

SECTION II – DETAILED SPECIFICATIONS

EQUIPMENT and CLARIFICATIONS

QUESTIONS:

Questions regarding the specifications shall be submitted in writing to David Crawford, dcrawford@tompkins-co.org no later than **9:00 a.m., July 24, 2014**. Questions received after July 24, 2014 will not be entertained.

AWARD:

Please note that the items in this section may be awarded separately from the Aircraft Rescue and Fire Fighting Vehicle bid per Section I. In the event that a separate award is made, the vendor awarded the vehicle and the vendor awarded the equipment shall work together to ensure that all warranties remain valid.

CAB INTERIOR:

The cab shall have seats for three crewmembers complete with approved three point seat belts with automatic retractors (911 ABTS SCBA seats w/6 position riser).

A removable or retractable insert (cover) shall be installed in each crew seat position to cover the breathing apparatus bottle.

Provisions for storage of 8 spare 4.5 30min-carbon SCBA cylinders, location to be determined at pre-build.

HVAC:

A/C System capable of maintaining ambient temperature less 15° F, during high temperature conditions. The Air Conditioning system shall have a minimum rating of 40,000 BTU'S. Vents shall be ceiling mounted with directional air vents for each seated position for the cab crew personal.

The A/C system shall be driven from the vehicle engine.

Heater/defroster with 200 BTU output per cubic foot of cab space, with blower capacity per minute equal to cab volume, with fresh air intake, and with defroster ducts to the windshield shall be provided.

LIGHTING SYSTEM and GENERATOR:

Exterior lighting shall meet or exceed Federal Department of Transportation (DOT), Federal Motor Vehicle Safety Standards (FMVSS).

Two or more halogen headlights with upper and lower driving beam.
Tail lights/stop lights mounted on each side of the vehicle.

Rear Stop/Tail-Turn light clusters to be the following Whelen
Lightheads mounted in a Whelen Cast 4 housing

Two (2) Whelen 60R00XRR LED Stop/Tail Lights
Two (2) Whelen 60A00TAR Amber Populated Arrow Turn Signal
Two (2) Whelen 60J000CR Halogen back-up Light

Two (2) Whelen 60RooFRR Red Lighthouse

Front Turn Indicators are to be mounted on front of cab above headlight clusters.

Two (2) Whelen 60AooTAR Amber Populated Arrow Turn Signal with 6Eflange, One (1) Each Side.

Reflectors, markers, and clearance lights shall be furnished and installed in conformance with the applicable FMVSS.

Compartment lights, non-glare type, arranged to illuminate both sides of the engine and the interior of all access and storage compartments with an individual switch located in each compartment. All lights shall be totally sealed, non-serviceable, and plug in mounting.

Cab entrance step lights shall be totally sealed, non-serviceable, mounted on the inside top section of each step.

The rear step lights shall be totally sealed, non-serviceable and actuated by a switch in the cab.

Two additional backup lights installed at the rear of the vehicle.

A minimum of two- (2) lights for illumination of the top work deck area for re-servicing the water and foam tanks on the vehicle shall be provided.

The cab dome lights shall be selective between red and/or white illumination.

In addition to the normal vehicle headlight system, two (2) high intensity-driving lights shall be mounted under the front bumper. Lights shall be Hella 550 or equal. A dash-mounted switch shall operate the lights.

There shall be an illuminated license plate bracket mounted at the rear of the vehicle.

Two (2) red halogen gooseneck map lights, one mounted on each side of the dash, shall be provided. (Hella - Model 87141 or equal).

Two (2) halogen floodlights shall be mounted at the rear of the vehicle on the engine enclosure. Floodlights shall be activated automatically when the vehicle is placed in reverse.

A 10 kW (minimum capacity), 110/240 VAC, 60 Hz diesel powered generator, mounted on the vehicle in an enclosed compartment. The engine shall run at 1800 rpm to achieve the rated capacity to assure low noise output and longer unit life. The generator shall draw fuel from the vehicle's common fuel tank. The generator shall be in-cab remote start/stop controlled and also have a light that will indicate when it is running. The engine shall be equipped with glow plugs controlled from the dash panel to assure cold weather starting. The generator shall be equipped with a system that will shut down the unit in event of low engine oil pressure and/or high engine coolant temperature. A low oil pressure warning light and a high engine coolant temperature light, both with a lamp test capability shall be installed in the dash panel.

