CITY OF GENEVA
GENEVA, ALABAMA

BID PACKAGE

BID NUMBER: 10-2024-01
BID TITLE: Structural Firefighting Turn-Out Gear

INVITATION TO BID

CITY OF GENEVA ALABAMA

Notice is hereby given to all interested parties that sealed bids will be received by the City of Geneva, Alabama 517 S. Commerce Street, Post Office Box 37, Geneva, Alabama 36340 until 10:00 A.M. local time October 4, 2024, for the purchase of the following:

BID NUMBER: 10-2024-01

BID TITLE: Structural Firefighting Turnout Gear

Bids will be opened in the City Council Room at the Geneva City Hall located at 517 S. Commerce Street, Geneva, Alabama 36340, October 4, 2024, at 10:00 A.M.

Specifications and General Conditions may be obtained from the City Clerk's office in City Hall between the hours of 8:00 A.M. and 5:00 P.M. Monday through Friday or online on the City's website at genevaal.gov.

All bids MUST be submitted in a sealed envelope marked:

SEALED BID and identified by the Bidder Name, Bid Number and Title along with the Date and Time of Opening

and delivered to the City of Geneva, Alabama, office of the City Clerk, P. O. Box 37, 517 S. Commerce Street, Geneva, Alabama, 36340.

The right is reserved as the interest of the City may require to reject any and all bids and to waive any informality in bids received.

_____

David B. Hayes, Mayor

GENERAL INSTRUCTIONS

BID NUMBER 10-2024-01

BID TITLE: Structural Firefighting Turnout Gear

GENERAL SCOPE: Structural Firefighting Gear

BIDS MUST BE RECEIVED BY: DATE: October 4, 2024 **TIME**: 10:00 A.M.

BIDS WILL BE RECEIVED AT:
Office of the City Clerk
The City of Geneva
City Hall
517 S. Commerce Street
Post Office Box 37
Geneva, Alabama 36340

BIDS WILL BE OPENED: **DATE**: October 4, 2024 **TIME**: 10:00 A.M.

BIDS WILL BE OPENED AT:
City of Geneva, City Hall
Council Room
517 S. Commerce Street
Geneva, Alabama 36340

GENERAL INSTRUCTIONS TO BIDDERS:

1. These documents constitute the complete set of specification requirements and bid forms. The Bid proposal, including all bid sheets and attachments, must be filled in, executed and submitted in a sealed envelope and mailed or delivered to the office of the City Clerk on or before the specified time and date. The face of the envelope must contain the Bidder's name, the Bid Number and Title and the date and time of the bid opening.

2. It is the sole responsibility of the bidder to ensure that his or her bid reaches the Office of the City Clerk on or before the closing date and time. The City of Geneva shall in no way be responsible for delays caused by any other occurrence. Offers by telephone, email, telegram or facsimile will not be accepted.

3. All bids must be typewritten or written in ink, and must be signed in ink by an officer or employee having authority to bind the company or firm. Bid must contain an original, manual signature of the authorized representative.

4. Bids must be delivered to the City of Geneva, Alabama, office of the City Clerk, P. O. Box 37

or 517 S. Commerce Street, Geneva, Alabama, 36340. Bids will not be accepted if submitted to any other addresses.

5. Once received bids will not be returned to a bidder. Any bidder wishing to modify their bid after submittal should submit a separated bid modification under the same terms of submittal as the original bid. Bids that have not be submitted may be modified by writing any addition or decoctions on the outside of the original bid envelope and must be signed by an authorized official of the company.

6. Bidders will not be allowed to modify their bids after the opening time and date. Bid files may be examined during normal working hours, after bid opening, by appointment only.

7. All bids received will be publicly opened in the City of Geneva Council room, 517 S. Commerce Street, Geneva, Alabama 36340. All bidders or their representatives are invited to be present.

8. All prices bid must remain in effect for a minimum of ninety (90) days.

9. All prices quoted are to be F.O.B. Geneva, Alabama, to the location designated.

10. For information concerning this bid please contact:

Ben Latimer
Fire Chief
334/726-4697

GENERAL CONDITIONS

BID NUMBER 10-2024-01

BID TITLE: Structural Firefighting Turnout Gear

This invitation to bid contemplates the furnishing of fifteen (15) sets of new structural firefighting turnout gear to include coat, pant, helmet, boots, gloves and hood to the City of Geneva, Alabama – Geneva Fire Department. Purchase will be for 15 (fifteen) of each of the items specified.

Equipment must meet or exceed the specification noted within. Unless otherwise specified, the mention of the particular manufacture's brand name or number in the specifications does not imply that this particular product is the only one that will be considered for purchase.

Equipment bid must meet current edition of NFPA 1971 and OSHA for structural fire fighters protective clothing.

Delivery shall be made to the Geneva Fire Department, 612 E Magnolia Avenue, Geneva, Alabama, Monday through Friday between the hours of 8:00 a.m. and 3:30 p.m. Delivery shall be made within 60 days of notification of award of bid. Freight is the responsibility of the seller. Successful bidder shall be required to provide onsite sizing/fit for coat, pant and boot at the Geneva Fire Station 612 E. Magnolia Avenue, Geneva, Alabama.

Warranty shall include the standard manufacturer's warranty.

LEGAL REQUIREMENTS:

Bidders are required to comply with all provisions of Federal, State and City codes and ordinances, rules and regulations, which are applicable to the item(s) being bid. Lack of knowledge by the bidder shall in no way be a cause for relief from responsibility, or constitute a cognizable defense against the legal effect thereof.

STATE TAXES

The City of Geneva is exempt from State taxes for tangible personal property. The City Clerk will supply the successful bidder with an exemption letter, if required.

W-9

The successful bidder will be required to complete a W-9 form prior to issuance of a contract.

E-VERIFY

Successful bidder must comply with the Beason-Hammon Alabama Taxpayer and Citizen Protection Act. A complete copy of that MOU must be submitted to the City by all successful

bidders confirming enrollment in the E-Verify program. Successful bidder is also responsible for requiring and submitting to the City MOUs from any subcontractors.

ALTERNATIVES/APPROVED EQUAL DEVIATIONS:

Unless otherwise specified, the mention of a particular manufacturer's brand name, catalog number, etc., in the specifications does not imply that this particular product is the only one that will be considered for purchase. This reference is intended solely to designate the type or quality of merchandise that will be acceptable. Alternate offers will be considered and must include descriptive literature and/or specifications. Failure to provide descriptive literature and/or specifications with alternate offers may be cause for disqualification of the bid. The determination as to whether any alternate product or service is or is not equal shall be made by the Geneva City Council and such determination shall be final and binding upon all bidders.

Although the City of Geneva provides for the consideration of alternate bids, it reserves the right to make an award in the best interest of the City. Such award may not necessarily be given to the lowest bid offered.

The bidder shall be responsible for reading very carefully, and understanding completely, the requirements and the specifications of the items bid upon. Any deviation from specifications listed herein must be clearly indicated, otherwise it will be considered that items offered are in strict compliance with these specifications, and the successful bidder will be held responsible therefore; deviations must be explained in detail or on an attached sheet(s) and itemized by number. Any item or items that do not meet the City of Geneva's specifications upon delivery will not be accepted and if the item cannot be brought up to specifications in a reasonable time, the bidder will be required to compensate the City for differences in price entailed in going to the next low bidder.

ACCEPTANCE/REJECTION:

1. The City of Geneva reserves the right to accept or to reject any or all bids. Contracts will be awarded to the lowest responsible bidder, who in the opinion of the City, will be in the best interest of and/or the most advantageous to the City and conforms to the invitation for bid, prices and other factors considered. The City also reserves the right to reject the bid of any vendor who has previously failed in the proper performance of an award or to deliver on time contracts of a similar nature or who is not in a position to perform properly under this award. The City of Geneva reserves the right to waive any irregularities and technicalities and may, at its discretion, request a re-bid.

