

REQUEST FOR BID

Ogden City Corporation is accepting sealed bids for the purchase of one (1) new **Self-Contained Bed/ Pump/Tank/Hoses/ Skid Unit** and associated equipment, as described herein.

Bid information and bid sheet may be downloaded from the Ogden City website at <http://ogdencity.com/264/Purchasing>.

Bidders are responsible for securing any and all addenda issued.

Two copies of the sealed bid shall be submitted to Ogden City Purchasing, c/o the Info Desk at the 1st floor of the Municipal Building located at 2549 Washington Blvd. Ogden, Utah 84401 **no later than 10 AM, April 22, 2021**. On the same date, the bids will be opened and read aloud thirty minutes later at 10:30 AM via an online format. Details are provided in the RFB document. **LATE BIDS WILL NOT BE ACCEPTED.**

Ogden City reserves the right to accept or reject any bid that best serves its convenience and/or is found to be in the best interest of the City.

Ogden City encourages and welcomes bids from local, women, minority owned businesses and other disadvantaged business enterprises.

PUBLISHED: April 3 & 10, 2021



**OGDEN CITY CORPORATION
REQUEST FOR BID
April 1, 2021**

**Self-Contained Bed/Pump/Tank/Hoses/ Skid Unit
Installed on a Supplier supplied cab & chassis
2022 Ford F-550 XLT, Extended Cab, 4x4, 6.7L Diesel Engine with 60" CA**

I. INTENT OF SOLICITATION

It is the intent of these specifications to set forth the minimum acceptable requirements for the purchase of one (1) new **Self-Contained Bed/Pump/Tank/Hoses/ Skid Unit** and associated equipment, as described herein. Units that have been used for demonstration purposes shall be considered.

II. WRITTEN AGREEMENT

Bid award shall be by written purchase order and upon receipt of the written purchase order the selected bidder shall be obligated to comply with all terms, conditions, and provisions set forth in this solicitation.

III. BID AWARD

Bidders are advised that award of an order from this bid shall be made to the lowest responsible and responsive bidder. The City reserves the right to reject any or all bids submitted in response to this solicitation, to waive any informality or technicality, or to accept bids deemed in the best interest of the City.

IV. SUBMISSION OF BIDS

Submission Deadline: Bids shall be submitted no later than **10 AM, April 22, 2021. Late Bids will not be accepted.**

- Submit two copies of the bid in one sealed envelope or other type of sealed container. Mark envelope or container with the project name "Brush Truck RFB." Indicate your firm's name and submission deadline date.

Use this address for all U.S. Postal Service, express courier or hand delivery, use:

Ogden City Corporation
Purchasing Agent
Purchasing Office
2549 Washington Blvd, Suite 510
Ogden, Utah 84401

V. CONTENT OF BID

All bids submitted must include the following information:

- A. Completed Forms - Exhibits “A”, “B”, “C”, and “D”.**
- B. Warranty information - As specified in Paragraph IX.**
- C. Complete specifications and descriptive literature for the product offered - As specified in Paragraph X.**
- D. Any other supplemental information.**

BIDS RECEIVED THAT DO NOT CONTAIN THE ABOVE ITEMS MAY BE DEEMED NON-RESPONSIVE.

PURSUANT TO REQUIREMENTS OF “UTAH MUNICIPAL OFFICERS AND EMPLOYEES’ ETHICS ACT,” PLEASE DO NOT SUBMIT ANY GIFTS OR PROMOTIONAL ITEMS WITH YOUR BID.

VI. SUBMISSION DEEMED AGREEMENT

Submission of a bid or other offer or submission constitutes the bidder's agreement to all of the terms, conditions and provisions of the bid package, or other solicitation documents. By the submission of any bid or other offer or submission, the bidder represents that the matters stated therein are true and correct.

VII. EXCEPTIONS

If a bidder takes exception to any term, condition, or requirement set forth in this Request for Bid and any of its exhibits and attachments, said exceptions must be clearly identified and included in the response to this Request for Bid.

Exceptions or deviations to any of the terms and conditions must not be added to the bid pages but must be submitted in a separate document accompanying the bid response and identified as “Exceptions”. Should the City omit anything from this bid request which is necessary to a clear understanding of the work, or should it appear that various instructions are in conflict, then the bidder shall secure written instructions from the Purchasing Division at least forty-eight (48) hours prior to the time and date of the bid opening shown in Paragraph IV above.

VIII. NOTICE TO BIDDERS

The City may not consider bids from individuals, contractors, firms, or corporations included in the following categories:

- A. Any organization or individual currently in arrears or in default to the City on a previous debt or contract.**
- B. Any organization or individual currently in default as surety, or otherwise, for any obligation to the City.**
- C. Any organization or individual who has previously failed to faithfully perform a contract with the City.**

IX. LOCAL WARRANTY SERVICE AND PARTS AVAILABILITY

Bids must be accompanied by a copy of the actual equipment warranty and a statement indicating the local sources for warranty service, repair and parts. Details of required documentation listed in Exhibit B section 19.

X. COMPLETE SPECIFICATIONS AND LITERATURE

In the event that it is necessary for comparative purposes, complete specifications, detailed engineered drawings, and descriptive literature for the equipment offered in response to this solicitation shall accompany the bid. Failure to comply with this requirement may result in rejection of your bid.

XI. SPECIFICATIONS DESCRIPTIVE AND NON-RESTRICTIVE

These specifications are intended to be descriptive and non-restrictive. The "**Minimum Requirements**" listed in Exhibit "B" is intended to identify the features to be most important to the department, in order to meet the design and performance expectations for the equipment specified. Bidders shall be expected to provide all minimum requirements as they are specified. However, the City shall reserve the right to consider alternatives which in the City's opinion do not compromise the ability of the equipment to meet design and performance expectations. The City shall be the sole judge in these matters and shall have the right to require an on-site equipment demonstration, at the City's discretion.

Note: As you fill out the attached Exhibit "B", if you have to mark any items in the "NO" column for items listed as "MINIMUM REQUIREMENT" your bid would be considered non-responsive and may not be considered for award; therefore, it is important that you request changes prior to the date in Paragraph XVI, in order to have your bid considered responsive.

XII. DELIVERY AN IMPORTANT FACTOR

The equipment specified herein is of key importance to the City's operations and availability shall be an important factor in determining award of this bid. Therefore, all bidders must state a guaranteed delivery date for the equipment offered, and the City reserves the right to award to the bidder offering the earliest delivery, if such action is determined to be in the best interest of the City.

XIII. ACCEPTANCE

The City shall be allowed a minimum of seven (7) business days following delivery of the equipment specified to inspect said equipment and either accept or reject the same. The City reserves the right to reject any equipment delivered, or any part of said equipment, if said equipment or part thereof fails to conform in every respect to the equipment specifications set forth in this solicitation. The City reserves the option to cancel any accepted bid, in its entirety, due to non-conformance on the part of the vendor and to accept the next lowest responsive bid.

XIV. INDEMNITY

Bidder shall indemnify, save harmless, and defend the City, its officers and employees, from and against all losses, claims, demands, actions, damages, costs, charges, and causes of action of every kind or character, including attorney's fees, arising out of bidder intentionally wrongful, reckless, or negligent performance hereunder. If the City's tender of defense, based upon this indemnity provision, is rejected by bidder, and bidder is later found by a court of competent jurisdiction to have been required to indemnify the City, then in addition to any other remedies the City may have, bidder shall pay the City's reasonable costs, expenses, and attorney's fees incurred in proving such indemnification, defending itself, or enforcing this provision. Nothing herein shall be construed to require bidder to indemnify the indemnity against the indemnities' own negligence.

XV. GOVERNING CODE AND RULES

The City's procurement processes, including this competitive solicitation, are governed by Ogden City Code and Ogden City Administrative Rules for Procurement available through AMLegal - <https://codelibrary.amlegal.com/codes/ogdencityut/latest/overview>

XVI. ADDITIONAL INFORMATION

For any questions related to this RFB, please contact the Ogden City Purchasing office via email purchasing@ogdencity.com or via phone at (801) 629-8742.

The question-and-answer period ends at 3 PM on April 15, 2021.

Questions received after the date above may not be considered or received as a written response. If questions prompt the need for changes to the specification, the City shall issue a written addendum to the original specification within 48 hours of the deadline. The Q&A information will be published on the City website within the Bid Opportunities page as an Addendum to the Brush Truck RFB document.

XVII. MANUFACTURER QUALIFICATIONS

Manufacturer guarantees that all essential parts for proper maintenance of the equipment being offered are available at the present time and shall continue to be available. During the warranty period, manufacturer guarantees delivery of replacement parts within five (5) working days after receipt of order, or less. Manufacturer agrees to provide factory-trained personnel, within a reasonable amount of time to assist with technical service problems.

XVIII. BID OPENING

Bids shall be submitted no later than **10 AM, April 22, 2021**.

On the same date, thirty (30) minutes later at 10:30 AM, bids will be opened and read aloud. In lieu of an in-person meeting, City employees will conduct the bid opening via Microsoft Teams, an online format. See details below:

Microsoft Teams meeting
Join on your computer or mobile app

[Click here to join the meeting](#)

Or call in (audio only)

[+1 385-419-1681,,1421481#](#) United States, Salt Lake City

Phone Conference ID: 142 148 1#
[Find a local number](#) | [Reset PIN](#)
[Learn More](#) | [Help](#) | [Meeting options](#)

IX. INSURANCE REQUIREMENTS

The successful bidder shall procure and maintain for the duration of the contract the required insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of this agreement. The Contractor shall pay the cost of such insurance.

- a. The amount of insurance shall not be less than:
 - i) Commercial General Liability: Minimum of \$3,000,000 commercial general liability coverage with \$2,000,000 for each occurrence. Policy to include coverage for operations, contractual liability, personal injury liability, products/completed operations liability, broad-form property damage (if applicable) and independent contractor's liability (if applicable) written on an occurrence form.
 - ii) Business Automobile Liability: \$1,000,000 combined single limit per occurrence for bodily injury and property damage for owned, non-owned and hired autos.

