



SEDGWICK COUNTY, KANSAS

DIVISION OF FINANCE

Purchasing Department

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Request for Bid Bid # 06-0131

SQUAD FIRE TRUCKS

October 25, 2006,

Sedgwick County, Kansas (hereinafter referred to as *County*) will accept bids for Squad Fire Trucks for the Sedgwick Fire Department. This request for bid provides a description of submittal requirements, terms and conditions.

Should you elect to participate, submit four (4) completed copies of the entire document with any supplementary materials NO LATER THAN 1:45 p.m. CST, Tuesday, November 21, 2006. Responses must be sealed and marked on the lower left-hand corner with the firm name and address, bid number, bid due date, and bid opening time. Late or incomplete responses will not be accepted and will not receive consideration for final award.

Responses to this Request for Bid will be opened and read aloud at a public meeting. You or your representatives are welcome to attend.

James A. McComas
Senior Purchasing Agent

1. BACK GROUND INFORMATION

Sedgwick County, located in south-central Kansas, is the most populous of Kansas' 105 counties with a population estimated at more than 462,000 persons. It is the sixteenth largest in area, with 1,008 square miles, and reportedly has the second highest per capita wealth among Kansas counties. Organizationally, the County is a Commission/Manager entity, employs nearly 2900 persons, and hosts or provides a full range of municipal services, e.g., public works, criminal justice, recreation, entertainment, cultural, human/social, and education.

Sedgwick County Fire District #1 is a separate taxing entity that encompasses 635 square miles within Sedgwick County. Operating out of eight (8) strategically placed stations the District provides fire suppression, technical rescue, hazardous material mitigation and first response medical service. The district responds in the suburban cities of Haysville, Park City, Goddard, Bel Aire, Garden Plain, Maize, Kechi, Andale, Oaklawn Improvement District and several other unincorporated towns. The estimated population served by the District is 85,000.

Sedgwick County Fire District #1 desires to reduce the number of vehicles in the fleet by purchasing a dual function vehicle to meet medical and fire response demands. The department currently has three (3) squad units and three (3) Brush Trucks. Squad units are utilized for small fires (i.e. trash, brush, car) and medical calls. Brush Trucks are utilized strictly for brush/grass fires. Vehicle water capacity ranges between 200 – 350 gallons. The department plans on replacing the following vehicles over the next three (3) years:

- 1st year – 1 ea (Initial Purchase)
- 2nd year – 1 ea
- 3rd year – 2 ea

Sedgwick County Fire District #1 also desires to incorporate the CAF System (Compressed Air Foam System) which is designed to extend the effectiveness of the water utilized. The principle behind the CAF system is the water is mixed with foam and pressurized. (Example: It is estimated that a 250 gal water tank would be equivalent to a 500 gal tank). All materials, workmanship, and finish of the apparatus shall conform to the character and purpose for which it is intended. It is preferred that single site manufacturing be provided. In all areas applicable, the apparatus shall conform to the requirements of the current (at the time of proposal) National Fire Protection Association Pamphlet #1901 for Motor Fire Apparatus unless otherwise specified in these specifications. The apparatus shall also comply with any Federal & Kansas State Department of Transportation requirements that are applicable.

2. OBJECTIVES

The County has identified the following objectives for securing a Squad Fire Truck described herein:

- Procure and establish contract pricing for a Squad Fire Truck meeting the parameters, conditions and mandatory requirements presented in this document.
- Procure a Squad Fire Truck with the best proven “track-record” in performance, durability and function.
- Procure a Squad Fire Truck with the most advantageous overall cost to the County.

3. INTENT OF SPECIFICATION

- a. Sedgwick County Fire District #1 will require certain items to be used in the manufacturing of this apparatus. Under certain headings this equipment or method of construction will be noted as a specification. These specifications point out the preferred qualifications on this apparatus. Any deviation from the preferred qualifications will require an in depth explanation of the manufacturers intent and purpose.
- b. All deviations from the minimum design, preferred qualifications and/or performance requirements should be listed. Exceptions shall be considered if they are deemed (by the County) to be equal to or superior to the specifications, provided they are fully explained on a separate page entitled "EXCEPTIONS TO SPECIFICATIONS." Exceptions shall be listed by page and heading number.

- c. Any other items or options that the manufacturer deems necessary, relevant or advantageous to this apparatus can be submitted with the bid as an option. These items should be listed with the price of the proposed item on a separate page(s) under the header "Additional Provisions". The County reserves the right to select one (1), some or none of the options identified.

4. MANDATORY REQUIREMENTS

The following requirements are provided to assist bidders in completing a thorough response.

A. General Firm Requirements

Firms must:

1. Have proper certification(s) or license(s) to distribute, deal, install and service proposed product(s) at the time of proposal closing.
2. Have the capacity to acquire all required bonds or insurances.
3. Have provided service(s) and/or product(s) similar to those specified in this RFP.
4. Provide contact name(s), title(s), qualification(s), phone number(s) and e-mail address(s) of lead professional personnel assigned to the County account.
5. Provide a detailed project timeline to include but not limited to design meetings, review of drawings, manufacturing, testing, delivery, set-up, installation etc.
6. Provide detailed quality control procedures.
7. Have appropriate material, equipment and labor to perform job safely and efficiently. All costs associated with meeting this requirement will be the sole responsibility of the vendor.
8. Provide four (4) references verifying exemplary service. These references MUST have received service(s) and/or product(s) similar to those proposed under this RFP. Provide the business name, address, contact name, phone number, e-mail address and a brief description of product(s) and/or service(s) provided.
9. Discuss any current local, state or federal violations and any ongoing litigation that may cause conflicts or affect the ability of the vendor to provide service(s) and/or product(s).

B. Quality and Workmanship

1. The design of the apparatus must embody the latest approved automotive engineering practices.
2. The workmanship must be the highest quality in its respective field. Special consideration shall be given to the following points: Accessibility to various areas requiring periodic maintenance, ease of operation (including both pumping and driving) and symmetrical proportions.
3. Construction must be rugged and ample safety factors must be provided to carry loads as specified and to meet both on and off road requirements and speed as set forth under "Performance Test and Requirements."

C. General Construction

The apparatus shall be designed and the equipment mounted with due consideration to distribution of load between the front and rear axles so that all specified equipment, including filled water tank, a full complement of personnel and fire hose shall be carried without injury to the apparatus. Weight balance and distribution shall be in accordance with the recommendations of the International Association of Fire Chiefs and National Fire Association (or American Insurance Association). Certified Laboratories certificate shall be submitted by the manufacturer. Weight of apparatus shall meet all federal axle load laws.