The following equipment shall be powered by the on-board generator, low voltage switch Controlled, for safety purposes, from the cab dash:

1. Two (2) 600 watt Magnifier wide angle flood lights mounted at the front of the vehicle above the windshield.
2. A Wilburt Night Scan shall be installed on the top of the vehicle with remote controls available from ground level. (Model NS15-5400M/DT)
A light raised indicator light shall be installed on the dash indicating the light tower is raised.
3. Two- (2) 120 volt AC, 20 amp duplex receptacles with one straight blade and one twist lock, one mounted on each side at the cab area complete with Hubbell weatherproof hinged covers. The electrical receptacles shall be wired to the GFCI circuit breaker box.
4. Holmatro hydraulic power unit (SR 40 electric 230v) with controls in or near hydraulic tools compartment.

The generator shall be wired to a breaker distribution panel. All wiring shall be a minimum of twelve- (12) gauge, stranded copper wire.

One (1) electric cord reels shall be provided with 200 feet of 12/3 SO meeting UL safety standards using safety yellow cord.

The cord reel shall be wired through a 20 amp, 120 volt circuit breaker and have a NEMA L5-15 twist lock at the end of the cable on the reel and receive its power from the generator.

The cord reel shall be mounted in compartment on vehicle. (To be discussed at prebuild)

The cord reel shall be a Hannay reel, equipped with a 12 VDC electric rewind motor, cord stop, and have provisions for a manual rewind. The power rewind switch shall be mounted adjacent to each cord reel.

All electric cord reels shall be provided with cord rollers.

EMERGENCY WARNING LIGHTS:

Alternating Head Lights - in high beams

Federal Signal Corp (4) Red Mod-Led -1F

1- LED mounted behind front wheel well both sides of truck on bodyline.

1- LED Mounted in front of rear wheel well on both sides of truck on bodyline.

47" 8 lamp code 3 arrowstick (1) AS-847-HS mounted on the rear truck either above or below the bumper

2) Tomar Model # 675B with red rectangular strobe lights/siren mounted on the inside of the headlights, but above front bumper

1) Code 3 550 Rotating Beacon 550M-Sus (red) mounted rear of fire truck on engine. Cover to be seen from rear and sides on corner.

1) Code 3 550 Rotating Beacon 550N-SW (Amber) mounted rear of fire truck on engine cover opposite of red, must be seen from 360 wired to a separate switch in cab marked rear amber.

Zone A Upper

Two (2) Whelen FT2CRCRP Mini Freedom Lightbars to be mounted one (1) each side of cab front. To be set at an angle for maximum light output, to have as little interference with ladder/water tower device as possible.

Zone B upper

To be covered by Zone A Upper and Zone C Upper lighthead.

Zone C upper

Two (2) Whelen S360 One (1) Red (S360DRP), one (1) Amber Super strobes to be placed on rear corners of apparatus body.

One (1) Whelen S360DAP Superstrobe Amber beacon will be mounted to meet FAA requirements.

Zone D upper

See Zone B upper

Lower Zone

Zone A Lower

Two (2) Whelen FT2CRCRP Mini Freedom Lightbars to be mounted on the front of the apparatus below the cab at the discretion of manufacturer for mounting place.

Zone B, C, D, Lower

Ten(10) Whelen 60RooRR Red L.E.D. lighthead with 6EFLANGE to be mounted five(5) each driver and passenger side of apparatus. Lighthead to be mounted at the discretion of the manufacturer in compliance with Ithaca Airport. Two(2) Rear of apparatus for a total of twelve(12) lighthead (see Stop, Tail, and Directional Section for other two(2) lighthead).

The emergency lighting described in items 34.1 through 34.6 shall be switched by means of 3-position switches and controlled by a master switch. The switch operation shall be off/master/on.