- iii) Workers' Compensation and Employer's Liability: Worker's Compensation limits as required by the Labor Code of the State of Utah and employer's liability with limits of \$1,000,000 per accident.
- b. Each insurance policy required by this Agreement shall contain the following clauses:
 - i) "This insurance shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty days prior written notice by certified mail, return receipt requested, has been given to the Ogden City Corporation".
 - ii) "It is agreed that any insurance or self-insurance maintained by Ogden City Corporation, its elected or appointed officials, employees, agents and volunteers shall be excess of Contractor's insurance and shall not contribute with insurance provided by this policy."
- c. Each insurance policy required by this Agreement, excepting policies for Workers' Compensation, shall contain the following clause in a separate endorsement:
 - i) "Ogden City Corporation, its elected and appointed officials, employees, volunteers and agents are to be named as additional insureds in respect to operations and activities of or on behalf of, the named insured as performed under Agreement with Ogden City Corporation."
- d. Insurance is to be placed with insurers acceptable to and approved by Ogden City Corporation. Contractor's insurer must be authorized to do business in Utah at the time the license is executed and throughout the time period the license is maintained, unless otherwise agreed to in writing by Ogden City Corporation. Failure to maintain or renew coverage or to provide evidence of renewal will be treated as a material breach of contract.
- e. City shall be furnished with original certificates of insurance and endorsements effecting coverage required within, signed by a person authorized by that insurer to bind coverage on its behalf. All certificates

and endorsements are to be received by the City before work begins on the premises.

- f. City reserves the right to require complete, certified copies of all required insurance policies at any time.
- g. Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of the City, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respect to the City, their elected and appointed officials, employees, agents and volunteers; or Contractor shall provide a financial guarantee satisfactory to the City guaranteeing payment of losses and related investigations, claim administration and defense expenses.
- h. Contractor shall include all of its contractors as insured under its policies or shall furnish separate certificates and endorsements for each contractor. All coverages for Contractor's contractors shall be subject to all of the requirements stated herein.
- i. Nothing contained herein shall be construed as limiting in any way the extent to which Contractor may be held responsible for payments of damages to persons or property resulting from the activities of Contractor or its agents, employees, invitees or contractors upon the Premises during the License Period.



**EXHIBIT "A"
BID COVER SHEET**

**Self-Contained Bed/Pump/Tank/Hoses /Skid Unit
Installed on a Supplier supplied cab & chassis
2022 Ford F-550 XLT, Extended Cab, 4x4, 6.7L Diesel Engine with 60" CA**

**COMPANY
NAME** _____

ADDRESS _____

CONTACT NAME, PHONE, AND

EMAIL _____

Print and Sign Name

EQUIPMENT PRICE

Price stated includes all costs associated with the performance of the services specified, including equipment, materials, freight, supervision, labor, training, insurance, transportation, delivery, off-loading, fuel or other surcharges, to Ogden City Fleet and delivering completed unit F.O.B. Ogden, Utah. No other charges shall be allowed.

Fleet Address: 175 W 29th Street, Ogden City, Utah 84401

Contact Person: Trent Nelson

Phone: 801-629-8341

Apparatus Cost \$ _____

Build Time _____

EXHIBIT "B"
TECHNICAL SPECIFICATIONS

**Self-Contained Bed/Pump/Tank/Hoses/ Skid Unit
Installed on a Supplier supplied cab & chassis
2022 Ford F-550 XLT, Extended Cab, 4x4, 6.7L Diesel Engine with 60" CA**

NOTICE TO BIDDERS: Any bidder who willfully falsifies responses indicating compliance or non-compliance with the minimum requirements listed below shall be subject to suspension and/or debarment from bidding.

Each item below shall have a yes or no response in the appropriate column. For all "NO" responses, attach a separate sheet with full explanation of the "NO" response including a description of the alternate to be supplied. The City reserves the right to determine if alternates are to be considered as approved equals.

Item No.	MINIMUM REQUIREMENT	YES	NO
	<p>CHASSIS</p> <ul style="list-style-type: none"> ❖ 2022 Ford F-550 Chassis XLT ❖ Color to be Rapid Red ❖ Extended Cab ❖ High Back Seats (Driver / Officer) ❖ 4X4 – Electronic Shift on The Fly (ESOF) ❖ 60" Cab to Axle ❖ 6.7L Diesel Engine ❖ Ambulance Prep Package W/ Power equip group ❖ Cruise Control ❖ Automatic Transmission ❖ LT225 BSW 19.5" All Traction Tires ❖ 19,500 GVWR ❖ 4.88 Limited Slip Rear Axle ❖ 40-Gallon Aft-Axle Gas Tank ❖ AM / FM Stereo ❖ Power Telescoping Trailer Tow Mirrors ❖ Heated Mirrors ❖ Electric Mirrors ❖ Electric Door Locks ❖ Skid Plates ❖ Rear View Camera 		
	<p>SINGLE TIRE CONVERSION PACKAGE</p> <p>There shall be a single tire conversion package installed on the chassis.</p> <p>The package shall include:</p> <ul style="list-style-type: none"> Five (5) Michelin XForce ZL 335/80R20 Tires Five (5) Forged Aluminum Two Piece Wheels with Bead Lockers One (1) 4.0" Suspension Lift Kit 		

Item No.	MINIMUM REQUIREMENT	YES	NO
	<p>Four (4) Custom Replacement Performance Shocks. Two (2) Custom Front Replacement Fenders, painted chassis color. Stryker dual steering stabilizer struts shall be installed. The front and rear differentials shall have the gears replaced so the chassis performs to stock factory performance. The speedometer shall be recalibrated to correct performance. The spare tire shall be mounted on top of the water tank.</p> <p>NERF BARS There shall be one pair of polished stainless steel nerf bars installed on the chassis or Ford factory installed running boards.</p>		
1	ELECTRICAL:		
1a	<p>Chassis Electrical: All electrical equipment installed by the manufacturer shall conform to current automotive electrical system standards and the requirements of the applicable NFPA fire apparatus standards. The installation shall meet SAE Standard J1128 in its latest edition for GXL or SXL temperature ratings. The electrical system shall consist of switches, circuit boards, relays, diodes, resistors, fuses, wiring, wiring harnesses, and connectors as required to ensure consistent and uninterrupted operation of the completed apparatus. The electrical system shall be composed of individual wiring harnesses that are integrated as a complete unit via bulkhead type Deutsch waterproof electrical connectors located between the chassis and fire body. All GXL / SXL wiring for the apparatus shall be located within temperature resistant harnesses rated at a minimum of 280°F. All electrical wires in each harness shall be permanently color and function coded throughout. All electrical connections made outside of the chassis shall be made utilizing heat shrink type connectors and / or Deutsch weatherproof connectors. All electrical circuits shall be protected with circuit breakers or fuses. The main low voltage electrical circuit board with associated circuit breakers and fuses shall be provided in a protective metal housing in a location inside the chassis' cab which provides easy service access. All circuit breakers and fuses located on the main low voltage electrical circuit board shall have diagnostic indicator lights providing for ease of diagnostics. All wiring ran outside of the body will be run along structural members and loom clamped in a neat and orderly manner.</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
	<p>Wiring shall be routed and / or protected to eliminate exposure to moving parts or debris. All wiring passing through metal shall be protected from tears, abrasions, or cuts by rubber grommets.</p> <p>The following additional electrical equipment shall be installed on, and modifications performed to, the specified cab and chassis by the apparatus builder:</p>		
1b	<p>BATTERY MASTER SWITCH The fire apparatus shall be supplied with one (1) battery disconnect switch and indicator plate. The switch shall be rated for 180-amps continuous duty. The switch shall be located on the chassis' floorboard next to the driver's seat. A green indicator light shall be provided and located on the center command console. The indicator light shall be labeled – BATTERY ON</p>		
1c	<p>BATTERY ON INDICATOR LIGHT One (1) "Battery On" indicator light, with a green lens, shall be provided on the center console, located forward on the left side. This light shall illuminate when the battery switch is turned to the "ON" position.</p>		
1d	<p>JUNCTION BOXES One circuit board control panel shall be located under the rear seat on the passenger side. All connection points shall be labeled according to function. A full electrical wiring diagram shall be supplied at time of bid.</p>		
1e	<p>BULKHEAD CONNECTIONS All apparatus body wiring either entering or exiting the cab shall be in a harness configuration and pass through a centralized location as close to the interior electrical junction box as possible. The harness(s) shall terminate at the point of the cab entry/exit with a Deutz bulkhead connector(s) or equivalent, designed to facilitate in the separation of the cab/chassis/apparatus body.</p>		
1f	<p>UNDERBODY LIGHTING There shall be ten (10) LED underbody lights provided on the apparatus. The underbody lights shall automatically activate when the chassis' transmission is shifted into park and shall automatically deactivate when the chassis' transmission is shifted out of park. The underbody lighting shall be wired to a switch located in the cab center console. The underbody lighting shall be activated by a switch on siren controller. One (1) 6" clear oval LED light shall be provided under each cab door.</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
	<p>Two (2) 6" clear oval LED lights shall be provided under the apparatus front bumper.</p> <p>Four (4) 6" clear oval LED lights shall be provided under the apparatus body, one (1) one under each corner. The lights shall be housed within an enclosure sufficient to protect from damage.</p>		
1g	<p>BACK UP ALARM AND CAMERA</p> <p>One (1) solid state back up alarm shall be provided at the rear of the apparatus protected from impact and debris. The backup alarm shall be wired to the reverse circuit of the transmission and shall provide an audible alarm to the rear of the apparatus when reverse gear is selected. The alarm shall have a volume of 87 to 112 DBA while in operation.</p> <p>There will also include a back up camera that activates in reverse</p>		
1h	<p>MAP LIGHT</p> <p>One (1) flexible goose neck LED map light shall be provided on the officer's side of the cab center console. The switch for the map light shall be located on the light and shall include a diffuser to prevent glare at night.</p>		
1i	<p>BATTERY MAINTAINER</p> <p>There shall be a Kussmaul Auto Charge 1000 with 20A Auto Eject installed on the apparatus. The location shall be determined at pre-build. A battery saver filter shall be installed to protect low amp electronics.</p>		
2	EMERGENCY EQUIPMENT:		
2a	<p>PRE-WIRE AND INSTALL EMEGENCY RADIO</p> <p>The chassis cab interior shall be wired with battery power; battery ground, switched power, and radio rebroadcast wires to the siren or PA, and labeled to simplify USFS radio installation. The radio shall occupy the second forward, angled, position in the cab center console.</p>		
2b	<p>TRAFFIC WARNING SYSTEMS</p> <p>There will be a traffic warning system provided and installed on the completed apparatus by the apparatus builder</p>		
2c	<p>SIREN AMPLIFIER</p> <p>One (1) Whelen brand or equivalent, CANCTL6 control head shall be mounted in the center console.</p>		
2d	<p>SIREN SPEAKER</p> <p>One (1) Whelen brand or equivalent, Model SA315P, 100-watt siren speaker shall be provided and installed inside the full replacement bumper.</p>		
2e	<p>EMERGENCY LIGHTING LIGHT BAR</p> <p>A Whelen Liberty NFPA LED 54" fully populated LED light bar or equivalent shall be provided.</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
	<p>The light bar shall feature ultra-bright, ultra-wide angle, all linear Super-LED technology.</p> <p>The light bar shall be mounted at the front of the fire body on the light bar mounting platform.</p> <p>There shall be ten (10) Whelen T-ION light heads with chrome bezels provided or equivalent.</p> <p>Each light head shall feature six (6) Super-LED diodes with 69 scan-lock flash patterns.</p> <p>The T-ION light heads shall be located as follows:</p> <ul style="list-style-type: none"> ❖ Four (4) at the front of the apparatus, mounted on the full replacement front bumper. ❖ One (1) on each chassis front fender. ❖ One (1) on each side of the fire body. ❖ Two (2) at the rear of the apparatus, mounted on the rear of the fire body. 		
2f	<p>FORWARD LOWER ZONE A WARNING LIGHTS</p> <p>Four (4) Whelen brand, ION T series, or equivalent, red LED flashers, with mounting flanges, shall be provided on the front of the apparatus, forward facing, two (2) per side, in the brush guard. The lights shall be wired to a switch located on the cab center console.</p>		
2g	<p>FORWARD LOWER ZONE B/D WARNING LIGHTS</p> <p>Two (2) Whelen brand, ION T Series, or equivalent, red LED flashers, with mounting flanges, shall be provided over the front wheel well of the apparatus chassis, side facing, one (1) per side, for use as “forward intersection” lights. The lights shall be wired to a switch located on the cab center console.</p>		
2h	<p>AFT LOWER ZONE B/D WARNING LIGHTS</p> <p>Two (2) Whelen brand, ION T Series, or equivalent, red LED flashers, with mounting flanges, shall be provided on the rear sides of the apparatus chassis, over the rear wheel, side facing, one (1) per side, for use as “rear intersection” lights. The lights shall be wired to a switch located on the cab center console.</p>		
2i	<p>AFT LOWER ZONE C WARNING LIGHTS</p> <p>Two (2) Whelen brand, ION T Series, or equivalent, red LED flashers, with mounting flanges, shall be provided on the lower rear of the apparatus, rear facing, one (1) each side. The lights shall be wired to a switch located on the cab center console.</p>		
3	LABELS:		

