



THE PORT AUTHORITY OF NY & NJ

1 Madison Avenue, 7th Floor, New York NY 10010

REQUEST FOR QUOTATION

<p>Contact person/Telephone Dennis Kopik/212-435-3931</p>	<p>Collective# / RFO Number / Bid Due Date 0000022034 / / 08/20/2010 Bids must be received no later than 11:00 AM on the above Bid Due Date.</p> <p>Deliver Goods/Services To: EWR Auto Shop Newark, NJ 00001</p>
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Quantity	Description	Unit Price	Total
	<p>REBID , PARKING LOT FIRE TRUCK AS PER ATTACHED REVISED SPECIFICATION CODE-021-4597-010</p> <p>****QUOTE ONLY FULLY DELIVERED PRICES****</p> <p>A price preference of 10 % is available for NY/NJ Minority and Women Business Enterprises (M/WBE) or 5% for NY/NJ Small Business Enterprises (SBE) certified by the Port Authority (PA) by the day before bid opening for awards not exceeding \$1,000,000. My firm was certified as a _____ on _____.</p> <p>LEAD TIME _____</p> <p>PLEASE SUPPLY AN ADDITIONAL COPY OF YOUR SUBMITTAL WITH YOUR REPLY. ALSO RETURN ALL DOCUMENTS.</p>		
	PLEASE QUOTE FULLY DELIVERED PRICES	PAYMENT TERMS	Total Delivered Price

This Quotation is subject to the terms and conditions set forth on the back page hereof. Bidder is advised to read these before signing.

We have read the instructions and, if favored with an order, we agree to furnish the items enumerated herein at the prices and under the conditions indicated.

NOTICE TO BIDDERS: Unless the following term of assurance that the above offer is irrevocable is signed, the offer submitted herein shall not be deemed to be complete.

Signed _____
 Firm Name _____
 Telephone number _____ Date _____
 Fax Number _____
 Federal Taxpayer ID _____

Bidder
 Must
 Sign
 In
 Two
 Places

The foregoing offer shall be irrevocable for 90 days after the date on which the Port Authority of New York and New Jersey opens this proposal.

Signed _____ Date _____
 Firm Name _____



REQUEST FOR QUOTATION

RFQ Number / Bid Due Date
/ 08/20/2010

Quantity	Description	Unit Price	Total
	<p>This is a Formal Bid Invitation Mail Sealed Bids to:</p> <p>The Port Authority of NY & NJ Attn: Bid Custodian Procurement Department One Madison Avenue, 7th Floor New York, N.Y. 10010</p> <p>by the date and time listed above, where it will be publicly opened and read.</p> <p>Bids are only accepted Monday through Friday, excluding Port Authority holidays, between the hours of 8 A.M. & 5 P.M., via regular mail, express delivery service or hand delivery.</p> <p>If you do not use or have an envelope provided, you must clearly mark the outside envelope/package with 'BID ENCLOSED' and show the company name, address, as well as Bid number and Due date as stated on this bid document.</p> <p>A valid photo id is required to gain access into the building, to attend the bid opening or hand deliver a bid.</p>		
	Parking Lot Fire Truck w/Foam System		
PLEASE QUOTE FULLY DELIVERED PRICES		PAYMENT TERMS	Total Delivered Price

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/ 08/20/2010

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1	<p>The item covers the following services: PArking Lot Fire Truck w/Foam System</p>				
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TERMS AND CONDITIONS

