15	Check all fluid levels and lube components prior to delivery.
16	
17	6.05 Warranty
18	All bidders shall provide a written statement of warranty with their bid. The warranty shall
19	provide a minimum of one (1) year of coverage for parts and labor on the work as detailed in
20	these specifications.
21	
22	6.06 Completion
23	All work associated with the refurbishment of the apparatus as described in the specifications shall
24	be completed within 120 days starting from the time the apparatus is delivered to the bidder's
25	facility. Each and every day past the deadline shall be assessed a penalty of \$100.00 per day and

26 deducted off the final invoice.