Item No.	MINIMUM REQUIREMENT	YES	NO
3a	<p>SEATING CAPACITY</p> <p>The completed apparatus shall be designed to have a fully enclosed seat with an approved seat belt for each occupant. The term "fully enclosed" shall mean four sides, a top and a bottom, with an appropriate door for easy entrance to and exit from the seating position. This apparatus shall have a seating capacity of two (2) personnel in front, three (3) in the rear for a total seating capacity of five (5). A warning label, listing the seating capacity of the completed apparatus, shall be provided in the apparatus cab interior. This label shall be located so that it is visible from all seating positions</p>		
3b	<p>SEAT BELT WARNING</p> <p>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.</p>		
3c	<p>VEHICLE HEIGHT WARNING</p> <p>A warning label, listing the overall height, 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.</p>		
3d	<p>NOISE HAZARD WARNING</p> <p>A warning label, stating: "WARNING: Noise Hazards Occur During Siren Operation," shall be provided and installed in the apparatus cab interior. This label shall be located so that it is visible from all seating positions.</p>		
3e	<p>AIR FILTER EMBER PROTECTION SCREEN WARNING</p> <p>A warning label, stating: "This apparatus is equipped with an air filter ember protection screen; routine inspection is required," shall be provided and installed in the apparatus cab interior. This label shall be located so that it is visible from the driver's seating position.</p>		
4	<p>CONSOLE SECTION:</p>		
4a	<p>SEATING</p> <p>The center portion of the 40/20/40 split bench seat shall be removed to accommodate the installation of the console.</p>		
4b	<p>CAB CONSOLE</p> <p>There shall be one (1) custom fabricated smooth aluminum command console located inside the chassis' cab between the front seats. The console will be designed and fabricated to accommodate all required switches, gauges, and components.</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
	<p>There shall be a grounding point and a power wire provided inside the console for wiring fire department mobile radio.</p> <p>The console shall be painted.</p> <p>The console lid shall be hinged, allowing for easy access for maintenance purposes.</p> <p>The console lid hinge shall be a heavy-duty full width stainless steel piano hinge secured with stainless steel fasteners.</p> <p>There shall be a rear pocket storage compartment located at the rear of the console.</p> <p>The following components shall be provided on the center command console:</p> <ul style="list-style-type: none"> ❖ One (1) Whelen Cencom Carbide control module or equivalent ❖ Two (2) microphone clip brackets ❖ One (1) flexible variable intensity LED map light ❖ Two (2) cup holders ❖ Four (4) 12-volt lighter plug power points ❖ 4 USB ports ❖ 2 Handheld Radio Mounts <p>~ <u>SWITCH CONTROL MODULE</u> ~</p> <p>The Whelen Cencom Carbide control head or equivalent includes 3 section control head and 8 push buttons, 4-position slide switch with a 7-position rotary knob, manual air horn plus 3 traffic advisor switches and microphone with extension cable.</p>		
5	BUMPER:		
5a	<p>FRONT BUMPER</p> <ul style="list-style-type: none"> • There shall be a heavy-duty full replacement bumper provided at the front of the apparatus. • The bumper shall have a durable textured black powder coat finish. • The bumper shall have an integral siren mount with protective expanded metal cover. The bumper shall be constructed to mount the Warn 16.5ti winch inside. • There shall be a monitor mounting platform as an integral part of the replacement bumper. • There shall be a pre-connect hose box installed to hold 50' x 1.0" of collapsible booster hose. • There shall be a winch installed, specs and brand for winch located in additional equipment section. 		
5b	TOW HOOKS – Bumper will have OEM "J" type tow hooks or re-located factory tow hooks. These hooks will be easy to work with		

Item No.	MINIMUM REQUIREMENT	YES	NO
	having plenty of clearance for attaching on a chain or tow strap and 180 degrees of pulling angle.		
5c	TRAILER RECEIVER - Standard to use on carrier style winches, backing trailers into tight spots, negotiating that small boat down the ramp with your huge camper or van, attaching a flatbed trailer and using your winch to pull up the load, steps, push bars, tire carriers, etc.		
6	MISCELLANEOUS:		
6a	HOSE AND HARNESS PROTECTION If applicable, any fuel lines or electrical harnesses below the chassis frame rails shall be protected with a fireproof sleeve designed specifically for such purpose.		
6b	UNDER CHASSIS SHIELDING The chassis shall be equipped with expanded aluminum lower radiator shielding (if applicable) and a solid plate guard mounted on the aft of the front bumper. This shield and guard shall be designed to prevent entry of sticks and other small debris which may pose a hazard to the cooling system.		
6c	CHASSIS AIR INTAKE EMBER GUARD The chassis air intake shall be protected by an ember guard of 18 Mesh, 0.017-inch wire diameter, and a maximum mesh opening of 0.039 inches. The ember guard shall be sized to fit and located at the intake opening. The screen shall be readily accessible for inspection and maintenance.		
6d	CABIN AIR EMBER GUARD The cabin air filter shall be protected by an ember guard with a maximum mesh opening of 0.039 inches. The screen shall be located at the point of intake and easily accessible for inspection and maintenance.		
7	APPARATUS PLATFORM BODY:		
7a	APPARATUS WILDLAND FIRE BODY <ul style="list-style-type: none"> The fire body shall be constructed entirely of heavy-duty extruded aluminum. The perimeter of the fire body shall be constructed of a custom heavy duty 5.0" x 3.0" 6061T6 aluminum extrusion. The fire body cross members shall be constructed of heavy duty 3.0" National Standard 6061T6 extruded aluminum channels. The extruded aluminum cross members shall be located on 12" centers. The fire body mounting sills shall be constructed of 6.0" National Standard 6061T6 extruded aluminum channels. The fire body sills shall be mounted to the fire body sub-frame utilizing a 6-point mounting system. 		