D. Delivery Requirements

The apparatus shall be completely equipped as per these specifications upon arrival and on completion of the required tests shall be ready for immediate service in the fire department of the purchaser. Any and all alterations required at the scene of delivery to comply with these specifications must be done at the contractor's expense.

E. U.S.A. Manufacturer

The entire apparatus shall be assembled within the borders of the Continental United States to insure more readily available parts (without added costs and delays caused by tariffs and customs) and service.

F. *Manufacturer's Experience*

1. Each manufacturer shall have been in business making similar apparatus for a minimum of five (5) years.
2. Elimination of Divided Responsibility
 - i. It is required that each apparatus bidder take full responsibility for the cab, chassis and body of the apparatus. This is done in an effort to eliminate divided responsibility in service and warranty work. Manufacturers shall state compliance with the paragraph. NO EXCEPTIONS.

G. *FAMA Compliance*

Manufacturer must be a current member of the Fire Apparatus Manufacturer's Association.

H. *Proposal Drawing*

A general layout drawing depicting the apparatus layout and appearance shall be provided with the bid. The drawing shall consist of left side, right side, top down, frontal and rear elevation views. The drawing shall be a depiction of the actual apparatus proposed and not of a generic similar product.

I. *Approval Drawing*

After the award of bid and pre-construction conference, a detailed layout drawing depicting the apparatus layout and appearance including any changes agreed upon shall be provided for customer review and signature. The drawing shall become part of the contract documents. The drawing shall consist of left side, right side, frontal and rear elevation views.

J. *Inspection Trips*

A pre-construction conference trip and a final inspection trip to the manufacturers facility shall be provided. Accommodations for three (3) Fire Department personnel, each trip, to include all transportation, food and lodging shall be included in the bid price.

K. *Proposal Drawing*

A general layout drawing depicting the apparatus layout and appearance shall be provided with the proposal. The drawing shall consist of left side, right side, top, frontal and rear elevation views. The drawing shall be a depiction of the actual apparatus proposed and not of a generic similar product.

L. *Pre-Construction Conference*

The manufacturer will attend a pre-construction conference at the Sedgwick County Fire District #1 administration office located at 4343 N. Woodlawn; Wichita, Ks 67220.

M. *Proposal Guarantee (Bid Bond)*

A certified check or bid bond in the sum of ten percent (10%) of the total bid price shall be submitted with the "Bid Proposal" at the time of the bid. The full amount of the bid surety shall be returned to the unsuccessful bidders following the award of the contract to the successful bidder.

N. *Performance Bond*

Within twenty (20) days of notification to the successful bidder by the purchaser, prior to any work commencing on the proposed apparatus, the successful bidder shall, at their own expense, obtain and submit to the purchasing entity a performance bond in the amount of 100% equal to the total contract price.

5. MINIMUM REQUIREMENTS (CAB AND CHASSIS)

The specifications listed below are considered *Minimum* and may be exceeded. Alternate items meeting fit, form and function of specifications may be submitted. However, Sedgwick County reserves the right to select the bid that most closely matches the specifications.

A. *Chassis*

1. 2006 or 2007 Ford F-550; 4 Door Cab; 4 x 4

B. *Power Train*

1. Power stroke, 6.0L V-8 OHV direct diesel injection, 32 valve, inter-cooled, turbo diesel engine
2. 110 amp dual alternator
3. 750 amp 78 amp hours (Ah) battery dual batteries
4. Engine block heater,

5. Transmission oil cooler
6. 5-speed electronic automatic transmission with overdrive
7. Lock-up
8. Driver selection
9. Rear-wheel drive
10. 4.88 axle ratio
11. Stainless steel exhaust

C. *Steering and Suspension*

1. Hydraulic power-assist re-circulating ball steering
2. 4 wheel disc brakes with front and rear vented discs
3. Firm ride suspension
4. Mono-beam non-independent front suspension
5. Front anti-roll bar
6. Front coil springs
7. HD front shocks
8. Rigid rear axle
9. Rear leaf suspension
10. Rear anti-roll bar
11. HD rear leaf springs
12. HD rear shocks
13. Front and rear 19.5" x 6.00" argent steel wheels
14. LT225/70SR19.5 BSW AS front and rear tires.
15. #17,900 GVW.

D. *Safety*

1. 4-wheel anti-lock braking system
2. Dual airbags, passenger side front-impact cancelable airbag
3. Front height adjustable seatbelts

4. *Interior Cab*

1. Vinyl Seats
2. Rubber Floor
3. Air conditioning
4. AM/FM stereo
5. Clock
6. Seek-scan
7. Two (2) speakers
8. Fixed antenna
9. Two (2) 12V DC power outlets
10. Ashtray
11. Front lighter element(s) location
12. Analog instrumentation display includes tachometer
13. Oil pressure gauge
14. Engine temperature gauge
15. Turbo/supercharger boost gauge
16. Transmission fluid temp gauge
17. Engine hour meter
18. Trip odometer
19. Warning indicators include oil pressure
20. Water temp warning
21. Battery
22. Key in ignition
23. Low fuel
24. Door ajar
25. Manual front windows with light tint

26. Variable intermittent front windshield wipers
27. Passenger side vanity mirror
28. Day-night rearview mirror
29. Interior lights include dome light with delay
30. Front reading lights
31. Glove box
32. Front cup holder
33. Instrument panel bin
34. Dashboard storage

E. Exterior Features

1. Paint color: Red
2. Side impact bars
3. Front license plate bracket
4. Fully galvanized steel body material
5. Black side window moldings
6. Black front windshield molding
7. Black rear window molding
8. Black door handles
9. Chassis to have chrome factory front bumper with aftermarket winch mount brush guard and Warn 12000# winch
10. Complete tow package
11. Trailer harness
12. Brake controller
13. Driver and passenger manual black folding outside mirrors
14. Front tow hooks
15. Sealed beam halogen headlamps
16. Additional exterior lights include cab clearance lights
17. Clear coat monotone paint
18. Chrome wheels
19. Nerf Bars

F. Warranty

1. *Limited Warranty*
 - a. Bumper to Bumper: 36 month/36,000 miles
 - b. Power Train: 36 month/36,000 miles
 - c. Corrosion Perforation: 60 month/unlimited mileage
 - d. Roadside Assistance: 36 month/36,000 miles
 - e. Diesel Engine: 60 month/100,000 miles
 - f. The chassis shall carry the standard manufacturers' warranty (Ford, Dodge, GM, International, etc.) All other warranties will be addressed in other portions of this document.
2. *Electrical Warranty*
 - a. The body manufacturer shall warrant the new apparatus electrical system for a period of five (5) years or 50,000 miles (whichever occurs first) from the date of delivery to the original retail purchaser. The warranty will ensure that the vehicle will be free from defects in the electrical harness and connections under normal use and service within the warranty period. A copy of the warranty shall be supplied with the bid.
3. *Body Structural Warranty*
 - a. The body manufacturer shall warrant the new apparatus for structural integrity for the a minimum of twenty (20) years from the date of delivery to the original retail purchaser. The warranty will ensure that the vehicle will be free all structural defects of both material and workmanship that may appear under normal use and

service within the warranty period. A copy of the warranty shall be supplied with the bid.

