**REQUEST FOR PROPOSAL and QUALIFICATIONS (RFP and RFQ) FOR:**
**The Valley Center Fire Protection District Structural Firefighting**
**Personal Protective Equipment (PPE)**

The Valley Center Fire Protection District is inviting responses from qualified companies that can provide a bid to the specifications of Valley Center Fire Protection District referencing Exhibit A.

The purpose of this Request for Proposal and Qualifications is for the Valley Center Fire Protection District to obtain proposals, qualifications and contract pricing from companies that have experience in and are capable of building and sizing Structural Firefighting Personal Protective Equipment to the specifications and needs of the Valley Center Fire Protection District.

**Time Schedules:**

The following is the Valley Center Fire Protection District's tentative schedule for the selection of a qualified firm:

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|---|---|---|
| 1. | RFP/RFQ Mailed or Electronically Sent: | January 12, 2026 |
| 2. | Deadline for Garment Walk Through: | January 26, 2026 |
| 3. | Deadline for proposals and qualifications: | February 12, 2026 |
| 4. | Staff RFP/RFQ Response Review: | February 19, 2026 |
| 5. | Notification of Award of Contract: | February 26,2026 |

Prior to 5:00 p.m. on February 12, 2026 an original and three (3) Proposals with Professional Qualifications shall be received in a sealed envelope addressed to:

Walk-In Delivery or Courier Service
Valley Center Fire Protection District
Fire Chief Josef G. Napier
28234 Lilac Road
Valley Center, CA 92082

via U.S. Mail
Valley Center Fire Protection District
Attn: Fire Chief Josef G. Napier
28234 Lilac Road
Valley Center, CA 92082

Please clearly identify on the outside of the package: **RFP/RFQ: Valley Center Fire Protection District Structural PPE RFP/RFQ**

Please call The Valley Center Fire Protection District Monday through Thursday 8am to 5pm with any questions pertaining to this Request for Proposal and Qualifications at (760) 751-7600

Please schedule any Garment walkthrough or questions prior to proposal submission to Fire Captain Joe Menton or Fire Engineer Christian D'Agostino 760-726-1340 ext. 2170.

Sincerely,
Josef G. Napier
Valley Center Fire Protection District

**Valley Center Fire Protection District**
**REQUEST FOR PROPOSAL and QUALIFICATIONS**
**The Valley Center Fire Protection District Structural Firefighting Personal Protective Equipment (PPE)**

## VALLEY CENTER FIRE PROTECTION DISTRICT OVERVIEW

The Valley Center Fire Protection District is a Special District governed by a 5-member Board of Directors. The Valley Center Fire Protection District resides within an 84.5 square mile boundary with a population of 23,000. The Valley Center Fire Protection District is framed by a rural backdrop of chaparral covered hillsides, a central business district and agricultural farmland. It has easy access to Interstate 15 to the West and State Route 76 to the North. The Valley Center Fire Protection District takes pride in its ISO Class 2 designation and is the Department of the Quality of Life for everyone who lives, works and plays in the District.

## CURRENT SITUATION

The Valley Center Fire Protection District has recently opened its third Fire Station to serve the District. We have hired nine new employees to fulfill the staffing requirement for that new station and are updating and upgrading our Structural PPE specifications and increasing our quantity to better serve our Firefighters.

## INSTRUCTIONS/CONDITIONS/LEGAL REQUIREMENTS:

1. The Proposal must include a cover letter introducing the company and provide the company name, address and telephone number of the corporate headquarters and local office, if applicable. The name of one individual who will be the primary contact with the Valley Center Fire Protection District and the names of key personnel and their association with the project shall also be provided.

2. The Proposal must contain a list of client references along with a resume of the company's experience in government or commercial audio and visual systems projects including:

    - Name, address and telephone number of client references who may be contacted, and the company or agency they work for.
    - A brief description of each project explaining the service performed.

3. The RFP/ RFQ response will include an analysis of the various methodologies by which the Valley Center Fire Protection District can meet the needs of our desired Structural PPE specifications.

4. A sample work schedule and time-line for the various phases of a similar project shall be provided. The company shall provide periodic progress reports and arrange any meetings with the assigned project manager or designee.

