BE IT REMEMBERED that the Board of Supervisors of Clay County, Mississippi, met at the Clay Courthouse in West Point, MS, on the 4th day of October, 2018, at 9:00 a.m., and present were: Lynn Horton, President, Luke Lummus, R. B. Davis, Shelton Deanes, and Joe Chandler. Also present were Amy G. Berry, Chancery Clerk and Clerk to the Board, Angela Turner-Ford, Attorney for the Board of Supervisors, and Eddie Scott, Sheriff of Clay County; when and where the following proceedings were as determined to wit;

, NO	<i>O</i>
	D AMENDING THE AGENDA FOR THE BOARD TING HELD ON OCTOBER 4, 2018

There came on this day for consideration the matter of adopting the agenda for the Board of Supervisors meeting held on October 4, 2018.

After motion by Luke Lummus and second by Shelton Deanes this Board doth vote unanimously to adopt the agenda as attached hereto as Exhibit A as presented.

Lynn D. Horton, President

SO ORDERED this the 4th day of October, 2018.

n O 13

Clay County Board of Supervisors Agenda for Board Meeting Held Thursday, October 4, 2018 at 9:00 a.m.

• Call to Order
Welcome and Prayer
Adopt and Amend the agenda
Lisa Klutts

o Presentation of Award

Johnny Carter

Eddie Scott

o Authority to repair truck for Buildings and Grounds

Amy Berry

Amendments:

Authority to purchase VF Fire Truck for NE Volunteer Fire Unit - RFTAAP Program

O Authority to L/P finance the cost of the MSWIN Radio System

o MAS Conference next week in Tupelo, MS

- Authority to spread on the minutes the Circuit Court Order appointing a new Law Clerk for the 16th
 District
- Adjourn until Thursday, October 25, 2018 at 9:00 a.m. at the Clay County Courthouse

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IN THE MATTER OF AUTHORIZING THE PURCHASE OF THE VOLUNTEER FIRE TRUCK ON STATE CONTRACT FROM EMERGENCY EQUIPMENT PROFESSIONALS INC. FOR THE NORTHEAST VOLUNTEER FIRE UNIT

There came on this day for consideration the matter of authorizing the purchase of the Volunteer Fire truck on state contract from Emergency Equipment Professionals Inc for the Northeast Volunteer Fire Unit.

It appears to this Board the County is a recipient of the RFTAAP Funding program Round 11 and if the Board plans to continue to utilize these funds to purchase a Volunteer Fire Truck the said purchase must be made within 90 days from the time your County received notice of RFTAAP Funding Approval, and;

It appears to this Board our County is within the 90 day window of time and the Volunteer Fire Coordinator, B. J. McClenton, is requesting this Boards consideration in purchasing the fire truck through Emergency Equipment Professionals Inc on state contract in the amount of \$258,650.00 as outlined in the proposal as attached hereto as Exhibit A.

After motion by Luke Lummus and seconded by Shelton Deanes this Board doth vote unanimously to authorize and approve to purchase the Volunteer Fire Truck on state contract as outlined in the proposal as attached hereto in Exhibit A in the amount of \$258,650.00.

SO ORDERED this the 4th day of October, 2018.

Lynn D. Horton, President



Equipment Proposal

This Equipment Proposal (the "Proposal") has been prepared by Emergency Equipment Professionals, Inc. ("Company") in response to the undersigned Customer's request for a proposal. This Proposal is comprised of the special terms set forth below, the Proposal Option List, Warranty, and Company's Purchasing Terms and Conditions. Through its signature below or other Acceptance (as defined below), Customer acknowledges having received, read and being bound by this Proposal, all attachments and Company's Purchasing Terms and Conditions.

Date: 10/4/2018 ("Proposal Date") Customer Name: Clay County MS ("Customer")

Customer Address:

Quantity	Product Description & Options	Price
1	2019 Pierce Commercial Freightliner Pumper	\$258,650.00
	Meets Current Mississippi State Contract #8200027988 for "Fire Trucks"	
	Purchase Price:	\$258,650.00

Delivery Timing: The Product described above in the Product Description and Options Section of this document will be built by and shipped from the manufacturer approximately nine to ten (9-10) months after Company receives Customer's acceptance of this Proposal as defined below.

Delivery Location: Clay County Board of Supervisors, W	Vest Point MS
Other:	

Acceptance of this proposal creates an enforceable binding agreement between company and customer. "Acceptance" means that customer delivers to company: (A) a proposal signed by an authorized representative, or (B) a purchase order incorporating this proposal, which is duly approved, to the extent applicable, by customer's governing board. Acceptance of this proposal is expressly limited to the terms contained in this proposal and company's purchasing terms and conditions. Any additional or different terms, whether contained in customers forms or otherwise forms or otherwise presented by customer at any time are hereby rejected, unless agreed upon by both parties in writing.

INTENDING TO CREATE A BINDING AGREEMENT, Customer and Company have each caused this Proposal to be executed by their duly authorized representatives as of date of the last signature below.

Customer Name: Clay County MS	Emergency Equipment Professionals, inc
Ву:	By:
Its:	Its:
Date:	Date:

Balance in Volunt	eer Fire Insurance Rebate Monies	58,775
Option A	Pay for MSWIN Existing Debt Payment	(46,195) (29,676) (6,245)
	New Fire truck Payment	(14,000)
	Plus Ins. Rebate Monies	50,000
	Ending Balance as of 9/30/19	12,660
FY 2019	Debt Payment	(29,676.00) (6,245.00) (18,000)
	Plus Ins. Rebate Monies	50,000.00
	Ending Balance as of 9/30/20	8,739
Opion B	Finance the full \$236,000 for MSWIN	<u> </u>
•	ng Balance	58,775 (29,676)
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•	Existing Debt Payment New Fire truck Payment Ins Rebate Distribution Plus Ins. Rebate Monies Ending Balance as of 9/30/19 Existing Debt Payment	(29,676) (6,245) (14,000) (17,500) 50,000 41,355 (29,676) (6,245)

Darance	in Volunte	er Fire Insurance Rebate Monies	58,775
Option A		Pay for MSWIN	(46,195)
		Existing Debt Payment	(29,676)
		•	(6,245)
		New Fire truck Payment	(14,000)
		Plus Ins. Rebate Monies	50,000
		Ending Balance as of 9/30/19	12,660
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			(18,000)
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		Ending Balance as of 9/30/20	8,739
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	_	Finance the full \$236,000 for MSWIN	58.775
mВ	_	Finance the full \$236,000 for MSWIN	58,775
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Ending Balance as of 9/30/20

37,434

Balance in Volu	58,775	
Option A	Pay for MSWIN	(46,195)
	Existing Debt Payment	(29,676)
	-	(6,245)
	New Fire truck Payment	(14,000)
	Plus Ins. Rebate Monies	<u>50,000</u>
	Ending Balance as of 9/30/19	12,660
FY 20	Debt Payment	(29,676.00)
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	Plus Ins. Rebate Monies	_ 50,000.00
	Ending Balance as of 9/30/20	8,739

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phon B	Beginning Balance	58,775
	Existing Debt Payment	(29,676) (6,245)
	New Fire truck Payment	(14,000)
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	Ending Balance as of 9/30/19	41,355
	Existing Debt Payment	(29,676) (6,245)
	New Fire truck Payment	(18,000)
	Plus Ins. Rebate Monies	50,000
	Ending Balance as of 9/30/20	37,434

Amy Berry

From:

BJ

sjmcclenton@gmail.com>

Sent:

Thursday, October 04, 2018 8:48 AM

To:

Amy Berry

Subject:

Fwd: truck specs

Attachments:

2018 Pumper Specs.docx; IMG_1229.JPG; IMG_1233.JPG

----- Forwarded message -----

rom: Marc Flanagan <mflanagan@eeproinc.com>

Date: Sat, Mar 31, 2018 at 12:28 PM

Subject: truck specs

To: bjmcclenton@gmail.com <bjmcclenton@gmail.com>

BJ,

I have attached a set of specifications for a two door Freightliner top mount pumper. A 2018 model of this truck will run about \$275,000.00 depending on options. If we did them just like the trucks that were purchased in 2015 we could probably get them for about \$265,000.00. I have also attached a couple of photos of the truck that is spec'd. If you have any questions please give me a call.

Thank you!

Marc Flanagan

Territory Manager

Emergency Equipment Professionals Inc.

662-210-3300

BJ McClenton Clay County Fire Coordinator
West Point, MS
Office: (662) 425-1185
email: bjmcclenton@gmail.com

El Ro Lorda

Your apparatus will be manufactured in Bradenton, Florida.

NFPA 2016 STANDARDS

This apparatus specification includes a commercial chassis that has not been certified to meet the requirements of NFPA 1901 by the chassis manufacturer. Although this chassis may comply with certain aspects of the standard, Pierce has not received certification from this chassis manufacturer that all criteria have been met. The body as built by the manufacturer must comply with the NFPA standards effective January of 2016.

Certification of slip resistance of all stepping, standing and walking surfaces must be supplied with delivery of the apparatus.

All horizontal surfaces designated as a standing or walking surface that are greater than 48.00" above the ground must be defined by a 1.00" wide line along its outside perimeter. Perimeter markings and designated access paths to destination points will be identified on the customer approval print and are shown as approximate. Actual location(s) will be determined based on materials used and actual conditions at final build. Access paths may pass through hose storage areas and opening or removal of covers or restraints may be required. Access paths may require the operation of devices and equipment such as the aerial device or ladder rack.

A plate that is highly visible to the driver while seated will be provided. This plate will show the overall height, length, and gross vehicle weight rating.

The manufacturer will have programs in place for training, proficiency testing and performance for any staff involved with certifications.

An official of the company will designate, in writing, who is qualified to witness and certify test results.

NFPA COMPLIANCY

Apparatus proposed by the bidder will meet the applicable requirements of the National Fire Protection Association (NFPA) as stated in the current edition at time of contract execution. Fire Department's specifications that differ from NFPA specifications will be indicated in the proposal as "non-NFPA."

PUMP TEST

The rated water pump will be tested, approved, and certified by an ISO certified independent third party testing agency at the manufacturer's expense. The test results, along with the pump manufacturer's certification of hydrostatic test, the engine manufacturer's certified brake horsepower curve, and the manufacturer's record of pump construction details will be forwarded to the Fire Department.

GENERATOR TEST

If the unit has a generator, the generator will be tested, approved, and certified by an ISO certified independent third party testing agency at the manufacturer's expense. The test results will be provided to the Fire Department at the time of delivery.

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AFTERMARKET SUPPORT WEBSITE

Pierceparts.com will provide <u>Pierce authorized dealer</u> access to comprehensive information pertaining to the maintenance and service of their customer's apparatus. This tool will provide the Pierce authorized dealer the ability to service and support their customers to the best of their ability with factory support at their fingertips.

Pierceparts.com is also accessible to the end user through the guest login. Limited access is available and vehicle specific parts information accessible by entering a specific VIN number. All end users should see their local authorized Pierce dealer for additional support and service.

The website will consist of the following screens at the dealer level:

My Fleet Screen

The My Fleet screen will provide access to truck detail information on the major components of the vehicle, warranty information, available vehicle photographs, vehicle drawings, sales options, applicable vehicle software downloads, etc.

Parts Screens

The Parts screens will provide parts look-up capability of Pierce Manufacturing sourced items, with the aid of digital photographs, part drawings and assembly drawings. The parts search application will permit the searching of parts by item description or function group (major system category). The parts application will provide the ability to submit electronically a parts order, parts quote, or parts return request directly to Pierce Manufacturing for processing.

Warranty Screen

The Warranty screens will provide dealers the ability to submit electronically warranty claims directly to Pierce Manufacturing for reimbursement.

My Reports Screens

The My Reports screens will provide access to multiple dealer reports to allow the dealership to maintain communication with the customer on the status of orders, claims, and phone contacts.

Technical Support Screens

The Technical Support screens will provide access to all currently published Operation and Maintenance and Service Publications. Access to Pierce Manufacturing Service Bulletins and Work Instructions, containing information on current service topics and recommendations will be provided.

Training

The Training screens will provide access to upcoming training classes offered by Pierce Manufacturing along with interactive electronic learning modules (Operators Guides) covering the operation of major

vehicle components will be provided. Access to training manuals used in Pierce Manufacturing training classes will be provided.

About Pierce

Access to customer service articles, corporate news, quarterly newsletters, and key contacts within the Customer Service Department will be provided. The current Customer Service Policy and Procedure Manual, detailing the operation of the Customer Service group will also be accessible.

BID BOND NOT REQUESTED

A bid bond will not be included. If requested, the following will apply:

All bidders will provide a bid bond as security for the bid in the form of a 5% bid bond to accompany their bid. This bid bond will be issued by a Surety Company who is listed on the U.S. Treasury Departments list of acceptable sureties as published in Department Circular 570. The bid bond will be issued by an authorized representative of the Surety Company and will be accompanied by a certified power of attorney dated on or before the date of bid. The bid bond will include language, which assures that the bidder/principal will give a bond or bonds as may be specified in the bidding or contract documents, with good and sufficient surety for the faithful performance of the contract, including the Basic One (1) Year Limited Warranty, and for the prompt payment of labor and material furnished in the prosecution of the contract.

Notwithstanding any document or assertion to the contrary, any surety bond related to the sale of a vehicle will apply only to the Basic One (1) Year Limited Warranty for such vehicle. Any surety bond related to the sale of a vehicle will not apply to any other warranties that are included within this bid (OEM or otherwise) or to the warranties (if any) of any third party of any part, component, attachment or accessory that is incorporated into or attached to the vehicle. In the event of any contradiction or inconsistency between this provision and any other document or assertion, this provision will prevail.

PERFORMANCE BOND NOT REQUESTED

A performance bond will not be included. If requested at a later date, one will be provided to you for an additional cost and the following will apply:

The successful bidder will furnish a Performance and Payment bond (Bond) equal to 100 percent of the total contract amount within 30 days of the notice of award. Such Bond will be in a form acceptable to the Owner and issued by a surety company included within the Department of Treasury's Listing of Approved Sureties (Department Circular 570) with a minimum A.M. Best Financial Strength Rating of A and Size Category of XV. In the event of a bond issued by a surety of a lesser Size Category, a minimum Financial Strength rating of A+ is required.

Bidder and Bidder's surety agree that the Bond issued hereunder, whether expressly stated or not, also includes the surety's guarantee of the vehicle manufacturer's Bumper to Bumper warranty period included within this proposal. Owner agrees that the penal amount of this bond will be simultaneously

amended to 25 percent of the total contract amount upon satisfactory acceptance and delivery of the vehicle(s) included herein. Notwithstanding anything contained within this contract to the contrary, the surety's liability for any warranties of any type will not exceed three (3) years from the date of such satisfactory acceptance and delivery, or the actual Bumper to Bumper warranty period, whichever is shorter.