G. Rear Tow Package

1. Under the rear tail board there shall be structural steel reinforcement attached to frame rails of chassis to support receiver type hitch assemblies. The receiver shall be installed at the rear center of apparatus and be capable to with stand the requirements of towing (not lifting) the apparatus without damage.

H. Labels

1. *Fuel Type Plate*
 - a. A permanently engraved plate shall be installed on or near the fuel fill to designate the chassis fuel type.
2. *Seating Label*
 - a. There shall be a label located in the cab or in view of the driver, stating maximum seating capacity.
3. *Vehicle Height Label*
 - a. There shall be a label located in the cab or in view of the driver, stating the overall height of the vehicle.
4. *Seat Belt Warning Label*
 - a. There shall be a label located at all seating areas, warning personnel that death or serious injury could result from not wearing seat belts while the vehicle is in motion.
5. *Riding On Step Label*
 - a. There shall be a label located at all exterior stepping surfaces, stating "Warning: Death or serious injury may result from riding on any stepping surface when the vehicle is in motion.

I. Rear Mud Flaps

1. There shall be a set of black mud flaps shall be installed on the rear wheel well.

J. Body

1. This body is built with the intension of being placed on an F-550 chassis with a 60" cab to axle measurement. **Body shall be constructed by the assembler of the apparatus.**

K. Body Construction

1. Construction material shall be aluminum, fully welded, with no rivets. The roof and wall beams shall be MIG welded to body exterior panels. All dissimilar metals shall have a barrier material between them to prevent electrolysis.
2. All exterior panels shall be 5052 corrosion resistant aluminum, .125" thickness.
3. All welds whether seen or not shall be of good craftsmanship, pleasing appearance. Welds, which are visible, shall be either ground smooth, cleaned or power wire brushed.
4. All aluminum body parts are to be welded for unitized construction to give maximum strength throughout the body.
5. The overall body construction and shelf support shall be welded.
6. The header walls and partitions forming and dividing the compartments, plus the compartment floors shall be of a .125" aluminum construction.
7. Compartment floors shall be properly supported and capable sustaining up to a five hundred (500) pound load.
8. The compartment tops shall be overlaid with polished aluminum tread plate that extends over the out side edge of the compartment forming a drip rail.
9. All compartments shall be of sweep-out type with no lip at bottom edge. The bottom of all compartments and shelving trays shall have turtle tile installed.
10. Compartment interiors walls shall painted with silver hammer finish paint. The finished walls shall be easier to maintain, reflect light better to allow you better visibility,
11. There shall be .125" aluminum tread brite installed around the rear wheel well areas. This shall be overlaid and shall be sealed at all seams. There shall be SCBA door installed on each side in the rear of the fender.

12. The rear bumper trimmed out on top and sides with 1/8" aluminum tread brite. The bumper shall extend approximately 8" from the body, and be approximately 18 - 20" from the ground to the top of the tailboard
13. The clearance between the chassis cab and utility body shall be minimal to allow for the installation of push-up floodlights and any other equipment placed between the cab and body.
14. The entire rescue module will be undercoated. Body is to be completely undercoated before mounting. Undercoating body separate from the chassis ensures better coverage in to the corners and crevices with obstruction from the chassis.

L. Compartmentation: (Firms may submit alternate options for compartment storage.)

1. The body is a modular design welded to heavy duty support frame work. The main frame rails will be of 6" x 1/4" wall Aluminum channel. The rigid main body will be of 6061-T6 tubing measuring 1.50" x 2.50" and 1.50" x 1.50" x .125" thick.
2. Aluminum storage compartments on each side. Complete body width is approximately 94" from side to side and 122" long.
3. Passenger side compartments sizes (from front to rear)

Note: All measurements are Length x Depth x Height

- a. P1 – 26" x 20" x 56" (transverse area 26" x 54" x 37")
- b. P2 – 50" x 20" x 36"
- c. P3 – 38 "x 20" x 56"

4. Driver's side compartment sizes (from front to rear)

Note: All measurements are Length x Depth x Height

- a. D1 – 26" x 20" x 56" (transverse area 26" x 54" 37")
- b. D2 – 50" x 20" x 56"
- c. D3 – 38" x 20" x 56"

5. Each side compartment will have a clear depth of 18" minimum with the doors closed.
6. All doors will be of the roll up cylinder type with lights and door ajar warning lights with door location located in cab.
7. The compartments will be covered inside with smooth aluminum .125" thick.
8. The compartments flooring will be of the sweep out design. With black turtle tile in bottom of compartments and shelves.

M. Front Bumper

1. An all steel full replacement front bumper shall be used in place of the factory bumper. The bumper shall have a full, rap around type brush guard unless a front bumper nozzle is to be used. The bumper shall be equipped with a Warn #12000 M series winch. The winch shall have a 12' remote cable and 125' of 3/8" steel braided cable.

N. Bumper Nozzle

1. An Elkhart Sidewinder remote bumper nozzle shall be installed on the driver side corner of the bumper. The nozzle shall be controlled via a joy stick type control inside the chassis cab.
2. The nozzle shall have a flow rate of no less than 30 gpm and no more than 45 gpm.
3. The joy stick control shall have the ability to control the flow pattern, left to right movement, up and down movement and shall also be capable of turning the water flow off or on.

O. Skid Unit

1. The skid unit shall be an Odin Compressed Air Foam System (CAFS) with a 300 gallon Poly tank and 25 gallon foam cell. **See Section 6 for detailed specification.**

P. Body Trim

1. The body shall be trimmed with .125" thick fire apparatus grade aluminum tread brite on the front, back, and both fender wells.

Q. Body Mounting

1. A six point mounting system (three (3) on each side) will be used to secure the body to the chassis. All mounting brackets will be painted black. Prior to mounting the body on

the chassis, a 1" rubber cushion shall be placed on the chassis frame to act as a barrier between the aluminum body frame rails and the steel chassis frame. This will eliminate any possibility of electrolysis.

R. Long Handle Tool Storage Compartment

1. A storage compartment under the cargo bed will be supplied
2. Interior box size shall be approximately 33" x 7" x 122" (Width x Height x Depth)
3. This compartment will be accessed from the rear of the body through a hinged drop down weather tight door.

S. Shelving: All Shelving will be considered an option. The county reserves the right to select one, none or all of the options. Pricing should be submitted separately from base bid.