2. Factors to be considered in awarding bids will be delivery date, price and suitability for use by the City of Geneva.

3. The City of Geneva reserves the right to make null and void the purchase order with the successful bidder if delivery cannot be made at the specified time.

SPECIFICATIONS

BID NUMBER: 10-2024-01 BID NAME: Structural Firefighting Gear

All items shall meet/exceed current edition of NFPA 1971 and OSHA for structural fire fighters protective clothing.

Unless otherwise specified, the mention of a particular manufacturer's brand name, catalog number, etc., in the specifications does not imply that this particular product is the only one that will be considered for purchase. This reference is intended solely to designate the type or quality of merchandise that will be acceptable. Alternate offers will be considered and must include descriptive literature and/or specifications. Failure to provide descriptive literature and/or specifications with alternate offers may be cause for disqualification of the bid. The determination as to whether any alternate product or service is or is not equal shall be made by the Geneva City Council and such determination shall be final and binding upon all bidders.

Please note any exceptions below each description and enclose information regarding the alternate being offered to each exception.

Bidder is requested to bid a style of gear designed with firefighter fatigue, comfort and range of motion in mind to allow firefighter to work with as little binding as possible, thereby reducing fatigue.

JACKETS AND PANTS:

OUTER SHELL MATERIAL - JACKETS AND PANTS

The **"PBI GEMINI® XT MATRIX™" (a.k.a. PBI® XT)** outer shell, trade name Gemini XT shall be manufactured by TENCATE and constructed of 60/40 Kevlar®/PBI™ modified plain weave outer shell fabric featuring a patented high-tech grid of composite filament & spun yarns in a "Matrix Technology" with an approximate weight of 7.5 oz. per square yard. The shell material must be treated with a durable water-repellent finish that offers resistance to liquid absorption. Color of the garments shall be gold.

_____Comply _____Exception

THERMAL INSULATING LINER - JACKET AND PANTS

The thermal liner shall be constructed of 7.4 oz. per square yard Safety Components **GLIDE ICE™ 2L-E89;** one layer of 1.5 oz. and one layer of 2.3 oz. per square yard E-89™ spun laced Nomex®/Kevlar® aramid blend, quilt stitched to a 60% Nomex® Filament/40% Nomex®/Lenzing spun yarn Face Cloth . A pocket, constructed of thermal liner over-edged to a layer of moisture barrier material, shall be affixed to the inside of the jacket thermal liner on the left side by means of a single needle stitch. The thermal liner shall be sewn to the moisture barrier and shall be independently bound around its perimeter. This provides superior abrasion resistance to the less expensive, less durable "stitch and turn" method. Further mention of "Thermal Liner" in this specification shall refer to this section.

_____Comply _____Exception

MOISTURE BARRIER - JACKETS AND PANTS

The moisture barrier material shall be STEDFAST "**STEDAIR® 3000"** ePTFE moisture barrier is engineered using an E-89™ substrate and BHA Technologies ePTFE membrane. The Stedair bi-component ePTFE membrane is a combination of microporous and monolithic technologies. The moisture barrier material shall meet all moisture barrier requirements of NFPA 1971, which includes water penetration resistance, viral penetration resistance and common chemical penetration resistance. The moisture barrier shall be sewn to the thermal liner at the edges only and bound with bias-cut neoprene-coated cotton/polyester binding. Further mention of "Specified Moisture Barrier" in this specification shall refer to this section.

_____Comply _____Exception

SEALED MOISTURE BARRIER SEAMS

All moisture barrier seams shall be sealed with a minimum 1 inch wide sealing tape. One side of the tape shall be coated with a heat activated glue adhesive. The adhesive side of the tape shall be oriented toward the moisture barrier seam. The adhesive shall be activated by heat and the sealing tape shall be applied to the moisture barrier seams by means of pressure exerted by rollers for that purpose.

_____Comply _____Exception

METHOD OF THERMAL LINER/MOISTURE BARRIER ATTACHMENT FOR JACKETS AND PANTS

One strip of 5/8 inch wide FR hook and loop fastener tape shall secure the moisture barrier system to the shell. In addition, a minimum of 6 snap fasteners shall secure the thermal liner/moisture barrier to the outer shell along the length of the neckline under the topmost collar (see Collar section). The topmost collar shall be turned under and finished such that the snaps on the collar shall not be able to contact the wearers skin. Snaps shall be protected from exterior heat by moisture barrier fabric. The remainder of the thermal liner/moisture barrier shall be secured with snap fasteners appropriately spaced on each jacket facing and snap fasteners at each sleeve end.

The thermal liner and moisture barrier shall be completely removable from the pant shell. Nine snap fasteners shall be spaced along the waistband to secure the thermal liner to the shell. The legs of the thermal liner/moisture barrier shall be secured to the shell by means of Ara-Shield® snap fasteners, 2 per leg. The Ara-shield® snap tabs shall be color coded to a corresponding color-coded snap tabs in the liner for ease of matching the liner system to the outer shell after inspection or cleaning is completed.

_____Comply _____Exception

THERMAL PROTECTIVE PERFORMANCE

The assembled garment, consisting of an outer shell, moisture barrier, and thermal liner, shall exhibit a TPP (Thermal Protective Performance) rating of not less than 35.

_____Comply _____Exception

STITCHING

The outer shell shall be assembled using stitch type #301, #401, #514 and #516. The thermal liners and moisture barriers shall be assembled using stitch type #301, #401, #504, #514, and #516. Major A outer shell structural seams, major B structural liner seams and shall have a minimum of 8 to 10 stitches per inch. All Major A seams shall be sewn with ball point needles only. All seams shall be continuously stitched only.

_____Comply _____Exception

JACKET CONSTRUCTION

BODY

The body of the shell and AXTION® liner system shall be constructed of three separate panels consisting of two front panels and one back panel. The body panels shall be shaped so as to provide a tailored fit thereby enhancing body movement and shall be joined together by double stitching with Nomex® thread.

_____Comply _____Exception

LOGOS

The garment brand shall be identified by means of FR Nomex thread embroidery on the top of the left collar denoting the manufacturer.

_____Comply _____Exception

DRAG RESCUE DEVICE (DRD)

A Firefighter Drag Rescue Device (DRD) shall be installed in each jacket. The ends of a 1-inch-wide strap, constructed of Kevlar®, shall be sewn together to form a continuous loop. The strap shall be installed in the jacket between the liner system and outer shell such that when properly installed shall loop around each arm. The strap shall be accessed through a portal between the shoulders on the upper back where it is secured in place by an FR strap. The DRD shall be removable for laundering. The access port shall be covered by an outside flap of shell material, designed to fit between the shoulder straps of an SCBA. The flap shall have a NFPA-compliant 3M Scotchlite™ reflective logo patch sewn to the outside to clearly identify the feature as the DRD (Drag Rescue Device). The DRD shall not extend beyond the outside flap. This device provides a quickly deployed means of rescuing a downed firefighter. Flimsy, rope-style DRD straps shall not be considered.

_____Comply _____Exception

LINER ACCESS OPENING - JACKET

The thermal liner and moisture barrier shall be completely removable from the jacket shell. One strip of ⅝ inch wide FR hook and loop fastener tape shall secure the thermal liner/moisture barrier to the outer shell along the length of the neckline under the collar. A minimum of 6 snap fasteners, to minimize gaps, shall secure the thermal liner/moisture barrier to the outer shell along the length of the neckline under the collar. This opening shall run

the full length of the collar for the purpose of inspecting the inner surfaces of the jacket liner system. The remainder of the thermal liner/moisture barrier shall be secured with a minimum of four snap fasteners appropriately spaced on each jacket facing and four Ara-Shield® snap fasteners at each sleeve end. The outside perimeter of the AXTION® liner moisture barrier and thermal liner layers shall be bound together along the side and bottom edges with a bias-cut Neoprene coated cotton/polyester binding for a finished appearance that prevents fraying and wicking of contaminants. Stitching used to secure the thermal liner and moisture barrier in place of the Neoprene shall not be considered since stitching is not able to provide the same level of abrasion resistance.