REFERENCE DRAWING

A drawing of the proposed apparatus will be provided for review. This drawing will indicate the major components such as the chassis make and model, body configuration and door style, location of the lights, siren, horns, compartments, major components, etc.

This drawing will not need to be signed and returned to the apparatus manufacturer and will not be part of the contract documents.

ELECTRICAL WIRING DIAGRAMS

Two (2) electrical wiring diagrams, prepared for the body as it interfaces with the commercial chassis, will be provided.

CHASSIS

The chassis will be a Freightliner, Model M2, 106MD Conventional Chassis, supplied with the following equipment:

WHEELBASE

The wheelbase of the vehicle will be 202".

GVW RATING

The gross vehicle weight rating will be 36,000#.

FRAME

The frame rails will be formed from 120,000 psi yield, heat treated alloy steel. The frame rails will be E-coated prior to painting.

FRONT AXLE

Front axle will be an I beam type, made of forged steel. It will be a Detroit brand axle with a ground rating capacity of 12,000 lb.

FRONT SUSPENSION

Spring mounted: Taper-leaf

Capacity at Ground: 12,000 lb

Shock Absorbers: Double Acting

Shock absorbers will be provided on the front axle.

TIRES, FRONT

Front tires will be Michelin 11R22.50, radial tires with a tread pattern suitable for the steering axle position. The capacity of the tires will meet or exceed the rating of the axle and/or suspension.

WHEELS, FRONT

Wheels for the front axle will be 22.50" x 8.25" aluminum disc, ten (10)-hole pattern.

REAR AXLE

The single reduction rear axle will be provided with a ground rating capacity of 24,000 lb.

The brake chambers will be forward mounted and the brakes will be 16.50" x 7.00", S-Cam type.

PARKING BRAKE

The parking brake will be spring set and located on the rear axle service brake.

REAR AXLE RATIO

A rear axle ratio will be furnished to allow the vehicle to reach a top speed of 68 MPH.

REAR SUSPENSION

The rear suspension will be spring mounted 11 leaf, 60.00" x 3.00" with a capacity at ground level of 24,000 lbs. Auxiliaries will be included and the deflection will be a variable rate

TIRES, REAR

Rear tires will be Michelin 11R22.50 radial tires with a traction tread pattern suitable for the drive axle position. The tires will meet or exceed the weight rating of the axle and/or suspension.

WHEELS, REAR

The rear wheels will be 22.50" x 8.25" disc with a ten (10)-hole pattern. The outer wheel will be polished aluminum and the inner wheel will be steel.

TIRE PRESSURE MANAGEMENT

There will be a RealWheels LED AirSecureTM tire alert pressure management system provided, that will monitor each tire's pressure. A sensor will be provided on the valve stem of each tire for a total of six (6) tires.

The sensor will calibrate to the tire pressure when installed on the valve stem for pressures between 10 and 200 psi. The sensor will activate an integral battery operated LED when the pressure of that tire drops 5 to 8 psi.

Removing the cap from the sensor will indicate the functionality of the sensor and battery. If the sensor and battery are in working condition, the LED will immediately start to flash.

CHROME LUG NUT COVERS

Chrome lug nut covers will be supplied on front and rear wheels.

WHEEL CHOCKS PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 5.9.4 requires two (2) or more wheel chocks mounted in readily accessible locations, that together will hold the apparatus, when loaded to its GVWR or GCWR, on a hard surface with a 20 percent grade with the transmission in neutral and the parking brake released.

The wheel chocks are not on the apparatus as manufactured. The fire department will provide and install these wheel chocks.

WHEEL CHOCK BRACKETS, PROVIDED BY FIRE DEPARTMENT

The wheel chock brackets are not on the apparatus as manufactured. The fire department will provide and install the wheel chock brackets.

ANTI-LOCK BRAKE SYSTEM

The vehicle will be equipped with a Wabco, Model 4S/4M, four (4) channel anti-lock braking system. The ABS will provide anti-lock braking control on both the front and rear wheels. It will be a digitally controlled system that utilizes microprocessor technology to control the anti-lock braking system. Each wheel will be monitored by the system. When any particular wheel begins to lockup, a signal will be sent to the control unit. This control unit then will reduce the braking of that wheel for a fraction of a second and then reapply the brake. This anti-lock brake system will eliminate the lockup of any wheel thus helping to prevent the apparatus from skidding out of control.

FRONT BRAKES

The front brakes will be S-Cam, 16.50" x 5.00". The front brakes will be provided with Meritor™ automatic slack adjusters.

AIR COMPRESSOR, BRAKE SYSTEM

The air compressor will be a Wabco with 18.7 cubic feet per minute output.

AIR DRYER

A Bendix AD-9SI air dryer with a heater will be provided. Other features of this air dryer include:

- Desiccant style filter
- In-line filtration system
- Automatic purge valve

AIR INLET

A single air inlet with male coupling will be provided. It will allow station air to be supplied to the apparatus brake system through a shoreline hose. The inlet will be located near the pump operator's position. A check valve will be provided to prevent reverse flow of air. The inlet will discharge into the

"wet" tank of the brake system. A mating female coupling will also be provided with the loose equipment.

ENGINE

Model: Electronic Cummins ISB-360

• Number of Cylinders: Six (6)

Displacement: 6.7 liters

Rated Brake Horsepower: 360 at 2600 rpm

Peak Torque: 800 at 1800 rpm

Governed rpm: 2600Charge Air Cooled

ENGINE ACCESSORIES

Air Cleaner: Dry type, with restriction indicator in cab

• Fuel Filters

· Governor: Limiting speed type

Lube Oil Cooler

Lube Oil Filter: Full flowStarting Motor: 12-volt

ENGINE WARRANTY

The engine will come with a warranty provided by the engine manufacturer.

RADIATOR

- · Pressurized System, Tube and Fin
- Deaeration Tank and Sight Glass
- Anti-Freeze Protection -34 Degrees Fahrenheit

HIGH IDLE

A high idle switch will be provided on the instrument panel inside the cab. Activating the switch will cause the vehicle to automatically maintain a preset engine rpm.

The high idle switch will be operational only when the parking brake is on and the truck transmission is in neutral. A green indicator light will be provided adjacent to the switch. The light will be labeled "OK To Engage High Idle."

ENGINE EXHAUST BRAKE

An exhaust brake with an integral variable geometry turbo charger (VGT) will be provided. The control will be located on the instrument panel within easy reach of the driver.

FUEL/WATER SEPARATOR

An Detroit fuel/water separator will be provided on the chassis. It will include a "water in fuel" sensor, hand primer and a 12-volt pre-heater.

AIR INTAKE, W/EMBER SEPARATOR

The air inlet will be equipped with a stainless steel mesh to separate water and burning embers from the air intake system such that particulate matter larger than 0.039" (1.0 mm) in diameter cannot reach the air filter element.

This will comply with NFPA 1901 and 1906 standards.

EXHAUST SYSTEM

The exhaust system will include a diesel particulate filter (DPF) and a selective catalytic reduction (SCR) device to meet current EPA standards. The DPF and SCR will be mounted horizontally outside of the frame rails in the passenger side front step area.

EXHAUST MODIFICATIONS

The exhaust will terminate the side of the body with a horizontal tailpipe and diffuser ahead of the passenger side rear wheels.

A heat deflector shield will be provided where the tail pipe is routed under any side compartmentation.

COOLANT LINES

Gates Blue Stripe rubber hose will be used for all engine coolant lines installed by the chassis manufacturer.

Hose clamps will be the constant torque type to prevent coolant leakage. They will expand and contract according to coolant system temperature thereby keeping a constant clamping pressure on the hose.

FUEL TANK

A 50 gallon fuel tank will be provided and mounted at the left-hand cab step. The rectangular tank will be constructed of aluminum.

DIESEL EXHAUST FLUID TANK

A 6.00 gallon diesel exhaust fluid (DEF) tank will be provided and mounted on the driver's side, below the cab

The tank will include an integrated heater unit that utilizes engine coolant to thaw the DEF in the event of freezing.

FUEL PRIMER PUMP

A fuel primer pump will be included with the heated fuel water separator.

AUXILIARY FUEL COOLING SYSTEM

A supplementary fuel cooling system will be provided to allow the use of water from the discharge side of the pump for cooling the chassis engine fuel. The heat exchanger will be a cylindrical type and will

be a separate unit. The cooler will operate any time the pump is discharging water and will be plumbed to the master drain valve.

TRANSMISSION

An Allison, model 3000 EVS, electronic torque converting automatic transmission will be provided.

Two (2) PTO openings will be located on left side and top of converter housing (positions 8 o'clock and 4 o'clock).

A transmission temperature gauge or warning light will be installed on cab instrument panel.

TRANSMISSION SHIFT CONTROL

A push button shift module will be mounted to right of driver. Shift position indicator will be indirectly lit for after dark operation.

The transmission will be a five (5)-speed.

TRANSMISSION COOLER

A transmission oil cooler will be provided in the lower tank of the radiator.

DRIVELINE

Drivelines will have a heavy duty metal tube that is properly sized for the intended application. The shafts will have a splined slip joint.

STEERING

The steering system will be hydraulically driven. The steering column will have an adjustable tilt and telescope feature.

BUMPER

A one (1)-piece, 10.00" high, stainless steel bumper will be attached to the front of the frame. A 9.00" channel will be mounted directly behind the bumper for additional strength. The bumper will be extended 19.00" from the front face of the cab.

GRAVEL PAN

A gravel pan, constructed of bright aluminum treadplate, will be furnished between the bumper and cab face. The gravel pan will be properly supported from the underside to prevent flexing and vibration of the aluminum treadplate.

TOW HOOKS

Two (2) chromed steel tow hooks will be installed under the bumper and attached to the front frame members. The tow hooks will be designed and positioned to allow up to a 6,000 lb straight horizontal pull in line with the centerline of the vehicle. The tow hooks will not be used for lifting of the apparatus.

HOSE TRAY

A hose tray, constructed of aluminum, will be placed in the center of the bumper extension.

The tray will have a capacity of 100' of 1.75" double jacket cotton-polyester hose.

Black rubber grating will be provided at the bottom of the tray. Drain holes will be included.

COVER, HOSE TRAY

A bright aluminum treadplate cover will be provided over the one (1) hose tray.

The cover will be attached with a stainless steel hinge and located center bumper tray.

One (1) "D" ring latch will secure the cover in the closed position and a pneumatic stay arm will hold the cover in the open position.

CAB

A 2-door flat-roof cab will be provided. The cab and doors will be of an aluminum construction.

Exterior Styling

Aerodynamic hood and windshield

Tinted Glass in all Windows

Fiberglass hood with mounted plastic grille

Single 63"x14" rear window

Interior

Leaf spring rear cab suspension

Vinyl mats

Forward roof mounted console

Two (2) dash-mounted cup holders, right-hand and left-hand

Gray Vinyl Upholstery

Dual Sun visors

Fresh Air Heater and Defroster

- Gray Vinyl Upholstery

CAB GRILLE, INTERIOR CONVENIENCE AND EXTERIOR APPEARANCE PACKAGE

The cab exterior will have a high impact plastic chromed grille and matching headlight bezels. The grille will tilt with the hood.

Additionally, the headlight bezels and the engine air intake housing will have a chrome finish.

The cab interior will include wood grain dash panels, molded door panels with vinyl inserts and brushed aluminum door kick plates.

MIRRORS

West Coast style heated, remote operated mirrors constructed from a molded composite material with a bright finish will be provided. A heated 8.00" convex mirror shall be included below the primary mirrors.

CAB ACCESS STEPS

The cab steps will be provided by the chassis manufacturer. The stepping surface will be constructed from polished stainless steel and have a punch formed slip resistant surface.

No modifications of any type will be provided by the apparatus manufacturer.

STEP LIGHTS

There will white LED step lights provided to meet NFPA step lighting requirements. Lights will be installed at each cab door step.

The lights will be activated when the adjacent door is opened.

POWER WINDOWS AND LOCKS

The cab doors will have electrically powered windows and locks.

DAYTIME RUNNING LIGHTS

The chassis will be provided with daytime running lights.

AIR CONDITIONING

An air conditioner will be provided that is integral with heater and defroster system.

ENGINE COMPARTMENT LIGHTS

Two (2) engine compartment lights will be installed under the engine hood, of which the switches are an integral part.

SEATING CAPACITY

The seating capacity in the cab will be two (2).

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SEATING

Seating inside the cab will consist of an air-ride driver seat and a fixed companion seat.

SEAT BELT WEB LENGTH

NFPA 1901, 2016 edition, Section 14.1.3.1 and 14.1.3.2 requires effective seat belt web length for a Type 1 lap belt for pelvic restraint to be a minimum of 60.00", and a Type 2 pelvic and upper torso restraint-style seat belt assembly to be a minimum of 110.00".

Per Fire Department specification of a commercial chassis, this apparatus may not have seat belts of the required length. These belts may not provide sufficient length for large firefighters in bunker gear. This apparatus will be non-compliant to NFPA 1901 standards effective at time of contract execution.

SEAT BELTS

All seating positions in the cab and crew cab will have highly visible (orange) seat belts.

HELMET STORAGE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 14.1.7.4.1 requires a location for helmet storage be provided.

There is no helmet storage on the apparatus as manufactured. The fire department will provide a location for storage of helmets.

PORTABLE HAND LIGHTS, PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 5.9.4 requires two portable hand lights mounted in brackets fastened to the apparatus.

The hand lights are not on the apparatus as manufactured. The fire department will provide and mount these hand lights.

CAB INSTRUMENTS

- Engine Temperature Gauge and Warning Buzzer
- Engine Oil Pressure Gauge and Warning Buzzer
- Speedometer with Odometer
- Engine Tachometer
- Engine Hourmeter
- Fuel Level Gauge
- DEF Level Gauge and Warning Lamp with 2010+ engines
- Voltmeter: Low voltage red warning light and audible alarm

- Air Brake Pressure Gauge
- Air Restriction Indicator

- Circuit Breakers: For overload protection of electric circuits

- Ignition Switch: Keyless type

EMERGENCY SWITCH PANEL

An emergency switch panel will be provided in the cab. The switch panel will be located within reach of the driver. All NFPA required emergency lights will be controlled from the master emergency switch. References within this proposal to a "switch in the cab" for zone specific options will mean the emergency master switch.

"DO NOT MOVE APPARATUS" INDICATOR

A flashing red indicator light (located in the driving compartment) will be illuminated automatically per the current edition of NFPA. The light will be labeled "Do Not Move Apparatus If Light Is On".

The same circuit that activates the Do Not Move Apparatus indicator will not activate any alarm when the parking brake is released.