1. **Fixed Shelving: (Option# 1)**
 - a. Shelf locations and number of shelves shall be determined prior to construction. Lower shelf will be used for rescue tool (AKA Jaws of Life).
2. **Slide Trays (Adjustable): (Option# 2)**
 - a. Slide tray locations and number of slides shall be determined prior to construction
3. **SCBA Bottle Storage Compartments:**
 - a. SCBA bottle storage in fender wells; one each side

T. Lighting

1. All DOTS required lights will be provided.
2. **Emergency Lighting:**
 - a. Body to be equipped with full Code 3 NFPA compliant light package
 - b. One (1) MX 7000 light bar
 - c. Two (2) LED-X lights in front grill
 - d. Two (2) LED-X lights recessed in rear of body
 - e. Two (2) 3 x 7 LED lights in rear fender
 - f. Two (2) 3 x 7 LED lights in front of front door
 - g. Two (2) 3 x 7 LED lights on top rear corner of body
 - h. NFPA ground lighting operated by in cab toggle switch

U. Electrical

1. Ambulance Prep Package
2. Compartment Lighting
3. Master Switch; Driver's Side Cab Area
4. Custom Center Console (Vendor is to submit center console options).
5. Open Compartment Warning Lights located in the center console
6. Persons familiar with AC, DC and emergency vehicle systems shall perform all electrical work.
7. All electrical systems involving operation of the emergency equipment shall be separate and distinct from the operation of the chassis systems. All wiring shall be automotive approved and shall be resistant to water grease and oil. The wiring and harness shall all be routed in protected locations neatly and securely fastened with grommets in all thru holes for wiring to pass.
8. The warning lights, light bar and siren shall all be controlled by a single control panel Code 3 model RLS 3999. This control panel has deluxe siren with arrow stick and spotlight control with built in self testing
9. Function. The control panel shall be connected to the microprocessor with fiber optic cable.
10. All heavy amps carrying cable shall have industrial crimp-on terminals on each end.
11. All compartment wiring shall be inside split loom and neatly and securely attached to inside of compartments.
12. The body shall have all DOT lighting per FMVSS 108.

6. MINIMUM REQUIREMENTS (SKID UNIT)

The specifications listed below are considered *Minimum* and may be exceeded. Alternate items meeting fit, form and function of specifications may be submitted. However, Sedgwick County reserves the right to select the bid that most closely matches the specifications.

A. *Odin Derringer 130/60 Specification*

1. The Derringer provides a self-contained, diesel-powered, “slide-in” type compressed air foam system (CAFS) unit. The CAFS unit shall be designed to fit into the back of a standard length and width pick-up truck body.
2. The CAFS shall be designed to discharge water only, air only, foam solution only or compressed air foam from the same discharge outlet. In addition, the consistency of the compressed air foam (expansion ratio), wet/dry shall be fully adjustable.

B. *Engine*

1. The power to drive the system shall be provided by a B&S / Daihatsu DM 950DT, 3-cylinder, 4-cycle, water-cooled diesel engine with 954 cubic centimeter displacement. The rating for this engine is 34 hp @ 3600 rpm. Automotive engines or ratings will not be used. The power unit shall have a 40-amp alternator and dry cartridge air filter and a muffler. **The engine will be supplied fuel via the chassis tank.**

C. *Water Pump*

1. The water pump shall be a *Darley* model 1½” AGE single-stage centrifugal pump with a vertically split aluminum case with replaceable bronze impeller and seal rings on a stainless steel shaft. It is designed to provide up to 130 gpm (492 L/min) of plain water flow and pressures up to 170 psi (11.7 b) . The pump seal shall be of a mechanical design. Helical cut gears shall be utilized in the pump transmission.

D. *Air Compressor*

1. The air compressor shall be of the oil injected rotary screw type, designed and installed to supply a minimum of 70 cfm @ 125 psi (1982.2 L/min @ 8.6 b) of free air at maximum engine rpm. The compressor air/oil receiver shall be built and designed by the compressor manufacturer. A spin-on oil filter shall also be integrated into the compressor system. Replacement elements shall be readily available.
2. The air compressor shall be driven via a dry *Gates Poly-V*[®] drive from the engine crankshaft and will be mounted to the pump platform. The air compressor shall be capable of maintaining prolonged pressure to 150 psi (10.3 b) throughout the service life of the complete CAFS unit.
3. A pneumatic modulating inlet valve mounted on the air end inlet shall control the compressor. An Auto Odin balancing system shall be provided to automatically maintain the air pressure within plus-or-minus 5% of the water pump pressure throughout the CAFS operating range.
4. The cooling water to the heat exchanger shall be supplied through a dedicated, filtered line, from the units water pump. Water shall flow through the heat exchanger whenever the water pump is operating. The air compressor cooling system shall incorporate a thermostat that maintains the system oil temperature within a 168°F (75.6°C) to 225°F (107.2°C) range. The system shall be capable of maintaining recommended operating temperatures throughout the full operational range in ambient temperatures up to 115°F (46.1°C). A dry cartridge type air filter shall be provided on the compressor air intake.

E. *Foam Proportioner*

1. The foam proportioner shall be a *FoamPro* model 1601 automatic, 12 VDC, direct-injection system. It shall be capable of maintaining a solution ratio of 0.1% to at least 1% of class “A” foam. The pump shall be a plunger type positive displacement pump. The pump output shall be 1.0 gpm @ 200 psi (3.8 L/min @ 13.8 b). The motor shall be rated at 1/3 hp with a maximum amp draw of 19 amps @ 200 psi (13.8 b). The proportioner shall be capable of using different types of class “A” liquid foam concentrates. This complete system will be mounted within the module.

F. *Drive System*

1. The water pump shall be directly driven using a centaflex coupling on an extension shaft in line with the crankshaft of the engine. The compressor, which will be mounted to the engine flywheel housing, shall be belt-driven using a *Gates Poly-V*[®] belt drive system.

G. Electrical System

1. All electrical equipment installed by the manufacturer shall conform to current automotive electrical system standards and the requirements of the applicable NFPA apparatus standards. The wiring shall be individually and permanently color and function coded. The installation shall meet SAE Standard J1128 in its latest edition for GXL or SXL temperature rating.
2. All exposed wiring shall run in loom with a minimum of 280°F (137.8°C) rating. All wiring loom shall be properly supported and attached to frame members along the entire run. At any point where wire or looms must pass through metal, rubber grommets shall be installed to protect the wire from abrasion.
3. The main low voltage electrical terminal block and circuit breaker panel shall be provided behind the pump operator's panel in a location providing easy service access.
4. The electrical connections shall be made using heat shrink and/or weatherproof connectors. All electrical circuits shall be protected with automatic reset circuit breakers or fuses.