AIR HORNS/SIREN/P.A. SPEAKERS:

Two, (2) Grover air horns, Model AL1601 or equal shall be provided.

The air horns shall be mounted in such a position so that the trumpets will be in front of the vehicle's seated occupants.

The horn shall be mounted for optimum sound projection to the front of the vehicle with a control button or ring located at the steering wheel. Standard electric vehicle horn shall remain live at all times, dash-mounted switch to choose air horn or siren.

One (1) Whelen 295I-IFS1 100W "Hands Free" Electronic Siren.

One (1) Whelen SA122 FMP "Projector™" 100 Watt Speaker will be recessed under the front bumper in a location to be determined.

COMPARTMENTS:

All upper and lower firefighting, storage compartments shall be of dustproof and rainproof construction equipped with Robinson "Rollomatic" or Dover Technologies roller shutter doors with a bar type external latching mechanism.

All upper, storage and access compartments shall include a strap or tether, securely attached to the lower portion of the roll up doors, to aid in closing.

All upper and lower firefighting, storage and access compartments shall be vented, drained and have a matching key lock provided by the roll-up door manufacturer.

A compartment open warning system shall be provided with a cab dash mounted indicator light for all upper and lower firefighting, storage and access compartments.

PVC matting shall be provided in each compartment intended for storage or on any storage tray shall be provided.

The bottom outside of all-upper and lower firefighting, storage and access compartments to have stainless steel edge guard.

The two lower storage compartments on the right and left side of the vehicle shall be equipped with a height adjustable shelf, one shelf per compartment. Each shelf shall have a roll out tray intended for the storage of fire rescue equipment. (Total of 4 shelves and 4 roll out trays).

Four tubular type SCBA cylinder mounting (8 total) compartments; four mounted on each side of the vehicle shall be provided. Each compartment shall be lined with rubber.

All upper compartments will have roll-out tilt-down trays.

CONNECTIONS, PIPING, COUPLINGS AND VALVES:

The suction system shall be designed for efficient flow at the designed pumping rates. There shall be a drain at the lowest point with a valve(s) for draining all of the liquid from the pumping system when desired. Plumbing to the drains shall be heavy-duty braid hose for long service life.

Piping shall be stainless steel securely mounted and provided with flexible couplings in areas of stress. Victaulic type couplings shall be provided to facilitate removal of piping.

All valves should be of the quick opening type, which can be serviced in-line and be selected for ease of operation and freedom from leakage (Swing-Out type or equal).

All water system piping shall be tested on the suction side of pump for leakage. All water and AFFF solution discharge piping shall be tested for leakage at 1-1/2 times the system operating pressure.

A means of pressure regulation shall be provided that is adjustable to maintain working pressures from 0 to 300 psi at normal pumping rpm.

All flexible hoses subject to pump pressure excluding drain lines and pressure gauge connections shall be wire braid reinforced hose. For long life, minimum burst pressure shall be 1000 psi

An FAA Structural pump panel shall be supplied and shall include the following as a minimum:(Installed similar to attached photos)

An exterior recessed panel shall be located on the left side of the vehicle and be constructed of stainless steel or black vinyl aluminum to prevent marring. This panel shall contain the following:

- (1) 6" Pump Suction with 5" MNST Connection w/electric valve
- (1) 2.5"Water fill/drain connection with gauge and 1/4 turn bleeder
- (1) 1.5"Foam fill/drain connection
- (2) 2.5" Discharges with gauges and bleeders w/30 deg. Droops and drains
- (1) 2.0" Tank fill off discharge manifold for tank filling.

All controls for structural operation

Master water drain

Water/foam level gauge

Panel light

Manual Foam metering control

Oil pressure/water temp/fuel level gauges

All needed controls to operate and regulate right side discharges from the left side.

An exterior recessed panel shall be located on the right side of the vehicle and be constructed of stainless steel to prevent marring. This panel shall contain the following:

- (2) 2.5" Discharges with gauges and bleeders w/30 deg. Droops and drains
- 5" Discharge with MNST.

Water/foam level gauge

Panel light

THERMAL RELIEF VALVE:

The agent system shall be protected against pressure buildup due to heat caused by deadhead pumping.