DO NOT MOVE TRUCK MESSAGES

A message will be displayed on the VMUX display in view of the driver whenever any of the following conditions exist:

- CAB DOOR OPEN (Any Cab Door Open with ignition on)
- LH COMPARTMENT OPEN (Any Left Hand Compartment Door Open)
- RH COMPARTMENT OPEN (Any Right Hand Compartment Door Open)
- REAR DOOR OPEN (Any Rear Compartment Door Open)
- TANK RACK DOWN (Tank Rack Not Stowed)
- LH LIGHT POLE RAISED (Left Hand Pole Light Raised)
- RH LIGHT POLE RAISED (Right Hand Pole Light Raised)

A warning message will also be displayed for any other device that is opened, extended or deployed that creates a hazard or is likely to cause major damage to the apparatus if the apparatus is moved.

WIPER CONTROL

Wiper control will include an intermittent feature and windshield washer controls.

POWER RECEPTACLES

There will be two (2) power receptacles located in the dash provided by the chassis manufacturer.

The circuit(s) may be load managed when the parking brake is set.

VEHICLE DATA RECORDER

There will be a vehicle data recorder (VDR) capable of reading and storing vehicle information provided.

The information stored on the VDR can be downloaded through a USB port mounted in a convenient location determined by cab model. A USB cable can be used to connect the VDR to a laptop to retrieve required information. The program to download the information from the VDR will be available to download on-line.

The vehicle data recorder will be capable of recording the following data via hardwired and/or CAN inputs:

- Vehicle Speed MPH
- Acceleration MPH/sec
- Deceleration MPH/sec
- Engine Speed RPM
- Engine Throttle Position % of Full Throttle
- ABS Event On/Off
- Seat Occupied Status Yes/No by Position
- · Seat Belt Buckled Status Yes/No by Position
- Master Optical Warning Device Switch On/Off
- Time 24 Hour Time
- Date Year/Month/Day

Seat Belt Monitoring System

A seat belt monitoring system (SBMS) will be provided. The SBMS will be capable of monitoring up to six (6) seating positions indicating the status of each seat position per the following:

- Seat Occupied & Buckled = Green LED indicator illuminated
- Seat Occupied & Unbuckled = Red LED indicator with audible alarm
- No Occupant & Buckled = Red LED indicator with audible alarm
- No Occupant & Unbuckled = No indicator and no alarm

The SBMS will include an audible alarm that will warn that an unbuckled occupant condition exists and the parking brake is released, or the transmission is not in park.

TWO-WAY RADIO ACCOMMODATION PACKAGE

One set of 12 volt wire leads will be provided for the future installation of a two-way radio. These leads will consist of one (1) 30-amp battery direct circuit, one (1) 10-amp battery switched circuit and one (1) ground circuit. These leads will be 6' long and terminate behind the cab dash with heat shrink caps.

One (1) NMO mobile radio antenna mount with RG-58A/U stranded coaxial cable will be provided. The antenna mount will be installed through the cab roof, and the coaxial cable will be routed behind the cab dash. All wiring will be neatly coiled and clearly marked.

A weatherproof cap for the antenna mount will also be installed.

ELECTRICAL

All 12-volt electrical equipment installed by the apparatus manufacturer will conform to modern automotive practices. All wiring will be high temperature crosslink type. Wiring will be run in loom or conduit where exposed and have grommets where wire passes through sheet metal. Automatic reset circuit breakers will be provided which conform to SAE Standards. Wiring will be color, function and number coded. Function and number codes will be continuously imprinted on all wiring harness conductors at 2.00" intervals. Exterior exposed wire connectors will be positive locking, and environmentally sealed to withstand elements such as temperature extremes, moisture and automotive fluids. Electrical wiring and equipment will be installed utilizing the following guidelines:

- (1) All holes made in the roof will be caulked with silicon. Rope caulk is not acceptable. Large fender washers, liberally caulked, will be used when fastening equipment to the underside of the cab roof.
- (2) Any electrical component that is installed in an exposed area will be mounted in a manner that will not allow moisture to accumulate in it. Exposed area will be defined as any location outside of the cab or body.
- (3) Electrical components designed to be removed for maintenance will not be fastened with nuts and bolts. Metal screws will be used in mounting these devices. Also a coil of wire will be provided behind the appliance to allow them to be pulled away from mounting area for inspection and service work.
- (4) Corrosion preventative compound will be applied to all terminal plugs located outside of the cab or body. All non-waterproof connections will require this compound in the plug to prevent corrosion and for easy separation (of the plug).
- (5) All lights that have their sockets in a weather exposed area will have corrosion preventative compound added to the socket terminal area.
- (6) All electrical terminals in exposed areas will have silicon (1890) applied completely over the metal portion of the terminal. All emergency light switches will be mounted on a separate panel installed in the cab. A master warning light switch and individual switches to be provided to allow pre-selection of emergency lights. The light switches will be "rocker" type with an internal indicator light to show when switch is energized. All switches will be properly identified and mounted in a removable panel for ease in servicing. Identification of the switches will be done by either printing or etching on the switch panel. The switches and identification will be illuminated.

All lights and reflectors, required to comply with Federal Motor Vehicle Safety Standard #108, will be furnished. Rear identification lights will be recessed mounted for protection. Lights and wiring mounted

in the rear bulkheads will be protected from damage by installing a false bulkhead inside the rear compartments.

An operational test will be conducted to ensure that any equipment that is permanently attached to the electrical system is properly connected and in working order.

The results of the tests will be recorded and provided to the purchaser at time of delivery.

BATTERY SYSTEM

A single starting battery system will be provided consisting of two (2) 12 volt, 1125 CCA, maintenance-free, group 31 batteries. The battery system will have a total of 2250 CCA.

Jump Start Connections

Positive and negative posts for jump starting will be provided by the chassis manufacturer. They will be frame mounted and located under the hood.

MASTER BATTERY SWITCH

A master battery switch, to activate the battery system, will be provided inside the cab within easy reach of the driver.

The master battery disconnect switch will be wired between the starter solenoid and the remainder of the electrical loads on the apparatus.

A green "battery on" indicator light, visible from the driver's position, will be provided.

BATTERY CHARGER/ AIR COMPRESSOR

A Kussmaul Pump Plus 1000, Model 51-21-1100, 15 amp single output battery charger/air compressor system with internal battery saver will be provided. A display bar graph indicating the state of charge will be included.

The battery saver circuit will be capable of supplying up to three (3) additional amps for external loads such as hand lights or auxiliary radio batteries.

The 12-volt air compressor will be installed to maintain the air system pressure when the vehicle is not in use.

The battery charger will be wired to the AC shoreline inlet through an AC receptacle adjacent to this battery charger.

BATTERY CHARGER LOCATION

The battery charger will be located in the left side forward body compartment. It will be mounted as high and forward as practical to keep it protected and away from other equipment in the compartment.

The battery charger indicator will be located on the driver's side pump panel.

KUSSMAUL AUTO EJECT FOR SHORELINE

one (1) shoreline inlet will be provided to operate the dedicated 120-volt circuits on the truck without the use of the generator.

The shoreline receptacle (s) will be provided with a NEMA 5-20, 120 volt, 20 amp, straight blade Kussmaul auto eject plug with a yellow weatherproof cover. The cover is spring loaded to close, preventing water from entering when the shoreline is not connected.

A solenoid wired to the vehicle's starter is energized when the engine is started. This instantaneously drives the plug from the receptacle.

The shoreline will be connected to the battery charger.

A mating connector body will also be supplied with the loose equipment.

The shoreline receptacle will be located on the driver side of pump panel.

ALTERNATOR

The alternator will be a Delco Remy 40SI, 275 amp, quadramount, with remote battery voltage senser.

ELECTRONIC LOAD MANAGEMENT

Included with the apparatus manufacturer's electrical system will be a programmable load management system.

This system will monitor the vehicle's 12-volt electrical system, and automatically reduce the electrical load in the event of a low voltage condition and by doing so, ensures the integrity of the electrical system.

EXTERIOR LIGHTING

Exterior lighting will meet or exceed Federal Department of Transportation, Federal Motor Vehicle Safety Standards and National Fire Protection Association requirements in effect at this time.

Front headlights will be halogen type and comply to all FMVSS requirements.

Five (5) LED clearance/marker lights will be installed across the leading edge of the cab.

INTERMEDIATE LIGHT

There will be two (2) Truck-Lite®, Model 60115Y, amber LED lights furnished, one (1) each side, horizontally in the rear fender panel. The light will double as a turn signal and marker light.

A stainless steel trim will be included with this installation.

REAR CLEARANCE/MARKER/ID LIGHTING

There will be three (3) LED identification lights located at the rear installed per the following:

· As close as practical to the vertical centerline

- Centers spaced not less than 6.00" or more than 12.00" apart
- Red in color
- All at the same height

There will be two (2) LED lights installed at the rear of the apparatus used as clearance lights located at the rear of the apparatus per the following:

- To indicate the overall width of the vehicle
- One (1) each side of the vertical centerline
- As near the top as practical
- Red in color
- To be visible from the rear
- All at the same height

There will be two (2) LED lights installed on the side of the apparatus used as marker lights as close to the rear as practical per the following:

- To indicate the overall length of the vehicle
- One (1) each side of the vertical centerline
- As near the top as practical
- Red in color
- To be visible from the side
- All at the same height

The lights will be mounted with no guard.

There will be two (2) red reflectors located on the rear of the truck facing to the rear. One (1) each side, as far to the outside as practical, at a minimum of 15.00", but no more than 60.00", above the ground.

There will be two (2) red reflectors located on the side of the truck facing to the side. One (1) each side, as far to the rear as practical, at a minimum of 15.00", but no more than 60.00", above the ground.

Per FMVSS 108 and CMVSS 108 requirements.

REAR FMVSS LIGHTING

There will be two (2) wrap around tri-cluster LED modules provided on the face of the rear body compartments.

Each tri-cluster will include the following:

- One (1) LED stop/tail light
- One (1) LED directional light
- One (1) LED backup light

LICENȘE PLATE BRACKET

There will be one (1) license plate bracket mounted on the rear of the body.

A white LED light will illuminate the license plate. A polished stainless steel light shield will be provided over the light that will direct illumination downward, preventing white light to the rear.

BACK-UP ALARM

A PRECO, Model 1040, solid-state electronic audible back-up alarm that actuates when the truck is shifted into reverse will be provided. The device will sound at 60 pulses per minute and automatically adjust its volume to maintain a minimum ten (10) dBA above surrounding environmental noise levels.

CAB PERIMETER SCENE LIGHTS

There will be two (2) Truck-Lite, Model 6060C, white LED lights with grommets provided, one (1) for each cab door.

These lights will be activated automatically when the battery switch is on and the exit doors are opened or by the same means as the body perimeter scene lights.

PUMP HOUSE PERIMETER LIGHTS

There will be four (4) Truck-Lite, Model 6060C, 6.00" x 2.00" oval white LED lights with Model 60700, grommets provided.

The lights will be mounted in the following locations:

- One (1) light will be provided under the driver's side top mount pump panel access step
- One (1) light will be provided under the driver's side pump panel running board
- One (1) light will be provided under the passenger's side pump panel running board
- One (1) light will be provided under the passenger's side top mount pump panel access step

The lights will be controlled by the same means as the body perimeter lights.

BODY PERIMETER SCENE LIGHTS

There will be two (2) Truck-Lite, Model 6060C, white LED lights with grommets provided under at the rear step area of the body, one (1) each side shining to the rear.

The perimeter scene lights will be activated when the parking brake is applied.

STEP LIGHTS

White LED, step lights will be provided to meet the NFPA step lighting requirement. Lights will be provided on each side, on the front compartment face and at the rear to illuminate the tailboard.

These step lights will be actuated with the parking brake.

All other steps on the apparatus will be illuminated per the current edition of NFPA 1901.

SCENE LIGHTS

There will be one (1) pair of Whelen, Model 6SC0ENZR Gradient LED scene lights provided. These lights will direct light downward via internal optics. There will be one (1) light each side on the rear of the apparatus. These lights will be installed no higher than 72.00" above the ground.

A control for the lights selected above will be the following:

- a switch at the driver's side switch panel
- a switch at the driver's side switch panel

12 VOLT LIGHTING

There will be one (1) Whelen Model PCP2P, 12 volt DC LED combination spot/floodlight installed on the apparatus.

The painted parts of this light assembly to be white.

The light will be installed on an extendable pole on the passenger's side.

The light(s) to be installed on a thru body/surface mount top adjust pull-up pole(s) connected to the Do Not Move Truck Indicator circuit in the cab.

The inside pole length to be as long as practical to fit in the location selected.

The light pole(s) to be installed without handle holder(s) and a not stowed sensor connected to the Do Not Move Truck Indicator Light in the cab.

The light will be controlled by the following:

- a switch at the driver's side switch panel.
- no additional switch location.

This light may be load managed when the parking brake is applied.

12 VOLT LIGHTING

There will be one (1) Whelen Model PFS2, 12 volt DC LED combination spot/floodlight installed on the apparatus.

The painted parts of this light assembly to be white.

The light will be installed on an extendable pole on the driver's side .

The light(s) to be installed on a thru body/surface mount top adjust pull-up pole(s) connected to the Do Not Move Truck Indicator circuit in the cab.

The inside pole length to be as long as practical to fit in the location selected.

The light pole(s) to be installed without handle holder(s) and a not stowed sensor connected to the Do Not Move Truck Indicator Light in the cab.

The light will be controlled by the following:

- a switch at the driver's side switch panel.
- no additional switch location.

This light may be load managed when the parking brake is applied.

WALKING SURFACE LIGHT

There will be Model FRP, 4" round black 12 volt DC LED floodlight with bolt mount provided to illuminate the entire designated walking surface on top of the body.

The light will be activated when the body step lights are on.

WATER TANK

Booster tank will have a capacity of 1000 gallons and be constructed of polypropylene plastic.

Tank joints and seams will be nitrogen welded inside and out.

Tank will be baffled in accordance with NFPA Bulletin 1901 requirements.

Baffles will have vent openings at both the top and bottom to permit movement of air and water between compartments.

Tank top will be sufficiently supported to keep it rigid during fast filling conditions.

A sump will be provided at the bottom of the water tank, and include a drain plug and the tank outlet.

Tank will be installed in a fabricated cradle assembly constructed of structural steel.

Sufficient crossmembers will be provided to properly support bottom of tank. Crossmembers will be constructed of steel bar channel or rectangular tubing.

Tank will "float" in cradle to avoid torsional stress caused by chassis frame flexing. Rubber cushions, .50" thick x 3.00" wide, will be placed on all horizontal surfaces that the tank rests on.

Stops or other provision will be provided to prevent an empty tank from bouncing excessively while moving vehicle.

Mounting system will be approved by the tank manufacturer.

Fill tower will be constructed of .50" polypropylene and will be a minimum of 8.00" wide x 14.00" long.

Fill tower will be furnished with a .25" thick polypropylene screen and a hinged cover.