H. Engine Compartment Light

1. An engine compartment light shall be installed in the module. The engine compartment light shall be controlled by a doorjamb switch, which is activated by raising and lowering the module lid. The engine compartment light shall energize when the module lid is in the raised position

I. Priming System

1. A *Darley* 12 VDC electric, oil-less, rotary-vane priming system shall be utilized. The primer is capable of priming the water pump through 20' of hard suction hose with a 10' lift. Primer controls and instruction plate shall be mounted on the operator's panel.

J. Plumbing, Hoses and Lines

1. All piping shall be stainless steel. Use of grooved end pipe couplings are required for flexibility and movement of system components on mobile equipment. The compressor manufacturer shall supply all air compressor control lines. Hydraulic hoses will only be used for air injection lines and not control air lines. Flexible piping may be used where applicable. Check valves are required throughout the system to maintain integrity and shall be placed so that the air, water foam and foam solution do not inadvertently mix. One (1) master drain valve shall be provided on the control panel to completely drain the system to prevent freeze damage.

K. Tank to Pump

1. The Tank to Pump Valve shall be a 2" *Akron* 2" NST-M self-locking, swing-out valve fitted in the module and controlled from the operator's panel with a push/pull T-handle control.

L. Tank to Pump Check Valve

1. A Brass 2" check valve shall be installed in the water pump inlet plumbing, between the water tank and the pump inlet.

M. Suction Inlet

1. Suction piping shall be stainless steel with a 2" tank to pump valve controlled from the operator's panel. A 2½" male adapter and cap shall be provided at the operator's panel for drafting. All inlet valves will be *Akron* self-locking, swing-out valves.

N. Direct Tank Fill

1. A separate valve with a 2½" NH female swivel connection and plug shall be provided and controlled at the operator's panel for "direct tank fill" operations with a pressurized water source.

O. Discharge Outlets

1. There shall be a 1½” stainless steel, plumbing to panel, mounted CAF discharge outlet. An additional CAF discharge mix point shall be provided for use as a hose reel, pre-connect (or other user defined discharge), for a total of two separate mix points.. Swing check valves shall be installed on each discharge to prevent foam from back flowing into the pump. The CAF mix point controls shall be grouped together on the panel with easy to read calibration marks laser cut into the panel. Discharge valves shall be Akron 1 ½” NST-M self-locking, swing-out valves.

P. Tank Refill

1. An 1 ½” tank refill line with an 1½” valve and flexible, reinforced wire-braid, hydraulic hose shall be provided.

Q. Master Drain

1. A Darley multi-port master drain with remote drain hose shall be installed and operated from the operator’s panel. The drain valve shall be located lower than the main pump body and plumbed to completely drain the system for winterizing.

R. Module Frame

1. The frame shall be constructed of aluminum and designed for rigorous use by fire service personnel. The top of the module shall be a laser-cut, aluminum diamond-plate material, stainless steel hinged for a complete service access door. The top access door shall use pneumatic gas shocks to maintain the door in the open position.

S. Corrosion Resistance Treatments

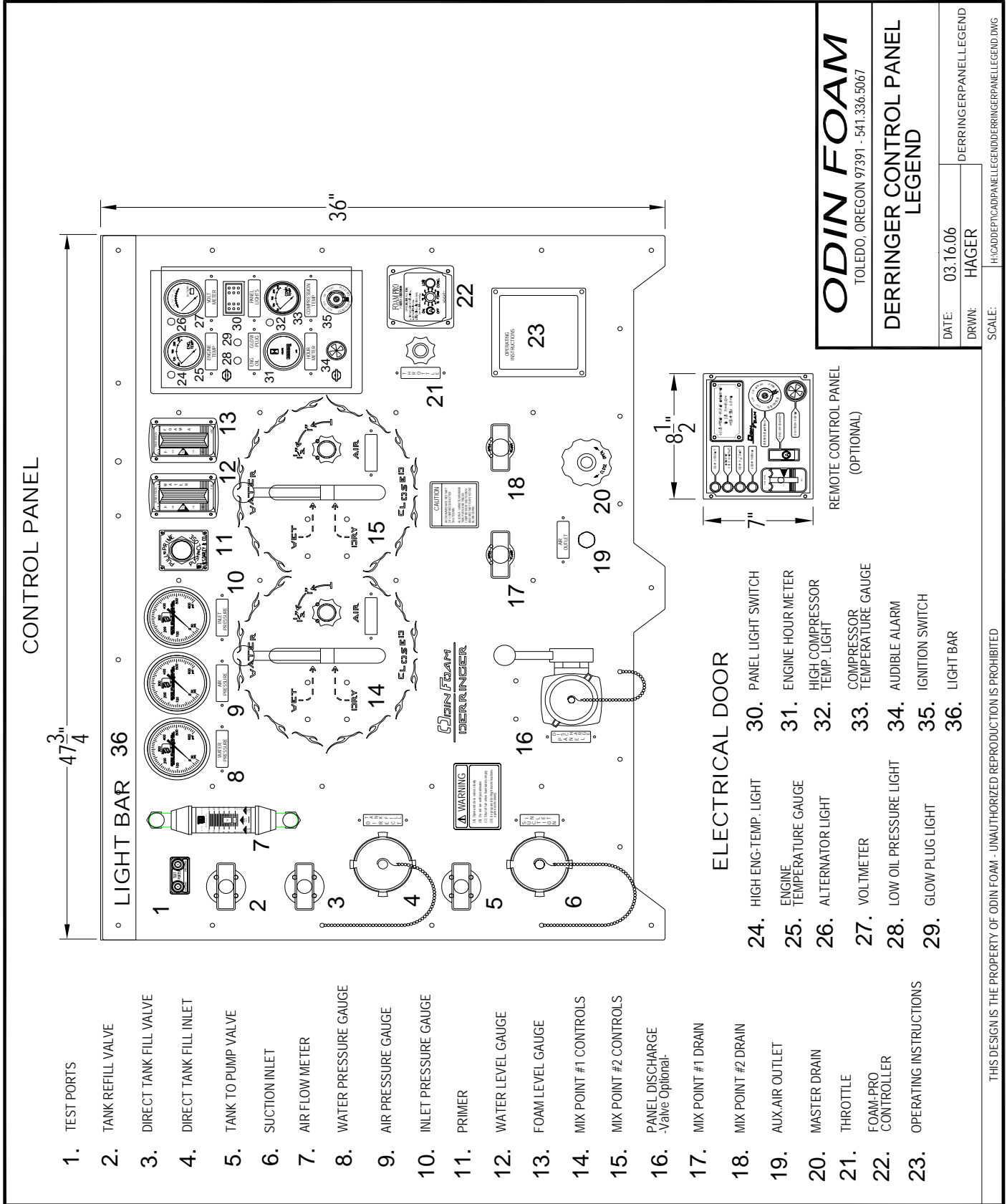
1. Die electric tape (laminating type UHMW) is used through out the construction of the module for dissimilar metal contact surfaces. This will include, but not be limited to control panel to frame, engine mounts to frame, and solution injection unit to frame.
2. All SS screws, which secure the SS panel to the aluminum frame, will be treated with dielectric liquid.
3. The majority of fasteners throughout the system will be SS.
4. All electrical ground connections to the frame will be treated with dielectric silicone compound.
5. Wire ends will have waterproof and corrosion resistant shrink tube, adhesive lined type terminals and connectors.
6. All electrical plugs in the module will be environmentally sealed Deutsch type.
7. The entire surface of the electric fuse / connection box will be treated with a urethane seal coat., to seal out moisture