_____Comply _____Exception

SIZING

The jacket length shall be measured from the juncture of the collar and back panel to the hem of the jacket and shall measure 32 inches long. The jacket shall be available in even size chest measurements of two-inch increments and shall range from a small size of 30 to a large size of 68. Generalized sizing, such as small, medium, large, etc., shall not be considered acceptable. Sizing specifically for women shall also be available.

_____Comply _____Exception

RETROREFLECTIVE FLUORESCENT TRIM

The retroreflective fluorescent trim shall be red/orange 3M Scotchlite™ Triple Trim (R/O borders with silver center). Each jacket shall have an adequate amount of retroreflective fluorescent trim affixed to the outside of the outer shell to meet the requirements of NFPA #1971 and OSHA.

The trim shall be in the following widths and shall be **NFPA Basic style**; 3-inch-wide stripes - around the bottom of the jacket within approximately 1 inch of the hem and around the back and chest area approximately 3 inches below the armpit, around each sleeve below the elbow.

_____Comply _____Exception

REINFORCED TRIM STITCHING

All sewn on reflective trim is secured to the outer shell with Nomex® thread, using a locking chainstitch protected by our exclusive TrimTrax® system. Developed exclusively by Globe Manufacturing Co., LLC. this strip of 3/32-inch strong, durable, flame-resistant black Kevlar® cording provides a bed for the stitching along each edge of the retroreflective fluorescent trim surface and affords extra protection for the thread from abrasion. TrimTrax® has been proven to be 5 to 7 times more durable than single or even double rows of stitching, significantly reducing maintenance costs and providing more value and a longer service life. Two rows of stitching used to attach the trim in place of the TrimTrax® shall be considered an unacceptable alternative, since it has been proven that the two rows of stitching have insignificant impact on wear life. All trim ends shall be securely sewn into a seam for a clean finished appearance.

_____Comply _____Exception

SEWN ON RETROREFLECTIVE LETTERING

Each jacket shall have 3" red/orange 3M Scotchlite™ lettering on Row A straight reading: GFD

_____Comply _____Exception

COLLAR & FREE HANGING THROAT TAB

The collar shall consist of a minimum four-layer construction and be of one-piece design. There shall be two layers of a moisture barrier material sandwiched in between (see Moisture Barrier section) two layers of outer shell fabric.. The forward inside ply of moisture barrier shall be sewn to the inside of the collar at the edges only. The multi layered configuration shall provide protection from water and other hazardous elements, while maintaining thermal protection. The collar shall be a minimum of 3 inches high and graded to size. The leading edges of the collar shall extend up evenly from the leading edges of the jacket front body panels so that no gap occurs at the throat area. The collar's back layers of outershell and moisture barrier shall be joined to the body panels with a minimum of two rows of stitching. Inside the collar, above the rear seam where the collar moisture barrier is joined to the shell, there shall be a full strip of ⅝ inch wide FR hook fastener tape running the full length of the collar on the moisture barrier, and a corresponding piece of ⅝ inch wide FR loop fastener tape running the full length of the collar on the outer shell. The collar 's inside outershell and moisture barrier layer shall have 6 snap fasteners (minimum) on the lower edge of the collar. There shall be a series of corresponding snap fasteners on the thermal liner to engage the snaps on the collar, thus enclosing the liner access opening under the shell collar. These snaps shall be installed such that they do not penetrate from the outer shell through to the inner layers. The top of the thermal liner and moisture barrier shall be sandwiched between the underside of the top collar shell fabric and moisture barrier material, and the bottom collar shell fabric and moisture barrier material so as to reduce the possibility of liner detachment while donning and doffing.

A self-material fabric hanger loop shall be sewn at the top of collar.

The throat tab shall be a minimum of 4 layers, of scoop type design and constructed of two plies of outer shell material with two center plies of moisture barrier material. The throat tab shall measure not less than 3½ inches wide at the center tapering to 1½ inches at each end with a total length of approximately 8½ inches. The throat tab shall be attached to the right side of the collar by a 1 inch wide by 1½ inch long piece of Nomex® twill webbing. The throat tab shall be secured in the closed and stowed position with FR hook and loop fastener tape. The FR hook and loop fastener tape shall be oriented to prevent exposure to the environment when the throat tab is in the closed position. A 1½ inch by 3 inch piece of FR loop fastener tape shall be sewn horizontally to the inside leading end of the throat tab and a 1 inch by 3 inch piece of FR hook fastener tape shall be sewn horizontally towards the opposite end of the throat tab. A corresponding piece of FR hook fastener tape measuring 1½ inches by 3 inches shall be sewn horizontally to the leading outside edge of the collar on the left side, for attachment and adjustment when in the closed position and wearing a breathing apparatus mask. The collar closure strap shall fold in half for storage with the FR loop fastener tape engaging the FR hook fastener tape.

_____Comply _____Exception

JACKET FRONT

The jacket shall incorporate separate facings to ensure there is no interruption in thermal or moisture protection in the front closure area. The facings shall measure approximately 2½ inches wide, extend from collar to hem, and be double stitched to the underside of the outer shell at the leading edges of the front body panels. A breathable moisture barrier material shall be sewn to the jacket facings and configured such that it is sandwiched between the jacket facing and the inside of the respective body panel. The breathable film side shall face inward to protect it. There shall be wicking barrier constructed of a moisture barrier material installed on the front closure system on the left and right side directly below the front facings to ensure continuous protection and overlap. The wicking barrier shall extend no more than a maximum of ¾ inch beyond the inner facing and false facing shall be unacceptable. The thermal liner and moisture barrier assembly shall be attached to the jacket facings by means of snap fasteners.

_____Comply _____Exception

STORM FLAP

A rectangular storm flap measuring approximately 3 inches (6 inches for hook and dee inside/FR hook and loop fastener tape outside closure; aka #7C) wide and a minimum of 23 inches long (based on a 32-inch length jacket) shall be centered over the left and right body panels to ensure there is no interruption in thermal or moisture protection in the front of the jacket. The outside storm flap shall be constructed of two plies of outer shell material with a center ply of breathable moisture barrier material. The outside storm flap shall be double stitched to the right-side body panel and shall be reinforced at the top and bottom with backtacks.

_____Comply _____Exception

STORM FLAP AND JACKET FRONT CLOSURE SYSTEM

The jacket shall be closed by means of a 22-inch size #10 heavy duty high-temp smooth-gliding resin zipper on the jacket fronts and FR hook and loop fastener tape on the storm flap. The teeth of the zipper shall be mounted on black Nomex® tape and shall be sewn into the respective jacket fronts. The storm flap shall close over the left and right jacket body panels and shall be secured with FR hook and loop fastener tape. A 1½ inch by 23-inch piece of FR loop fastener tape shall be installed along the leading edge of the storm flap on the underside with four rows of stitching. A corresponding 1½ inch by 23-inch piece of FR hook fastener tape shall be sewn with four rows of stitching to the front body panel and positioned to engage the loop fastener tape when the storm flap is closed over the front of the jacket.

_____Comply _____Exception

DUAL ACTION POCKETS

Each jacket shall be equipped with two pockets: one on the left side and one on the right side. The pockets shall be located at the bottom of the jacket near the storm flap and be double stitched to the respective body panels. Retroreflective trim shall run over the bottom of the pockets so as not to interrupt the trim stripe. The lower pocket corners shall be stitched in such a way that a small diagonal opening is left for complete water drainage. *The lower half of the pocket shall be reinforced with a layer of Kevlar® material on the inside.* The

pockets shall measure approximately 9 inches wide by 9 inches high and be accessed from the top. Each pocket shall be constructed with two pleats installed vertically for the full height of the pocket to provide expansion capability. The pocket flaps shall be rectangular in shape, constructed of two layers of outer shell material, and shall measure approximately 3 inches deep and ½ inch wider than the pocket. A piece of 1½ inch by 3-inch FR hook and loop fastener tape shall secure each flap in the closed position. The upper pocket corners and pocket flaps shall be reinforced with backtacks.