1. The Port Authority (PA) reserves the right to request information relating to seller's responsibility, experience and capability to perform the work.
2. Unless otherwise provided, complete shipment of all items must be in one delivery FOB delivery point. Payment will not be made on partial deliveries unless authorized in advance by the party to be charged and the discount, if any, will be taken on the total order.
3. PA payment terms are net 30 days. Cash discounts for prompt payment of invoices may be taken but will not be considered in determining award, except in the case of tie bids.
4. Separate unit and total FOB delivered prices must be shown.
5. Sales to the PA and to PATH are currently exempt from New York and New Jersey State and local taxes and generally from federal taxation. The seller certifies that there are no federal, state, municipal or any other taxes included in the prices shown hereon.
6. The PA shall have the absolute right to reject any or all proposals or to accept any proposal in whole or part and to waive defects in proposals.
7. Unless the phrase "no substitute" is indicated, bidder may offer alternate manufacturer / brands, which shall be subject to Port Authority approval. Please indicate details of product being offered with bid.
8. Acceptance of seller's offer will be only by Purchase Order Form signed by the PA. No change shall be made in the agreement except in writing.
9. If the seller fails to perform in accordance with the terms of this purchase order, the PA may obtain the goods or services from another contractor and charge the seller the difference in price, if any, a reletting cost of \$100, plus any other damages to the PA.
10. Upon request, sellers are encouraged to extend the terms and conditions of any terms agreement with the PA to other government and quasi-government entities by separate agreement.
11. By signing this quotation or bid, the seller certifies to all statements on Form PA 3764 regarding non-collusive bidding; compliance with the PA Code of Ethics; and the existence of investigations, indictments, convictions, suspensions, terminations, debarments and other stated occurrences to assist the PA in determining whether there are integrity issues which would prevent award of the contract to the seller. The PA has adopted a policy set forth in full on PA 3764, that it will honor a determination by an agency of the State of New York or New Jersey that a bidder is not eligible to bid on or be awarded public contracts because the bidder has been determined to have engaged in illegal or dishonest conduct or to have violated prevailing wage legislation. The Terms and Conditions of PA 3764 apply to this order. A copy can be obtained by calling (212) 435-3902 or at <http://www.panynj.gov/pdf/PA3764.pdf>.
12. The vendor may subcontract the services or use a supplier for the furnishing of materials required hereunder to such persons or entities as the Manager, Purchasing Services may from time to time expressly approve in writing. All further subcontracting shall also be subject to such approval.
13. The successful bidder (vendor) shall not issue nor permit to be issued any press release, advertisement, or literature of any kind, which refers to the Port Authority or that goods will be, are being or have been provided to it and/or that services will be, are being or have been performed for it in connection with this Agreement, unless the vendor first obtains the written approval of the Port Authority. Such approval may be withheld if for any reason the Port Authority believes that the publication of such information would be harmful to the public interest or is in any way undesirable.

PORT AUTHORITY OF NEW YORK AND NEW JERSEY
OPERATION SERVICES DEPARTMENT
CENTRAL AUTOMOTIVE DIVISION
241 ERIE STREET, ROOM 307
JERSEY CITY, NEW JERSEY 07310-1397

DATE: MAY 2010
CODE: 021-4597-010

SPECIFICATIONS FOR:
PARKING LOT FIRE TRUCK WITH FOAM SYSTEM

TECHNICAL SPECIFICATIONS

1. GENERAL

THE VENDOR SHALL FURNISH AND INSTALL THE FOLLOWING EQUIPMENT AND ACCESSORY ITEMS AS DEFINED BELOW. THESE SPECIFICATIONS COVER THE FURNISHING OF THE LATEST PRODUCTION MODEL MINI-PUMPER TYPE FIRE FIGHTING TRUCK WITH A FOAM SYSTEM AND EQUIPMENT THE OVERALL HEIGHT OF THE VEHICLE SHALL NOT EXCEED 86". THIS IS A MAJOR REQUIREMENT – NO EXCEPTIONS PERMITTED.

THE UNIT AND ASSOCIATED COMPONENTS, FEATURES, AND EQUIPMENT SHALL BE FURNISHED COMPLETE AND READY FOR USE, ALL AS MORE FULLY REQUIRED BY THE TERMS OF THESE SPECIFICATIONS AND IN STRICT ACCORDANCE THEREWITH, EVEN IF NOT SPECIFICALLY ENUMERATED IN THESE SPECIFICATIONS. THE UNIT AND ALL EQUIPMENT SHALL BE THE MANUFACTURER'S LATEST CURRENT PUBLISHED STOCK MODEL(S), WHICH MEET THE REQUIREMENTS OF THESE SPECIFICATIONS.

BIDS SHALL BE SUBMITTED IN DUPLICATE. THE VENDOR SHALL SUBMIT WITH ITS BID A COMPLETED VENDOR'S DETAIL SHEET (PROVIDED AT THE END OF THE SPECIFICATIONS) AND ALL OTHER BROCHURES, DATA SHEETS, CATALOGUES, DRAWINGS, AND TECHNICAL INFORMATION NECESSARY TO PERFORM A COMPLETE PRODUCT EVALUATION ALSO SUBMITTED IN DUPLICATE.