T. Control Panel

1. A brushed stainless steel, laser-cut control panel shall be mounted to the electrical box, which shall be of a water resistant design. The following items shall be positioned and clearly marked in a logical manner on the control panel to provide for simple and easy operation.
2. 3-Lamp Shielded Pump Panel Light Cluster & Switch
3. Water Tank Level Indicator
4. Foam Tank Level Indicator
5. Air Flow Meter (cfm)
6. 4” Black Face, Master Water Pressure Gauge
7. 4” Black Face, Master Air Pressure Gauge
8. 4” Black Face, Master Inlet Compound Gauge
9. Pump Test Ports
10. Primer Control
11. Tank Refill Valve, Locking, Push/Pull, T-Handle Valve
12. Direct Tank Fill, Locking, Push/Pull, T-Handle Valve
13. Direct Tank Fill, Inlet, 2½” NH Female Swivel with Plug & Lanyard
14. Tank to Pump, Locking, Push/Pull, T-Handle Valve
15. Suction Inlet, 2½” NH Male with Cap & Lanyard
16. Vernier Throttle Control

17. Master Drain Valve
18. Auxiliary Air Outlet
19. System Operation Instruction Placard
20. Panel Discharge CAFS Outlet 1½" NH Male with Cap & Lanyard
21. Two (2) Separate Sets of Mix Point Controls
 - a. Water Solution Valve
 - b. Quarter-Turn Air Injection Control Valve
 - c. Quarter-Turn Mix Point Pressure Drain Valve
22. Electrical Door
 - a. Engine temperature switch gauge
 - b. Volt meter
 - c. Hour meter
 - d. Compressor temperature switch gauge
 - e. Engine high temperature light
 - f. Alternator light
 - g. Compressor high temperature light
 - h. Low engine oil pressure light
 - i. Glow plug light
 - j. Panel light switch
 - k. Ignition switch
 - l. 97dB Audible Alarm
 - m. *FoamPro* Concentrate Proportioner Control

U. Control Panel Layout: (For Reference Purposes Only)



1. TEST PORTS

2. TANK REFILL VALVE

3. DIRECT TANK FILL VALVE

4. DIRECT TANK FILL INLET

5. TANK TO PUMP VALVE

6. SUCTION INLET

7. AIR FLOW METER

8. WATER PRESSURE GAUGE

9. AIR PRESSURE GAUGE

10. INLET PRESSURE GAUGE

11. PRIMER

12. WATER LEVEL GAUGE

13. FOAM LEVEL GAUGE

14. MIX POINT #1 CONTROLS

15. MIX POINT #2 CONTROLS

16. PANEL DISCHARGE Valve Optional

17. MIX POINT #1 DRAIN

18. MIX POINT #2 DRAIN

19. AUX. AIR OUTLET

20. MASTER DRAIN

21. THROTTLE

22. FOAM-PRO CONTROLLER

23. OPERATING INSTRUCTIONS

24. HIGH ENG-TEMP. LIGHT

25. ENGINE TEMPERATURE GAUGE

26. ALTERNATOR LIGHT

27. VOLTMETER

28. LOW OIL PRESSURE LIGHT

29. GLOW PLUG LIGHT

30. PANEL LIGHT SWITCH

31. ENGINE HOUR METER

32. HIGH COMPRESSOR TEMP. LIGHT

33. COMPRESSOR TEMPERATURE GAUGE

34. AUDIBLE ALARM

35. IGNITION SWITCH

36. LIGHT BAR

ELECTRICAL DOOR

V. Labels

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

W. Testing

1. The completed unit shall undergo a manufacturer's run-in test prior to delivery. The engine, pump and air compressor shall be operated for a minimum period of six (6) hours, during which time the test operator shall monitor and record the functions and performance of each system component. Compressed air foam shall be produced during the test.
2. This testing shall be performed to ensure proper system operation and performance prior to shipment.

X. Manuals

1. One (1) copy of the *Operation and Maintenance Manual* and a CD copy shall be provided to the purchaser with each unit. This manual shall include detailed instructions in the operation and maintenance of the overall unit, engine, water pump, air compressor and foam proportioner.

Y. Dimensions (Approximate)

1. Length: 48" (121.92 cm)
2. **Width: 47.5" (120.65 cm)**
3. Height: 36.5" (71.12 cm)
4. Weight: 1,250 lbs. (269.9 kg)

Z. Performance

1. Water Pump: 130 gpm @ 100 psi (492.1 L/min @ 6.9 b)
2. Air Compressor: 60 cfm @ 125 psi (1699 L/min @ 8.6 b)
3. Simultaneous Flow (NFPA): 110 gpm & 55 cfm @ 125 psi (416.4 L/min & 1557.4 L/min @ 8.6 b)
4. Simultaneous Flow: 130 gpm & 60 cfm @ 100 psi (492.1 L/min & 1699 L/min @ 6.9 b)
5. Engine Horsepower: 34 hp @ 3600 rpm
6. Fuel Use @ Full Load: 1.6 gph (6.1 L/hr)

AA. Warranty

1. Engine: 1 year
2. Compressor: 1 year
3. Water Pump: 3 year/3000 hours
4. Chemical Injector: 1 year
5. Water Tank: Lifetime
6. All fabrication and materials are warranted for a period of two (2) years barring accidents, abuse or negligence. Excluding from warranty are all consumables and parts subject to routine replacement. We will repair or assist in the repair or replacement of the product in its entirety.

4. CONTRACT PERIOD AND PAYMENT TERMS

The contract period with the successful firm will be three (3) years, to begin following Board of County Commission approval of the recommended proposal, as finalized, and receipt by the County of any and all required paperwork. The County will have an option to renew the contract for two (2) additional one (1) year terms, if agreeable between all parties.