An overflow pipe, constructed of 4.00" schedule 40 polypropylene, will be installed approximately halfway down the fill tower and extend through the water tank and exit to the rear of the rear axle.

HOSE BED

The hose bed will be fabricated of .125"-5052 aluminum with a nominal 38,000 psi tensile strength.

Hose bed width will be a minimum of 92.00" inside.

Upper and rear edges of side panels will have a double break for rigidity, a split tube finish will not be acceptable.

Flooring of the hose bed will be removable aluminum grating with the top surface corrugated to aid in hose aeration. The grating slats will be a minimum of 0.50" x 4.50" with spacing between slats for hose ventilation.

HOSEBED ILLUMINATION

The hose bed will be illuminated with LED lighting. The lights will have control from a switch at the rear of the truck.

Hose bed will accommodate 1500 feet of 2.50" and 400 feet of 1.50" hose.

HOSE BED DIVIDER

One (1) adjustable hosebed divider will be furnished for separating hose.

Each divider will be constructed of a .25" brushed aluminum sheet. Flat surfaces will be sanded for uniform appearance, or constructed of brushed aluminum.

Divider will be fully adjustable by sliding in tracks, located at the front and rear of the hose bed.

Divider will be held in place by tightening bolts, at each end.

Acorn nuts will be installed on all bolts in the hose bed which have exposed threads.

HOSE BED HOSE RESTRAINT

The hose in the hose bed will be restrained by a black nylon Velcro® strap at the top of the hosebed. At the rear of the hose bed, 2.00" black nylon webbing with a 1.50" x 4.00" box pattern will attach at the top rear outside corners with 2.00" cam buckle fasteners. The webbing will have straps connected with 2.00" cam buckle fasteners located at the rear body sheet below the hose bed.

RUNNING BOARDS

Running boards will be fabricated of .125" bright aluminum treadplate.

Each running board will be supported by a welded 2.00" square tubing and channel assembly, which will be bolted to the pump compartment substructure.

Running boards will be 12.75" deep and spaced .50" away from the pump panel.

A splash guard will be provided above the running board treadplate.

TAILBOARD

The tailboard will also be constructed of .125" bright aluminum treadplate and spaced .50" from the body, as well as supported by a structural steel assembly.

The tailboard area will be 12.00" deep and full width of the body.

The exterior side will be flanged down and in for increased rigidity of tailboard structure.

REAR WALL, SMOOTH ALUMINUM/BODY MATERIAL

The rear facing surfaces of the center rear wall will be smooth aluminum.

The bulkheads, the surface to the rear of the side body compartments, will be smooth and the same material as the body.

TOW BAR

A tow bar will be installed under the tailboard at center of truck.

Tow bar will be fabricated of 1.00" CRS bar rolled into a 3.00" radius.

Tow bar assembly will be constructed of .38" structural angle. When force is applied to the bar, it will be transmitted to the frame rail.

Tow bar assembly will be designed and positioned to allow up to a 30-degree upward angled pull of 17,000 lb, or a 20,000 lb straight horizontal pull in line with the centerline of the vehicle.

Tow bar design will have been fully tested and evaluated using strain gauge testing and finite element analysis techniques.

COMPARTMENTATION

Body and compartments will be fabricated of .125", 5052-H32 aluminum.

Side compartments will be an integral assembly with the rear fenders.

Circular fender liners will be provided for prevention of rust pockets and ease of maintenance.

Compartment flooring will be of the sweep out design with the floor higher than the compartment door lip.

Drip protection will be provided above the doors.

All screws and bolts which protrude into a compartment will have acorn nuts on the ends to prevent injury.

UNDERBODY SUPPORT SYSTEM

Due to the severe loading requirements of this pumper a method of body and compartment support suitable for the intended load will be provided.

The backbone of the support system will be the chassis frame rails which is the strongest component of the chassis and is designed for sustaining maximum loads.

AGGRESSIVE WALKING SURFACE

All exterior surfaces designated as stepping, standing, and walking areas will comply with the required average slip resistance of the current NFPA standards.

TESTING OF BODY DESIGN

Body structural analysis will be fully tested. Proven engineering and test techniques such as finite element analysis, stress coating and strain gauging will be performed with special attention given to fatigue, life and structural integrity of the cab, body and substructure.

Body will be tested while loaded to its greatest in-service weight.

The criteria used during the testing procedure will include:

- Raising opposite corners of the vehicle tires 9.00" to simulate the twisting a truck may experience when driving over a curb.
- Making a 90 degree turn, while driving at 20 mph to simulate aggressive driving conditions.
- Driving the vehicle at 35 mph on a washboard road.
- Driving the vehicle at 55 mph on a smooth road.
- Accelerating the vehicle fully, until reaching the approximate speed of 45 mph on rough pavement.

Evidence of actual testing techniques will be made available upon request.

COMPARTMENTATION, DRIVER'S SIDE

A full height, roll-up door compartment ahead of the rear wheels will be provided. The interior dimensions of this compartment will be 29.50" wide x 60.00" high x 26.00" deep in the lower 30.50" of the compartment and 13.00" deep in the remaining upper portion. The height of the compartment will be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment will be calculated with the compartment door closed. The compartment interior will be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment will be 26.625" wide x 63.75" high.

Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

A roll-up door compartment over the rear wheels will be provided. The interior dimensions of this compartment will be 59.00" wide x 34.25" high x 13.00" deep. The height of the compartment will be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment will be calculated with the compartment door closed. The clear door opening of this compartment will be 59.00" wide x 35.25" high.

Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

A full height, roll-up door compartment behind the rear wheels will be provided. The interior dimensions of this compartment will be 48.625" wide x 60.00" high x 26.00" deep in the lower 30.50" of height and 13.00" deep in the remaining upper section of the compartment. The height of the compartment will be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment will be calculated with the compartment door closed. The compartment interior will be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment will be 48.50" wide x 63.75" high.

Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

COMPARTMENTATION, PASSENGER'S SIDE

A full height, roll-up door compartment ahead of the rear wheels will be provided. The interior dimensions of this compartment will be 29.50" wide x 60.00" high x 26.00" deep in the lower 30.50" of the compartment and 13.00" deep in the remaining upper portion. The height of the compartment will be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment will be calculated with the compartment door closed. The compartment interior will be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment will be 26.625" wide x 63.75" high.

Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

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Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

ROLLUP DOOR, SIDE COMPARTMENTS

There will be six (6) compartment doors installed on the side compartments. The doors will be double faced aluminum construction, an anodized satin finish and manufactured by Gortite®.

Lath sections will be an interlocking rib design and will be individually replaceable without complete disassembly of door.

Between each slat at the pivoting joint will be a PVC inner seal to prevent metal to metal contact and prevent dirt or moisture from entering the compartments. Seals will allow door to operate in extreme temperatures ranging from 180 to -40 degrees Fahrenheit. Side, top and bottom seals will be provided to resist ingress of dirt and weather and be made of Santoprene.

All hinges, barrel clips and end pieces will be nylon 66. All nylon components will withstand temperatures from 300 to -40 degrees Fahrenheit.

A polished stainless steel lift bar to be provided for each roll-up door. Lift bar will be located at the bottom of door and have latches on the outer extrusion of the doors frame. A ledge will be supplied over lift bar for additional area to aid in closing the door.

Doors will be constructed from an aluminum box section. The exterior surface of each slat will be flat. The interior surfaces will be concave to provide strength and prevent loose equipment from jamming the door from inside.

To conserve space in the compartments, the spring roller assembly will not exceed 3.00" in diameter.

The header for the rollup door assembly will not exceed 4.00".

A heavy-duty magnetic switch will be used for control of open compartment door warning lights.

COMPARTMENTATION, REAR

A roll-up door compartment above the rear tailboard will be provided.

Interior dimensions of this compartment will be 42.00" wide x 56.63" high x 27.88" deep in the lower 47.75" of height and 19.75" deep in the remaining upper portion. Depth of the compartment will be calculated with the compartment door closed.

For a chassis with a rear mounted fuel tank, a louvered removable access panel will be furnished on the back wall of the compartment.

Rear compartment will be open into the rear side compartments.

Clear door opening of this compartment will be 34.38" wide x 48.25" high.

Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

ROLLUP DOOR, REAR COMPARTMENT

There will be a rear rollup door. The door will be double faced aluminum construction, an anodized satin finish and manufactured by Gortite®.

Lath sections will be an interlocking rib design and will be individually replaceable without complete disassembly of door.

Between each slat at the pivoting joint will be a PVC inner seal to prevent metal to metal contact and prevent dirt or moisture from entering the compartments. Seals will allow door to operate in extreme temperatures ranging from 180 to -40 degrees Fahrenheit. Side, top and bottom seals will be provided to resist ingress of dirt and weather and be made of Santoprene.

All hinges, barrel clips and end pieces will be nylon 66. All nylon components will withstand temperatures from 300 to -40 degrees Fahrenheit.

A polished stainless steel lift bar to be provided for each roll-up door. Lift bar will be located at the bottom of door and have latches on the outer extrusion of the doors frame. A ledge will be supplied over lift bar for additional area to aid in closing the door.

Door will be constructed from an aluminum box section. The exterior surface of each slat will be flat. The interior surface will be concave to provide strength and prevent loose equipment from jamming the door from inside.

To conserve space in the compartments, the spring roller assembly will not exceed 3.00" in diameter.

The header for the rollup door assembly will not exceed 4.00".

A heavy-duty magnetic switch will be used for control of open compartment door warning lights.

COMPARTMENT LIGHTING

There will be seven (7) compartments with LED compartment light strip. Each light strip will be centered vertically along the door framing. All body compartments with roll-up doors will have these strip lights.

Any remaining compartment without a light strip will have a 6.00" diameter Truck-Lite, Model: 79384 light. Each light will have a number 1076 one filament, two wire bulb.

Opening the compartment door will automatically turn the compartment lighting on.

MOUNTING TRACKS

There will be four (4) sets of tracks for mounting shelf(s) in D1, D3, P1, P3. These tracks will be installed vertically to support the adjustable shelf(s), and will be full height of the compartment. The tracks will be unpainted with a natural finish.

ADJUSTABLE SHELVES

There will be two (2) shelves with a capacity of 215 lb provided. The shelf construction will consist of .18" aluminum with 2.00" sides. Each shelf will be painted to match the compartment interior. Each shelf will be infinitely adjustable by means of a threaded fastener, which slides in a track.

The shelves will be held in place by .12" thick stamped plated brackets and bolts.

The location will be D3 and P3.

SLIDE-OUT FLOOR MOUNTED TRAY

There will be one (1) floor mounted slide-out tray(s) with 2.00" sides provided P1. Each tray will be rated for up to 500lb in the extended position. The tray(s) will be constructed of a minimum .13" aluminum with welded corners. The finish will be painted to match compartment interior.

There will be two undermount-roller bearing type slides rated at 250lb each provided. The pair of slides will have a safety factor rating of 2.

To ensure years of dependable service, the slides will be coated with a finish that is tested to withstand a minimum of 1,000 hours of salt spray per ASTM B117.

To ensure years of easy operation, the slides will require no more than a 50lb force for push-in or pullout movement when fully loaded after having been subjected to a 40 hour vibration (shaker) test under full load. The vibration drive file will have been generated from accelerometer data collected from a heavy truck chassis driven over rough gravel roads in an unloaded condition. Proof of compliance will be provided upon request.

Automatic locks will be provided for both the "in" and "out" positions. The trip mechanism for the locks will be located at the front of the tray for ease of use with a gloved hand.

RUB RAIL

Bottom edge of the side compartments will be trimmed with a bright aluminum extruded rub rail.

Trim will be 2.12" high with 1.38" flanges turned outward for rigidity.

The rub rails will not be an integral part of the body construction, which allows replacement in the event of damage.

BODY FENDER CROWNS

Stainless steel fender crowns will be provided around the rear wheel openings.

A rubber welting will be installed between the body and the crown to seal the seam and restrict moisture from entering.

A dielectric barrier will be provided between the fender crown fasteners (screws) and the fender sheet metal to prevent corrosion.

HARD SUCTION HOSE

Hard suction hose will not be required.

HARD SUCTION HOSE STORAGE

Storage for two (2) hard suction hoses, mounted side by side, will be provided inside the hosebed on the driver side.

A section of hose bed grating will be provided above the hard suction hose storage area.

A nylon strap will be provided at the rear of the storage area to contain the hose.

HANDRAILS

The handrails will be 1.25" diameter anodized aluminum extrusion, with a ribbed design, to provide a positive gripping surface.

Chrome plated end stanchions will support the handrail. Plastic gaskets will be used between end stanchions and any painted surfaces.

Drain holes will be provided in the bottom of all vertically mounted handrails.

Handrails will be provided to meet NFPA 1901 section 15.8 requirements. The handrails will be installed as noted on the sales drawing.

- One (1) vertical handrail, with offset stanchions, and not less than 29.00" long, will be located on each rear bulkhead.
- Additionally, a handrail to aid in accessing the hose bed will be installed on the driver side rear
 vertical and top horizontal rearward edge of the hosebed side sheet.

AIR BOTTLE STORAGE

A total of four (4) air bottle compartments will be provided, two (2) each side of the body. The air bottle compartment will be in the form of a PVC round tube to accommodate different size air bottles. The inside diameter of the tube will be approximately 7.63" in diameter x 26.00" deep. Drain holes will be provided at the bottom of the tubes to prevent water collection.

A Cast Products door with latch will be provided to contain the air bottle.

EXTENSION LADDER

There will be a 24' two-section aluminum Duo-Safety Series 900-A extension ladder provided.

ROOF LADDER

There will be a 14' aluminum Duo-Safety Series 775-A roof ladder provided.

LADDER STORAGE

The ladders will be stored inside the upper section of the passenger's side compartments.

The ladder rack will reduce the depth of the upper section, in the side compartments, by approximately 12.00".

A partition will be installed inside the compartments to conceal the ladder rack and allow for equipment storage. The ladders will extend through the forward wall of the compartmentation, into the pump area. The ladders will be stored in separate storage troughs lined with Dura-Surf slides to aid in loading and unloading of the ladders. Rear of ladder storage area will be a vertically hinged door with D-ring latch to contain the ladders.

FOLDING LADDER

One (1) 10.00' aluminum, Series 585-A, Duo-Safety folding ladder will be installed in a U-shaped trough inside the ladder storage compartment.

PIKE POLE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, Section 5.9.4 requires one (1) 8 ft or longer pike pole mounted in a bracket fastened to the apparatus.

The pike pole is not on the apparatus as manufactured. The fire department will provide and mount the pike pole.

The pike pole(s) will be a Akron 10' pike pole.

6' PIKE POLE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, Section 5.9.4 requires one (1) 6' pike pole or plaster hook mounted in a bracket fastened to the apparatus.

The pike pole is not on the apparatus as manufactured. The fire department will provide and mount the pike pole.

The pike pole(s) will be a Akron 6' pike pole.