CAMERA/MONITOR and FORWARD LOOKING INFRARED (FLIR):

FORWARD LOOKING INFRARED CAMERA (FLIR):

A.) FLIR:

The night vision subsystem shall be composed of a FLIR (Forward Looking Infrared) camera and display. The system shall not increase the workload stress of the vehicle operator. The FLIR camera must be operational, providing clear thermal images, within 30 seconds of vehicle startup. The system must be capable of allowing the driver to operate the vehicle safely under o/o visibility conditions. The camera shall be of the pan and tilt design with all available options and be mounted on a special frame above and behind the roof turret.

B.) DETECTION RANGE:

The camera must be able to detect debris, personnel and other wreckage that are within twenty (20) feet of a JET A fuel fire from a range of one-thousand (1000) feet. In addition, the FLIR shall be able to detect personnel under the following conditions. Ambient temperature -20 to 115° F, Humidity (%) 0 - 100 throughout all conditions.

<u>DISTANCE</u>	<u>SPEED (mph)</u>	<u>WEATHER</u>
500	50	LIGHT FOG
400	40	HEAVY FOG
400	40	SMOKE
300	35	RAIN

The FLIR must sense long wave (8-12 micron) band IR energy. The image shall not be adversely affected by high heat sources, e.g., fires within the scene. Output shall be industry standard such as RS-170.

C.) MOUNTING:

The FLIR camera shall be mounted on the forward section of the cab. The camera shall be housed in a weatherproof housing and shall produce an image usable for driving the vehicle. The mounting of the FLIR must not compromise the operation of the roof turret in any manner.

D.) CONTROLS:

Controls for the pan/tilt unit shall be mounted inside the driver's compartment, within easy reach of the driver and right seat crew person and shall have a means of displaying the direction of the FLIR line of sight.

E.) AUTOMATIC OPERATION:

The FLIR shall have an automatic gain and level controls. No operator intervention shall be required. The FLIR camera automatically activates upon starting the vehicle.

F.) FIELD OF VIEW:

The horizontal Field Of View (HFOV) shall be a minimum of 27°. The Vertical Field Of View (VFOV) shall be a minimum of 18°.

G.) DISPLAY:

The FLIR camera shall have a 10" monitor. Display screen images shall be visible in daylight conditions.

COLOR CAMERA

- A. A full color, high resolution, shock resistant, weatherproof camera of compact design shall be attached to the nozzle assembly. Camera will move in conjunction with nozzle motion to allow remote controlled positioning. The camera shall be fitted with a motor zoom control. An appropriate lens remote zoom control switch shall be accessible to the operator. A lightweight, compact LCD "flat screen" monitor 10" shall be provided for the operator's position. Monitor shall have a resolution of 719 x 234 with contrast, brightness, color and tint controls plus intensity positions for day, night or automatic settings. Video transmission shall be via cable carried. A camera heater shall be provided, if necessary, to prevent lens fogging. A selectable system shall be provided to allow viewing of two separate camera inputs on one monitor.
- B. When specified a larger format 10.4" [264mm] flat screen monitor of comparable quality and picture resolution.
- C. When simultaneous VCR recording capability is required, the VCR unit shall be ½" VHS format (or other specified format) and have the capability to record in 2-4-6 hour modes. A separate audio input shall be provided to simultaneously record radio conversations. Day, date and time encoding shall also be provided.

HAND LINES:

The vehicle shall be supplied with two handlines for the discharge of foam/water and one handline for the discharge of Dry Chemical as described below:

A preconnected hand line shall be provided for access from each side of the vehicle, complete with 250 ft. of 1-3/4 inch, with 1-1/2 inch couplings, double jacketed soft hose and Task Force Mid-Matic #HML-VPGI 125 GPM nozzles. These will be in the form of top side cross lay hose beds with a top diamond plate cover built into the first section behind the cab. The nozzles will be secured in cans at mid truck level on each side.

The nozzle shall be a pistol grip non-aspirating 125 GPM @ 100 PSI, which is automatically controlled by a pressure reducing system.