The County reserves the right to cancel the contract and discontinue services with a fifteen (15) day written notice as a result of the failure of the contracted proposer to provide acceptable reports and services as delineated in the response to this document or if determined that services can be better provided by in-house or other sources.

Payments for all specified services or product to the successful bidder can be made with the following criteria taken into consideration:

- Delivery of the proposed service(s) and/or product(s);
- Receipt of a detailed invoice;
- Payment won't be made until above conditions are met.

5. TENTATIVE TIME LINE

The following dates are provided for information purposes and are subject to change without notice. Contact James McComas, Purchasing Department at (316) 660-7255 to confirm any and all dates.

Distribution of Request for Proposal to interested parties	October 25, 2006
Clarification, Information and Questions submitted in writing by 5:00 p.m. CST	November 02, 2006
Addendum Issued	November 06, 2006
Sealed proposals due before 1:45 p.m. CST	November 21, 2006
Evaluation Period	November 22, 2006 – December 06, 2006
Board of Bids and Contracts Recommendation	December 07, 2006
Board of County Commission Award	December 13, 2006

6. QUESTIONS and CLARIFICATIONS

All requests for clarifications of the RFB process should be directed to James McComas, at (316) 660-7255, or e-mail jmccomas@sedgwick.gov. All questions must be submitted in writing by 5:00 p.m. CST, November 02, 2006. Answers will be provided in written form as an addendum and will be posted on the County website at www.sedgwickcounty.org/purchasing by November 06, 2006. **Vendors are responsible for checking the web site and acknowledging any addendums on the bid response form.**

7. REQUEST FOR BID CONDITIONS

In submitting a response to this Request for Bid, vendors hereby understand the following:

1. Pricing offered in the bid document will be provided to other local governments and governments whom Sedgwick County regularly enters into cooperative agreements.
2. Sedgwick County reserves the right to reject any and/or all bids and responses to these and/or related documents, to accept any item(s) in the bids, to waive any irregularity in the bids, and further if determined to be non-responsive in any form, or if determined to be in the best interest of Sedgwick County.
3. Alternate bids (two or more bids submitted) will be considered for an award. Sedgwick County reserves the right to make the final determination of actual equivalency or suitability of such bids with respect to requirements outlined herein. The bids submitted, and any further information acquired through interviews, will become and is to be considered a part of the final completed contract. If there is any variance or conflict, the bid specifications will control.
4. Bidders MUST return, completed copies of the entire document to the Sedgwick County Purchasing Department, 604 North Main, Suite F, Wichita, KS 67203-3703, on or before the date and time specified. Bids must be sealed in an envelope and marked with the firm name and address, bid number, bid opening date, and bid opening time. The time clock stamp, located in the Sedgwick County Purchasing Department will determine the time of receipt.
5. All project participants, consultants, engineers, and contractors, must comply with all applicable Federal, State and County laws pertaining to contracts entered into by governmental agencies, including non-discriminating employment.
6. Bids submitted may not be withdrawn for a period of 60 days immediately following the opening of this Request for Bid. Prices MUST be free of federal, state, and local taxes unless otherwise imposed by a governmental body, and applicable to the material on the bid.
7. Sedgwick County interprets the term "Lowest Responsible Bidder" as requiring Sedgwick County to: (a) choose between the kinds of materials, goods, wares, or services subject to the bid, and (b) determine which bid is most suitable for its intended use or purpose. Sedgwick County can consider, among other factors, such things as the availability of service(s), part(s) material(s) and/or supply(s), maintenance and labor cost of items upon which bids are received.
8. All requested information must be supplied. If you cannot respond to any part of this request, state the reason you cannot respond. You may provide supplemental information to assist Sedgwick County in analyzing your bid.
9. If the supplier refuses or fails to make deliveries of the materials within the times specified on the face of the Request for Bid or purchase order, Sedgwick County may, by written notice, terminate the contract or purchase order.

10. The supplier will certify and warrant that goods, personal property, chattels, and equipment sold and delivered are free and clear of any and all liens, or claims of liens, for materials or services arising under, and by virtue of the provisions of K.S.A. Sections 58-201, et seq., and any other lien, right, or claim of any nature or kind whatsoever.
11. The successful bidder will hold and save Sedgwick County, and its officers, agents, servants/employees harmless from liability of any patented, or unpatented invention, process, article, or appliance manufactured, or used in the performance of the contract, including its use by Sedgwick County.
12. All items furnished, if applicable, must be the best of their respective kinds, and will be free from defects in material and workmanship. Items will be subject to County inspection and approval at any time within 30 days after delivery. If a substitution is made, it will be the decision of a Sedgwick County representative to determine if it is of equal quality. Items furnished must be manufactured in compliance with all existing legal or governmental directives.
13. All items must be properly packed, if applicable, to insure delivery in good condition, and in accordance with instructions listed on the face of the Request for Bid or purchase order, if any.
14. Contracts entered into on the basis of submitted bids are revocable if contrary to law.
15. The Bidder agrees to comply with K.S.A. 44-1030.
 - a. The contractor shall observe the provisions of the Kansas act against discrimination and shall not discriminate against any person in the performance of work under the present contract because of race, religion, color, sex, disability, national origin or ancestry;
 - b. In all solicitations or advertisements for employees, the contractor shall include the phrase, "equal opportunity employer," or a similar phrase to be approved by the commission;
 - c. If the contractor fails to comply with the manner in which the contractor reports to the commission in accordance with the provisions of K.S.A. 44-1031 and amendments thereto, the contractor shall be deemed to have breached the present contract and it may be canceled, terminated or suspended, in whole or in part, by the contracting agency;
 - d. If the contractor is found guilty of a violation of the Kansas act against discrimination under a decision or order of the commission which has become final, the contractor shall be deemed to have breached the present contract and it may be canceled, terminated or suspended, in whole or in part, by the contracting agency; and
 - e. The contractor shall include the provisions of subsections (a) through (d) in every subcontract or purchase order so that such provisions will be binding upon such subcontractor or vendor.
16. The vendor responding to this bid solicitation proposes to furnish all materials, labor, supplies, equipment and incidentals necessary to provide the equipment/materials/services described herein in accordance with the Notification of Solicitation (if applicable), Request for Information (if applicable), Request for Bid, Addenda, Contract, Bonds, Insurance, Plans, Specifications, Mandatory Requirements and Conditions.
17. It will be understood that the bidder's sureties and insurers are subject to the approval of the County.
18. Upon award, the bidder agrees to execute and deliver to the County a contract in accordance with the contract documents (if applicable) within ten days of notice of the award to the bidder. The bidder agrees that the surety/deposit given concurrently herewith will become the property of the County in the event the bidder fails to execute and deliver such contract within the specified time. In the further event of such failure, the bidder will be liable for the County's actual damages that exceed the amount of the surety.
19. It will be understood that time is of the essence in the bidder's performance. The bidder agrees that the County's damages would be difficult or impossible to predict in the event of a default in the performance hereof; and it is therefore agreed that if the bidder defaults in the performance of the contract documents, the bidder will be liable for payment of the sums stipulated in the contract documents as liquidated damages, and not as a penalty.
20. The bidder hereby certifies that he or she has carefully examined all of the documents for the project, has carefully and thoroughly reviewed this Request for Bid, has inspected the location of the project (if applicable), and understands the nature and scope of the work to be done; and that this bid is based upon the terms, specifications, requirements, and conditions of the Request for Bid documents. The bidder further agrees that the performance time specified is a reasonable time, having carefully considered the nature and scope of the project as aforesaid.
21. It will be understood that any bid and any and/or all referencing information submitted in response to this Request for Bid will become the property of Sedgwick County, and will not be returned. As a governmental entity, Sedgwick County is subject to making records available for disclosure after Board of County Commission approval of the recommendation.
22. Sedgwick County will not be responsible for any expenses incurred by any vendor in the development of a response to this Request for Bid including any onsite (or otherwise) interviews and/or presentations, and/or supplemental information provided, submitted, or given to Sedgwick County and/or its representatives. Further, Sedgwick County will reserve the right to cancel the work described herein prior to issuance and acceptance of any contractual agreement/purchase order by the recommended vendor even if the Board of County Commissioners has formally accepted a recommendation.
23. By submission of a response, the bidder agrees that at the time of submittal, he or she: (1) has no interest (including financial benefit, commission, finder's fee, or any other remuneration) and will not acquire any interest, either direct or indirect, that would conflict in any manner or degree with the performance of bidder's services, or (2) benefit from an award resulting in a "Conflict of Interest". A "Conflict of Interest" will include holding or retaining membership, or employment, on a board, elected office, department, division or bureau, or committee sanctioned by and/or governed by the Sedgwick County Board of County Commissioners. Bidders will identify any interests, and the individuals involved, on separate paper with the response and will understand that the County, at the discretion of the Purchasing Director in consultation with the County Counselor, may reject their bid/quotation. The bidder certifies that this bid