THE VENDOR SHALL COMPLETE THE BID PRICING SHEET, APPENDIX E. THE VENDOR IS TO LIST THE PRICING FOR THE COST OF THE TRUCK AND ANY OPTIONS THAT MAY BE LISTED FOR INFORMATION ONLY. THE BID WILL BE EVALUATED BY THE "TOTAL BID PRICE."

2. CAB-CHASSIS

THE FIRE SYSTEM AND EQUIPMENT SHALL BE MOUNTED ON A 4X4 FORD F-550 SUPER-DUTY, CAB-CHASSIS, OR APPROVED EQUAL, WITH AN EXTENDED CAB AND A 17,500 LB. GVWR. THE CAB-CHASSIS SHALL HAVE A MAXIMUM WHEELBASE OF 162" AND A CAB-TO-AXLE DIMENSION OF 84" AND BE EQUIPPED WITH ALL EQUIPMENT AND COMPONENTS AS FURTHER DESCRIBED IN THESE SPECIFICATIONS.

ENGINE:

- TURBOCHARGED V-8 DIESEL, 6.7L, MEETING THE LATEST EPA REGULATIONS
- COOLING SYSTEM, HEAVY DUTY, 50/50 MIX OF ANTIFREEZE AND WATER TO -40° F
- ENGINE OIL COOLER
- MUFFLER HEAT SHIELD
- FUEL/WATER SEPARATOR
- HIGH IDLE CONTROL KIT

- ENGINE VISUAL AND AUDIBLE WARNING FOR:
 - LOW OIL PRESSURE
 - HIGH ENGINE TEMPERATURE
- 1000 WATT ENGINE BLOCK HEATER
- ENGINE COMPARTMENT LIGHTS

THE ENGINE SHALL BE APPROVED FOR CONTINUOUS OPERATION USING COMMERCIALY AVAILABLE ASTM D2 FUEL AND B5 ASTM D 6751 BIODIESEL FUEL. THE ENGINE SHOULD ALSO BE CAPABLE OF OPERATING ON B20 ASTM D6751 BIODIESEL FUEL WITH KEROSENE. IF THESE FUELS REQUIRE ADDITIVES OR INVOLVE RESTRICTIONS, ALL SUCH REQUIREMENTS, RESTRICTIONS, AND CONCERNS ARE TO BE DETAILED WITH THE BID.

TRANSMISSION:

- AUTOMATIC MULTI-SPEED W/OVERDRIVE
- TRANSMISSION OIL COOLER

STEERING:

- POWER STEERING

BRAKES:

- FOUR WHEEL ABS HYDRAULIC BRAKES

FRONT AXLE, SUSPENSION, TIRES:

- 6,000 LB. AXLE CAPACITY
- 6,000 LB. SPRING SUSPENSION
- SHOCK ABSORBERS
- STABILIZER BAR
- (2) 225/70R19.5 ALL-SEASON
- MOUNTED SPARE TIRE, SHIPPED LOOSE

REAR AXLE, SUSPENSION, TIRES:

- 13,660 LB. AXLE CAPACITY
- 13,660 LB. SPRING SUSPENSION
- 4.88:1 AXLE RATIO, LIMITED SLIP
- STABILIZER BAR
- (4) 225/70R19.5 ALL-SEASON

EXHAUST SYSTEM:

THE EXHAUST SYSTEM SHALL INCLUDE A DIESEL PARTICULATE FILTER, A DIESEL OXIDATION CATALYST AND SCR (SELECTIVE CATALYTIC REDUCTION) TO MEET CURRENT EPA STANDARDS. THE EXHAUST SHALL TERMINATE WITH A HORIZONTAL TAILPIPE AND DIFFUSER ON THE RIGHT SIDE BEHIND THE REAR WHEELS. ENGINE EXHAUST TEMPERATURE MUST NOT EXCEED 850° F WHEN MEASURED AT THE EXIT OF THE EXHAUST PIPE.