5. An estimate shall be provided of the amount of time the Valley Center Fire Protection District might expect to devote to this project, specified by task.

6. Provide a sealed estimate and compensation schedule on the specifications, the schematic diagram, equipment list, labor, trade-in, warranty and scope of work as outlined in Exhibit "A". The proposed fee schedule shall include estimated cost for each separate component of the Structural PPE ensemble. The Valley Center Fire Protection District reserves the right to clarify and further define the scope of work and the basis for pricing any and all changes.

7. The RFP/RFQ response must contain a description of each component of the PPE product, the assembly of the PPE procurement and the sizing services to be provided in narrative format, with any exhibits or documentation deemed essential, addressing the scope of work contained in this document.

8. The Vendor shall provide an original and three (3) copies of the RFP/RFQ response. The RFP/RFQ response must be received no later than February 12, 2026 by 5:00 pm. It is the sole responsibility of the bidder to see that his bid is received in the proper time. Late bids will be returned to the bidder unopened. Failure to provide three (3) copies of the RFP/RFQ responses which are received after the deadline may be disqualified from consideration for contract award. Likewise, if information that is requested in this RFP/RFQ is omitted, the RFP/RFQ response may be deemed "non-responsive" and may be eliminated from further consideration.

9. The Valley Center Fire Protection District has outlined the requirements herein in as much detail as is currently known. Please provide any exceptions, additional information, or suggestions that will aid in the Valley Center Fire Protection District's selection process (attachments are acceptable).

10. The Valley Center Fire Protection District reserves the right to negotiate terms and specifications/scope of work with the highest ranked vendor or piggyback on any existing governmental contract. If an agreement cannot be negotiated, the Valley Center Fire Protection District reserves the right to negotiate with any other finalist.

11. Vendor shall identify those services, if applicable, that will be outsourced to a sub-vendor. The prime vendor will be responsible for verifying the qualifications and validity of all licenses, permits and quality of work for any outsourced work to sub-vendors. The prime vendor is also responsible for paying its employees and any sub-vendors the prime vendor hires.

12. The selected vendor is required to comply with all existing State and Federal labor laws. The selected vendor is also responsible for complying with all OSHA standards and requirements. If a vendor outsources any work or job to a sub-vendor, it will be the prime vendor's responsibility to ensure all sub-vendors meet the requirements as stated in this RFP. The selected vendor may not use any sub-vendor outside of the United States or outside the territories of the United States for any portion of the project.

13. A professional services agreement, in a form substantively conforming to that used by the Valley Center Fire Protection District, which will act as the administrative agency, will be offered to the company, agency or firm submitting the most competitively priced and qualified proposal. Although price is of prime consideration, it is not the sole determining factor. The Valley Center Fire Protection District reserves the right to select the appropriate firm based on the most qualified proposal. The determination of the most qualified and most competitively priced proposal may involve all or some of the following factors: price, thoroughness of the proposal package, previous experience and performance, conformity to specifications in Exhibit "A"; terms of payment; outsourced work; other costs; and other objective and accountable factors which are reasonable. The Valley Center Fire Protection

District reserves the right to select a vendor to perform all of the work identified in the RFP/RFQ, or only selected portions based on price and/or other factors.

14. Proposals containing alterations, additions not called for, conditional alternative bids, incomplete bids, or irregularities of any kind may be rejected. The right to reject any and all proposals is reserved to the Valley Center Fire Protection District Board of Directors as is the right to waive any irregularities deemed to be in the best interest of the District.

15. At the time of contract execution, the selected vendor must provide satisfactory evidence of insurance to include coverage for: Workers Compensation, General Commercial Liability, including Automobile Liability, and Professional Liability in amounts to be determined of at least $1,000,000 per occurrence.

16. Successful bidders shall show proof of OSHA, NIOSH and NFPA Compliance.

17. The successful vendor shall be an independent contractor, and nothing shall be construed to cause the vendor to be deemed or represent itself as an agent or employee of the Valley Center Fire Protection District. The vendor shall defend, indemnify, and hold any of the agencies that make or are a part of the Valley Center Fire Protection District and its officers, agents, volunteers and employees harmless from any and all causes of action or claims and damages arising out of or related to the vendor's performance under this contract.