is submitted without collusion, fraud or misrepresentation as to other bidders, so that all bids for the project will result from free, open and competitive bidding among all vendors.

24. Unless specified otherwise, all items bid are to be as a minimum but not necessarily limited to: new, current model year, and untitled prior to shipping and/or installation.
25. Sedgwick County will issue a purchase order/contract for the acquisition of products/services specified as a result of an award made in reference to this document. Contract documents will be subject to any regulations governed by the laws of the State of Kansas and any local resolutions specifically applicable to the purchase.
26. Any dispute arising out of the contract documents or their interpretation will be litigated only within the courts of the State of Kansas. No prepayment of any kind will be made prior to shipment. Payment will be made upon verification of delivery, compliance with specifications, assurance that the product/service performs as specified and warranted, and receipt of correct invoicing.
27. The bidder must provide Sedgwick County with a toll-free telephone number, or accept collect calls. FAX numbers should also be provided if available. Information regarding the procurement process may be obtained from the Sedgwick County Purchasing Department, 604 North Main, Suite F, Wichita, KS 67203-3703, (316) 660-7255.
28. Sedgwick County will accept responses transmitted via a facsimile unless stated to the contrary within this document. Bids must be received prior to the time and dates listed to be considered responsive. Sedgwick County will not accept late responses and will return them to the sender. Further, Sedgwick County will NOT: (1) guarantee security of the document received; (2) be held responsible for Bids which are NOT legible (and may choose to reject such responses); and, (3) guarantee that the receiving facsimile machine will accept transmission or that phone lines are functioning and available for transmission. Submitting a bid response via facsimile does NOT relieve the bidder of: (1) responsibilities stated in the document (such as attendance at a mandatory pre-bid conference); (2) providing non-paper informational items which must be returned with the response (diskettes, large drawings, photographs, models, etc.); and, (3) providing original copies of bid sureties (bonds, certificates of insurance, etc.).

**BID RESPONSE FORM
 Bid # 06-0131
 SQUAD FIRE TRUCK**

PRICING INFORMATION

I/We _____, propose to provide the product(s) and/or service(s) described herein with the following costs:

Description	QTY	Each Pricing
1. Squad Fire Truck	1 ea	\$
Pricing Firm for 2 nd Year	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Pricing Firm for 3 rd Year	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Estimated Delivery for (1) one Squad Fire Truck	<div style="text-align: right;">days</div>	
Option# 1 Fixed Shelf	<div style="text-align: right;">\$ / ea</div>	
Option# 2 Adjustable Sliding Shelf	<div style="text-align: right;">\$ / ea</div>	
Price(s) proposed must include shipping, handling and in-side delivery FOB to the Sedgwick County Fire Department.		

BID RESPONSE FORM
Bid # 06-0131
SQUAD FIRE TRUCK

The undersigned, on behalf of the Bidder, certifies that: (1) this offer is made without previous understanding, agreement or connection with any person, firm, or corporation making a bid on the same project; (2) is in all respects fair and without collusion or fraud; (3) the person whose signature appears below is legally empowered to bind the firm in whose name the bid entered; (4) they have read the complete Request for Bid and understand all provisions; (5) if accepted by the County, this bid is guaranteed as written and amended and will be implemented as stated; and (6) mistakes in writing of the submitted bid will be their responsibility.

Firm Name			
Contact Name			
Address		City	State
Phone #		Fax #	Hours of Operation
Tax Payer I.D. Number			
General Nature of Business			
Number of Locations			Number of Persons Employed
Company Web Site Address			E-mail

TYPE OF ORGANIZATION: Public Corporation Private Corporation L.L.C. Partnership

Minority Business _____(type)

Woman-Owned Business Small Business Distributor

Educational Institution Retail Dealer

We acknowledge receipt of addenda: NO. _____, DATED _____; NO. _____, DATED _____.

Emergency Contact Information		
<input type="checkbox"/> Yes, I would like to be on the emergency vendor list. <input type="checkbox"/> No, I would not like to be on the emergency vendor list.		
Emergency Contact Name		
After Hours Phone #	After Hours Fax #	

The contract period with the successful firm will be three (3) year, to begin following Board of County Commission approval of the recommended proposal, as finalized, and receipt by the County of any and all required paperwork. The County will have an option to renew the contract for two (2) additional one (1) year terms, if agreeable between all parties.

In submitting this bid, vendor acknowledges all requirements, terms, conditions, and sections of this document. **Any exceptions should be clearly delineated and detailed.**

Signature _____ Title _____

Dated _____