Item No.	MINIMUM REQUIREMENT	YES	NO
	<ul style="list-style-type: none"> • A rubber isolation barrier shall be provided between the chassis' frame rails and the fire body mounting sills. • There shall be .125" aluminum diamond plate covering the entire deck of the fire body. The fire body dimensions shall be approximately 111"L x 96"W. • There shall be a headache rack located at the front of the fire body. The headache rack shall be constructed of heavy duty 3.0" x 2.0" 6061T6 extruded aluminum tube. The headache rack shall have .125" aluminum diamond plate covering the bottom half on the front side and expanded aluminum on the top half. • There shall be a 60"W x 10"D x .25" aluminum plate light bar mounting platform located on top of the fire body headache rack. • There shall be a 2.0" receiver tube provided at the rear of the apparatus. The receiver tube shall be integrated into the fire body mounting sills and chassis' frame rails. • A chassis' fuel fill shall be provided. A "DIESEL FUEL ONLY" label shall be provided next to the fuel filler cap. • Mud flaps shall be located behind the chassis' rear wheels. • There shall be a 108"D x 30"W x 5.0"H long tool storage compartment provided between the fire body mounting sills, with the door opening facing the rear of the apparatus. The compartment door shall be constructed of .125" aluminum smooth plate and shall be horizontally hinged. The compartment door shall have dual thumb latches. Possum belly shall be split in half. The Driver's side shall be 72" deep. 		
7b	<p>WELDING Welds shall meet American Welding Society Standards (AWS). Welds on the top and outer sides of the body and miscellaneous equipment shall be ground flush.</p>		
7c	<p>INSTALLATION The body(s) shall be mounted in compliance with FMVSS 301-75 standards. Body(s) shall be mounted as low as possible without limiting tire clearance or restricting the ability to fuel the truck. The minimum distance from the top of the tire to the bottom of the floor shall be equal to the maximum suspension travel plus 2 inches. Maximum suspension travel is the distance between the axle and the rubber bumper that limits suspension travel plus 1 inch.</p>		
8	PLATFORM:		
8a	<p>DIMENSIONS</p> <ul style="list-style-type: none"> • Length for platform shall be 111 inches. • Width for platform shall be 96. 		

Item No.	MINIMUM REQUIREMENT	YES	NO
	<ul style="list-style-type: none"> • Bodies shall be flat plus or minus 1/8 inch over their entire length or width. • Bodies shall be square with 1/8 inch or less offset from the opposite parallel side. 		
8b	<p>LONG SILLS</p> <p>Two Long Sills (LS) shall run full length in alignment with and perpendicular to the chassis frame rails. Long Sills on bodies shall be rectangular c-channel aluminum alloy 6 inches tall X 2 inches wide minimum .250-inch wall thickness material.</p>		
8c	<p>CROSS SILL MEMBERS</p> <p>Cross Sill Members (CSM) on bodies shall be rectangular C-channel aluminum alloy 3 inches tall X 1.5 inches wide minimum .180-inch wall thickness material. Cross Sill Members shall be located on maximum 12-inch centers. CSM to LS welds shall be at least 100% of the length of the contact edges on two opposing sides of the LS. CSM to outer rail welds shall be 100% of the length of both vertical sides of the CSM.</p>		
8d	<p>OUTER RAIL</p> <p>The outer rail shall be a custom aluminum extrusion 5 inches tall X 3 inches wide minimum .1875-inch wall thickness material. The outer rail shall consist of square rear corners.</p>		
8e	<p>PLATFORM DECK</p> <p>Decking on the platform shall be .125-inch marine grade aluminum diamond plate. Decking shall be interior perimeter welded to the outer rail, and 6-12" intermittently along the cross sills.</p>		
8f	<p>TAILBOARD</p> <p>The tailboard shall consist of .190 smooth aluminum with a broke bottom edge.</p> <p>The tailboard shall house all referenced lighting and draft tube storage. The apron shall be sufficient in design to grant a departure angle of 24 degrees. The completed tailboard assembly shall meet all other requirements of NFPA 1906 for angle of departure.</p>		
8g	<p>FUEL TANK FILLER</p> <p>The fuel filler-neck shall be incorporated into the bed channel outer rail unless using an OEM standalone system. Fuel cap shall not protrude past outer rail. The fuel tank filler shall be mounted in accordance with FMVSS 301. The fuel filler hose shall not touch any rough or sharp surfaces and have no kinks or restrictions. Hose shall be supported on no more than 16-inch centers, have at least 6 inches clearance from the rear tire with any amount of suspension travel, and if closer than 12 inches to the tires, have a shield to protect it from objects that may be thrown from the tires.</p>		
8h	<p>DRAFT LINE STORAGE</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
	Draft hose storage shall be mounted under the platform, between the frame rails of the truck. The draft hose box shall be a minimum of 4 inches tall, 30 inches wide and 100 inches deep. The opening is covered with a drop down, aluminum diamond plate door. The door shall utilize a full-length stainless-steel piano hinge and a stainless-steel twist latch.		
9	COMPARTMENTATION:		
	All upper storage compartment walls shall be constructed from .125-inch aluminum diamond plate. All upper compartment doors shall be .125 smooth aluminum and painted chassis color. All compartment doors shall have a horizontal, full-length stainless-steel piano hinge and gas struts to hold the doors open. All compartment interiors shall be free of exposed electrical harnesses or plumbing components. All compartments shall be as large as possible, as determined by the design of the apparatus. Compartment configuration and approximate sizes required are listed below:		
9a	<p>DRIVER'S SIDE COMPARTMENTS ~ DRIVER SIDE UPPER BODY COMPARTMENT ~</p> <p>There shall be one (1) sweep-out style compartment with three (3) lift-up style compartment doors provided on the driver side deck of the fire body.</p> <p>The body of the compartment shall be constructed of .125" aluminum diamond plate.</p> <p>The compartment doors shall be constructed of .125" smooth aluminum plate and painted chassis color.</p> <p>Each compartment door shall be attached to the compartment body utilizing a full-length stainless-steel piano hinge with stainless steel fasteners.</p> <p>Each compartment door shall be held in the open position by two (2) heavy duty pneumatic struts.</p> <p>The compartment door latches shall be D-style paddle slam latches. Door latches shall not be lockable.</p> <p>Dimensions of the compartment shall be 108"L x 18"D x 26 1/2"H.</p> <p>The compartment shall be provided with one (1) .125" smooth aluminum plate bulkhead divider, separating the compartment into two (2) separate compartments (L1 / L2).</p> <p>The front 36" compartment (L1) shall be provided with one (1) .125" smooth aluminum plate adjustable shelf. The rear 72" compartment (L2) shall be provided with one (1) .125" smooth aluminum plate adjustable shelf.</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
	<p>Compartment L1 shall be provided with two (2) vertical 12" 36-light LED compartment lights, located one (1) on each side of the compartment opening. Each compartment light shall automatically activate when the compartment door is opened and shall automatically deactivate when the compartment door is closed.</p> <p>Compartment L2 shall be provided with three (3) vertical 12" 36-light LED compartment lights, located one (1) on each side of the compartment and one (1) in the middle door jam. Each compartment light shall automatically activate when the compartment door is opened and shall automatically deactivate when the compartment door is closed.</p> <p>~ DRIVER SIDE UNDERBODY COMPARTMENT ~ There shall be one (1) compartment with one (1) fold down style compartment door provided on the underside of the fire body, between the front of the fire body and chassis' rear wheels. The body of the compartment shall be constructed of .125" aluminum diamond plate. The compartment door shall be constructed of .125" aluminum diamond plate. The compartment door shall be held open at 90-degrees by stainless steel lanyards. The compartment door latch shall be a twist latch. Dimensions of the compartment shall be 30"L x 20"D x 16"H. The compartment shall be provided with one (1) horizontal 12" 36-light LED compartment light. The compartment light shall automatically activate when the compartment door is opened and shall automatically deactivate when the compartment door is closed.</p> <p>~ DRIVER SIDE DUNNAGE COMPARTMENT ~ There shall be a 102"L x 17"W x 8.0"H dunnage storage compartment located on top of the driver side upper body compartment. The dunnage storage compartment shall provide for additional storage of Fire Department supplied equipment. The dunnage storage compartment shall be constructed of aluminum diamond plate. The dunnage storage compartment shall have a black nylon webbing cover with chromed turn style fasteners. The rear 15" of the dunnage shall be provided as a pre-connect "ENGINE PROTECTION" hose storage. The engine protection box shall have an aluminum drop down door to access the 25' of 1.5" hose.</p>		
9b	<p>PASSENGER'S SIDE COMPARTMENTS ~ PASSENGER SIDE UPPER BODY COMPARTMENT ~</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
	<p>There shall be one (1) sweep-out style compartment with two (2) lift-up style compartment doors provided on the passenger side deck of the fire body.</p> <p>The body of the compartment shall be constructed of .125" aluminum diamond plate.</p> <p>The compartment doors shall be constructed of .125" smooth aluminum plate and painted chassis color.</p> <p>Each compartment door shall be attached to the compartment body utilizing a full-length stainless-steel piano hinge with stainless steel fasteners.</p> <p>Each compartment door shall be held in the open position by two (2) heavy duty pneumatic struts.</p> <p>The compartment door latches shall be D-style paddle slam latches. Door latches shall not be lockable.</p> <p>Dimensions of the compartment shall be 72"L x 18"D x 26 1/2"H.</p> <p>The compartment shall be provided with one (1) .125" smooth aluminum plate bulkhead divider, separating the compartment into two (2) separate compartments (R1 / R2). The front 40" compartment (R1) shall be provided with one (1) .125" smooth aluminum plate adjustable shelf.</p> <p>The rear 32" compartment (R2) shall be provided with one (1) .125" smooth aluminum plate adjustable shelf.</p> <p>Each compartment (R1 / R2) shall be provided with two (2) vertical 12" 36-light LED compartment lights, located one (1) on each side of the compartment opening.</p> <p>Each compartment light shall automatically activate when the compartment door is opened and shall automatically deactivate when the compartment door is closed.</p> <p>~ PASSENGER SIDE UNDERBODY COMPARTMENT ~</p> <p>There shall be one (1) compartment with one (1) fold down style compartment door provided on the underside of the fire body, between the front of the fire body and chassis' rear wheels.</p> <p>The body of the compartment shall be constructed of .125" aluminum diamond plate.</p> <p>The compartment door shall be constructed of .125" aluminum diamond plate.</p> <p>The compartment door shall be held open at 90-degrees by stainless steel lanyards.</p> <p>The compartment door latch shall be a twist latch.</p> <p>Dimensions of the compartment shall be 30"L x 20"D x 16"H.</p> <p>The compartment shall be provided with one (1) horizontal 12" 36-light LED compartment light.</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
	<p>The compartment light shall automatically activate when the compartment door is opened and shall automatically deactivate when the compartment door is closed.</p> <p>~ PASSENGER SIDE DUNNAGE COMPARTMENT ~</p> <p>There shall be a 66"L x 17"W x 8.0"H dunnage storage compartment located on top of the passenger side upper body compartment. The dunnage storage compartment shall provide for additional storage of Fire Department supplied equipment. The dunnage storage compartment shall be constructed of aluminum diamond plate. The dunnage storage compartment shall have a black nylon webbing cover with chromed turn style fasteners.</p>		
9c	<p>COMPARTMENT DOORS</p> <p>All compartment doors shall be integral in design and recessed into the box (compartment body) sides, sized to provide easy access to all interior areas of the compartment. All doors shall be consistent in fit and finish with the compartment unit. All doors shall be weatherproof and maintain contact with all points of the weather stripping. Weather stripping shall be bulb type, attached to the opening flange of the compartment opening. The doors will have a pan stiffener in each door for strength. Doors painted either Ford Rapid Red or other customer approved finish.</p> <p>~ APPARATUS OPEN DOOR WARNING SYSTEM ~</p> <p>Each compartment door shall be wired into the apparatus open door warning system. The apparatus open door warning system shall have a red LED warning light and audible alarm located inside the chassis' cab. The red LED warning light shall be labeled "WARNING OPEN DOOR". The open-door warning light shall be activated any time a compartment door is open, and the chassis' transmission is in park. The open-door warning light and alarm shall be activated any time a compartment door is open, and the chassis' transmission is shifted out of park.</p>		
9d	<p>DOOR LATCHES AND HARDWARE</p> <p>Unless where noted, all compartment door latch assemblies shall be installed with threaded fasteners, shall not be welded, and shall be easily removable for servicing or replacement. All door latch assemblies shall be of a flush-mount, "D-Handle" design, with all external components fabricated from polished stainless steel. All latches shall be of a two-position twist latch type design latching operation.</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
	<p>All hardware shall be corrosion resistant and suitable for its intended use. All nuts and bolts shall be stainless steel. Stainless steel nuts shall be the self-locking type.</p> <p>All compartment doors will have the capability to be locked preferably with the use of the truck keyless entry remote.</p>		
9e	<p>COMPARTMENT MATTING</p> <p>Dri-Dek tiles shall be installed in all compartments, hose trays, and dunnage boxes.</p>		
9f	<p>ADJUSTABLE SHELF CHANNELS</p> <p>Vertically mounted aluminum shelf system shall be provided and welded to the side wall of all enclosed top compartments. This is for the current or future installation of adjustable shelving, slide out trays or equipment brackets.</p>		
9g	<p>COMPARTMENT SHELVES</p> <p>Four (4) adjustable shelves shall be provided and installed in the completed top body compartments. The shelving system shall be mounted on a punched finger style) slim-line track to allow the change of elevation. The shelves shall be 17.5" in depth, width of the box with 2" peripheral lip constructed of aluminum and be capable of supporting 250 lbs. of live load without being damaged or permanently distorted. The shelf locations shall be as follows:</p> <ul style="list-style-type: none"> • One (1) in the driver's side top front compartment box. • One (1) in the driver's side top rear compartment. • One (1) in the passenger's side top front compartment • One (1) in the passenger's side top rear compartment. 		
9h	<p>PRE-CONNECT HOSE TRAY</p> <p>There shall be an approximate 94"L x 6.0"W x 8.0"H pre-connect hose tray located at the front of the fire body, directly behind the fire body headache rack.</p> <p>The hose tray shall be constructed of .125" aluminum diamond plate. The hose tray shall have a red vinyl cover with nylon webbing ends, allowing for rapid hose line deployment.</p>		
9i	<p>CROSSLAY</p> <p>The crosslay is three sided formed aluminum 6"Wx8"Hx96"L. It will have a red tarped cover with Turnbuckle Curtain Fasteners and Velcro on both long sides for tarp cover removal in order to reinstall hose used on scene. The tarp end will cover the ends and have quick release straps. It will bolt to the rear cab protection and the baskets to hold into place.</p>		
10	REAR OF CAB:		