PIKE POLE STORAGE

Tubing will be used for the storage of two (2) pike poles and will be located in the ladder storage compartment. If the head of a pike pole can come in contact with a painted surface, a stainless steel scuffplate will be provided.

LADDER, HOSE BED ACCESS

A hose bed access ladder, constructed of aluminum rungs and extruded aluminum rails, will be provided on the left side rear of the apparatus.

MIDSHIP FIRE PUMP

Midship fire pump will be a Hale DSD1250, 1250 gpm, single stage, midship mounted, centrifugal type.

Pump will be the class "A" type.

Pump will deliver the percentage of rated discharges at the pressures indicated below:

- 100% of rated capacity at 150 psi net pump pressure.
- 100% of rated capacity at 165 psi net pump pressure.
- -70% of rated capacity at 200 psi net pump pressure.
- -50% of rated capacity at 250 psi net pump pressure.

Entire pump, both suction and discharge passages, will be hydrostatically tested to a pressure of 600 psi (40.8 bar).

Pump will be fully tested at the pump manufacturer's factory to the performance requirements as outlined by the latest NFPA pamphlet #1901, and will be free from objectionable pulsation and vibration.

The pump body and related parts will be of fine grain alloy cast iron, with a minimum tensile strength of 30,000 psi (2041.2 bar). All moving parts in contact with water will be of high quality bronze or stainless steel.

Pump body will be vertically split, on a single plane,.

Pump impeller will be hard, fine grain bronze of the mixed flow design, accurately machined, hand-ground, and individually balanced. The vanes of the impeller intake eyes will be hand-ground and polished to a sharp edge, and be of sufficient size and design to provide ample reserve capacity utilizing minimum horsepower.

Impeller clearance rings will be bronze, easily renewable without replacing impeller or pump volute body.

Pump shaft will be electric furnace, heat-treated, corrosion resistant stainless steel. Pump shaft must be sealed with double oil seal to keep road dirt and water out of drive unit.

MECHANICAL SEAL ON PUMP

Only one (1) mechanical seal will be required on the suction (inboard) side of the pump. The mechanical seal will be two (2.00) inches in diameter and will be spring loaded, maintenance-free, and self-adjusting.

The mechanical seal construction will be a carbon sealing ring, stainless steel coil spring, Viton® rubber boot, and a tungsten carbide seat with a Teflon backup seal.

PUMP TRANSMISSION

The drive unit will be cast and completely manufactured and tested at the Hale Products, Inc. factory. The pump drive unit will be of sufficient size to withstand up to 16,000 foot/ pounds of torque from the engine in both the road and pump operating conditions. The drive unit is will be designed with ample lubrication reserve to maintain the proper operating temperature.

The gearbox drive shafts will be of heat treated chrome nickel steel and 2.75" in diameter on both the input and output drive shafts. They will be designed to withstand the full torque of the engine in both road and pump operating conditions.

All gears, both drive and pump, will be of the highest quality, electric furnace, chrome nickel steel. Bores will be ground to size and teeth integrated, crown-shaved and hardened, to give an extremely accurate gear for long life, smooth, quiet running and higher load carrying capability. An accurately cut spur design will be provided to eliminate all possible end thrust.

Pierce Manufacturing will select the pump ratio to provide the maximum performance with the engine and transmission selected. Three (3) green warning lights will be provided to indicate to the operator(s) when the pump has completed the shift from Road to Pump position. Two (2) lights will be located in the truck driving compartment and one (1) light on pump operator's panel adjacent to the throttle control.

PUMPING MODE

An interlock system will be provided to ensure that the pump drive system components are properly engaged so that the apparatus can be safely operated. Interlock system will be designed to allow stationary pumping only.

AIR PUMP SHIFT

Pump shift engagement will be made by a two (2) position sliding collar, actuated pneumatically (by air pressure), with a three (3) position air control switch located in the cab.

Two (2) indicator lights will be provided adjacent to the pump shift inside the cab. One (1) green light will indicate the pump shift has been completed and be labeled "pump engaged". The second green light will indicate when the pump has been engaged and the chassis transmission is in pump gear. This indicator light will be labeled "OK to pump".

Another green indicator light will be installed adjacent to the hand throttle on the pump panel and indicate either the pump is engaged and the road transmission is in pump gear, or the road transmission is in neutral and the pump is not engaged. This light will be labeled "Warning: Do not open throttle unless light is on".

The pump shift will be interlocked to prevent the pump from being shifted out of gear when the chassis transmission is in gear to meet NFPA requirements.

The pump shift control in the cab will be illuminated to meet NFPA requirements.

TRANSMISSION LOCK-UP

The direct gear transmission lock-up for the fire pump operation will engage automatically when the pump shift control in the cab is activated.

AUXILIARY COOLING SYSTEM

A supplementary heat exchange cooling system will be provided to allow the use of water from the discharge side of the pump for cooling the engine water. The heat exchanger will be cylindrical type and will be a separate unit. The heat exchanger will be installed in the pump or engine compartment with the control located on the pump operator's control panel. Exchanger will be plumbed to the master drain valve.

INTAKE RELIEF VALVE

An intake relief valve shall be installed on the suction side of the pump preset at 125 psig.

Relief valve shall have a working range of 50 psig to 350 psig.

Outlet shall terminate below the frame rails with a 2.50" National Standard hose thread adapter and shall have a "do not cap" warning tag.

PRESSURE CONTROLLER

A Fire Research Pump Boss Model PBA200 pressure governor will be provided.

A pressure transducer will be installed in the water discharge manifold on the pump.

The display panel will be located at the pump operator's panel.

PRIMING PUMP

The priming pump will be a Trident Emergency Products compressed air powered, high efficiency, multistage venturi based AirPrime System, conforming to standards outlined in the current edition of NFPA 1901.

All wetted metallic parts of the priming system are to be of brass and stainless steel construction.

One (1) priming control will open the priming valve and start the pump primer.

PUMP MANUALS

There will be a total of two (2) pump manuals provided by the pump manufacturer and furnished with the apparatus. The manuals will be provided by the pump manufacturer in the form of two (2) electronic copies. Each manual will cover pump operation, maintenance, and parts.

PLUMBING, STAINLESS STEEL AND HOSE

All inlet and outlet lines will be plumbed with either stainless steel pipe, flexible polypropylene tubing or synthetic rubber hose reinforced with hi-tensile polyester braid. All hose's will be equipped with brass or stainless steel couplings. All stainless steel hard plumbing will be a minimum of a schedule 10 wall thickness.

Where vibration or chassis flexing may damage or loosen piping or where a coupling is required for servicing, the piping will be equipped with victaulic or rubber couplings.

Plumbing manifold bodies will be ductile cast iron or stainless steel.

All piping lines are to be drained through a master drain valve or will be equipped with individual drain valves. All drain lines will be extended with a hose to drain below the chassis frame.

All water carrying gauge lines will be of flexible polypropylene tubing.

All piping, hose and fittings will have a minimum of a 500 PSI hydrodynamic pressure rating.

MAIN PUMP INLETS

A 6.00" pump manifold inlet will be provided on each side of the vehicle. The suction inlets will include removable die cast zinc screens that are designed to provide cathodic protection for the pump, thus reducing corrosion in the pump.

MAIN PUMP INLET CAP

The main pump inlets will have National Standard Threads with a long handle chrome cap.

The cap will be the Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.

VALVES

All ball valves will be Akron® Brass. The Akron valves will be the 8000 series heavy-duty style with a stainless steel ball and a simple two-seat design. No lubrication or regular maintenance is required on the valve.

Valves will have a ten (10) year warranty.

LEFT SIDE INLET

There will be one (1) auxiliary inlet with a 2.50" valve at the left side pump panel, terminating with a 2.50" (F) National Standard hose thread adapter.

The auxiliary inlet will be provided with a strainer, chrome swivel and plug.

Inlet valve location will be behind the pump panel.

INLET CONTROL

The side auxiliary inlet(s) will incorporate a quarter-turn ball valve with the control located at the top mount control panel. The valve operating mechanism will indicate the position of the valve.

There will be two (2) inlets.

INLET BLEEDER VALVE

A 0.75" bleeder valve will be provided for each side gated inlet. The valves will be located behind the panel with a swing style handle control extended to the outside of the panel. The handles will be chrome plated and provide a visual indication of valve position. The swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage. The water discharged by the bleeders will be routed below the chassis frame rails.

TANK TO PUMP

The booster tank will be connected to the intake side of the pump with 4.00" heavy duty piping and a quarter turn 3.00" full flow line valve with the control remotely located at the operator's panel. Tank to pump line will run straight (no elbows) from the pump into the front face of the water tank and angle down into the tank sump. A rubber coupling will be included in this line to prevent damage from vibration or chassis flexing.

A check valve will be provided in the tank to pump supply line to prevent the possibility of "back filling" the water tank.

TANK REFILL

A 1.50" combination tank refill and pump re-circulation line will be provided, using a quarter-turn full flow ball valve controlled from the pump operator's panel.

LEFT SIDE DISCHARGE OUTLETS

There will be two (2) discharge outlets with a 2.50" valve on the left side of the apparatus, terminating with a 2.50" (M) National Standard hose thread adapter.

RIGHT SIDE DISCHARGE OUTLETS

There will be one (1) discharge outlet with a 2.50" valve on the right side of the apparatus, terminating with a (M) 2.50" National Standard hose thread adapter.

FRONT DISCHARGE OUTLET

There will be one (1) 1.50" discharge outlet piped to the front of the apparatus and located in the center bumper tray.

Plumbing will consist of 2.00" piping and flexible hose with a 2.00" full flow ball valve with control at the pump operator's panel. A fabricated weldment made of stainless steel pipe will be used in the

plumbing where appropriate. The piping will terminate with a 1.50" NST with 90 degree stainless steel swivel.

There will be Class 1 automatic drains provided at all low points of the piping.

FRONT OF HOSE BED DISCHARGE OUTLET

There will be one (1) discharge outlet discharge(s) piped to the front of the hose bed and located passenger's side. Plumbing will consist of 2.50" piping with a 2.50" full-flow ball valve controlled at the pump operator's panel. The discharge(s) will terminate with a 2.50" (M) National Standard hose thread adapter.

DISCHARGE CAPS

Chrome plated, rocker lug, caps with chains will be furnished for all side discharge outlets.

The caps will be the Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.

OUTLET BLEEDER VALVE

A 0.75" bleeder valve will be provided for each outlet 1.50" or larger. Automatic drain valves are acceptable with some outlets if deemed appropriate with the application.

The valves will be located behind the panel with a swing style handle control extended to the outside of the side pump panel. The handles will be chrome plated and provide a visual indication of valve position. The swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage. Bleeders will be located at the bottom of the pump panel. They will be properly labeled identifying the discharge they are plumbed in to. The water discharged by the bleeders will be routed below the chassis frame rails.

LEFT SIDE OUTLET ELBOWS

The 2.50" discharge outlets located on the left side pump panel will be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 45 degree elbow.

The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.

RIGHT SIDE OUTLET ELBOWS

The 2.50" discharge outlets located on the right side pump panel will be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 45 degree elbow.

The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.

DISCHARGE OUTLET CONTROLS

The discharge outlets will incorporate a quarter-turn ball valve with the control located at the pump operator's panel. The valve operating mechanism will indicate the position of the valve.

If a handwheel control valve is used, the control will be a minimum of a 3.9" diameter stainless steel handwheel with a dial position indicator built in to the center of the handwheel.

DELUGE RISER

A 3.00" deluge riser will be installed above the pump in such a manner that a monitor can be mounted and used effectively.

The 3.00" piping will be installed securely so there is no movement when the line is charged. A 2.50" gated valve will be installed and directly controlled at the pump operator's position with a lever style handle.

This deluge outlet will flow a minimum 1000 GPM.

The deluge riser will have male National Pipe Threads for mounting the monitor.

SPEEDLAYS WITH TRAY

Ahead of the pump enclosure will be two (2) 1.75" speedlay hose beds. Each bed will have a 2.00" preconnect line with a 2.00" quarter-turn ball valve and terminate with a 1.50" National Standard hose thread 90 degree swivel. The swivel will be located at the top of the speedlay compartment to allow easy removal of the hose in either direction.

Individual controls for the speedlays will be at the pump operator's panel.

Each compartment will be capable of carrying 200 feet of 1.75" double jacketed hose with the one (1) compartment located above the other.

A removable tray will be provided for each speedlay hosebed. The speedlay trays will be constructed with two (2) hand holes for easy removal from the compartment. The floor of the trays will be perforated to allow for drainage and hose drying.

SPEEDLAY HOSE RESTRAINT

A black 1.00" nylon webbing design with 2.00" box pattern will be provided across each end of two (2) speedlay(s) to secure the hose during travel. The webbing will be permanently attached at the bottom of the speedlay opening. There will be quarter turn fasteners located at the opposite end of the permanently attached webbing.

HUSKY 3 FOAM PROPORTIONER

A Pierce Husky 3 foam proportioning system will be provided. The Husky 3 is an on demand, automatic proportioning, single point, direct injection system suitable for all types of Class A and B foam concentrates, including the high viscosity (6000 cps), alcohol resistant Class B foams. Operation will be based on direct measurement of water flow, and remain consistent within the specified flows and

pressures. The system will automatically proportion foam solution at rates from .1 percent to 3.0 percent regardless of variations in water pressure and flow, up to the maximum rated capacity of the foam concentrate pump.

The design of the system will allow operation from draft, hydrant, or relay operation.

SYSTEM CAPACITY

The system will have the ability to deliver the following minimum foam solution flow rates at accuracies that meet or exceed NFPA requirements at a pump rating of 150 psi.

100 gpm @ 3 percent

300 gpm @ 1 percent

600 gpm @ 0.5 percent

Class A foam setting in .1 percent increments from .1 percent to 1 percent. Typical settings of 1 percent, .5 percent and .3 percent (maximum capacity shall be limited to the plumbing and water pump capacity).

CONTROL SYSTEM

The system will be equipped with a digital electronic control display located on the pump operators panel. Push button controls will be integrated into the panel to turn the system on/off, control the foam percentage, and to set the operation modes.

The percent of injection will have a preset. This preset can be changed at the fire department as desired. The percent of injection will be able to be easily changed at the scene to adjust to changing demands.

Three (3) .50 tall LEDs will display the foam percentage in numeric characters. Three (3) indicator LEDs will also be included: one (1) green, one (1) red, and one (1) yellow. The LEDs will indicate various system operation or error states.

The indications will be:

Solid Green - System On

Solid Red - Valve Position Error

Solid Yellow - Priming System

Flashing Green - Injecting Foam

Flashing Red - Low Tank Level

Flashing Yellow - Refilling Tank

The control display will house a microprocessor, which receives input from the systems water flow meter while also monitoring the position of the foam concentrate pump. The microprocessor will

compare the values of the water flow versus the position/rate of the foam pump, to ensure the proportion rate is accurate. One (1) check valve will be installed in the plumbing to prevent foam from contaminating the water pump.