18. The Valley Center Fire Protection District's terms for payment is net thirty (30) days upon receipt of invoice. Vendors shall submit invoices between the first and fifteenth business day of each month for services provided the previous month. Payment shall be made within thirty (30) days of receipt of each invoice as to all undisputed fees.

19. Vendor is required to carefully and fully investigate all of the requirements of this RFP/RFQ, as well as, the site(s) where the project will take place and all work or arrangements needed to fulfill the terms of the proposal. By submitting a proposal, the vendor represents and certifies to the Valley Center Fire Protection District that such investigation has been completed and that it fully understands the Specifications/Scope of Work.

20. The Valley Center Fire Protection District will not reimburse vendors for any costs involved in the preparation and submission of proposals. Furthermore, this RFP/RFQ does not obligate the Valley Center Fire Protection District to accept or contract for any expressed or implied services.

21. Prohibited Interest – No officer, or employee of the participating agencies in the Valley Center Fire Protection District have any financial interest, direct or indirect, in this Agreement, the proceeds thereof, the Contractor, or Contractor's sub-contractors for this project, during his/her tenure or for one year thereafter. The Contractor hereby warrants and represents to the Valley Center Fire Protection District that no officer or employee of the Valley Center Fire Protection District, any interest, whether contractual, non-contractual, financial or otherwise, in this transaction, or in the business of the Contractor or Contractor's sub-contractors on this project. Contractor further agrees to notify the Valley Center Fire Protection District in the event any such interest is discovered whether or not such interest is prohibited by law or this Agreement.

22. If an Exhibit "A" requirement cannot be met by a vendor, then the vendor should submit a "No Proposal Response" for the items affected. Alternate or equivalent items may be submitted for consideration by the Valley Center Fire Protection District, unless otherwise specified.

**EXHIBIT A:**

## Valley Center Fire Protection District Structural Firefighting PPE Scope of Work, Design and Recommended PPE Specification

### I. Task 1: Evaluation of Vendor meeting the Specification Requirements

1. The bidding vendor, company or agency must have the ability to provide structural PPE outlined in Exhibit "A."

### II. Task 2: Diagram/Schematic of each component of the Structural PPE ensemble

1. Provide a schematic drawing of each component of the structural PPE ensemble.
2. Provide a logical plan for manufacturing structural PPE
3. Provide a logical plan for delivering within 90 days.
4. Provide a logical plan for service after sale in the advent of defects.

### III. Contract Compliance

1. Once produced, delivered and all invoices are paid, all equipment and associated products produced are owned by the Valley Center Fire Protection District
2. The Valley Center Fire Protection District reserves the right to cancel the contract and retain all plans, data, codes, equipment and associated products installed or produced to another company or agency at its discretion with adequate notification to the company or agency.
3. The Company or agency and its employees shall be bonded and insured.
4. The contract between the bidding company or agency and the Valley Center Fire Protection District will be a performance-based contract that could lead to cancellation in the event the company or agency does not meet the obligation of the scope of work in a timely manner or to the quality deemed necessary by the Valley Center Fire Protection District.

5. Provide a line-item accounting of deliverables and contract services to the Valley Center Fire Protection District.
6. Provide a warranty of any and all installation materials, equipment and labor against defects in workmanship for a period of no less than one year.

### V. Liability

The Valley Center Fire Protection District will assume no liability for a product that does not meet the specific specification of the RFP, a component with a manufactured defect or a product that does not meet OSHA, NIOSH or NFPA Standards.

## VI. PPE Equipment List or Equivalent Ensemble Component

| Quantity | Brand | Model Number | Description |
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## SCOPE

The purpose of the clothing is to provide protection during structural fire-fighting operations where there is a threat of fire or when certain physical hazards are likely to be encountered, such as during non-fire-related rescue operations, emergency medical operations, and victim extrication.

## STANDARDS

All garments produced shall meet or exceed the criteria set forth in the current edition of NFPA 1971 STANDARD ON PROTECTIVE ENSEMBLES FOR STRUCTURAL FIRE FIGHTING AND PROXIMITY FIRE FIGHTING, FED-OSHA CFR 1910, Subpart L, OSHA 29 CFR Part 1910.1030 and/or the requirements of CAL-OSHA title 8, Article 10.1, Para. 3406.