Item No.	MINIMUM REQUIREMENT	YES	NO
10a	<p>REAR CAB PROTECTION (RCP) There shall be a headache rack located at the front of the fire body. The headache rack shall be constructed of heavy duty 3.0" x 2.0" x .25 6061-T6 extruded aluminum tube. The headache rack shall have .125" aluminum diamond plate covering the bottom half on the front side and aluminum louvers on the top half. There shall be an approximate 60"W x 10"D aluminum plate light bar mounting platform located on top of the fire body headache rack.</p> <p>~ APPARATUS ALUMINUM SKID ~ A heavy-duty aluminum skid shall be provided and shall serve as the mounting platform for the water tank, fire pump, and plumbing system water manifold. The aluminum skid design allows for the entire firefighting package of the apparatus to be an integral unit. The skid shall be constructed of heavy duty 2.5" x 2.5" x 0.25" aluminum tube. The skid shall have a DA sanded finish. The skid shall have an incorporated water tank mounting system, which will allow for mounting of the water tank to the aluminum skid at two (2) locations. Aluminum water tank supports shall be provided at the four (4) corners of the water tank to eliminate any possible movement of the tank. There shall be a pump mounting platform integrated into the rear of the aluminum skid. The pump mounting platform shall be approximately 40"W x 30"D. The pump mounting platform shall have a .125" aluminum diamond plate overlay. The complete skid assembly shall be mounted to the fire body in a minimum of six (6) locations.</p> <p>~ APPARATUS FASTENERS ~ All fasteners utilized for construction of the fire apparatus shall be stainless steel.</p> <p>~ CORROSION RESISTANCE TREATMENT ~ ECK (Electrolysis Corrosion Kontrol) shall be utilized throughout the manufacturing process of the apparatus. ECK is a proven and patented coating that is utilized to prevent dissimilar metal corrosion of all metals including stainless steel, aluminum, cold rolled steel, and brass. ECK prevents corrosion by providing a barrier between dissimilar metals, sealing out moisture, and absorbing energy created by a dissimilar metal reaction. ECK is also dielectric and can be utilized on electrical connections.</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
	All stainless-steel fasteners utilized in the manufacturing process shall be pre-treated with ECK prior to being utilized on the apparatus. ECK shall be applied to ANY areas where dissimilar metals come into or may come into contact with each other.		
11	BODY ELECTRICAL REQUIREMENTS:		
11a	<p>WIRING SPECIFICATIONS</p> <p>All apparatus body electrical components shall be served by independent circuits which shall be separate and distinct from the apparatus cab and chassis electrical circuits. All wiring supplied and installed by the apparatus manufacturer shall be installed in flexible split convoluted loom and shall be color coded and function labeled at 6" intervals per NFPA standards. All wiring supplied and installed from the apparatus manufacturer by an EVT certified technician shall be grease, oil and moisture resistant; and shall be securely fastened with insulated metal clamps and nylon wire ties. Solderless insulated connectors shall be utilized at all splice joints and shall be enclosed with heat shrink tubing for extra corrosion protection. Automatic reset type circuit breakers shall be provided wherever possible. The following electrical components shall be provided and installed on the completed apparatus by the apparatus builder:</p>		
11b	<p>LIGHTING SPECIFICATIONS</p> <p>All required lighting complying with Federal Government Codes for vehicles of this size and design shall be provided and installed. These lights shall include headlamps, front turn signals with hazard switch, cab marker and clearance lights, body clearance lights, reverse lights, stop-turn-tail lights, and license plate lights. The body clearance lights, rear stop-turn-tail lights, and reverse lights shall be LED. The apparatus reverse lights shall be wired into the work light switch, providing activation when the chassis' transmission is shifted into reverse and when the work light switch inside the cab is activated. A license plate bracket with integrated LED lights shall be provided at the rear of the fire body.</p>		
11c	<p>BACK UP LIGHTS</p> <p>A pair of Peterson LED Oval Sealed 10 Diode Pattern, or equivalent, clear LED back up lights shall be provided at the rear of the body, one (1) each side, above the rear step. The backup lights shall be wired so that they illuminate when the chassis is placed in reverse gear.</p>		
11d	TAILLIGHTS & BRAKE LIGHTS		

Item No.	MINIMUM REQUIREMENT	YES	NO
	A pair of Peterson LED Oval Sealed 10 Diode Pattern, or equivalent, red LED combination tail/brake lights shall be provided at the rear of the body, one (1) each side, above the rear step.		
11e	<p>TURN SIGNAL LIGHTS</p> <p>A pair of Peterson LED Oval Sealed 10 Diode Pattern, or equivalent, amber LED arrow style turn signal lights shall be provided at the rear of the body, one (1) each side, above the rear step.</p>		
11f	<p>LICENSE PLATE BRACKET AND LIGHT</p> <p>Two (2) Peterson brand, 26 Series LED clear light fixture, or equivalent, with license plate mounting bracket, shall be provided at the rear of the body.</p>		
11g	<p>CLUSTER/CLEARANCE LIGHTS AND REFLECTORS</p> <p>Three (3) round ICC LED clearance lights shall be located at the rear of the apparatus above the bumper. Additional lighting clearance lights shall be provided to conform to DOT, Federal and NHTSA specifications for vehicles of 80" wide. All lighting shall be compatible with the 12V chassis electrical system. Lighting shall be located according to ICC regulations.</p>		
11h	<p>REAR STEPS</p> <p>Two (2) pull-out / fold-down steps shall be provided at the rear of the fire body. A warning label shall be provided at the rear of the fire body stating the following: WARNING: DO NOT RIDE ON REAR STEP WHILE VEHICLE IS IN MOTION. DEATH OR SERIOUS INJURY MAY RESULT.</p>		
11i	<p>FLOOD LIGHTS/SCENE LIGHTING</p> <p>There shall be four (4) 20K lumen scene lights mounted one on each corner of the fire body. Each light shall be capable of rotating 360 degrees as well as up and down. FRC SPA580-K20 satisfies this requirement.</p> <p>There shall be one (1) 20K lumen scene light mounted on the rear of the water tank, facing the rear. FRC SPA 520-K20 satisfies this requirement.</p> <p>There shall be two (2) LED off road flood lights, one each corner of the front bumper. Each light shall be adjustable and protected from off road debris.</p> <p>~ APPARATUS WORK LIGHTING ~</p> <p>There shall be three (3) LED work lights provided. The work lights shall be located as follows:</p> <ul style="list-style-type: none"> ❖ One (1) on each side of the light bar mounting platform, facing the rear of the apparatus. ❖ One (1) at the rear of the fire body 		