HYDRAULIC DRIVE SYSTEM

The foam concentrate pump will be powered by an electric over hydraulic drive system. The hydraulic system and motor will be integrated into one (1) unit.

FOAM CONCENTRATE PUMP

The foam concentrate pump will be of positive displacement, self-priming; linear actuated design, driven by the hydraulic system. The pump will be constructed of brass body; chrome plated stainless steel shaft, with a stainless steel piston. In order to increase longevity of the pump, no aluminum will be present in its construction.

A relief system will be provided which is designed to protect the drive system components and prevent over pressuring the foam concentrate pump

The foam concentrate pump will have minimum capacity for 3 gpm with all types of foam concentrates with a viscosity at or below 6000 cps including protein, fluoroprotein, AFFF, FFFP, or AR-AFFF. The system will deliver only the amount of foam concentrate flow required, without recirculating foam back to the storage tank. Recirculating foam concentrate back to the storage tank can cause agitation and premature foaming of the concentrate, which can result in system failure. The foam concentrate pump will be self-priming and have the ability to draw foam concentrate from external supplies such as drums or pails.

EXTERNAL FOAM CONCENTRATE CONNECTION

An external foam pick-up will be provided to enable use of a foam agent that is not stored on the vehicle. The external foam pick-up will be designed to allow continued operation after the on-board foam tank is empty, or the use of foam different than the foam in the foam tank.

PANEL MOUNTED EXTERNAL PICK-UP CONNECTION / VALVE

A bronze three (3)-way valve will be provided. The unit will be mounted to the pump panel. The valve unit will function as the foam system tank to pump valve and external suction valve. The external foam pick-up will be one (1) .75" male connection GHT (garden hose thread) with a cap.

PICK-UP HOSE

A .75" flexible hose with an end for insertion into foam containers will be provided. The hose will be supplied with a .75" female swivel GHT (garden hose thread) swivel connector. The hose will be shipped loose.

DISCHARGES

The foam system will be plumbed into a manifold. All outlets that are plumbed into that manifold will be foam capable. This will include, but will not be limited to the two (2) speedlays and 2.50" rear outlet.

(TECH NOTE: The 2.50" side outlets and the deluge are the only discharge outlets not plumbed into the manifold and therefore, will not be foam capable.)

SYSTEM ELECTRICAL LOAD

The maximum current draw of the electric motor and system will be no more than 55 amperes at 12 VDC.

FOAM CAPABLE DISCHARGES

The foam system will be plumbed into a manifold. All outlets that are plumbed into that manifold will be foam capable.

Foam capable outlets will be:

- Speedlays (2)
- Rear 2.50" outlet

(TECH NOTE: The 2.50" side outlets and the deluge are not plumbed into the manifold and therefore, will not be foam capable.)

REFILL, SINGLE FOAM TANK

The foam system's proportioning pump will be used to fill the foam tank. This will allow use of the auxiliary foam pick-up to pump the foam from pails or a drum on the ground into the foam tank. A foam shut-off switch will be installed in the fill dome of the tank to shut the system down when the tank is full. The fill operation will be controlled by a mode in the foam system controller. While the proportioner pump is filling the tank, the controller will display a flashing yellow LED to indicate that the tank is filling. When the tank is full, as determined by the float switch in the tank dome, the pump will stop and the controller will shut the yellow LED off. If it attempted to use tank fill and the refill valve and suction valve are in the wrong position(s), then a red LED will illuminate to indicate the improper valve position(s). When the valves are positioned properly, then filling will commence.

FOAM TANK

The foam tank will be an integral portion of the polypropylene water tank. The cell will have a capacity of 30 gallons of foam with the intended use of [Type of Foam]. The brand of foam stored in this tank will be [Foam, Brand Name]. The foam cell will reduce the capacity of the water tank. The foam cell will have a screen in the fill dome and a breather in the lid.

FOAM TANK DRAIN

A system of 1.00" foam tank drains will be provided, integrated into the foam systems strainer and tank to foam pump valve management system. The tank to pump hoses running from the tank(s) to the strainer will 1.00" diameter. The foam system controller will have a mode that allows for a given foam valve to be opened at will. Flow of foam from the tank valve to the strainer will be usable as a tank drain mode.

An adaptor will be supplied, that allows the 1.00" foam intake screen to assembly to be used as a drain outlet. The standard supplied 1.00" foam pick up hose will be attached to the screen assembly by way of the adapter. The drain mode will allow the operator to open and close the tank valve as required from the control head, to drain foam and re-fill foam containers through the connected hose, without foam spillage beneath the vehicle.

PUMP COMPARTMENT

The pump compartment will be separate from the hose body and compartments so that each may flex independently of the other. It will be a fabricated assembly of steel tubing, angles and channels which support both the fire pump and the side running boards.

Compartment will be mounted on chassis frame rails with rubber biscuits in a four point pattern to allow for chassis frame twist.

Pump compartment, pump, plumbing and gauge panels must be removable from the chassis as a single assembly.

PUMP MOUNTING

Pump will be mounted to a substructure which will be mounted to the chassis frame rail using rubber isolators. The mounting will allow chassis frame rails to flex independently without damage to the fire pump.

PUMP CONTROL PANELS (TOP MOUNT)

All pump controls and gauges to be properly marked and located above the pump to the rear of the walkway. Operator to face the rear of the truck when viewing the control panel from the operating position.

The control panel will be in two planes.

The upper plane will be hinged at the bottom with a full length stainless steel hinge.

Both planes to be full width of the pump house structure.

The side pump panels will be 34.00" wide.

The side pump panels will be removable for ease of maintenance.

Polished stainless steel trim collars to be installed around all inlets and outlets.

Controls will have chrome plated bezels encircling the opening securely mounted to the pump panel. Identification tags for the discharge controls will be recessed within the same bezel. The discharge identification tags will be color coded, with each discharge having its own unique color.

All remaining identification tags will be mounted on the pump panel in chrome plated bezels.

WALKWAY

A 19.00" wide walkway will be provided for access to the top control panel. The walkway will be constructed of bright aluminum treadplate and properly reinforced.

There will be six (6) six (6) white LED lights provided to illuminate the walkway. The lights will come on with the body perimeter lights.

WALKWAY TOOL COMPARTMENT

A tool compartment will be provided on each side of the walkway. Each compartment will have an aluminum treadplate door and will be equipped with two (2) white LED lights with chrome bezels, one (1) in each compartment.

PUMP PANEL CONFIGURATION

The pump panel configuration will be neat and orderly.

PUMP AND GAUGE PANEL

The side control panels will be constructed of aluminum with a painted FormCoat black finish. A polished aluminum trim molding will be provided around each panel.

The gauge and top mount control panels will be constructed of aluminum with a painted FormCoat black finish. A polished aluminum trim molding will be provided around each panel.

The gauge panel will be hinged at the bottom with a full length stainless steel hinge. The fasteners that hold the panel in the up right position will be quarter-turn style. Vinyl covered chains will be used to hold the panel in the dropped position.

The driver's and passenger's side pump panels will be removable and fastened with swell type fasteners.

PUMP COMPARTMENT LIGHT

A compartment light will be provided inside the pump enclosure.

PUMP PANEL GAUGES AND CONTROLS

The following will be provided on the pump panels in the FRC IN Control Pressure Governor system

- Engine Oil Pressure Gauge: LED bar graph display
- Engine Water Temperature Gauge: LED bar graph display
- Tachometer: over 1/2" high LED digits
- Voltmeter: LED bar graph display

VACUUM AND PRESSURE GAUGES

The pump vacuum and pressure gauges will be liquid filled and manufactured by Class 1 Incorporated ©.

The gauges will be a minimum of 4.00" in diameter and will have white faces with black lettering, with a pressure range of 30.00"-0-600#.

Gauge construction will include a Zytel nylon case with adhesive mounting gasket and threaded retaining nut.

The pump pressure and vacuum gauges will be installed adjacent to each other at the pump operator's control panel.

Test port connections will be provided at the pump operator's panel. One will be connected to the intake side of the pump, and the other to the discharge manifold of the pump. They will have 0.25 in. standard pipe thread connections and non-corrosive polished stainless steel or brass plugs. They will be marked with a label.

This gauge will include a 10 year warranty against leakage, pointer defect, and defective bourdon tube.

PRESSURE GAUGES

The individual "line" pressure gauges for the discharges will be Class 1© interlube filled.

They will be a minimum of 2.00" in diameter and have white faces with black lettering.

Gauge construction will include a Zytel nylon case with adhesive mounting gasket and threaded retaining nut.

Gauges will have a pressure range of 30"-0-400#.

The individual pressure gauge will be installed as close to the outlet control as practical.

This gauge will include a 10 year warranty against leakage, pointer defect, and defective bourdon tube.

WATER LEVEL GAUGE

There will be an electronic water level gauge provided on the operator's panel that registers water level by means of five (5) colored LED lights. The lights will be durable, ultra-bright five (5) LED design viewable through 180 degrees. The water level indicators will be as follows:

- 100 percent = Green
- 75 percent = Yellow
- 50 percent = Yellow
- 25 percent = Yellow
- Refill = Red

The light will flash when the level drops below the given level indicator to provide an eighth of a tank indication. To further alert the pump operator, the lights will flash sequentially when the water tank is empty.

The level measurement will be based on the sensing of head pressure of the fluid in the tank.

The display will be constructed of a solid plastic material with a chrome plated die cast bezel to reduce vibrations that can cause broken wires and loose electronic components. The encapsulated design will provide complete protection from water and environmental elements. An industrial pressure transducer will be mounted to the outside of the tank. The field calibratable display measures head pressure to accurately show the tank level.

FOAM LEVEL GAUGE

An electronic foam level gauge will be provided on the operator's panel that registers foam level by means of five colored LED lights. The lights will be durable, ultra-bright five LED design viewable through 180 degrees. The foam level indicators will be as follows:

- -100% = Green
- -75% = Yellow
- -50% = Yellow
- -25% = Yellow
- Refill = Red

The light will flash when the level drops below the given level indicator to provide an eighth of a tank indication. To further alert the pump operator, the lights will flash sequentially when the foam tank is empty.

The level measurement will be based on the sensing of head pressure of the fluid in the tank.

The display will be constructed of a solid plastic material with a chrome plated die cast bezel to reduce vibrations that can cause broken wires and loose electronic components. The encapsulated design will provide complete protection from foam and environmental elements. An industrial pressure transducer will be mounted to the outside of the tank. The display will be able to be calibrated in the field and will measure head pressure to accurately show the tank level.

LIGHT SHIELDS

Illumination will be provided at each pump control panel for controls, switches, essential instructions, gauges, and instruments necessary for the operation of the apparatus and the equipment provided on it. External illumination will be a minimum of five (5) foot-candles on the face of the device. Internal illumination will be a minimum of four (4) foot-lamberts.

Lights will be installed under a stainless steel shield. One pump panel light will come on at the operator's panel when the pump is in "ok to pump" mode. The remaining lights to be actuated from a switch located on the pump panel.

AIR HORN SYSTEM

Two (2) Grover air horns will be provided and located, in the front bumper, recessed outside the frame rails. The horn system will be piped to the air brake system wet tank utilizing 0.38" tubing. A pressure protection valve will be installed in-line to prevent loss of air in the air brake system.

Air Horn Location

The air horns will be located on each side of the bumper, towards the outside.

AIR HORN CONTROL

The air horns will be actuated by a foot switch on the officer's side and by the horn button in the steering wheel. The driver will have the option to control the air horns or the chassis horns from the horn button by means of a selector switch located on the instrument panel.

ELECTRONIC SIREN

A Whelen®, Model 295SLSA1, electronic siren with noise canceling microphone will be provided.

This siren to be active when the battery switch is on and that emergency master switch is on.

Siren head will be located in the cab within reach of the driver.

Siren will be actuated by a foot switch on the officer's side and by the horn button in the steering wheel. The driver will have the option to control the siren or the chassis horns from the horn button by means of a selector switch.

SPEAKER

There will be one (1) speaker provided. Each speaker will be a Whelen model SA315P black nylon composite, 100-watt, with through bumper mounting brackets. Each speaker will be connected to the siren amplifier.

The speaker will be recessed in the left side of the front bumper, just outside of the frame rail.

LIGHTBAR, CAB ROOF

One (1) 56.00" Whelen, Justice LED lightbar will be mounted on the cab roof.

This lightbar will include the following:

Four (4) red flashing CON3 LED modules facing forward.

Two (2) white flashing CON3 LED modules facing forward.

Two (2) red flashing LIN6 LED modules one (1) in each front corner.

Two (2) red flashing LIN6 LED modules, one (1) in each rear corner.

All lenses will be clear.

There will be a switch located in the cab on the switch panel to control the lightbar.

To meet NFPA requirements, all white warning lights will be when the parking brake is applied.

WARNING LIGHTS (CAB FACE)

A pair of flush mounted Whelen model 5*003Z*R, Super 500 flashing LED lights will be provided on the cab face or grille.

The color of these lights will be red Super LED/clear lens.

A switch will be provided inside the cab on the switch panel for actuation.

These lights will be installed with a chrome plated ABS plastic flange.

SIDE ZONE LOWER LIGHTING

There will be four (4) Whelen, Model 50*03Z*R, flashing LED lights located at the following positions:

- Two (2) lights located, one (1) each side on the engine hood under 62.00"
 - o The color of these lights will be red Super LED/clear lens
- Two (2) lights located, one (1) each side on the body fender panels
 - o The color of these lights will be red Super LED/clear lens

A switch located in the cab on the switch panel will control these lights.

These lights will be provided with a chrome plated ABS plastic flange

REAR ZONE LOWER LIGHTING

Two (2) Whelen, SUPER-LEDTM model 50*03F*R flashing LED lights will be located at the rear of the apparatus required to meet the lower level optical warning and optical power requirements of NFPA.

The color of the lights will be red Super LED/clear lens

There will be a switch located in the cab on the switch panel to control the lights.

Each light will be installed with a chrome plated ABS plastic flange

WARNING LIGHTS (REAR AND SIDE UPPER ZONE)

There will be two (2) Whelen, Model 60*02F*R, LED lights with Whelen, Model 6EFLANGE, chrome flanges provided - one light each side facing the rear.

The LEDs and lens color of these lights will be red Super LED/clear lens.

Two (2) Whelen, SUPER-LED model 50*03Z*R flashing Super LED lights will be provided at the rear of the truck in the upper zone, one light facing each side. These lights will also be installed with chrome plated flanges.

The LEDs and lens color of these lights will be red Super LED/clear lens.

There will be a switch located in the cab to control these lights.

REAR LIGHT MOUNTING

The rear warning lights will be mounted on the rear side sheet flange and rear bulkhead of the body as high as possible with all wiring totally enclosed.