_____Comply _____Exception

SLEEVES

The sleeves shall be of two-panel construction, contoured, drop shoulder design. The outer and under sleeve panels shall be double stitched together with Nomex® thread. The sleeves shall be contoured (curved) to follow the natural shape of the human arm unlike straight, tubular sleeve configurations. The drop shoulder design, along with the contoured sleeves shall provide for a high degree of uninhibited arm and shoulder movement. The same contoured, drop shoulder design shall be used in all layers of the garment (shell, moisture barrier, and thermal liner).

_____Comply _____Exception

SLEEVE CUFF REINFORCEMENTS

The sleeve cuffs shall be reinforced with grey suede leather. The cuff reinforcements shall not be less than 2 inch in width and folded in half, approximately one half inside and one half outside the sleeve end for greater strength and abrasion resistance. The cuff reinforcement shall be double stitched to the sleeve end; a single row of stitching shall be considered unacceptable. This independent cuff provides an additional layer of protection as compared to a turned and stitched cuff. Jackets finished with a turned and stitched cuff do not provide the same level of abrasion resistance and shall be considered unacceptable.

_____Comply _____Exception

WRISTLETS / SLEEVE WELLS

Each jacket shall be equipped with **Nomex® hand and wrist guards** (over the hand) not less than 7 inches in length and of double thickness. A separate thumbhole with an approximate diameter of 2 inches shall be recessed approximately 1 inch from the leading edge. Nomex® knit is constructed of 96% Nomex® and 4% Spandex for shape retention. The color of the wristlets shall be white.

The wristlets shall be sewn to flame resistant neoprene coated cotton/polyester material, which in turn shall be sewn to the inside of the sleeve shell approximately five inches from the sleeve cuff. This sleeve well configuration serves to prevent water and other hazardous elements from entering the sleeves when the arms are raised. The neoprene material shall also line the inside of the sleeve shell from the cuff to a point approximately five inches up, where it joins the sleeve well and is double stitched to the shell. Four Ara-shield® snap tabs shall be sewn into the juncture of the sleeve well and wristlet. The tabs shall be spaced equidistant from each other and shall be fitted with female snap fasteners to accommodate corresponding male snaps in the liner sleeves. One of the Ara-shield® snap tabs shall be a different color in the liner to correspond with color coded snap tabs

for ease of matching the liner system to the outer shell after inspection or cleaning is completed. This configuration shall ensure there is no interruption in protection between the sleeve liner and wristlet.

_____Comply _____Exception

LINER SHOULDER THERMAL ENHANCEMENT

A minimum of one additional layer of thermal liner material shall be used to increase thermal insulation in the shoulder area of the liner system. This thermal enhancement layer shall drape over the top of each shoulder extending from the collar to the sleeve/shoulder seam, down the front a minimum 2 inches from the juncture of the collar down the back to a depth of a minimum of 2 inches to provide greater CCHR protection in this high compression area. The thermal enhancement layer shall have finished edges by means of overedging. Raw or unfinished edges shall be considered unacceptable. Thermal scraps shall not be substituted for full-cut fabric padding. Smaller CCHR reinforcements shall not be considered acceptable since they provide far less area of coverage.

_____Comply _____Exception

RADIO POCKET

Each jacket shall have a pocket designed for the storage of a portable radio. This pocket shall be of box type construction, double stitched to the jacket and shall have one drainage eyelet in the bottom of the pocket. The pocket flap shall be constructed of two layers of outer shell material measuring approximately 3 inches longer than the depth of the pocket and ¼ inch wider than the pocket. The pocket flap shall be closed by means of FR hook and loop fastener tape. A 1½ inch by 3-inch piece of FR hook fastener tape shall be installed on the inside of the pocket flap beginning at the center of the bottom of the flap. A 1½ inch by 3-inch piece of FR loop fastener tape shall be installed horizontally on the outside of the pocket near the top center and positioned to engage the hook fastener tape. In addition, the entire inside of the pocket shall be lined with neoprene coated cotton/polyester material to ensure that the radio is protected from the elements. The impermeable barrier material shall also be sandwiched between the two layers of outer shell material in the pocket flap for added protection. The radio pocket shall measure approximately 3 inches deep by 3.5 inches wide by 9 inches high and shall be installed on the left chest.

_____Comply _____Exception

MICROPHONE STRAPS

A strap shall be constructed to hold a microphone for a portable radio. They shall be sewn to the jacket at the ends only. The size of the microphone straps shall be 1 inch x 3 inches. The microphone straps shall be mounted above the radio pocket and shall and flashlight holder and shall be constructed of double layer outer shell material.

_____Comply _____Exception

SUNLANCE FLASHLIGHT HOLDER

Each jacket shall be equipped with two specially configured straps to hold a "Sunlance" flashlight. The top strap shall measure approximately 1 inch high and 3 inches wide and shall accommodate the clip portion of the flashlight. The lower strap shall measure approximately 2½ inches high and 9 inches wide and shall hold the barrel of the flashlight. The lower strap shall be equipped with a 1½ inch by 2½ inch FR hook and loop fastener tape closure at the front of the strap to facilitate easy removal of the flashlight. There shall be approximately ¾ inch between the upper and lower strap. The "Sunlance" flashlight holder shall be sewn to the jacket on the right chest.

_____Comply _____Exception

PANT CONSTRUCTION

BODY

The body of the shell shall be constructed of four separate body panels consisting of two front panels and two back panels. The body panels shall be shaped to provide a tailored fit, thereby enhancing body movement, and shall be joined together by double stitching with Nomex® thread. The body panels and seam lengths shall be graded to size to assure accurate fit in a broad range of sizes.

_____Comply _____Exception

LINER ACCESS OPENING (PANT)

The thermal liner and moisture barrier layers of the pant liner system shall be constructed in such a way as to allow an access opening for interior inspection, service and replacement. The thermal liner and moisture barrier layers shall be stitched together for security and prevention of inadvertent use of one layer without the other. The liner system shall be reinforced at the base of the crotch by means of a strip of additional material measuring approximately ¾ inches wide by 3 inches long. This reinforcing material shall be secured by the binding tape at the bottom of the fly opening, straddling the crotch seam. This reinforcement shall serve to prevent the liner from tearing in this high stress area, because of the constant donning and doffing of the pants.

The liner system of the pant shall incorporate an opening along the back of the waistline for ease in inspecting the inner layers and to facilitate performing the complete Liner Inspection. The thermal liner and moisture barrier shall be individually bound with a neoprene coated bias cut tape and joined together on each of the front panels, along the waistband from the front fly opening to side seam. The back of the liner system shall be allowed to remain open with two snaps on either side of the back seam to attach the moisture barrier layer to the thermal liner layer. As described previously, the pant thermal layer system snaps directly to the independent waistband by means of nine snap fasteners. There shall be no hook and loop used to close the liner access opening.

_____Comply _____Exception

SIZING

The pants shall be available in even size waist measurements of two-inch increments and shall be available in a range of sizes from 24 to 68. The pant inseam measurement shall be available in two-inch increments. Generalized sizing, such as small, medium, large, etc., shall not be considered acceptable. Sizing specifically for women shall also be available.

_____Comply _____Exception

RETROREFLECTIVE FLUORESCENT TRIM

The pants shall have a stripe of retroreflective fluorescent trim encircling each leg below the knee to comply with the requirements of NFPA #1971 in 3 inch red/orange 3M Scotchlite™ Triple Trim (R/O borders with silver center). Bottom of trim band shall be located approximately 3" above cuff.