A HEAT DEFLECTOR SHIELD SHALL BE PROVIDED WHERE THE TAIL PIPE IS ROUTED UNDER ANY SIDE COMPARTMENTATION. THE TAIL PIPE DIFFUSER SHALL BE POSITIONED AT AN ANGLE, AS OPPOSED TO BEING PERPENDICULAR TO THE BODY, TO ALLOW FOR EXHAUST REMOVAL SYSTEM DEVICES.

A DIESEL EXHAUST FLUID (DEF) TANK SHALL BE PROVIDED FOR THE EMISSIONS SYSTEM.

3. ELECTRICAL SYSTEM

THE VEHICLE SHALL BE EQUIPPED WITH AN INTEGRAL ELECTRICAL SYSTEM CONSISTING OF BATTERY, ALTERNATOR, STARTER, WIRING HARNESS, CIRCUIT BREAKERS, FUSES AND OTHER NECESSARY COMPONENTS AND DEVICES. THE SYSTEM SHALL CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS:

- 12-VOLT NOMINAL SYSTEM VOLTAGE
- NEGATIVE GROUND
- STARTER WITH OVER CRANK PROTECTION
- HEAVY DUTY WIRING
- WIRING HARNESS CONNECTORS WITH WEATHERPROOF BULKHEAD CONNECTORS

ALTERNATOR(S):

ENGINE-DRIVEN ALTERNATOR SHALL BE INSTALLED, 200 AMP MINIMUM CAPACITY TO PROVIDE ALL ELECTRICAL POWER REQUIRED FOR ALL VEHICLE SYSTEM'S ELECTRICAL DEMANDS AND TO MAINTAIN BATTERY CHARGE. THE ALTERNATORS SHALL BE INSTALLED USING STANDARD VEHICLE MOUNTING BRACKETS.

BATTERY(IES):

DUAL HEAVY-DUTY, HIGH CYCLE BATTERIES SHALL BE INSTALLED OUTSIDE THE CAB IN A LOCATION READILY ACCESSIBLE FOR MAINTENANCE AND REPLACEMENT. THE BATTERIES SHALL HAVE A MINIMUM RATING OF 1500 CCA COMBINED. THE BATTERIES SHALL BE PROTECTED FROM WEATHER AND SPLASHING BY A SUITABLE VENTED COVER OR ENCLOSURE WITH AN EASILY REMOVABLE OR HINGED COVER.

MASTER SWITCH:

THE VEHICLE SHALL BE EQUIPPED WITH A MASTER BATTERY DISCONNECT SWITCH. THIS SWITCH SHALL CUT OFF ALL POWER TO THE BODY ELECTRICAL SYSTEMS. MASTER SWITCH SHALL BE PERMANENTLY LABELED AS TO ITS FUNCTION, "ON" POSITION AND "OFF" POSITION. A MASTER "ON" INDICATOR LIGHT SHALL BE PROVIDED ON THE DRIVER'S CONSOLE.

4. FUEL TANK

THE VEHICLE SHALL BE EQUIPPED WITH ONE (1) 40-GALLON CAPACITY FUEL TANK, ALUMINUM OR PLASTIC HIGH-DENSITY POLYETHYLENE IF AVAILABLE. IF A STEEL TANK IS PROVIDED IT MUST BE COMPATIBLE WITH BIODIESEL FUEL. THE FUEL FILLER CAP SHALL BE SAFETY CHAINED TO PREVENT LOSS. THE SAFETY CHAIN SHALL NOT BE WELDED; RIVETED OR BOLTED TO THE TANK.

THE TANK FILLER CAP, NECK, AND A 6" X 6" SQUARE AROUND THE FILLER NECK OR THE COMPLETE TANK, SHALL BE PAINTED GREEN. A PERMANENT 1½" HIGH, GREEN LABEL WITH WHITE LETTERING STATING "DIESEL FUEL ONLY" SHALL BE INSTALLED AS CLOSE AS PRACTICAL TO THE FUEL FILLER NECK.

A MINIMUM OF ONE (1) AUXILIARY FUEL TAP SHALL BE PROVIDED ABOVE THE CHASSIS ENGINE PICKUP.