Item No.	MINIMUM REQUIREMENT	YES	NO
	The work lights shall be controlled by a single switch from inside the chassis' cab from the switch module.		
11j	<p>COMPARTMENT LIGHTS</p> <p>Two (2) 12" LED lights, one each side of the door openings, shall be provided to illuminate the compartment. Lighting shall be plastic encapsulated, shock resistant, continuous LED light segments. The LED strip lights shall be attached securely at the sides and top of each compartment opening depending on placement. Each compartment shall have a door switch installed to activate compartment lighting when the individual door is opened.</p>		
12	OTHER APPARATUS BODY ITEMS:		
12a	<p>EXHAUST SYSTEM</p> <p>The exhaust system shall remain unmodified and as received from the chassis manufacturer. If the exhaust system proves to conflict with mounting items or departure angle, a conference between the chassis manufacturer, the apparatus builder and the department shall ensue about proper placement. Upon agreement, the apparatus builder shall move the exhaust system properly to its new placement at no extra charge.</p>		
12b	<p>MUD FLAPS</p> <p>One (1) pair of flexible rubber mud flaps shall be provided on both sides of the apparatus body behind the rear wheels. The mud flaps shall extend down far enough to be effective but shall not allow the flaps to become entangled with the rear tires when the apparatus is backing up.</p>		
12c	<p>BUMPER – RECIVER HITCH</p> <p>A full-length rear bumper with integral receiver tube shall be installed on the apparatus. The bumper shall be made of 3" x 6" x .1875 steel tube and provide a step to help access the fill tower.</p> <p>A warning plate shall be affixed to the rear of the apparatus in a conspicuous place. The warning plate shall read: "WARNING: DO NOT RIDE ON REAR STEP WHILE VEHICLE IS IN MOTION. DEATH OR SERIOUS INJURY MAY RESULT".</p>		
	Blank		
12e	<p>GRAB HANDLES</p> <p>There shall be two (2) NFPA compliant grab rails provided at the rear of the fire body.</p> <p>The grab rails shall be extruded aluminum with slip resistant inserts. Location of the grab rails shall be determined by the Fire Department.</p>		
12f	WHEEL CHOCKS		

Item No.	MINIMUM REQUIREMENT	YES	NO
	Two (2) Zico brand AC-32 or equal NFPA 1901-09 compliant wheel chocks shall be provided with the completed apparatus, one (1) each side. They will be mounted to the location chosen by the SLC fire department at the mid-build factory inspection. The holders shall be Zico brand QCH-32-H or equal holders for convenient storage.		
13	PUMP:		
13a	PUMP PACKAGE: The following specifications are for a complete apparatus pump firefighting unit, consisting of tank, control panel, engine, pump and plumbing that shall be permanently mounted on the platform style body. The system shall cover the rest of the platform deck space.		
13b	PUMP, PLUMBING & VALVES The following pump, plumbing, controls, gauges, and accessories shall be provided as indicated below. The plumbing requirements outlined below shall be considered a minimum standard, and are preferred to be followed by the apparatus manufacturer without exception: All plumbing components shall be fabricated from welded stainless steel except for the valves, which will be brass and hose flex connections. The auxiliary fire pump plumbing system shall be built mostly of stainless-steel piping, fittings, and connections. Victaulic couplings shall be installed to permit flexing of the plumbing system and allow for quick removal of piping or valves for service. Tank connections and remote plumbing shall use high-pressure flexible piping. Flexible hose couplings shall be threaded stainless steel or Victaulic connections. All pump compartment components, including wiring, gauges, pump panel rear surfaces, high pressure hoses, and small diameter tubing, shall be left unpainted for rapid identification and ease of repair. All valves used in the plumbing installation shall be stainless steel quarter turn full flow type. The plumbing installation shall include quarter turn ball valves with local "on-valve" handle control, with custom embossed labeling for each valve. The hose threads shall be National Hose Standard (NH) on all base threads on the apparatus intakes and discharges, unless otherwise specified.		
13c	PUMP ENGINE: The engine shall be a Briggs and Stratton Vanguard V-twin overhead valve (OHV) air cooled gasoline engine. Engine rating shall be 35 HP @ 3600 rpm. Engine shall have an electric starter with manual recoil back-up.		

Item No.	MINIMUM REQUIREMENT	YES	NO
	Engine shall be equipped with a USDA approved spark arrestor.		
13d	<p>PUMP</p> <p>The pump body shall be made of aluminum alloy castings coupled together with a stainless-steel band clamp with O-ring seal, allowing for quick pump volute removal for servicing.</p> <p>The pump end shall be factory hydrostatically tested to 400 PSI for 10 minutes.</p> <p>The impeller shall be bronze. The impeller shall be 4.875” in diameter and designed with a sleeve back end to prevent water from coming in contact with the engine shaft.</p> <p>The impeller is directly threaded onto the engine crankshaft.</p> <p>The renewable clearance rings shall be made of anodic plated bronze to inhibit galvanic corrosion.</p> <p>The pump shaft seal shall be an automatically adjusting, maintenance free, mechanical type seal.</p> <p>The pump body shall be provided with a petcock style drain valve.</p>		
13e	<p>PUMP PRIMING</p> <p>The pump shall be equipped with electric, oil-less primer.</p>		
13f	<p>PUMP SUCTION/DISCHARGE</p> <p>~ Pump Suction ~</p> <p>The pump suction inlet shall be a 4.0” connection.</p> <p>~ Pump Discharge ~</p> <p>The pump discharge shall be a 3.0” connection.</p>		
13g	<p>PUMP MAKE, MODEL & PERFORMANCE</p> <p>There shall be one (1) Hale HPX275 pump with 35-HP Briggs and Stratton gasoline engine mounted at the rear of the apparatus on the aluminum skid pump mounting platform.</p> <p>The pump/engine shall be capable of meeting the NFPA 1906 performance rating of 50 GPM @ 150 PSI and 150 GPM @ 100 PSI. Typical pump performance from 5-foot draft at sea level shall be:</p> <ul style="list-style-type: none"> • 170 GPM @ 150 PSI • 250 GPM @ 100 PSI • 290 GPM @ 60 PSI 		
13h	<p>REAR MOUNTED PUMP OPERATOR'S PANEL</p> <p>A pump operator’s control panel shall be located at the rear of the apparatus body. It shall contain all controls necessary to operate the pump systems. The panel shall be appropriately sized with the controls</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
	<p>positioned in a methodical, user-friendly format. The edges of the panel shall be smooth radius to prevent the snagging of clothing or injury. The panel shall have an extended top to assist in weather protection and to house the panel lights. Controls shall be provided on the operator's panel as follows:</p> <ul style="list-style-type: none"> • Pump engine ignition/start/stop controls • Starter push button • Oil pressure warning light • Engine choke control • Throttle control • Primer control • 2.5" liquid filled discharge gauge • Low water pressure override switch (protected toggle type) • Low oil pressure override switch (momentary push button type) • Operator's panel light and switch 		
13i	<p>IN CAB PUMP CONTROLS All electric, in cab pump controls shall be installed on the center console. The in-cab controls shall offer start, stop, choke, throttle up, and throttle down functions. There shall also be a 200psi gauge installed to monitor pump pressure and a FRC mini water level display as well.</p>		
13j	<p>PUMP PANEL LIGHT One (1) 12" LED cargo light, or equivalent, facing downward, shall be provided to illuminate the rear pump operator's panel. This light shall be controlled by a manual switch on the pump operator's panel.</p>		
13k	<p>FUEL TANK SYSTEM The pump motor will use a custom gas tank. A small engine electric fuel pump shall be installed to pump fuel to the level of the pump motor requirements.</p>		
14	<p>MAIN DISCHARGE AND INTAKE PLUMBING:</p>		
14a	<p>MAIN SPECIFICATIONS The discharge and intake valves specified shall be either of a direct-actuated quarter turn design or shall be provided with control rods that are directly connected from the valve handle to the rear mounted pump panel area. All discharges and intakes shall have NST thread brass chrome rocker lug style caps with chains, unless designed to be pre-connected, or otherwise specified. Where vibration or chassis flexing may damage or loosen piping, the piping shall be equipped with</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
	<p>Victaulic couplings, rubber pressure rated hose or pump hose connections. The main pressure manifold is to be behind the pump in front of the tank for a less cluttered area on the rear of the platform. The main suction and discharge plumbing shall be welded stainless steel pipe or high-pressure flexible hose with appropriate fittings designed to withstand the normal operating pressures of the pump. All high-pressure hose shall be installed with a swivel or Victaulic coupling on at least one end of the hose. The nominal sizes of all of the plumbing supplying the pump and discharges shall be as follows:</p> <ul style="list-style-type: none"> • Main suction – 2.5 inch • Discharges –1-1/2 inch • Hose reel – 1 inch • Monitor connection – 1 inch • Pre-Connector to bumper – 1 inch 		
14b	<p>MAIN VALVES All valves shall be Akron 8800 series swing-out style. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.</p>		
14c	<p>MASTER DRAIN A master drain valve shall be plumbed to the pump, suction plumbing and discharge plumbing as required to fully drain the piping and pump to prevent damage from freezing. The drain valve and associated plumbing will be designed to withstand pressures of 400 psi.</p>		
14e	<p>DISCHARGE LOCATIONS The discharge plumbing from the fire pump to the water distribution manifold shall be plumbed with 2.5" welded stainless steel pipe. The discharge plumbing shall integrate into the fire pump discharge with a stainless steel 4-bolt flange and shall integrate into the water distribution manifold with a 2.5" Victaulic fitting. The water distribution manifold shall be a 4.0" square stainless-steel tube. The water distribution manifold shall have the following inlets / outlets:</p> <ul style="list-style-type: none"> ➤ One (1) 2.5" Victaulic fitting for the 2.5" plumbing from the fire pump. ➤ One (1) 1.0" 4-bolt flange for the front monitor. ➤ One (1) 1.5" 4-bolt flange for the 1.5" pre-connect. ➤ One (1) 1.5" 4-bolt flange for the rear 1.5" discharge 		