_____Comply _____Exception

REINFORCED TRIM STITCHING

All sewn on reflective trim is secured to the outer shell with Nomex® thread, using a locking chainstitch protected by our exclusive TrimTrax® system. Developed exclusively by Globe Manufacturing Co., LLC. this strip of 3/32-inch strong, durable, flame-resistant black Kevlar® cording provides a bed for the stitching along each edge of the retroreflective fluorescent trim surface and affords extra protection for the thread from abrasion. TrimTrax® has been proven to be 5 to 7 times more durable than single or even double rows of stitching, significantly reducing maintenance costs and providing more value and a longer service life. Two rows of stitching used to attach the trim in place of the TrimTrax® shall be considered an unacceptable alternative, since it has been proven that the two rows of stitching have insignificant impact on wear life. All trim ends shall be securely sewn into a seam for a clean finished appearance.

_____Comply _____Exception

WAISTBAND

The waist area of the pants shall be reinforced on the inside with a separate piece of black aramid outer shell material, cut on the bias (diagonally). The reinforcement shall be folded in half, for a finished bottom edge and shall have a finished width of not less than approximately 1½ inches. The top edge of the waistband reinforcement shall be double stitched to the outer shell at the top of the pants. The lower edge of the waistband shall be unattached to the shell to accept the thermal liner and moisture barrier. The top of the thermal liner and moisture barrier shall be secured to the underside of the waistband reinforcement by means of nine snaps, spaced equidistant along the length of the waistband reinforcement. Inserting the liner system between the waistband reinforcement and outer shell serves to reduce the possibility of liner detachment while donning and doffing. The independent waistband construction affords greater comfort and fit than a turned and stitched method. Pants that do not include an independent waistband or are not cut on the bias shall not provide the same amount of stretch to the garment and shall be considered unacceptable.

_____Comply _____Exception

PANT CLOSURE SYSTEM

The internal fly flap closure shall consist of 1½ inch wide by full-length FR hook and loop fastener tape. The FR loop portion shall be sewn with four rows of stitching to the inside of the leading edge of the external fly flap. The corresponding portion of FR hook fastener tape shall be sewn with four rows of stitching to the right front body panel positioned to engage the loop portion when the external fly flap is in the closed position.

_____Comply _____Exception

BLACK ARAMID BELT WITH BELT LOOPS

Each pant shall include an approximate 2-inch-wide belt constructed of aramid webbing material with an adjustable hi-temp thermoplastic Delrin buckle serving as the exterior primary positive locking closure. This buckle shall also provide a quick-release mechanism for donning and doffing. The pants shall be equipped with a series of black aramid material belt loops spaced around the waist to accommodate the aramid belt. There shall be three large loops measuring approximately 2 inches by 4 inches and two smaller loops measuring approximately 1/2 inch wide by 3 1/2 inches long. Two of the large belt loops shall be placed on each side of the front of the pant and third on the rear of the waist, centered over the rear seam. The two smaller loops shall be placed on the rear of the pant, behind the side seams.

_____Comply _____Exception

EXTERNAL / INTERNAL FLY FLAP

The pants shall have a vertical outside fly flap constructed of two layers of outer shell material, with a layer of moisture barrier material sandwiched between. The fly flap shall be double stitched to the left front body panel and shall measure approximately 2 ¾ inches wide, with a length graded to size based on waist measurement and reinforced with bartacks at the base. An internal fly flap constructed of one layer of outer shell material, thermal liner and specified moisture barrier, measuring approximately 2 inches wide, with a length graded to size based on waist, shall be sewn to the leading edge of the right front body panel. The inside of the right front body panel shall be thermally enhanced directly under the outside fly with a layer of moisture barrier and thermal liner material.

The underside of the outside fly flap shall have a 1½ inch wide piece of FR loop fastener tape quadruple stitched along the full length and through the shell material only; stitching shall not penetrate the moisture barrier insert between the two layers to insure greater thermal protection and reduced water penetration. A corresponding strip of 1½ inch wide piece of FR hook fastener tape shall be quadruple stitched to the outside right front body panel securing the fly in a closed position.

Appropriate snap fastener halves shall be installed at the leading edge of the waistband for the purpose of further securing the pants in the closed position.

_____Comply _____Exception

LINER KNEE THERMAL ENHANCEMENT

A minimum of one additional layer of specified thermal liner and one additional layer of moisture barrier material, measuring a minimum of 7 inches by 10 inches, shall be sewn to the knee area of the liner system

for added CCHR protection and increased thermal insulation in this high compression area. The knee thermal enhancement layers shall be sandwiched between the thermal liner and moisture barrier layers of the liner system and shall be stitched to the thermal liner layer only. The thermal enhancement layer shall have finished edges by means of overedging. Raw or unfinished edges shall be considered unacceptable. Thermal scraps shall not be substituted for full-cut fabric padding. Smaller CCHR reinforcements shall not be considered acceptable since they provide far less area of coverage.

_____Comply _____Exception

KNEE REINFORCEMENTS

The knee area shall be reinforced with grey suede leather. The knee reinforcement shall be centered on the leg to ensure proper coverage when bending, kneeling and crawling. The knee reinforcements shall measure approximately 9 inches wide by 12 inches high and shall be double stitched to the outside of the outer shell in the knee area for greater strength and abrasion resistance. Knee reinforcements of a smaller size do not provide the same protective coverage and shall be considered unacceptable. The knee reinforcement specified shall be removable for replacement without opening Major A seams of the outer shell of the pant.

_____Comply _____Exception

PADDING UNDER KNEE REINFORCEMENTS

Padding for the knees shall be accomplished with one layer of flame-resistant neoprene coated cotton/poly material and one layer of quilted aramid batt. Both layers of padding shall be sandwiched between the shell and the knee reinforcement layers.

_____Comply _____Exception

EXPANSION POCKETS

An expansion pocket, measuring approximately 2 inches deep by 10 inches wide by 10 inches high shall be double stitched to the side of each leg straddling the out-seam above the knee and positioned to provide accessibility. *The lower half of each expansion pocket shall be reinforced with a layer of Kevlar® material on the inside.* Two rust resistant metal drain eyelets shall be installed on the underside of each expansion pocket to facilitate drainage of water. The pocket flaps shall be rectangular in shape, constructed of two layers of outer shell material and shall measure approximately 3 inches deeper than the pocket expansion and ½ inch wider than the pocket. The pocket flaps shall be closed by means of FR hook and loop fastener tape. Two pieces of 1½ inch by 3-inch FR hook fastener tape shall be installed vertically on the inside of each pocket flap (one piece on each end). Two corresponding pieces of 1½ inch by 3-inch FR loop fastener tape shall be installed horizontally on the outside of each pocket near the top (one piece on each end) and positioned to engage the hook fastener tape.

_____Comply _____Exception

PANT CUFF REINFORCEMENTS

The cuff area of the pants shall be reinforced with grey suede leather. The cuff reinforcement shall not be less

than 2 inch in width and folded in half, approximately one half inside and one half outside the end of the legs for greater strength and abrasion resistance. The cuff reinforcement shall be double stitched to the outer shell for a minimum of two rows of stitching. This independent cuff provides an additional layer of protection over a hemmed cuff. Pants that are turned and stitched at the cuff, as opposed to an independent cuff reinforcement, do not provide the same level of abrasion resistance and shall be considered unacceptable.

_____Comply _____Exception

PADDED RIP-CORD SUSPENDERS & ATTACHMENT

On the inside waistband shall be attachments for the standard "H" style "Padded Ripcord" suspenders. There shall be four attachments total – 2 front, 2 back. The suspender attachments shall be constructed of black Ara-Shield® material measuring approximately ½ inch wide by 3-inches long. They shall be sewn in a horizontal position on the ends only to form a loop. The appearance shall be much like a horizontal belt loop to capture the suspender ends.

A pair of "H" style "Padded Ripcord" suspenders shall be specially configured for use with the pants. The main body of the suspenders shall be constructed of 2-inch-wide black webbing straps. The suspenders shall run over each shoulder to a point approximately shoulder blade high on the back, where they shall be joined by a 2-inch-wide horizontal piece of webbing measuring approximately 8-inches long, forming the “H”. This shall prevent the suspenders from slipping off the shoulders. The shoulder area of the suspenders shall be padded for comfort by fully encasing the webbing with aramid batting and wrap-around black aramid.