5. CAB

- CAB ENTRANCE ASSIST HANDLES, EACH SIDE
- ALUMINUM RUNNING BOARDS
- LED STEP LIGHTS, ONE AT EACH DOOR
- SUN VISOR, EACH SIDE
- LEFT & RIGHT SIDE REAR VIEW POWER MIRRORS, WITH CONVEX MIRROR
- FRONT VINYL BUCKET SEATS - FULL SUSPENSION
- REMOVE REAR SEATING
- RETRACTABLE SEAT BELTS

- DUAL ELECTRIC HORNS
- BACKUP ALARM
- INTERMITTENT WINDSHIELD WIPERS AND WASHERS
- LIGHTS AUTOMATICALLY ON WHEN WIPERS ARE ON
- TINTED WINDOWS
- GAUGE PACKAGE
- POWER DOOR LOCKS AND WINDOWS
- HEATER AND DEFROSTER – MANUFACTURER’S FACTORY INSTALLED STANDARD, HIGH OUTPUT
- AIR CONDITIONER - MANUFACTURER’S FACTORY INSTALLED STANDARD, HIGH OUTPUT
- AM/FM RADIO
- SIX (6) SETS OF CAB/IGNITION KEYS W/KEYLESS REMOTE
- TILT STEERING COLUMN
- (2) RED/WHITE DOME LIGHTS
- CUP HOLDERS
- FRONT AND REAR TOW HOOKS
- RUBBER FLOOR MATS
- MUD FLAPS SHALL BE PROVIDED, BLACK AND DEVOID OF ALL ADVERTISING
- CHASSIS AND BODY UNDERCOATING

A CONTROL PANEL/CONSOLE SHALL BE INSTALLED BETWEEN THE TWO FRONT SEATS. INCORPORATED INTO THE CONSOLE SHALL BE A COOLING FAN, VENTS, AND TWO (2) 12-VOLT POWER OUTLETS. ALL COMPONENT SWITCHES SHALL BE LOCATED ON CONTROL PANEL.

ALL SWITCHES SHALL BE SEALED, LIGHTED PUSH TYPE, WITH SINGLE OR DUAL FUNCTIONS AS REQUIRED. THE SWITCHES SHALL HAVE LED INDICATORS TO INDICATE FUNCTION IS ON. ALL SWITCHES SHALL BE PROPERLY AND PERMANENTLY LABELED AS TO ITS FUNCTION.

LOCATED IN THE CAB SHALL BE A COMBINATION LOCKABLE STORAGE BOX THAT CAN STORE TWO OFFICER GUN BELTS. LOCATION SHALL BE DETERMINED AT PRECONSTRUCTION MEETING.

THE CONSOLE SHALL ALSO HAVE SPACE FOR FOUR PORT AUTHORITY RADIOS. VENDOR SHALL INSTALL ALL ANTENNAS REQUIRED.

6. FRONT BUMPER

A ONE (1) PIECE, 10" HIGH, STAINLESS STEEL BUMPER SHALL BE ATTACHED TO THE FRONT OF THE FRAME. A 9" CHANNEL SHALL BE MOUNTED DIRECTLY BEHIND THE BUMPER FOR ADDITIONAL STRENGTH. THE BUMPER SHALL BE EXTENDED APPROXIMATELY 20" FROM THE FRONT FACE OF THE CAB.

A GRAVEL PAN, CONSTRUCTED OF ALUMINUM TREADPLATE, SHALL BE FURNISHED BETWEEN THE BUMPER AND CAB FACE. THE GRAVEL PAN SHALL BE PROPERLY SUPPORTED FROM THE UNDERSIDE TO PREVENT FLEXING AND VIBRATION OF THE ALUMINUM TREADPLATE.

7. FIRE SYSTEMS

THE FIRE SUPPRESSION SYSTEM SHALL INCLUDE A COMPRESSED AIR FOAM SYSTEM (CAFS), A DRY CHEMICAL SYSTEM, AND A WATER SYSTEM.