All components and composites used in the construction of garments shall be third party tested, certified, and listed for compliance to NFPA 1971. The label of the third-party certification organization shall denote certification.

The manufacturer shall be registered to the ISO Standard 9001 to assure a satisfactory level of quality.

## COMPOSITE PERFORMANCE

The garment composite, consisting of the outer shell, moisture barrier and thermal liner, shall provide a Thermal Protective Performance (TPP) of not less than 42 when tested in accordance with NFPA 1971 standard.

The garment composite, consisting of the outer shell, moisture barrier and thermal liner, shall provide a Total Heat Loss (THL) of not less than 252 when tested in accordance with NFPA 1971 standard.

The Heat Transfer Index rating shall be a minimum of 25 seconds for the shoulder when measured at 2 psi (pounds per square inch) and a minimum of 25 seconds for the knee when measured at 8 psi.

## OUTER SHELL MATERIAL

**7 oz PBI® MAX:** +/- 7.0 oz./sq. yd. 70% “PBI Dominant” PBI®/PARA-ARAMID spun yarns/30% 600 denier PARA-ARAMID filament in a twill weave with extremely durable water repellent finish. Color shall be Natural.

## MOISTURE BARRIER MATERIAL

META-ARAMID substrate laminated to a lightweight breathable, EPTFE membrane; weighing 4.7 oz./sq. yd.

## THERMAL LINER MATERIAL

The thermal liner shall be composed of Glide Ice™ high-lubricity, stress reducing, filament/spun face cloth weighing 3.6 oz/sq/yd. The Kevlar Nomex filament yarns shall represent no less than 60% of the face cloth's composition and shall be positioned in the warp direction of the weave in order to optimize their slippery characteristics on the face. Spun yarns comprising 30% Nomex

and 10% Lenzing FR spun yarns with superior wicking characteristics shall be used to promote moisture management within the garment. The Glide Ice™ face cloth shall be quilted to one layer spun lace aramid (85% NOMEX® / 15% KEVLAR®) weighing approximately 2.3 oz./sq. yd. and one layer of apertures (11-13 apertures/sq. inch) spun lace aramid (85% NOMEX® / 15% KEVLAR®) weighing approximately 1.5 oz./sq. yd. both layers shall be treated with a Teflon® finish to promote minimal moisture storage in the garment as well as promote rapid drying (Total weight +/- 7.3 oz./sq. yd.

**STRESS POINTS**

All outer shell stress points, including top and bottom pocket corners, pocket flap corners, top and bottom of storm flap/fly shall be reinforced using a 42-stitch bartack.

**REFLECTIVE TRIM**

All trim shall be sewn with four rows lockstitch 301. Trim shall be 3" Ventilated Scotchlite

Triple Trim lime/yellow

**COAT – Coat trim shall be applied as follows:**

- 3" Yellow Ventilated reflective trim, across storm flap, around chest & back completely.
- 3" Yellow Ventilated reflective trim around coat cuff.
- 3" Yellow Ventilated Trim reflective trim, around contoured hem.
- 3" Yellow Ventilated reflective trim. 2 angled strips set from chest to hem trim

**PANT - Pant trim shall be applied as follows:**

(1) strip set full circumference around the bottom of the cuff 3" from the bottom cuff.

**OPTIONAL LETTERING**

Size 2" or 3" letters of Scotchlite™, lime/yellow shall be set on letter patches.

**SIZES**

Coats shall be made available in even chest sizes with corresponding sleeve lengths available in short, regular, and long. Pant sizes shall be made available in even waist sizes with inseam lengths available in extra short, short, regular, and long. Male and female sizing is available.

**NOTE**: All measurements are approximate and have an industry standard +/- tolerance. Positioning of parts on smaller size garments also may vary due to limited space available on smaller chest and waist sizes.

**LABELING**

Each garment shall have a garment label(s) permanently and conspicuously attached stating at least the following language, as well as detailed warning instructions provided by the manufacturer.