The handlines shall have an auto charge feature that will automatically charge the handline upon complete deployment of the hose from the hose bed.

A Dry Chemical reeled handline mounted with 150 feet of 1.00 booster hose. The flow of the handline shall be a minimum of 5 lbs. per second with the discharge being controlled prior to the nozzle by means at the compartment. The hose reel shall be equipped with a 12 VDC electric rewind motor with manual rewind provisions and rollers for hose deployment. A tension device should be installed to prevent the unreeling of the hose.

An override throttle control shall be provided for the initial charging of each pre-connected hose. (if applicable)

The flow of each Hand line shall be a minimum of 125 GPM with a working pressure of no more than 100 PSI.at 200'. The discharge being controlled prior to the nozzle by means in the cab and at the pre-connect with a safety interlock system that will only allow charging after all of the hose has been deployed.

The cab dash shall have an indicator light to advise when each hose is fully deployed from each compartment.

UNDER TRUCK NOZZLES:

Three(3) under truck nozzles shall be mounted under the truck and controlled from cab so as to protect the bottom of the vehicle and the inner sides of the wheels and tires with foam solution discharged in a spray pattern.

TREATING AND PAINTING:

All parts of the vehicle shall be cleaned; primed, puttied, water sanded, and painted the specified color with a lead and chromate free polyurethane paint.

After the vehicle components are completely painted, except for bright trim parts, the entire vehicle shall be assembled with proper corrosion barriers between all areas of differential metals that would promote corrosion.

The finished paint shall be free from "orange peel" (pebbly finish), runs, and other imperfections. The final finished shall be a clearcoat finish.

The cab shall match color Sikkens lime/yellow FLNA 6051.

Two vinyl reflective red stripes w/1/4" black outline will run the length of vehicle in a manner and location to be determined.

One 8" vinyl white stripe will run the length of the vehicle in a manner and location to be determined.

8" vinyl black lettering, in a font agreed upon in advance, depicting "ITHACA TOMPKINS REGIONAL AIRPORT" will be on both sides of vehicle.

A goldleaf vinyl Maltese cross will be on each cab door. Artwork will be provided and will be sized to fit door.

PRE-CONSTRUCTION CONFERENCE:

The successful supplier is required, prior to the start of manufacture, to hold a Pre-construction conference at an agreed upon time, day, at the Ithaca Tompkins Regional Airport, with the Airport Fire Rescue Division to finalize all details. At this conference the contractor shall furnish all blueprints, drawings, specifications and details of the unit to be manufactured and delivered. This conference will take place within 30 days of award. The scope of this meeting will be final locations of shelving and Blue Print layout, etc.

ON-SITE VISITS:

During the period of manufacture and production, the Airport shall make a maximum of two- (2) on-site visits to the plant for two- (2) personnel. These visits shall be for the purpose of observing and reviewing the manufacturing progress. The time and duration of each visit shall be agreed upon between the Fire Chief and the Contractor. It is anticipated that each on-site visit shall take two- (2) full days. Ithaca Tompkins Regional Airport shall incur and pay all cost for such visits including ground/air transportation, lodging and meals for these employees; such cost shall Not be included in the bid price.

Note: This inspection will be thorough and inclusive. A line by line comparison of the specification with the vehicle will be made. All phases of performance testing will be performed. The bidder will be responsible for providing adequate facilities for these tests as well as any hardware or hose needed for the tests.

WARRANTIES:

The Manufacturer's 60-month (minimum) Warranty on the vehicle which covers defective parts and/or components, improper design or choice of materials, parts and/or components, improper design or engineering and poor or improper workmanship or quality control techniques. Warranty shall cover the complete apparatus and shall include any and all cost for labor and parts or material that are required to correct any and all deficiencies.

It is not the intent of Ithaca Tompkins Regional Airport that the warranty apply to parts or components that could normally wear out within a one year period, such as, light bulbs, filters, brake linings, windshield wiper blades, etc. If a component manufacturer provides an independent warranty, which exceeds the 60-Month period, the component manufacturers warranty shall be effective.