WATER TANK:

THE WATER TANK SHALL BE POLYPROPYLENE PLASTIC, UNITED PLASTIC FABRICATION, INC. (UPF) OR APPROVED EQUAL, WITH A MINIMUM CAPACITY OF 200 GALLONS. THE TANK SHALL BE T-SHAPED TO PROVIDE FOR SIDE COMPARTMENTS. THE TANK SHALL INCLUDE BAFFLES WITH OPENINGS AT THE TOP AND BOTTOM TO ALLOW THE MOVEMENT OF AIR AND WATER BETWEEN COMPARTMENTS. ALL INTERIOR PARTITIONS SHALL INTERLOCK AND BE WELDED TO THE TANK BOTTOM AND SIDES. THE TANK SHALL BE CONSTRUCTED AND SUPPORTED TO ALLOW FOR FAST FILLING OPERATIONS.

THE TANK SHALL BE EQUIPPED WITH A SUMP AT THE BOTTOM, EQUIPPED WITH A DRAIN PLUG AND TANK OUTLET.

THE TANK SHALL BE INSTALLED IN A FABRICATED CRADLE ASSEMBLY CONSTRUCTED OF STRUCTURAL STEEL, PROPERLY SUPPORTED AT THE BOTTOM. THE TANK SHALL "FLOAT" IN THE CRADLE TO AVOID TORSIONAL STRESS CAUSED BY CHASSIS FRAME FLEXING. RUBBER CUSHIONS SHALL BE PLACED ON ALL HORIZONTAL SURFACES THAT THE TANK RESTS ON. STOPS OR OTHER PROVISIONS SHALL BE PROVIDED TO PREVENT THE EMPTY TANK FROM BOUNCING EXCESSIVELY WHILE IN TRANSIT.

MOUNTING SYSTEM SHALL BE APPROVED BY THE TANK MANUFACTURER.

INCLUDED SHALL BE TWO (2) 1,000-WATT STAINLESS STEEL IMMERSION HEATERS INSTALLED IN THE WATER TANK. EACH HEATER SHALL BE THERMOSTATICALLY CONTROLLED.

WATER LEVEL GAUGE:

AN ELECTRONIC MASTER WATER LEVEL GAUGE SHALL BE PROVIDED ON BOTH THE OPERATOR'S PANEL AND INSIDE THE CAB. WATER LEVELS SHALL BE INDICATED BY MEANS OF FIVE (5) DURABLE, ULTRA-BRIGHT LED LIGHTS. THE MASTER LEVEL GAUGE SHALL HAVE A LENS DESIGN THAT SHALL BE VIEWABLE THROUGH 180°. THE WATER LEVEL INDICATORS SHALL BE AS FOLLOWS:

- 100% - GREEN
- 75% - YELLOW
- 50% - YELLOW
- 25% - YELLOW
- REFILL - RED

THE LIGHT SHALL 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 SHALL FLASH SEQUENTIALLY WHEN THE WATER TANK IS EMPTY.

THE DISPLAY SHALL 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 SHALL PROVIDE COMPLETE PROTECTION FROM WATER AND ENVIRONMENTAL ELEMENTS. AN INDUSTRIAL PRESSURE TRANSDUCER SHALL BE MOUNTED TO THE OUTSIDE OF THE TANK. THE FIELD CALIBRATABLE DISPLAY MEASURES HEAD PRESSURE TO ACCURATELY SHOW THE TANK LEVEL.

FOAM TANK:

THE FOAM TANK SHALL BE AN INTEGRAL PORTION OF THE WATER TANK. THE CELL SHALL HAVE A CAPACITY OF 25 GALLONS OF FOAM. THE BRAND OF FOAM STORED IN THIS TANK SHALL BE TO BE DETERMINED AT PRECONSTRUCTION MEETING. THE FOAM CELL SHALL NOT REDUCE THE CAPACITY OF THE WATER TANK. THE FOAM CELL SHALL HAVE A SCREEN IN THE FILL DOME AND A BREATHER IN THE LID.

THE FOAM TANK SHALL HAVE A 1" DRAIN VALVE LOCATED IN THE PUMP COMPARTMENT ON THE PUMP PANEL.