**DO NOT REMOVE THIS LABEL.**

**THIS STRUCTURAL FIREFIGHTING PROTECTIVE GARMENT MEETS THE GARMENT REQUIREMENTS OF NFPA 1971, 2018 EDITION. MADE IN THE U.S.A.**

## TRACKING LABEL SYSTEM

There shall be a bar code label permanently affixed to each garment for tracking purposes. The bar code shall contain a unique serial number and shall be able to withstand customary wash and wear cycles. There shall also be a label with the minimum of the following information:

- Unique serial number
- Item description (brand, model, material color)
- Lot information (date of mfg., size, etc.)
- Material description
- The standard to which the garment is compliant

## PACKAGING

Each Coat and Pant shall be packaged in a dark plastic bag in order to provide protection during shipping and prior to first use.

## USER INFORMATION GUIDE

Each garment shall include a hang tag with a website address that links to an online, electronic User Information Guide with information required by NFPA 1971. This guide shall include:

### A. PRE-USE INFORMATION

- Safety considerations
- Limitations of use
- Garment marking recommendations and restrictions
- A statement that most performance properties of the garment cannot be tested by the user in the field.
- Warranty information

### B. PREPARATION FOR USE

- Sizing/adjustment
- Recommended storage practices

### C. INSPECTION

- Inspection frequency and details

### D. DON/DOFF

- Donning and doffing procedures
- Sizing and adjustment procedures
- Interface issues

### E. USE

- Proper use consistent with NFPA 1500, Standard on Fire Department, Occupational Safety and Health Program, and 29 CFR 1910, 132

### F. MAINTENANCE AND CLEANING

- Cleaning instructions and precautions with a statement advising users not to use garments that are not thoroughly cleaned and dried
- Inspection details
- Maintenance criteria and methods of repair where applicable
- Decontamination procedures for both chemical and biological contamination

### G. RETIREMENT AND DISPOSAL

- Retirement and disposal criteria and considerations

**H. DRAG RESCUE DEVICE (DRD)**

- Use, inspection, maintenance, cleaning, and retirement of the DRD

## WARRANTY

Each garment shall have a limited lifetime warranty against defects in material and workmanship.

## COUNTRY OF ORIGIN

The garments shall be manufactured in the United States of America.

**EXHIBIT A:**

# PPE STRUCTURAL COAT

## COAT CONSTRUCTION

The coat is designed of a 3-panel construction in all layers of the innovative V-fit design. For optimum comfort and mobility an inverted pleat on each side where back front and back body panel pieces meet shall be incorporated. Each pleat shall begin at the back of each shoulder and shall extend vertically down the side of the coat. A combination moisture barrier/thermal liner shall include a corresponding 1" inward dynamic fold approximately 1.5" from each sleeve seam at the shoulder. This fold shall provide for coat expansion when extending arms forward and shall interface with the inverted pleats of the outer shell to maximize mobility and function of the outer shell and thermal liner. When measured at the center of the back from the collar seam to the hem bottom, the coat shall measure – 29", 30.5" 32", 33.5" or 35" long; 29" or 32" female. Sleeves shall be of raglan design in the front and set in design in back.

## MOISTURE BARRIER/THERMAL LINER CONSTRUCTION

Design shall be compatible with the outer shell so that the liner does not buckle, pull, or otherwise restrict body motion. The left and right fronts of the moisture barrier/thermal liner shall be attached to the facings at the front closure of the outer shell. The moisture barrier/thermal liner shall be secured to the outer shell collar such that when donning the coat an arm may not be accidentally caught between the outer shell and its inner linings.

The liner shall have one internal pocket which shall be made of black outer shell material. The liner pocket shall be located on the left side of the coat liner.

The moisture barrier shall be completely sewn to a Teflon treated NOMEX® facecloth at its perimeter. The CROSSTECH®/NOMEX® pajama check moisture barrier shall be sewn to the thermal liner at its perimeter with the breathable membrane-oriented inward toward the thermal liner and away from the outer shell. All moisture barrier seams shall be sealed as required by NFPA 1971. The moisture barrier/thermal liner shall finish no more than 1" from the cuffs and 2" from the hem.

## MOISTURE BARRIER/THERMAL LINER ATTACHMENT

**Completely Removable:** The moisture barrier/thermal liner shall be completely detachable from the outer shell for ease of cleaning by the use of hook and loop, zippers, and snaps. There shall be a thermoplastic zipper and two snaps down each front facing, hook and loop shall also be located around the entire neck opening. In addition, there will be a snap for alignment along the bottom of the liner, and one snap and hook and loop at each sleeve end.