The rear ends of the suspenders shall be sewn to 2-inch-wide elasticized webbing extensions measuring approximately 8-inches in length and terminating with thermoplastic loops. The forward ends of the suspender straps shall be equipped with specially configured black powder coat non-slip metal slides with teeth. Through the metal slides shall be the 9-inch lengths of strap webbing "Ripcords" terminating with thermoplastic loops on each end. Pulling on the "Ripcords" shall allow for quick adjustment of the suspenders.

Threaded through and attached to the thermoplastic loops on the forward and rear ends of the suspenders shall be black aramid suspender attachments incorporating two snap fasteners. The aramid suspender attachments are to be threaded through the suspender attachment loops on the inside waistband of the pants. The aramid suspender attachments shall then fold over and attach to themselves securing the suspender to the pants.

_____Comply _____Exception

REVERSE BOOT CUT

The outer shell pant leg cuffs shall be constructed such that the back of the leg is approximately 1 inch shorter than the front. The liner shall also have a reverse boot cut at the rear of the cuff and a concave cut at the front to keep the liner from hanging below the shell. This construction feature shall minimize the chance of premature wear of the cuffs and injuries due to falls because of "walking" on the pant cuffs. Pants that have “cut-outs” in the back panel rather than a contoured boot cut shall be considered unacceptable.

_____Comply _____Exception

THIRD PARTY TESTING AND LISTING PROGRAM

All components used in the construction of these garments shall be tested for compliance to NFPA Standard #1971 by Underwriters Laboratories (UL). Underwriters Laboratories shall certify and list compliance to that standard. Such certification shall be denoted by the Underwriters Laboratories certification mark.

_____Comply _____Exception

LABELS

Appropriate warning label(s) shall be permanently affixed to each garment. Additionally, the NFPA certification label shall include the following information.

Compliance to NFPA Standard #1971
Underwriters Laboratories classified mark
Manufacturer's name
Manufacturer's address
Manufacturer's garment identification number
Date of manufacture
Size

_____Comply _____Exception

ISO CERTIFICATION / REGISTRATION

The protective clothing manufacturer shall be certified and registered to ISO Standard 9001 to assure a satisfactory level of quality. Indicate below whether the manufacturer is so certified and registered by checking either "Yes" or "No" in the space provided.

_____Yes _____No

WARRANTY

The manufacturer shall warrant these jackets and pants to be free from defects in materials and workmanship for their serviceable life when properly used and cared for.

_____Comply _____Exception

HOOK AND LOOP SUPPORT PROGRAM

Support program shall cover hook or loop tape that has begun to fray or otherwise degrade from normal wear. This program shall remain in effect for a period of five years from the original date of manufacture of the garment. This support program shall cover the repair or replacement, without charge, of any hook and/or loop on the garments produced by the manufacturer providing the garments are otherwise serviceable.

This support program does NOT cover damage from fire, heat, chemicals, misuse, accident or negligence. Failure to properly care for garments shall serve to void this support program.

_____Comply _____Exception

SIZING BY VENDOR

Sizing samples shall be on hand for use when sizing. Measuring with a tape measure is not acceptable.

_____Comply _____Exception

BAR-CODE/RECORD KEEPING INTERFACE

A 1-dimensional barcode, in the interleaved 2 of 5 format shall be printed on the label of each separable layer of the garment.

This barcode shall represent the serial number of the garment. The manufacturer shall be able to provide a detailed list of each asset of a drop-shipped order, and shall include the following:

- Brand
- Order Number
- Serial Number
- Style Number
- Color
- Description
- Chest/Waist Size
- Jacket/pant Length
- Sleeve Length
- Date of Manufacture
- Mark-For Data

This information shall be able to be imported into the manufacturers web-based system designed to facilitate the organization and tracking of assets in accordance with the cleaning and inspection requirements of OSHA and NFPA 1851.

_____Comply _____Exception

FIRE HELMENT

PERFORMANCE CRITERIA/STANDARDS:

The Fire Helmets shall meet the requirements of NFPA 1971:2018 (or the current edition) for structural firefighting and proximity firefighting when that option is selected; US- OSHA 1910.156, and CAL-OSHA

All eye/face protection sold as part of the original helmet assembly shall be compliant with the impact requirements of the current versions of ANSI/ISEA Z87.1 and NFPA 1971:2018.

PERFORMANCE VERIFICATION DATA REQUIREMENT:

Response to this specification shall include a complete and current NFPA 1971 test report from a recognized, accredited test facility detailing all performance data for the helmet(s) and compliant helmet components included in the original assembly. Certificates of conformance and/or letters of certification alone shall not be acceptable. Component testing is not acceptable. Certification testing is conducted every year to a random lot size, as per NFPA requirements.

MANUFACTURER'S WARRANTY:

The Fire Helmets shall be free from defects in materials and/or faulty workmanship for a period of ten (10) years from the date of manufacture.

HELMET SHELL:

The helmets shall be of the Modern Fire Helmet style. The shell shall have a down-sloping brim to enhance water shed. The radius of the juncture of the brim and crown shall be no less than 0.1875" to maximize deflection of debris and impact protection.

The shell material shall be a fiberglass composite, consisting of a high-temperature-, flame-, and chip- resistant "through-colored" thermoset resin, reinforced with 1" and 2" chopped fiberglass, compression- molded to form a one-piece shell.

The shell shall be available in white, red, black, and yellow with an unpainted, matte finish.

The shell dimensions (w/ edge trim) shall be 14.00" (L), 11.13" (W) and have a crown depth of 5.9". The shell shall have a nominal wall thickness of 0.065".

The shell shall have black or white[1], high-temperature, flame-resistant, flexible edge trim composed of an aluminum core coated with thermoplastic rubber (TPR). The edge-trim is secured around the entire brim of the helmet by crimping the aluminum core and secured at the mating ends with a high- temperature adhesive and clamped by the helmet hangar clip at the edge of the rear brim.

The shell shall have a helmet hanger comprised of a ¾" nickel-plated "D" ring and a stainless-steel clip. The helmet hanger shall be attached to the center rear of the brim.

IMPACT CAP:

The impact cap is designed to help provide increased thermal and impact protection. The impact cap shall be comprised of a rigid cell, high-temperature urethane foam dome attached to a flame-resistant, thermoplastic Polyphenylene Oxide (PPO) inner liner that covers the entire inside crown of the helmet. The impact cap shall be modular and field-removable for periodic inspection of the foam's integrity.

HEAD SUSPENSION:

The Fire Helmets shall consist of a six-way head suspension system, attached to the impact cap. The head suspension system comprises three (3) fixed 0.75" wide nylon straps mounted at six points on the impact liner and fastened at their intersection to form the 6-way overhead strap assembly. The straps are attached to the impact cap by means of a rigid plastic strap that locks the straps into a routed round groove in the impact cap.

SHELL RELEASE SYSTEM:

The impact liner, complete with suspension system and chinstrap assembly (retained as described under "

CHINSTRAP:

Shall be retained to the helmet shell by means of two (2) thermoplastic retention clips mounted under the eye/face protection hardware, and by four (4) pieces of hook-and-pile fastener sections between the impact liner and helmet shell in the crown area. This design will enable the shell to be released from the helmet when impacted from below the brim, reducing the chance of being injured by the chinstrap, and leaving the impact cap on the wearer's head for continued thermal and impact protection.

SIZING ADJUSTMENT:

The size of the headband may be adjusted to fit the wearer's head by means of a ratchet adjustment system. The headband is attached to the sides of the impact cap liner by four (4) flexible retention tabs. The rear ratchet arms shall have three (3) adjustable positions so that the angle of the ratchet may be set to accommodate the nape of the wearer's head. The headband height shall be adjustable at the front of the helmet via a hook and loop system to provide additional comfort to the wearer.