FOAM LEVEL GAUGE:

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- 50% - YELLOW
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DRY CHEMICAL SYSTEM:

A DRY CHEMICAL SYSTEM SHALL BE PROVIDED WITH TWO DISCHARGE OUTLETS. THIS SYSTEM SHALL CONSIST OF AN AGENT CONTAINER WITH A CAPACITY OF 450 POUNDS OF DRY CHEMICAL (450 POUNDS OF ANSUL PURPLE K, ANSUL PART NUMBER 9335 INCLUDED), A 400 FT³ NITROGEN CYLINDER (NITROGEN INCLUDED), A REGULATOR FOR CHEMICAL PROPULSION, A DUAL AGENT ELECTRIC REWIND REEL WITH 100' OF HOSE (ONE FOR FOAM/WATER SOLUTION AND ONE FOR DRY CHEMICAL), A TWIN HANDLINE NOZZLE, AND A BUMPER TURRET.

MOUNTED ON THE HOSE REEL SHALL BE A WILLIAMS HYDRO-CHEM 7 LB/SEC DRY CHEMICAL FLOW RATE NOZZLE. THE NOZZLE SHALL BE CAPABLE OF DISCHARGING BOTH DRY CHEMICAL AND FOAM. THE NOZZLE SHALL BE 1" NST BASE THREAD. THE FLOW RATE SHALL BE 60 GPM @ 100 PSI.

TWO REMOTE ACTUATORS SHALL BE PROVIDED TO ACTIVATE THE DRY CHEMICAL SYSTEM. ONE SHALL BE INSTALLED IN THE CAB AND ONE AT THE REAR OF THE TRUCK NEAR THE HOSE REEL. GUARDS SHALL BE INSTALLED OVER THE ACTUATORS TO PREVENT ACCIDENTAL ACTIVATION. THE SYSTEM SHALL INCLUDE TWO ELECTRICALLY CONTROLLED VALVES; ONE SHALL CONTROL THE DISCHARGE OF THE CHEMICAL AGENT TO THE FRONT BUMPER TURRET AND ONE SHALL CONTROL AGENT DISCHARGE TO THE HOSE REEL. THE FRONT BUMPER DISCHARGE CONTROL SHALL BE INSTALLED IN THE CAB AND THE REEL CONTROL SHALL BE INSTALLED NEAR THE REEL.

THE SYSTEM SHALL BE INSTALLED IN THE AREA REARWARD OF THE WATER TANK BETWEEN THE BODY SIDE PANELS.

THE LOCATION OF THE NITROGEN CYLINDER SHALL BE DETERMINED AT THE PRE-CONSTRUCTION MEETING.

COMPRESSED AIR FOAM SYSTEM (CAFS):

AN ELECTRONIC DIRECT INJECTION FOAM SYSTEM SHALL BE PROVIDED TO PROPORTION FOAM CONCENTRATE INTO THE WATER STREAM. IT SHALL BE A DISCHARGE SIDE, FULLY AUTOMATIC, VARIABLE SPEED TYPE. THIS SYSTEM SHALL BE A SINGLE AGENT SYSTEM, CAPABLE OF HANDLING CLASS "A" OR "B" FOAM CONCENTRATES.

THE FOAM SYSTEM SHALL BE PIPED TO THREE (3) DISCHARGE OUTLETS; THE FRONT BUMPER TURRET AND TWO CROSSLAY HANDLINES.

THE FOAM PROPORTIONING SYSTEM OPERATION SHALL BE BASED ON WATER FLOW, AND REMAIN CONSISTENT WITHIN THE SPECIFIED FLOW AND PRESSURE. THE SYSTEM SHALL BE EQUIPPED WITH AN ELECTRONIC CONTROL DISPLAY ON THE PUMP PANEL. INCORPORATED WITHIN THE CONTROL DISPLAY SHALL BE A MICROPROCESSOR, WHICH RECEIVES INPUT FROM THE SYSTEM FLOW METER WHILE ALSO MONITORING THE FOAM CONCENTRATE PUMP OUTPUT. THE MICROPROCESSOR SHALL COMPARE THE VALUES OF THE WATER FLOW VERSUS THE FOAM FLOW, TO ENSURE THE PROPORTION RATE IS ACCURATE. A PADDLE WHEEL SHALL BE INSTALLED TO MONITOR ALL FOAM DISCHARGES.

FOAM PROPORTIONING RATES SHALL ALLOW RATIOS FROM 0.1% TO 3.0% IN 0.1% INCREMENTS. THE RATED CAPACITY OF THIS SYSTEM SHALL BE 166 GPM AT 3.0% AND 1000 GPM AT 0.5 %.