If a component manufacturer does not provide a warranty equal in time to that specified, or which does not fully cover all cost, the contractor is solely responsible for bearing any additional cost or, labor for removal and installation. The manufacturer is responsible for contractual warranty repair or replacement service, and the reimbursement for salaries of all Ithaca Tompkins Regional Airport employees that may be engaged in performing warranty work at the request of the Contractor.

Within forty-eight (48) hours after receipt of a verbal or written notification by Ithaca Tompkins Regional Airport of warranty service is required. The contractor shall respond verbally, and immediately follow up by letter to Ithaca Tompkins Regional Airport with a statement of intent to show where and when the warranty service shall be accomplished.

In the event that there is no response or if the response exceeds forty-eight (48) hours, or if the response that is received is on time but is not acceptable to the Chief of the Ithaca Tompkins Regional Airport Fire Rescue Division, the Chief will provide for the required warranty service, and the total costs of all labor, parts, components, materials, and freight shall be reimbursed to Ithaca Tompkins Regional Airport by the Contractor within thirty (30) calendar days after the bill has been mailed to the Contractor.

All warranties shall begin upon acceptance of the unit by Ithaca Tompkins Regional Airport Fire Rescue Division.

The Contractor shall furnish to the Ithaca Tompkins Regional Airport all information and material necessary for mandatory revisions modifications as determined by the manufacturer.

Shoreline Connections:

The air and electrical connections will be discussed at pre-build conference.

Manuals to be delivered with the Vehicle:

- A. 2 factory service manuals
- B. 2 Parts manual, to include part numbers for ALL vehicle components.
- C. 1 Complete electrical schematic drawing
- D. 1 Lubrication chart
- E. 2 Operating manual
- F. 2 Complete sets of filters with locations of each filter.

SECTION III – AUXILIARY EQUIPMENT

AWARD:

Please note that the items in this section may be awarded separately from the Aircraft Rescue and Fire Fighting Vehicle bid per Section I and the items in Section II. In the event that a separate award is made, the vendor awarded the auxiliary equipment will work with the vendor awarded the vehicle and the vendor awarded the equipment to ensure that all warranties remain valid.

The bid for the Auxiliary Equipment shall be awarded in whole to the overall lowest responsible bidder.

The following auxiliary equipment shall be supplied with the vehicle (and mounted in a location agreed upon with the purchaser):

- 1 Set of chocks, rubber
- 2 Rope line, 1/2" dia., 50 foot length
- 2 8' fiberglass pike poles
- 2 Hand crash axe, rescue with sheath
- 1 Blanket, (12'X12') fire resistant furnished with a storage pouch
- 1 Cutter, bolt 24 inch
- 1 Crowbar, 36 inch
- 2 Rechargeable flashlight equipped with a spot beam shall be mounted in the cab, Streamlight Light Box, model SL40 or equal.
- 1 Hacksaw, heavy duty with spare blades
- 1 Medical kit, EMT type (Moore Medical #51961 or equal)
- 1 Pliers, side-cutting 9 inch (Snap-On or approved equal)
- 1 Pliers, slip joint 10 inch (Snap-On or approved equal)
- 1 Saw, Partner K1200 kit powered rescue complete with two 12 inch spare metal cutting blades, carrying case, goggles, fuel can
- 1 Screwdriver set, assorted sizes and blade types (Snap-On or approved equal)
- 1 Shears, sheet metal straight cut (Snap-On or approved equal)
- 1 Wrench, adjustable (Snap-On or approved equal)
- 1 Toolbox or canvas tool roll to hold all hand tools.
- 2 30" Halligan tools (Iowa American, model IAHT_30SS or approved equal); one piece construction.