The headband shall have a head size range of 6-3/8 to 8-3/8, adjustable in 1/8" increments.

COMFORT LINER:

The helmet shall have a removable comfort liner, consisting of a headband cushion and a ratchet pad. Both components made of a foam-core laminate system, comprised of a soft black flame-resistant flannel material against the user's head backed by a soft loop material secured to the headband and ratchet with hook fastener. The comfort liner is machine washable. It can easily be upgraded to a standard flannel or deluxe leather-lined version.

CHINSTRAP:

The chinstrap shall be constructed of three (3) pieces (or sections) of 3/4" wide, spun-Nomex webbing, which are connected by a high-temperature, durable thermoplastic quick-release buckle on the left side of the helmet, and by a cast zinc postman's slide buckle on the right side of the helmet.
The chinstrap is attached at either end of the impact cap by means of a plastic tube that travels the circumference of the impact cap assembly, locking the chinstrap into a groove in the impact cap.

The long middle section, with the female half of the quick-release buckle sewn to the left end, shall pass through the postman's slide buckle on the right. The middle section shall be a minimum of 23.0" in length and the total length of the chinstrap shall be 35.0" at full extension, end to end. The chinstrap includes a hook-and-loop fastener to secure extra material.

EAR/NECK PROTECTION:

The Fire Helmets provide for ear and neck protection with a 6.5" wide, 19.0" long, full-cut earlap. The double-layer earlap consists of a 4.5 oz. / yd., black colored Nomex outer layer, and a flame resistant black flannel inner layer. The earlap shall be secured to the shell by pieces of hook and pile fastener in no fewer than five (5) locations.

RETRO-REFLECTIVE TRIM:

The helmet shall have three bar shaped pieces of retro-reflective, fluorescent Reflexite trim around the exterior of the crown of the helmet shell. There shall be two additional pieces of bar-shaped Reflexite trim on the front of the top of the helmet for maximum daytime and nighttime visibility.

Name	*Description*
	Hardware The faceshield shall be mounted to the helmet shell by means of two (2) glass-reinforced, high-temperature and flame-resistant thermoplastic bracket assemblies, with adjustable thermoplastic knobs one (1) on either side of the helmet shell. The brackets allow the face shield to be raised above the helmet shell when not in use.

MAINTENANCE, REPAIR AND RETIREMENT:

Upon the customer's request, the successful bidder will conduct training explaining the proper maintenance, repair and retirement of Fire Helmets.

14" PULL-ON BOOTS:

NFPA 1971 and NFPA 1992 Certified
Certified to NFPA 1971, *Standard on Protective Ensembles for Structural Firefighting and Proximity Firefighting, Current Edition* for Structural Fire Fighting and NFPA 1992, *Standard on Liquid Splash-Protective Ensembles and Clothing for Hazardous Materials Emergencies, Current Edition*.

_____Comply _____Exception

CSA Z195-14 Certified
Boots shall be certified in accordance with the requirements of CSA Z195-14 Protective Footwear.

_____Comply _____Exception

General Design

14 inch Pull-On athletic footwear (cement construction) boot, black flame-resistant and water-resistant leather, double-stitched leather joining seams, hi-vis yellow and silver reflective trim, webbing pull straps, padded leather collar, padded leather flex joints in the shaft above vamp and heel, liquid and chemical resistant breathable bootie liner, cut-resistant and thermal protective bootie-shield liner, composite safety toe cap, composite shank, composite penetration-resistant insole barrier, molded shin guard, flame-resistant synthetic rubber molded cup outsole and toe bumper, 3D lasting board, molded composite heel counter, internal heel fit system, and a removable molded footbed as well as an additional insert for use in conjunction with the footbed.

_____Comply _____Exception

Slip Resistance

Boots must exceed the minimum test values for slip resistance (average of left and right foot) as detailed below to provide superior performance in dry, wet, and frosted ice conditions. Boots that do not exceed these minimums in all conditions shall not be acceptable. Bidders must promptly supply a Technical Services Report from a recognized independent testing laboratory upon request showing the boots bid exceed this requirement.

Test Method: VUSA TT S&C 1-18 Ed.1 Rev. 0
Slip Resistance of Footwear and Floorings
Load = 500 N

Dry Clay Quarry Tile:	Forepart > 1.00
	Heel > 1.00
Wet Clay Quarry Tile:	Forepart > 0.60
	Heel > 0.60
Frosted Ice -7°C Run 1:	Forepart = 0.28
	Heel = 0.28
Frosted Ice -7°C Run 4:	Forepart > 0.12
	Heel > 0.12

For maximum slip resistance each outsole shall have Siping lines. Siping lines cut into flat areas open up when flexed to provide additional traction on water and ice. The boot shall also include self-cleaning lugs and an omni-direction tread pattern designed for superior performance in all terrains and when working on ladders.

_____Comply _____Exception

Flexibility

Boots must reach the Maximum Flex Angle of 48 degrees without exceeding the critical bending moment with a resulting stiffness index less than 10.0 as detailed below to provide maximum flexibility. Boots that do not meet this requirement shall not be acceptable. Bidders must promptly supply a Technical Services Report from a recognized independent testing laboratory upon request showing the boots bid meet this requirement.

Test Method: SATRA TM194:2004
Longitudinal stiffness of footwear

_____Comply _____Exception

FireStorm Leather

Boots shall be made from heavy-duty, flame-resistant and water-resistant full-grain cattle hide leather measuring 2.0 – 2.2 mm of thickness for durable tear and puncture resistance. Tumbled full-grain cattle hide leather shall be utilized in collar and flex areas for mobility. The leather shall be chrome tanned to withstand high temperature with minimal shrinkage, re-tanned to impart water resistance and low water absorption and finished to retain maximum breathability. Leather shall meet or exceed the following physical tests:

Water Penetration	ASTM D2099	15,000 flex minimum
Dynamic Water Absorption	ASTM D2099	15% maximum
Static Water Absorption	ASTM D6015	30% maximum
Slit Tearing Strength	ASTM D2212	30 pound minimum
Moisture Vapor Transmission	ASTM D5052	350 g/meter2/24 hours minimum
Flame Resistance	NFPA 1971	afterflame no more than 2.0 sec, not melt or drip, no burn through

_____Comply _____Exception

CROSSTECH® Footwear Fabric

A full-height, full sock, bootie liner made from a package of Omaha lining fabric, 300g felt insulation, and CROSSTECH® moisture barrier shall be provided for a liquid resistant and breathable moisture barrier as well as thermal protection as defined by the specified NFPA standards.

_____Comply _____Exception

Athletic Footwear (Cement) Construction Outsole

For optimum flexibility, comfort, and weight reduction, the boot shall include a VIBRAM® Synthetic Rubber Sculpted, Contoured Cup Outsole cemented to the bottom and sides of the upper using a 2-part cross-linking adhesive that forms a bond stronger than the materials it attaches. The outsole must be made from a flame, abrasion, oil, acid, and slip resistant compound engineered for high-traction, cold-weather resistance, and durability. Goodyear welt or direct attach construction methods shall not be acceptable.

_____Comply _____Exception

Bootie-Shield Liner

A protective bootie-shield of KEVLAR® fiber blend stitchbonded non-woven batting weighing 4.0 oz/yd^2 shall be positioned between the leather shell and the CROSSTECH® moisture barrier bootie to provide abrasion and cut resistance and additional thermal protection. Boots that do not have an additional Flame Resistant (FR) protective bootie-shield between the leather shell and the CROSSTECH® moisture barrier bootie shall not be acceptable.

_____Comply _____Exception

Composite Safety Toe Cap

The safety toe shall consist of a composite material that is lighter than steel, does not transmit heat or cold, and will spring back to shape after impact. Must exceed NFPA standards for safety. Metal toe caps shall not be acceptable.