Item No.	MINIMUM REQUIREMENT	YES	NO
	<ul style="list-style-type: none"> ➤ One (1) 1.0" 4-bolt flange for the booster reel. ➤ One (1) 1.0" 4-bolt flange for the front bumper pre-connect. ➤ One (1) ¼" MNPT fitting for the manifold drain. <p>There shall be one (1) 1.0" water tank refill / recirculation line provided. The refill / recirculation line shall be controlled by a 1.0" stainless steel full port, full flow gate valve. The refill / recirculation line plumbing shall be a high-pressure hose with welded stainless-steel fittings.</p> <p>There shall be one (1) 1.5" discharge plumbed from the water distribution manifold to the pre-connect hose tray. The discharge shall be plumbed with 1.5" high pressure flexible hose with welded stainless-steel fittings. This discharge shall terminate inside the pre-connect hose tray with a brass 1.5" MNST 90-degree swivel.</p> <p>There shall be one (1) 1.5" MNST discharge provided at the rear of the apparatus. The entire 1.5" discharge assembly (manifold to valve – valve to discharge) shall be composed entirely of welded stainless steel and shall contain no threaded connections. The 1.5" discharge shall terminate with MNST threads and shall be provided with a chrome 1.5" rocker lug cap and chain.</p> <p>There shall be one (1) 1.0" discharge plumbed from the water distribution manifold to the front bumper for the preconnected hose.</p> <p>There shall be one (1) 1.0" discharge plumbed from the water distribution manifold to the booster reel.</p> <p>There shall be one (1) 1.0" hose plumbed to the front of the apparatus for the monitor supply. This hose shall be equipped with an automatic drain. The discharge shall be plumbed with 1.0" high pressure flexible hose with welded stainless-steel fittings. The complete discharge plumbing system shall be hydrostatically tested at 300 psi for two (2) minutes. This shall be completed to test the integrity of the plumbing system and to verify the plumbing system is leak free.</p>		
14f	<p>INTAKE LOCATION</p> <p>The tank to pump plumbing shall be 3.0" welded stainless steel. A wire reinforced flexible connection shall be located between the water tank and tank to pump valve, providing for reduced fire pump vibration and ease of service.</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
	<p>The tank to pump plumbing shall connect to the fire pump intake by a Victaulic coupler.</p> <p>There shall be a 2.5" gated suction intake provided at the rear of the apparatus.</p> <p>The suction intake shall be controlled by a 2.5" gate valve with hand wheel valve control.</p> <p>The suction intake shall terminate with a chrome 2.5" FNST swivel connection with integrated suction screen.</p> <p>The suction intake shall be provided with a chrome 2.5" rocker lug plug and chain.</p>		
14g	<p>MONITOR FRONT BUMPER</p> <p>There shall be an Akron Forestry monitor provided and installed on the chassis modified front bumper. The joystick shall be mounted on the center console. The monitor shall be plumbed with 1.5" plumbing. The monitor shall be capable of flowing 30-125gpm</p>		
14h	<p>BOOSTER HOSE REEL:</p> <p>A Hannay SBEF-24-30-31 heavy duty polished aluminum booster reel shall be provided, mounted at the passenger side rear corner of the fire body.</p> <p>The booster reel shall be plumbed with 1.0" high pressure hose with welded stainless-steel fittings.</p> <p>The booster reel shall be provided with a 40-amp. automatic reset circuit breaker for added protection of the booster reel motor.</p> <p>The booster reel shall be provided with a single chrome hose roller and spool assembly.</p> <p>The booster reel shall be provided with one (1) push button rewind switch, located at the booster reel location.</p> <p>The booster reel shall have one (1) manual rewind crank assembly. The crank assembly shall be provided loose with the fire apparatus upon delivery.</p> <p>The booster reel shall be provided with 200' x 1.0" lightweight booster hose with low profile powder coated aluminum couplings.</p> <p>Color of the booster hose will be red. Booster reel will mount on the right rear of the fire body with the reel facing the rear.</p>		
14i	<p>NOZZLE CLIP AND HOLDER</p> <p>One (1) PAK brand, Model 1004, or equivalent, and shall be permanently affixed per department recommendation at mid-build meeting.</p>		
15	<p>WATER TANK AND CONSTRUCTION:</p>		
15a	<p>~ POLYPROPYLENE WATER TANK ~</p> <p>One (1) polypropylene water tank shall be provided with the apparatus. The color of the tank shall be black.</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
	<p>The water tank shall have a capacity of 400 gallons.</p> <p>The water tank shall be baffled to help prevent sudden movement of the water while driving.</p> <p>The water tank baffling shall meet or exceed published NFPA standards.</p> <p>The water tank shall have one (1) 8.0" square fill tower with incorporated 4.0" vent / overflow pipe and removable polypropylene screen.</p> <p>The fill tower shall be located at the passenger side rear of the water tank.</p> <p>The water tank shall have one (1) liquid level sight gauge located on the rear wall of the tank.</p> <p>The water tank shall have a 3.0" FNPT tank suction located on the left lower rear wall of the tank.</p> <p>The tank suction shall be provided with a recessed sump with anti-swirl plate.</p> <p>The water tank shall have a 1.5" FNPT recirculation fitting.</p> <p>The water tank shall have a 1.0" FNPT drain fitting located at the passenger rear of the water tank.</p> <p>The tank drain shall be plumbed to the underside of the fire body with 1.0" stainless plumbing.</p> <p>A 1.0" stainless steel full port quarter-turn industrial valve shall be provided for the tank drain.</p> <p>The water tank shall have two (2) heavy duty mounting tabs molded into the floor of the tank.</p> <p>The mounting tabs shall be utilized to securely mount the water tank onto the heavy-duty aluminum skid frame. There shall be two (2) custom 9.0"W x 6.0"H mounting blocks provided on the rear wall of the tank, located one (1) at each top corner.</p> <p>These mounting blocks shall be utilized for mounting of rear emergency and work lighting.</p> <p>There shall be two (2) auxiliary mounting blocks located on top of the water tank.</p> <p>These mounting blocks can be utilized for mounting equipment to the top of the water tank.</p> <p>The water tank shall have a lifetime warranty.</p> <p>~ STAINLESS STEEL PLUMBING SYSTEM ~</p> <p>All plumbing on the apparatus shall be heavy duty welded stainless steel plumbing.</p> <p>All plumbing connections shall be completed by either Victaulic couplers or 4-bolt flanges.</p> <p>When required, a high-pressure hose shall be utilized with welded stainless-steel fittings.</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
16	LABELING:		
16a	<p>TRUCK IDENTIFICATION PLATE A truck identification plate shall be provided and installed on the pump operator's panel. The plate shall state the name and address of the apparatus manufacturer, the serial number of the unit and the pump performance test results.</p>		
16b	<p>PUMP PANEL LABELING All controls, discharges, intakes, ports, drains, and other pump panel components that are not provided with a pre-printed legend or trim plate shall be labeled as required for ease of operation.</p>		
16c	<p>VALVE LABELING Valves and /or Valve control handles shall be labeled as to duty. The tags shall be placed adjacent to the components in such a way as to clearly distinguish the item that they are identifying.</p>		
17	COMPLETED APPARATUS TESTING:		
17a	<p>PUMP PERFORMANCE TEST AND CERTIFICATION Upon completion, the apparatus shall undergo a complete pumping test that conforms to the requirements of NFPA Standard 1906 (latest edition) for the size and type of pump provided in Ogden City, Utah. The test shall consist of a continuous one-half hour test pumping at rated capacity and rated net pump pressure, a vacuum test of the primer system and plumbing, a tank discharge flow test and a pressure test of the apparatus piping. The chassis engine and transmission, the pump and other components of the apparatus shall show no undue heating, leaks, or other defect. The results of the test shall be documented to establish the performance of the apparatus and to further insure that the unit shall perform satisfactorily when placed into service. The test results shall be certified in writing, with the certification provided to the purchaser for their records at the time of delivery of the completed apparatus.</p> <p>PUMP PERFORMANCE TEST AND CERTIFICATION: The pump/engine shall be capable of meeting the NFPA 1906 performance rating of 50 GPM @ 150 PSI and 150 GPM @ 100 PSI. Typical pump performance from 5-foot draft at sea level shall be: 170 GPM @ 150 PSI, 250 GPM @ 100 PSI and 290 GPM @ 60 PSI.</p>		
17b	<p>ELECTRICAL, LOW-VOLTAGE TEST The fire apparatus low voltage electrical system shall be tested as required by this section and the test results shall be certified by the apparatus manufacturer. The certification shall be delivered to the</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
	purchaser with the documentation for the completed apparatus. The tests shall be performed when the air temperature is between 0°F and 110°F (18°C and 43°C).		
17c	<p>TEST SEQUENCE</p> <p>The three (3) tests defined below shall be performed in the order in which they appear. Before each test, the chassis batteries shall be fully charged until the voltage stabilizes at the voltage regulator set point and the lowest charge current is maintained for 10 minutes. The failure of any of these tests shall require a repeat of the test sequence.</p>		
17d	<p>RESERVE CAPACITY TEST</p> <p>The chassis engine shall be started and kept running until the chassis engine and engine compartment temperatures are stabilized at normal operating temperatures and the chassis battery system is fully charged. The chassis engine shall be shut off and the minimum continuous electrical load shall be applied for 10 minutes. All electrical loads shall be turned off prior to attempting to restart the chassis engine. The chassis battery system shall then be capable of restarting the chassis engine. The failure to restart the chassis engine shall be considered a failure of this test.</p>		
17e	<p>ALTERNATOR PERFORMANCE TEST AT IDLE</p> <p>The minimum continuous electrical load shall be applied with the chassis engine running at idle speed. The chassis engine temperature shall be stabilized at normal operating temperature. The chassis battery system shall be tested to detect the presence of a chassis battery current discharge. The detection of chassis battery current discharge shall be considered a failure of this test.</p>		
17f	<p>ALTERNATOR PERFORMANCE TEST AT FULL LOAD</p> <p>The total continuous electrical load shall be applied with the chassis engine running up to the engine manufacturer's governed speed. The test duration shall be a minimum of two (2) hours. The activation of the electrical system load management system shall be permitted during this test. The activation of an alarm due to excessive chassis battery discharge, as detected by the system required by NFPA (current edition), or an electrical system voltage of less than 11.8 VDC for a 12 VDC nominal system, for more than 120 seconds, shall be considered a failure of this test.</p>		
18	DECALS:		
18a	<p>CAB AND BODY LETTERING AND STRIPING</p> <p>Fire Department specific lettering and striping shall be applied to the chassis cab doors and the body compartment doors.</p> <p>~ APPARATUS REFLECTIVE STRIPING ~</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
	<p>A reflective striping package shall be provided around the perimeter of the apparatus, meeting NFPA 1906 current edition standards. The reflective striping package shall consist of the following:</p> <ul style="list-style-type: none"> ❖ 1.0" / 4.0" / 1.0" reflective stripe on each side of the chassis' body and on each upper body compartment door – Color of stripe is Grey/Black ❖ 4.0" reflective stripe within the fire body perimeter extrusion – Color of stripe is black. ❖ Red / Yellow Chevron pattern reflective striping on rear vertical skirt of fire body. ❖ 4.0" reflective striping at the front of the apparatus on the full replacement front bumper – Color of stripe to be determined by the Fire Department. <p>~ APPARATUS LETTERING ~ Fire Department specific lettering shall be provided on the apparatus as directed by the Fire Department.</p> <p>APPARATUS FINISH: Compartment Doors painted Ford Rapid Red or other customer approved finish.</p>		
19	ADDITIONAL EQUIPMENT & INFORMATION:		
19a	The following equipment shall be provided with the completed apparatus. The equipment shall be new and unused, and shall meet all current NFPA, OSHA and other applicable safety regulations.		
19b	<p>MANUALS AND DRAWINGS</p> <ul style="list-style-type: none"> • The following specified materials shall be provided with the completed apparatus: • One (1) complete set of standard chassis operation, parts and service manuals. • One (1) apparatus manufacturer's operation and service manual, to include: <ul style="list-style-type: none"> ✓ Warranty Registration and Information ✓ Pump Operation and Troubleshooting Instructions ✓ Maintenance and Lubrication Information & Charts ✓ Complete Electrical Diagrams ✓ Component Literature (ie: siren, hose reel, etc.) ✓ Pump Test Certificate, Weight Certificate, Service Parts Replacement List 		
19c	<p>ROAD KIT</p> <p>The completed apparatus shall be equipped with a road kit containing the following items:</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
	<ul style="list-style-type: none"> • One (1) 2-1/2 lb. Class B/C fire extinguisher with vehicle mounting bracket, shipped loose • One (1) set of warning triangle reflectors, containing three (3) folding reflectors in a plastic storage case • One (1) 12 ton hydraulic jack with handle 		
19d	<p>WINCH</p> <p>There shall be a Warn 16.5ti fixed mount winch provided at the front of the apparatus, mounted within the apparatus full replacement front bumper assembly.</p> <p>The winch shall have the following features:</p> <ul style="list-style-type: none"> ❖ 16,500 pound pulling capacity ❖ 90' of 7/16" wire rope ❖ 25' umbilical remote with integrated thermometric indicator light 		
19e	<p>WARRANTIES:</p> <p>The award will also take into consideration warranty and warranty provisions of the proposed vehicle. The bid shall state the type of warranty that the manufacturer will provide, with copies of warranty coverage and omissions enclosed with these specifications.</p> <p>Warranties will at minimum provide a thirty-six (36) months and 36,000-mile warranty on the entire vehicle which covers defective parts and or components of its manufacturer. Warranty shall include any and all costs for labor and parts or materials that are required to correct any and all deficiencies.</p> <p>Under this warranty, the apparatus manufacturer shall be responsible for the costs of repairs to the apparatus that have been caused by defective workmanship or materials during this period.</p>		
19f	<p>THREE YEAR CHASSIS WARRANTY</p> <p>The manufacturer of the chassis shall warranty the chassis for a period of at least Three Years. As an apparatus may be integrally married to the chassis and this is an emergency vehicle, the City reserves the right at its discretion to call upon apparatus warranty first to determine whether the issue is a chassis or an apparatus problem at no charge.</p>		
19g	<p>THREE YEAR APPARATUS WARRANTY</p> <p>All materials and workmanship herein specified, including all equipment furnished, shall have a warranty for a period of three (3) years after the acceptance date of the apparatus, unless otherwise noted, with the exception of any normal maintenance services or adjustments which shall be required. A copy of the warranty shall be submitted with the Bidder's proposal.</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
19h	<p>WATER TANK WARRANTY</p> <p>The polypropylene water tank that is specified to be supplied with this apparatus shall have a warranty by the water tank manufacturer for a "lifetime" period from the date that the apparatus is put into service. The manufacturer shall repair, at no cost to the purchaser, any problems caused by defective materials and/or workmanship. The warranty shall cover the reasonable costs of removing the water tank from the apparatus and reinstalling it after the completion of the covered warranty repairs, but shall not cover any liability for the loss of service or downtime costs of the apparatus. A sample of warranty shall be submitted with the Bidder's proposal.</p>		
19i	<p>ALUMINUM BODY PRODUCTS</p> <p>The aluminum body that is specified to be supplied with this apparatus shall have a warranty by the manufacturer for a "lifetime" period from the date that the apparatus is put into service. The manufacturer shall repair, at no cost to the purchaser, any problems caused by defective materials and/or workmanship. The warranty shall cover the reasonable costs of removing any body component from the apparatus and reinstalling it after the completion of the covered warranty repairs, but shall not cover any liability for the loss of service or downtime costs of the apparatus. A sample of warranty shall be submitted with the Bidder's proposal.</p>		
19j	<p>EMERGENCY LIGHTING PRODUCTS</p> <p>The emergency lighting products that is specified to be supplied with this apparatus shall have a warranty by the manufacturer for a period of at least five years from the date that the apparatus is put into service. The manufacturer shall repair, at no cost to the purchaser, any problems caused by defective materials and/or workmanship. The warranty shall cover the reasonable costs of removing any emergency lighting component from the apparatus and reinstalling it after the completion of the covered warranty repairs, but shall not cover any liability for the loss of service or downtime costs of the apparatus. A sample of warranty shall be submitted with the Bidder's proposal.</p>		
19k	<p>WARRANTY SERVICE RESPONSE:</p> <p>The successful Bidder must have the ability to provide a factory authorized service technician with certified emergency vehicle technicians (EVT) to perform warranty repairs. Vendor shall be willing to provide follow-up service including replacement parts for repairs, etc. as may be needed to maintain the vehicle after it is put into operation.</p>		