- 1 Axe, rescue, large six pound serrated large non-wedge type head and fiberglass handle mounted on the vehicle.
- 10 Scott Air-Pak X3 SCBA with integrated PASS, fire ground communications enhancement with the AV-3000 HT facepiece, EPIC 3 Communications, "external" HUD, optimally positioned "buddy" lights, and CGA cylinder connection. 4500 psi 30-min carbon air cylinders.
- 10 Spare Scott 4500psi 30-min. carbon air cylinders with valve assemblies.
- 1 Hammer, 4 pound (Snap-On or approved equal)
- 1 Ladder, Little Giant 26 ft., mounted as approved
- 1 Ladder, 20' Duo Safety (two section) mounted as approved.
- 1 Air Hammer Rescue Kit (AJAX #911 RKM or equal)
- 1 FFAST Penetrating Nozzle w/standard carrying case, KK 1.50" ball valve (F140F), Double female 1.50" x 1.50"NST
- 4 2 1/2" spanner wrenches, 2 mounted on each side (Akron style 10 or equal).
- 2 Small STORTZ wrenches
- 2 Large STORTZ wrenches
- 8 50' lengths of 12/3 HD extension cord, w/ twist-lock ends.
- 2 20 lb Water mist fire extinguishers
- 2 20 lb Purple K fire extinguishers
- 1 16" Chain saw, gas (Cutters Edge model #CE-2071-RS-16 w/D-6 kit or equal)
- 1 Positive Pressure Ventilation (PPV) Fan (Super Vac Model #720G4H w/Honda motor option #GX-160)
- 2 Hand held Thermal Imaging Camera (Bullard Eclipse LD)
- 3 100' Core style Hydraulic reels (Holmatro DHR100C or equal)
- 1 Rescue Spreader (Holmatro 4240 or equal)
- 1 Rescue Cutters (Holmatro 4050 NCT or equal)
- 1 Mini Cutter (Holmatro CU4007 or equal)
- 1 Telescoping Rescue Ram (Holmatro 4340 or equal)

- 1 Telescoping Rescue Ram (Holmatro 4350 or equal)
- 1 Battery Powered Mobile Pump with spare battery and charging stations for both. (Holmatro SPU 16 BC or equal)
- 1 50' Core style Hydraulic hose (Holmatro or equal)

Additional adapters:

- 1 5" NSFHT to 5" stortz
- 1 5"-4" Stortz
- 1 2.50" gated "Y", NSFHT
- 1 2.50" to 1.50" gated "Y" NSFHT
- 3 2.50" NSFHT to 1.50" NSFHT
- 3 1.50" NSFHT to 1.50" NSFHT
- 1 5" stortz to gated siames 2.50" NSFHT
- 2 10', 5" NSFHT flexible suction line
- 1 5" NSFHT Low Level Strainers
- 1 5" NSFHT barrel strainer
- 1 5" Portable 5 way manifold w/4-2.5" NHM (Harrington # H400-50-50-25NH or equal)
- 1 5" NSFHT Hydrant adapter
- 1 50'-5" supply line
- 10 50'-3" double jacketed hose

EQUIPMENT AND RADIOS:

The following radios will be installed in a radio cluster within easy reach of the driver or crewmember:

- 1-Icom IC-A200m
 - 1-Motorola CDM 1550-LS (UHF 403-470Mhz)
 - 1-Motorola CDM 1250 (VHF 136-174Mhz)
 - 1-Motorola CDM 1250 (Low Band 42-50Mhz)
 - 1-Motorola XTL 2500 (800Mhz) with status head
- All radios will have aux. Speakers

BID FORM
 Ithaca Tompkins Regional Airport
 Aircraft Rescue and Fire Fighting (ARFF) Vehicle
RE-BID

The unit cost indicated below assumes all costs associated with procurement of one (1) Aircraft Rescue and Fire Fighting (ARFF) Vehicle as described within Section I of the preceding specifications including, but not limited to:

1. *Delivery of the vehicle within the specified timeframe indicated below;*
2. *Training of Airport personnel as required;*

Year	Make	Model	Bid Price	Delivery (in calendar days after approval to build is given by the Airport)

Bid Price Written in Words: _____

Total Cost Additional for Items Specified in Section II – Detailed Specifications – Equipment and Clarifications:

\$ _____

Total Cost Additional for Items Specified in Section III – Auxiliary Equipment:

\$ _____

Deviations

Please describe below any/all deviations to the specifications. Attach additional pages if needed.

Company Information

Company Name: _____

Contact Information: _____

Name, cell phone # (if applicable), email address