LOOSE EQUIPMENT

The following equipment will be furnished with the completed unit:

- One (1) bag of chrome, stainless steel, or cadmium plated screws, nuts, bolts and washers, as used in the construction of the unit.

NFPA REQUIRED LOOSE EQUIPMENT PROVIDED BY FIRE DEPARTMENT

The following loose equipment as outlined in NFPA 1901, 2016 edition, section 5.9.3 and 5.9.4 will be provided by the fire department.

- 800 ft (60 m) of 2.50" (65 mm) or larger fire hose.
- 400 ft (120 m) of 1.50" (38 mm), 1.75" (45 mm), or 2.00" (52 mm) fire hose.
- One (1) handline nozzle, 200 gpm (750 L/min) minimum.
- Two (2) handline nozzles, 95 gpm (360 L/min) minimum.
- One (1) smoothbore of combination nozzle with 2.50" shutoff that flows a minimum of 250 gpm
- One (1) SCBA complying with NFPA 1981 for each assigned seating position, but not fewer than four (4), mounted in brackets fastened to the apparatus or stored in containers supplied by the SCBA manufacturer.
- One (1) spare SCBA cylinder for each SCBA carried, each mounted in a bracket fastened to the apparatus or stored in a specially designed storage space(s).
- One (1) first aid kit.
- Four (4) combination spanner wrenches.
- Two (2) hydrant wrenches.
- One (1) double female 2.50" (65 mm) adapter with National Hose threads.
- One (1) double male 2.50" (65 mm) adapter with National Hose threads.
- One (1) rubber mallet, for use on suction hose connections.
- Two (2) salvage covers each a minimum size of 12 ft x 14 ft (3.7 m x 4.3 m).
- One (1) traffic vest for each seating position, each vest to comply with ANSI/ISEA 207, Standard for High Visibility Public Safety Vests, and have a five-point breakaway feature that includes two (2) at the shoulders, two (2) at the sides, and one (1) at the front.
- Five (5) fluorescent orange traffic cones not less than 28.00" (711 mm) in height, each equipped with a 6.00" (152 mm) retro-reflective white band no more than 4.00" (152 mm) from the top of the cone, and an additional 4.00" (102 mm) retro-reflective white band 2.00" (51 mm) below the 6.00" (152 mm) band.

- Five (5) illuminated warning devices such as highway flares, unless the five (5) fluorescent orange traffic cones have illuminating capabilities.
- One (1) automatic external defibrillator (AED).
- Four (4) ladder belts meeting the requirements of NFPA 1983, Standard on Fire Service Life Safety Rope and System Components (if equipped with an aerial device).
- If the supply hose carried does not use sexless couplings, an additional double female adapter and double male adapter, sized to fit the supply hose carried, will be carried mounted in brackets fastened to the apparatus.
- If none of the pump intakes are valved, a hose appliance that is equipped with one or more gated intakes with female swivel connection(s) compatible with the supply hose used on one side and a swivel connection with pump intake threads on the other side will be carried. Any intake connection larger than 3.00" (75 mm) will include a pressure relief device that meets the requirements of 16.6.6.
- If the apparatus does not have a 2.50" National Hose (NH) intake, an adapter from 2.50" NH female to a pump intake will be carried, mounted in a bracket fastened to the apparatus if not already mounted directly to the intake.
- If the supply hose carried has other than 2.50" National Hose (NH) threads, adapters will be carried to allow feeding the supply hose from a 2.50" NH thread male discharge and to allow the hose to connect to a 2.50" NH female intake, mounted in brackets fastened to the apparatus if not already mounted directly to the discharge or intake.

SOFT SUCTION HOSE

There will be no soft suction hose provided.

DRY CHEMICAL EXTINGUISHER PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 5.9.4 requires one (1) approved dry chemical portable fire extinguisher with a minimum 80-B:C rating mounted in a bracket fastened to the apparatus.

The extinguisher is not on the apparatus as manufactured. The fire department will provide and mount the extinguisher.

WATER EXTINGUISHER PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, section 5.9.4 requires one (1) 2.5 gallon or larger water extinguisher mounted in a bracket fastened to the apparatus.

The extinguisher is not on the apparatus as manufactured. The fire department will provide and mount the extinguisher.

FLATHEAD AXE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, Section 5.9.4 requires one (1) flathead axe mounted in a bracket fastened to the apparatus.

The axe is not on the apparatus as manufactured. The fire department will provide and mount the axe.

PICKHEAD AXE PROVIDED BY FIRE DEPARTMENT

NFPA 1901, 2016 edition, Section 5.9.4 requires one (1) pickhead axe mounted in a bracket fastened to the apparatus.

The axe is not on the apparatus as manufactured. The fire department will provide and mount the axe.

PAINT PROCESS

The exterior custom cab and/or body painting procedure will consist of a seven (7) step finishing process. A commercial chassis paint process will follow similar processes as determined by the chassis manufacturer. The following procedure will be used by Pierce:

- Manual Surface Preparation All exposed metal surfaces on the custom cab and body will be thoroughly cleaned and prepared for painting. Imperfections on the exterior surfaces will be removed and sanded to a smooth finish. Exterior seams will be sealed before painting. Exterior surfaces that will not be painted include; chrome plating, polished stainless steel, anodized aluminum and bright aluminum treadplate.
- 2. Chemical Cleaning and Pretreatment All surfaces will be chemically cleaned to remove dirt, oil, grease, and metal oxides to ensure the subsequent coatings bond well. The aluminum surfaces will be properly cleaned and treated using a high pressure, high temperature 4 step Acid Etch process. The steel and stainless surfaces will be properly cleaned and treated using a high temperature 3 step process specifically designed for steel or stainless. The chemical treatment converts the metal surface to a passive condition to help prevent corrosion. A final pure water rinse will be applied to all metal surfaces.
- 3. <u>Surfacer Primer</u> The Surfacer Primer will be applied to a chemically treated metal surface to provide a strong corrosion protective base coat. A minimum thickness of 2 mils of Surfacer Primer is applied to surfaces that require a critical aesthetic finish. The surfacer primer will be a two-component high solids urethane that has excellent sanding properties and an extra smooth finish when sanded.
- 4. <u>Finish Sanding</u> The surfacer primer will be sanded with a fine grit abrasive to achieve an ultrasmooth finish. This sanding process is critical to produce the smooth mirror like finish in the topcoat.
- 5. <u>Sealer Primer</u> The sealer primer is applied prior to the base coat in all areas that have not been previously primed with the surfacer primer. The sealer primer is a two-component high solids urethane that goes on smooth and provides excellent gloss hold out when top coated.
- 6. <u>Base coat Paint</u> Two coats of a high performance, two component high solids polyurethane base coat will be applied. The Base coat will be applied to a thickness that will achieve the proper color match. The Base coat will be used in conjunction with a urethane clear coat to provide protection from the environment.
- 7. <u>Clear Coat</u> Two (2) coats of clear coat will be applied over the base coat color. The clear coat is a two-component high solids urethane that provides superior gloss and durability to the

exterior surfaces. Lap style doors will be clear coated to match the body. Paint warranty for the roll-up doors will be provided by the roll-up door manufacturer.

Our specifications are written to define cyclic corrosion testing, physical strengths, durability and minimum appearance requirements must be met in order for an exterior paint finish to be considered acceptable as a quality finish.

Each batch of base coat color will be checked for a proper match before painting of the cab and the body. After the cab and body are painted, the color is verified again to make sure that it matches the color standard. Electronic color measuring equipment will be used to compare the color sample to the color standard entered into the computer. Color specifications are used to determine the color match. A Delta E reading will be used to determine a good color match within each family color.

All removable items such as brackets, compartment doors, door hinges, and trim will be removed and separately if required, to ensure paint behind all mounted items. Body assemblies that cannot be finish painted after assembly will be finish painted before assembly.

PAINT - ENVIRONMENTAL IMPACT

Contractor will meet or exceed all current State regulations concerning paint operations. Pollution control will include measures to protect the atmosphere, water and soil. Controls will include the following conditions:

- Topcoats and primers will be chrome and lead free.
- Metal treatment chemicals will be chrome free. The wastewater generated in the metal treatment process will be treated on-site to remove any other heavy metals.
- Particulate emission collection from sanding operations will have a 99.99% efficiency factor.
- Particulate emissions from painting operations will be collected by a dry filter or water wash process. If the dry filter is used, it will have an efficiency rating of 98.00%. Water wash systems will be 99.97% efficient
- Water from water wash booths will be reused. Solids will be removed on a continual basis to keep the water clean.
- Paint wastes will be disposed of in an environmentally safe manner.
- Empty metal paint containers will be recycled to recover the metal.
- Solvents used in clean-up operations will be recycled on-site or sent off-site for distillation and returned for reuse.

Additionally, the finished apparatus will not be manufactured with or contain products that have ozone depleting substances. Pierce will, upon demand, present evidence that the manufacturing facility meets the above conditions and that it is in compliance with the state EPA rules and regulations.

COMMERCIAL CHASSIS PAINT

The chassis will be painted by the chassis manufacturer. It will remain the color and commercial quality finish as provided. The primary color will be Pierce #90 candy apple red.

PAINT

The chassis will be painted by the chassis manufacturer, and will remain the commercial grade finish as provided. To ensure a good color match between the body and chassis, the apparatus manufacturer and chassis manufacturer will have a mutually preapproved paint color program. The apparatus will be painted Pierce #90 candy apple red.

PAINT CHASSIS FRAME ASSEMBLY

The chassis frame assembly shall be painted black by the chassis manufacturer. It shall remain the commercial grade finish as provided.

COMPARTMENT INTERIOR PAINT

The compartment interior will be painted with a gray spatter finish for ease of cleaning and to make it easier to touch up scratches and nicks.

REFLECTIVE BAND

A 10.00" white reflective band will be provided across the front of the vehicle and along the sides of the body.

The reflective vinyl band will be provided across the front bumper.

REAR CHEVRON STRIPING

There will be alternating chevron striping located on the rear-facing vertical surface of the apparatus. The rear surface, excluding the rear compartment door, will be covered.

The colors will be red and L2 fluorescent yellow green.

Each stripe will be 6.00" in width.

This will meet the requirements of the current edition of NFPA 1901, which states that 50% of the rear surface will be covered with chevron striping.

REFLECTIVE STRIPE, CAB DOORS

A white reflective stripe will be provided on the interior of each cab door.

This stripe will be a minimum of 96.00 square inches and will meet the NFPA 1901 requirement.

CD MANUAL, BODY PARTS ONLY

A custom parts manual for the Pierce® installed parts only will be provided in CD format with the completed unit.

The manual will contain the following:

- Job number
- Part numbers with full descriptions

- Table of contents
- Parts section sorted in functional groups reflecting a major system, component, or assembly
- Parts section sorted in Alphabetical order
- Instructions on how to locate parts

The manual will be specifically written for the body model being purchased. It will not be a generic manual for a multitude of different bodies.

SERVICE PARTS INTERNET SITE

The service parts information included in this manual are also available on the Pierce website. The website offers additional functions and features not contained in this manual, such as digital photographs and line drawings of select items. The website also features electronic search tools to assist in locating parts quickly.

MANUALS, SERVICE

A CD format service manual supplement containing parts and service information on Pierce® installed components will be provided with the completed unit.

The manual will be specifically written for the unit being purchased. It will not be a generic manual for a multitude of different units.

MANUAL, CHASSIS OPERATION

One (1) chassis operation manual will be provided with the completed unit.

ONE (1) YEAR MATERIAL AND WORKMANSHIP

Each new piece of apparatus will be provided with a minimum one (1) year basic apparatus material and workmanship limited warranty. The warranty will cover such portions of the apparatus built by the manufacturer as being free from defects in material and workmanship that would arise under normal use and service.

A copy of the warranty certificate will be submitted with the bid package.

CHASSIS WARRANTY

The chassis manufacturer will provide a five (5) year or 100,000 mile warranty.

PAINT WARRANTY

The commercial chassis manufacturer's paint warranty will apply to the paint on the chassis only.

COMPARTMENT LIGHT WARRANTY

The Pierce 12 volt DC LED strip lights limited warranty certificate, WA0203, is included with this proposal.

TRANSMISSION WARRANTY

The transmission will have a five (5) year/unlimited mileage warranty covering 100 percent parts and labor. The warranty to be provided by Allison Transmission and not apparatus builder.

WATER TANK WARRANTY

A UPF poly water tank limited warranty certificate, WA0195, is included with this proposal.

TEN (10) YEAR STRUCTURAL INTEGRITY

The Pierce apparatus body limited warranty certificate, WA0009, is included with this proposal.

ROLL UP DOOR MATERIAL AND WORKMANSHIP WARRANTY

A Gortite roll-up door limited warranty will be provided. The mechanical components of the roll-up door will be warranted against defects in material and workmanship for the lifetime of the vehicle. A six (6) year limited warranty will be provided on painted and satin roll up doors.

The limited warranty certificate, WA0190, is included with this proposal.

PUMP WARRANTY

A Hale pump limited warranty certificate, WA0248, is included with this proposal.

TEN (10) YEAR PUMP PLUMBING WARRANTY

The Pierce apparatus plumbing limited warranty certificate, WA0035, is included with this proposal.

FOAM SYSTEM WARRANTY

The Husky 3 foam system limited warranty certificate, WA0231, is included with this proposal.

TEN (10) YEAR PRO-RATED PAINT AND CORROSION

A Pierce body limited pro-rated paint warranty certificate, WA0057, is included with this proposal.

VEHICLE STABILITY CERTIFICATION

The fire apparatus manufacturer will provide a certification stating the apparatus complies with NFPA 1901, current edition, section 4.13, Vehicle Stability. The certification will be provided at the time of bid.

CAB INTEGRITY

The cab has been tested to and passed the following standards:

- ECE Regulation No.29
- SAE J2422 Cab Roof Strength Evaluation Quasi-Static Loading Heavy Trucks.

AMP DRAW REPORT

The bidder will provide, at the time of bid and delivery, an itemized print out of the expected amp draw of the entire vehicle's electrical system.

The manufacturer of the apparatus will provide the following:

- Documentation of the electrical system performance tests.
- A written load analysis, which will include the following:
 - o The nameplate rating of the alternator.
 - o The alternator rating under the conditions specified per:
 - Applicable NFPA 1901 or 1906 (Current Edition).
 - o The minimum continuous load of each component that is specified per:
 - Applicable NFPA 1901 or 1906 (Current Edition).
 - Additional loads that, when added to the minimum continuous load, determine the total connected load.
 - o Each individual intermittent load.

All of the above listed items will be provided by the bidder per the applicable NFPA 1901 or 1906 (Current Edition).



STATE FIRE MARSHAL'S OFFICE

MIKE CHANEY DIVISION OF THE MISSISSIPPI INSURANCE DEPARTMENT rance 660 NORTH STREET, SUITE 1008

ministry at . .