_____Comply _____Exception

Padded Leather Collar
The padded collar shall have a rolled top edge formed by folding over the leather to help the boots slide against the pants liner and reduce the potential for the pants liner to hang up on the top of the boots as well as to reduce abrasion against the wearer's calf.

_____Comply _____Exception

Composite Penetration Resistant Insole Barrier
Penetration resistance shall be provided by a composite insole to maximize flexibility and insulate from heat or cold transmission. Must exceed NFPA standards for safety. Metal plates shall not be acceptable.

_____Comply _____Exception

3D Composite Lasting Board
Boot uppers shall be lasted to a molded and contoured dual-density lasting board with a built-in flex zone in the forefoot and a torsionally stable heel. Flat fiber board lasting boards shall note be acceptable.

_____Comply _____Exception

Composite Shank
The shank shall consist of a composite material that is lighter than steel, does not transmit heat or cold, and springs back to shape better. Metal shank shall not be acceptable.

_____Comply _____Exception

Molded Heel Counter
Boots shall have a molded heel counter of water-resistant composite material individually molded to fit each size perfectly. Leather or fiber board heel counters shall not be acceptable.

_____Comply _____Exception

Padded Shin Guard
Boots shall include a padded composite shin guard to provide extra protection when working on a ladder. Moisture absorbing natural fiber padding shall not be acceptable.

_____Comply _____Exception

Synthetic Rubber Toe Bumper
Boots shall have a molded Flame Resistant (FR) synthetic rubber toe bumper to provide abrasion resistance when crawling. The toe bumper shall be cemented, and 2-needle stitched to the vamp.

_____Comply _____Exception

3M SCOTCHLITE™ Reflective Material
Boots shall have flame-resistant fluorescent yellow and silver 3M SCOTCHLITE™ reflective material sewn to both sides of the shaft for added visibility.

_____Comply _____Exception

Webbing Pull-Straps
Boots shall have NOMEX® webbing pull-straps securely attached to the leather uppers by inserting into to collar seam to minimize stitching through the leather.

_____Comply _____Exception

Internal Fit System
Boots shall have an anatomical foam insert that wraps around the top and sides of the heel with an opening to fit and hold the back of the heel securely while cushioning the ankle.

_____Comply _____Exception

3D Molded Footbeds System
Boots shall have a removable urethane foam footbed. The footbeds are contoured to cradle and cushion the bottom of the foot and to provide arch support. The footbeds shall have a moisture-wicking and anti-microbial fabric top layer. A second pair of 3D molded footbeds that are thicker in the forefoot is provided with every pair for a custom fit. This thicker footbed provides a snugger fit.

_____Comply _____Exception

Sizes
Boots must be available in Men's full sizes 5 – 18 and half sizes 5½ – 15½ in Narrow, Medium, Wide, and X-Wide widths. Boots must also be available in a Wide Calf model in the same size range that will provide an additional 3 inches in circumference at the calf to fit those with larger calves. Boots must be available in Women's full sizes 5 – 12 and half sizes 5½ – 11½ in Narrow, Medium, Wide, and X-Wide widths.

_____Comply _____Exception

Resoling Service
The winning vendor shall have resoling services available at their factory as needed.

_____Comply _____Exception

Country of Origin
Boots shall be manufactured in the United States.

_____Comply _____Exception

Third Party Testing and Listing Program
The footwear shall be tested for compliance to NFPA Standard 1971 and 1992 by a recognized independent testing lab which shall certify and list compliance to that standard. Such certification shall be denoted by the independent testing labs mark on the certification label affixed to the boots.

_____Comply _____Exception

Labels
Appropriate warning label(s) shall be permanently affixed to each boot. Additionally, the label(s) shall include the following information.

Compliance to applicable NFPA Standard(s), current edition(s).
Independent Testing Lab mark
Manufacturer's name
Manufacturer's address
Manufacturer's boot identification number
Date of manufacture
Size

_____Comply _____Exception

ISO Certification/Registration
The manufacturer shall be certified and registered to ISO Standard 9001 to assure a satisfactory level of quality.

_____Comply _____Exception

Warranty
The manufacturer shall warrant these boots to be free from defects in materials and workmanship for one year when properly used and cared for.

_____Comply _____Exception

Sizing by Vendor
The vendor shall be available to perform all sizing requirements.
_____Comply _____Exception

STRUCTURAL FIREFIGHTING GLOVE:

OUTER SHELL:

Black Eversoft split cowhide & Kevlar® knit for proven protection, abrasion resistance and flexibility.
Inner face of the outer shell is lined with Nomex® / Kevlar® knit for maximum heat protection.

MOISTURE BARRIER:

PROTECT™ glove inserts by INSERT TECHNOLOGY INC., which exceeds NFPA 1971 current edition for chemical and viral penetration, 100% waterproof, excellent dexterity, excellent high and low temperature flexibility and does not contain chemical known to cause cancer. Odor and fungus resistant.

LINING:
8.3 oz Nomex® I Kevlar® thermal lining for superior heat and slash protection.

FEATURES:

- 3D glove style with complete fourchette on all sides of fingers for improved fit and dexterity.
- Improved thumb to palm connection for better ease of movement and durability.
- Preformed fingers for better comfort and reduced fatigue.
- Cowhide leather reinforcement at thumb and index finger for better abrasion protection in this highly stressed area. Thumb seam welt for increased abrasion resistance in this critical area.
- Reflective band below knuckle for increased visibility.
- Formed knuckle-guard with foam insert for better flexibility and protection.
- Foam insert in the palm for better shock protection and comfort while crawling.
- Liner system attached at each fingertips to prevent liner shifting and pull-out.
- Cowhide leather pull tab at wrist for easy donning.
- Kevlar® thread with lock stitching on the shell for added strength and heat resistance.
- ½" Heavy duty elastic sewn around the entire wrist helps prevent the glove from falling off the hand by keeping a snug fit around the wrist.

CARBON HOOD:

Labels must contain UL third party certification mark

Materials

Ultra C6 Carbon fiber material
100% Nomex Thread
1/2"Heavy-Duty Genuine Elastic

Construction
The hood shall have a double layer, notched-shoulder design.

Seam shall be merrow stitched then top and bottom covered with a 5-thread cover stitch for extended durability. All bottom edges are bound with binding.

Measurements shall be consistent with NFPA 1971, 2007 Edition

The length from the top of the head to the neck shall be 13**”.** The width from the back seam to the top of the face shall be 9”. The width of the back seam to the bottom of the head shall be 11”.

The hood shall measure 15” from the top of the head to the bottom of the notched shoulder.

Face opening must stretch to a full 15”. Face opening at rest shall be 5”.

The overall hood length from the top of the head to the bottom of apron shall be approximately 21”.

Packaging

Each hood should be individually poly-bagged with required end user information

EXCEPTIONS TO SPECIFICATIONS

All exceptions to the above specifications must be clearly stated for each heading. Use additional pages for exceptions, if necessary.

Options shall include:

1. Radio pocket on left chest w/mic clip.
2. Flashlight clip/strap on right chest.
3. Side pockets w/hand warmers.
4. Leather reinforcements on elbows and cuffs.
5. 3-inch GFD lettering on back top/center.
6. Wristers w/reinforced thumb holes.
7. Reflective trim and lettering: Basic NFPA 3-M Scotchlite 3-inch triple-trim, lime-yellow.

BID SHEET

BID NUMBER: 10-2024-01 BID NAME: Structural Firefighting Turnout Gear

Item #/Description	Bid Price Each	Quantity	Total Bid Price
Item #1 Coat:	$_____	X 15	$_____
Item #2 Pant:	$_____	X 15	$_____
Item #3 Helmet:	$_____	X 15	$_____
Item #4 Boot:	$_____	X 15	$_____
Item #5 Glove:	$_____	X 15	$_____
Item #6 Hood:	$_____	X 15	$_____
		Total	$_____

Bidder Name_____

Address_____

Phone Number_____ Fax Number_____

Bid Representative_____
Typed or Printed Name

Bid Representative_____
Signature

Date_____