Item No.	MINIMUM REQUIREMENT	YES	NO
19l	<p>DELIVERY & TRAINING Person or persons delivering the unit must be a licensed representative of the firm bidding and must be a certified service technician of the represented dealership. They must be willing to give orientation and training on the vehicle to this service and be willing to spend up to 8-hours in the area and/or per vehicle if necessary. Included in the bid price shall be a round trip ticket for 2 to the manufacturer's location for a final inspection. Rental car and lodging shall be included.</p>		
20	OTHER BID DOCUMENTATION:		
20a	<p>ADDITIONAL PURCHASES We reserve the right to add additional vehicles to this purchase if so desired. If model year has changed additional purchases may include up charge from model year to the next.</p>		

**EXHIBIT "D"
REFERENCES**

**Self-Contained Bed/ Pump/Tank/Hoses/ Skid Unit
Installed on a Supplier supplied cab & chassis
2022 Ford F-550 XLT, Extended Cab, 4x4, 6.7L Diesel Engine with 60" CA**

NOTICE TO BIDDERS: Any bidder who willfully falsifies any portion of the references listed below shall be subject to suspension and/or debarment from bidding.

Bidder shall list references of companies who have purchased the equipment specified from your company within the previous four (4) years. References shall be in United States.

COMPANY NAME AND ADDRESS	PHONE NUMBER	CONTACT NAME

*Please authorize the City and its designated procurement officials to check on references submitted by your company by filling out the information requested below.

SIGNED: _____ **DATE:** _____

PRINTED NAME: _____

TITLE: _____

COMPANY NAME: _____

ADDRESS: _____

CITY: _____

STATE: _____

ZIP: _____

PHONE: _____

MOBILE: _____

FAX: _____

EMAIL: _____

WEBSITE: _____