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alter to be subadited to

July 17, 2018

BJ McClenton Clay County Fire Coordinator 7060 Lone Oak Road West Point, MS 39773

Dear BJ,

On Monday, July 16, 2018, the RFTAAP Review Committee approved your Round 11, Part I, Section I-IV application and obligated funds up to \$70,000 for this application.

In accordance with the guidelines established by the Rural Fire Truck Review Committee, you have ninety days to advertise and accept a bid for this apparatus and submit Part II of the application. The committee reserves the right to reobligate these funds should you fail to meet this requirement.

Please find enclosed the Round 11 Part II, Sections I-IV application to be submitted to this office when the bid has been accepted. As in the previous rounds these truck specifications must meet the most recent National Fire Protection Standards for Fire Apparatus (NFPA 1900).

If you have any questions, please contact me at (601) 359-1062.

Sincerely,

Brad Smith

State Fire Coordinator

JBS/tlc

Enc. 1

NO.	

IN THE MATTER OF AUTHORIZING AND APPROVING TO SPREAD ON THE MINUTES THE BCAP REPORTS FOR THE MONTHS OF JULY, AUGUST, AND SEPTEMBER 2018

There came on this day for consideration the matter of authorizing and approving to spread on the minutes the BCAP reports for the months of July, August, and September 2018.

After motion by Shelton Deanes and second by Luke Lummus this Board doth vote unanimously to authorize and approve to spread on the minutes the BCAP Reports for the months of April, May, and June 2018 as attached hereto as Exhibit A.

SO ORDERED this the 19th day of July, 2018.



Tim Floyd Wildlife Specialist

United States Department of Agriculture Animal and Plant Health Inspection Service Wildlife Services

Phone/Fax: Cell:

(662)637-2541 (662)299-2235

Email: Timothy.A.Floyd@aphis.usda.gov

Monthly BCAP Report

Jul-18

Direct Control

Project	Hours	Beavers	Dams
Beasley rd Robinson	5	1	1
Hwy 46 Gipson	3	1	0
Pine Grove rd Davis	3.	2	2
Una/Brand rd	2	0	2
Lake Grove rd Shaffer	2	0	0
R B rd Smith	2	1	0

T A Survey

Hours

6.5

Location

Dixie rd Brownlee, Colony rd Beasley rd Robinson, Hwy 46 Gipson Pine Grove rd Davis, CWC Line, Hwy 50 Powell, Hwy 50 Wooten Hwy 46 Williamson, Hwy 46 Cox Una/Brand rd, R B rd Smith, Beasley Hwy 47 Barr, Hwy 46 McReynolds

Report submitted by:

Johnny Carter

662-803-6929

Monthly BCAP Report

Aug-18

Direct Control

Project	Hours	Beavers	Dams
Hwy 46 Gipson	3	0	6
Una/Brand rd	3	1	1
Pine Grove rd Davis	3	1	0
Lake Grove rd Shaffer	7.5	3	2
Barton Ferry Box Culvert	1	0	1
R B rd Smith	2.5	0	1
Beasley rd	4	1	1
Hwy 46 Cox	3	0	1
Colony rd Awtrey	5	2	2

T A Survey

Hours

9.5

Location

Dixie rd Brownlee, Colony rd
S. Bennett, B. Ferry Bryant, Baker
B. Ferry Tomfinson, CWC Line,
Pate rd, Wicks rd, Yokohoma Blvd
Blair rd, Tomcat rd, Beacon rd,
Tibbee Lake, McNaulty rd, Berry rd
Point Harbor, Pine Grove rd, Beasley
Brand Place, Una/Brand, R B rd Smith
Happy Hallow rd, Hwy 47 Barr,
Lake Lilly, Hoss Johnson, Churchhill
Hwy 50 Pate, Hwy 50 Kellogg
Waverly Mansion rd

Report submitted by:

Johnny Carter

662-803-6929

Monthly BCAP Report

Sep-18

Direct Control

Project	Hours	Beavers	Dams
Tibbee Lake	1 .	0	1
Beasley rd McReynolds	6.5	1	2
Pine Grove rd Davis	3	. 2	2
Colony rd Awtrey	9	3	1
Beasley rd Robinson	9.5	2	2
Hwy 50 W (71.6)	5	2	1

T A Survey

Hours

5.5

Location

Colony rd White, Colony rd
Hwy 46 Gipson, Hwy 46 Cox
Hwy 46 Wiffiamson, Hwy 50 Powelf
US Davidson rd, Turnage rd
Pine Bluff rd, Tomcat rd, Beasley rd,
Happy Hallow rd, McNaulty rd,
Beasley rd Robinson, Pine Grove rd,
Beasley rd McReynolds

Report submitted by:

Johnny Carter

662-803-6929

NO.	

IN THE MATTER OF AUTHORIZING AND APPROVING TO PURCHASE AN ENGINE FOR 2004 TRUCK

There came on this day for consideration the matter of authorizing and approving to purchase an engine for 2004 truck.

It appears to this Board the engine went out on building maintenance and grounds employee, Dennis Jefferson's Truck, and based upon the quotes to repair as attached hereto as Exhibit A it would be more cost effective for the County to purchase an engine for \$1,000 and have inmate labor install and repair the engine in the truck.

After motion by Luke Lummus and second by Shelton Deanes this Board doth vote unanimously to authorize and approve to purchase the engine for \$1,000 and to have inmate labor do the install of the engine and make the said repairs to the truck.

SO ORDERED this the 4th day of October, 2018.



DEDICATED TO THE PROFESSIONAL

Store 1128, 7171 HIGHWAY 45 ALT N, WEST POINT, MS 39773 (662) 494-9070

Bill To:

CLAY CO SHERIFFS DEPT XXRETURN MAIL 03-15-17XX 330 W BROAD ST WEST POINT, MS 39773 (662) 494-7339



** QUOTE **	Invoice
QUOTE	Sale Type
10/02/2018 9:19 AM	Date
	Ship Via
	PO Number

Counter #	Customer Account	Ordered By	Special Instructions
327343	2214158		Quote

Qty	Line	Item Number	Description	Warr	Unit	Tax	List	Net	Extended
1	0SP	ENGINE	4.8 ENGINE		EA	NA		1,000.00	1,000.00
		D Code							

** Quote Only - Prices Subject to Change **

lyr used

1 Item

Super Start Batteries carry a Nationwide Warranty. Ask for details.

 Sub-Total
 1,000.00

 Sales Tax
 0.00

 Quote Total
 1,000.00

WWW.FIRSTCALLONLINE.COM

Please visit www.firstcallonline.com/warranty for warranty details

1/1

WE APPRECIATE YOUR BUSINESS!

Remit To: PO BOX 9464, SPRINGFIELD, MO 65801-9464



DEDICATED TO THE PROFESSIONAL

Store 1128, 7171 HIGHWAY 45 ALT N, WEST POINT, MS 39773 (662) 494-9070

Bill To:

CLAY CO SHERIFFS DEPT XXRETURN MAIL 03-15-17XX 330 W BROAD ST WEST POINT, MS 39773 (662) 494-7339



Invoice	** QUOTE **
Sale Type	QUOTE
Date	10/02/2018 11:45 AM
Ship Via	
PO Number	

Counter #	Customer Account	Ordered By	Special Instructions	
65856	2214158		Quote	L.

Qty	Line	Item Number	Description	Warr	Unit	Tax	List_	Net	Extended
1	PTQ	VCTC2WD	LONG BLOCK	3E	EA	NA	3,659.32	1,900.00	1,900.00
		2004 GMC Sier	ra 1500						•
		VCTC2WD	Core Charge		EA	NA		335.00	335.00
		VCTC2WD	Core Exchange		EA	NA		-335.00	-335.00

** Quote Only - Prices Subject to Change **

3yr

1 Item

Super Start Batteries carry a Nationwide Warranty. Ask for details.

Sub-Total

1,900.00

Sales Tax

0.00

Quote Total

1,900.00



WWW.FIRSTCALLONLINE.COM

Please visit www.firstcallonline.com/warranty for warranty details

1/1

WE APPRECIATE YOUR BUSINESS!

Remit To: PO BOX 9464, SPRINGFIELD, MO 65801-9464

NO.	

IN THE MATTER OF AUTHORIZING AND APPROVING TO TRANSFER FUNDS

There came on this day for consideration the matter of authorizing and approving to transfer funds.

It appears to this Board there is a need to transfer the remaining \$65,931.00 as budgeted for year ending 9/30/2018 from fund no. 001, General County Fund to fund no. 097, E911 Fund in order to subsidize the said fund so that it will not be overdrawn during the various month ends.

After motion by Shelton Deanes and second by R. B. Davis this Board doth vote unanimously to authorize and approve of the said transfer as stated above.

SO ORDERED this the 4th day of October, 2018.

NO.		

IN THE MATTER OF TRANSFERRING INTEREST EARNED

There came on this day for consideration the matter of transferring interest earned.

It appears to this Board interest has been earned on the Payroll Clearing Account in the amount of \$25.09 and in the Insurance Clearing Account in the amount of \$6.63 for and the said amounts should be transferred and settled to the General Operating Fund.

After motion by R. B. Davis and second by Joe Chandler this Board doth vote unanimously to authorize the said transfer as stated above.

SO ORDERED this the 4th day of October, 2018.

IN THE MATTER OF AN INTER FUND LOAN

There came on this day for consideration the matter of an inter-fund loan.

It appears to this Board an inter-fund loan is needed to be made to Fund No. 097, E911 Fund from Fund No. 018, TVA Special Fund in the amount of \$ 21,061.62 in order for the said fund to not be overdrawn for the month of September 30, 2018.

After motion by Luke Lummus and second Shelton Deanes this Board doth vote unanimously to authorize the said inter-fund loan as stated above.

SO ORDERED this the 4th day of October, 2018.

NO.	
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IN THE MATTER OF A TRANSFER OF FUNDS

There came on this day for consideration the matter of a Transfer of Funds.

It appears to this Board a Transfer of Funds is needed to be made to Fund No. 240, District 4 Road B & I 2008 Fund from Fund No. 154, District 4 Road Fund in the amount of \$8,876.09 in order for the said fund to not be overdrawn for the month of September 30, 2018 and as budgeted.

After motion by Shelton Deanes and second by R. B. Davis this Board doth vote unanimously to authorize the said transfer as stated above.

SO ORDERED this the 4th day of October, 2018.

President

NO.		
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IN THE MATTER OF AUTHORIZING AND APPROVING TO FINANCE THE FULL COST OF THE MSWIN RADIO SYSTEM

There came on this day for consideration the matter of authorizing and approving to finance the full cost of the MSWIN Radio System.

It appears to this Board in preparing and adopting the budget for year 2019 this budget reflected the volunteer fire unit portion of the MSWIN Radio System in the amount of \$46,000 to be paid for from Volunteer Insurance Rebate Funds, and

It appears to this Board after the budget was adopted and approved, the County received its notice of approval of RFTAAP Funding and made aware of the 90 Day deadline to order the Volunteer Fire truck or the County would no longer be eligible for its portion of the RFTAAP Funding, and

It appears to this Board there are not sufficient funds in the Volunteer Fire Insurance Rebate Fund to pay for all of the items needed at this time such as the MSWIN Radio system (\$46,000), pay for the monthly debt service payment on the New Volunteer Fire Truck, and to have sufficient beginning cash balance to begin the next fiscal year for existing payments, and

It appears to this Board, the Chancery Clerk, Amy Berry, is recommending to this Board she feels it is in the County's best interest to finance the full amount of the MSWIN Radio system.

After motion by Luke Lummus and second by Shelton Deanes this Board doth vote unanimously to authorize and approve to finance the full cost of the MSWIN Radio System.

SO ORDERED this the 4th day of October 2018

NO		
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IN THE MATTER OF SPREADING ON THE MINUTES THE CIRCUIT COURT ORDER APPOINTING A LAW CLERK

There came on this day for consideration the matter of authorizing and approving of spreading on the minutes the Circuit Court order appointing a Law Clerk.

After motion by R. B. Davis and second by Shelton Deanes this Board doth vote unanimously to authorize and approve to spread on the minutes the Circuit Court order as attached hereto as Exhibit A appointing a Law Clerk.

SO ORDERED this the 4th day of October, 2018.

IN THE SIXTEENTH DISTRICT CIRCUIT COURT, MISSISSIPPI

IN RE: ORDER APPOINTING LAW CLERK II

There having come on for consideration the matter of appointing a Law Clerk II for the 16th District Circuit Court for the three Circuit Court Judges of the 16th District, the Honorable Lee J. Howard, the Honorable James T. Kitchens, Jr., and the Honorable Lee S. Coleman, effective starting date October 1, 2018. It is hereby ordered by Judge Lee J. Howard, Judge James T. Kitchens, Jr., and Judge Lee S. Coleman, Circuit Judges of the 16th Circuit Court District, that Victoria Jones, the current Law Clerk I for the 16th District, be appointed to the position of Law Clerk II, Ms. Jones having now passed the Mississippi Bar (see attached certificate as an exhibit to this order), her resume should already be on file. The salary for this position shall be \$41,750.00 per year, plus benefits, pursuant to Mississippi Code Annotated § 9-1-36, as amended, and is to be funded from the support staff funds of the Circuit Judges of the Sixteenth District, with 30% of the salary coming from Judge Howard's funds, 30% of the salary coming from Judge Kitchen's funds, and 40% from Judge Coleman's funds.

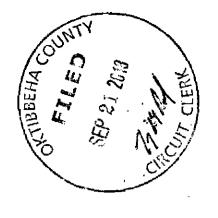
The Circuit Clerk of Oktibbeha County is to enter this order upon its official minutes and send copies of this order to the Circuit Clerks of Noxubee, Clay, and Lowndes Counties, and a certified copy to the Administrative Office of Courts.

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FILED COMPO	RDERED, this the	day of	Syl	_, 2018.
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County and State, certify that copy of the original of said in	of the Circuit Court in sour for sale to the foregoing is a true and correct in strument, as the same appears of	1 216	CIRCUIT.	SEP 21 2018
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Woard of War Admissions State of Mississippi





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Victoria Roseanne Jones

having met the requirements of Section 73-3-2, Mississippi Code of 1972, and having complied with applicable rules and regulations governing admission to the Bar on examination, is hereby certified as being duly qualified for admission to practice law in all courts of this state, this the 13th day of September, 2018.



Witness our hands and seal this the 13th day of September, 2018.

Chair

DSW##

MISSISSIPPI

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NO.		

IN THE MATTER OF RECESSING

There came on this day for consideration the matter of recessing.

After motion by R. B. Davis and second by Lynn Horton this Board doth vote unanimously to authorize and approve to recess until Thursday, October 25, 2018, at 9:00 a.m.

SO ORDERED this the 4th day of October, 2018.