## COAT LINER INSPECTION SYSTEM

There shall be an opening located on the coat liner system at the bottom of the liner. This opening will provide the ability to completely invert the coat liner to properly view the integrity of the entire liner system. There shall be 1" x 10" hook and loop sewn to the liner system to ensure proper alignment. This Liner Inspection System is completely hidden when the liner is properly installed into the outer shell.

## COLLAR

The 3" split collar shall consist of two-piece construction shaped for comfort. The collar shall be configured such that when the collar is raised it shall remain standing while providing continuous thermal and moisture protection around the neck and face. To ensure this protection, the two layers of outer shell collar shall be fully lined with a layer of CROSSTECH® Black. The shell collar shall provide proper interface with the liner to insure no moisture penetration through the collar seam to the inside of the coat. The shell collar shall have a thermoplastic zipper along the top edge for liner attachment. The collar shall be attached to the liner facing using a thermoplastic zipper. Collar shall be of such design so as not to interfere with SCBA face masks, or helmet.

The liner collar shall be a layer of self-material and a layer of CROSSTECH® Black. The design shall be compatible with the outer shell so that the liner does not buckle, pull, or otherwise restrict body motion. The left and right fronts of the liner collar shall be attached to the facings at the front closure of the outer shell. The neck of the liner collar shall be secured to the neck of the outer shell collar such that when donning the coat an arm may not be accidentally caught between the outer shell and its inner linings. A 4" wide CROSSTECH® Black and 1.75" self-material extension shall be sewn the full length of the neck with a thermoplastic zipper for attachment to shell collar. The self-material extension shall overlap the shell collar to prevent exposure of the zipper. Collar closure shall be provided by hook and loop 1.5" x 4", with hook portion sewn on right side of collar, and loop portion sewn on left, set horizontal.

There shall be a .75x2" hook applied to shell PLACED ON INSIDE OF LEFT SIDE OF COLLAR; PLACE VERTICAL RIGHT NEXT TO LOOP ON COLLAR

There shall be 1x4" self-fabric strap with 1"x1" hook on one and & 1"x1" loop on the opposite end, bartack to shell. PLACE ON BACKSIDE OF COLLAR; DIRECTLY ABOVE DRD; SET VERTICALLY; LOOP TO PULL UP FROM HOOK

## DRAG RESCUE DEVICE (DRD)

The Fire Fighter Recovery Harness™ shall be constructed of a one and one-half inch wide KEVLAR® strap that shall be installed between the outer shell and the thermal liner. This DRD shall have a hand loop (16" in circumference) that exits the outer shell through a 2" polymer coated aramid reinforced slot on the back of the coat just below the collar and is held in place by means of a piece of 1.5" x 2" hook on the strap and a piece of 1.5" x 2" loop attached to the 3.25" x 6" flap. This strap is then secured under the flap. One piece 1" x 4.5" loop shall be set

horizontally on the outer shell to align with one piece of 1" x 4.5" hook set horizontally to the underside of the flap. The 2" strap is folded and sewn down 1" wide and 4.5" long for the handle. The strap is also held in proper alignment by means of hook and loop. A piece of .75"x 4.5" loop sewn on the strap handle, and a piece of hook sewn on the opposite side of the strap. A piece of 2.25"x2.75" black PCA tab with a reflective logo shall be sewn to the center bottom of the strap for ease of access to the DRD. The DRD is also held in proper alignment by means of hook and loop in two areas. A 1.5"x2" piece of loop placed on the inside of the outer shell 2" below the bottom of the slot that corresponds to a piece of 1.5"x2" hook placed on the strap. A 2" x 2" piece of loop placed on the inside of the outer shell underneath the chest trim corresponds to a piece of 1.5"x 2" hook located on the DRD. Two 1" x 3.5" self-fabric straps with 1" x 2" hook on one end and 1" x 2" loop on other end shall be set to coat in the shoulder cap area to keep straps in proper position for use. The loop handle shall have a silver retro-reflective logo patch.

Fire Fighter Recovery Harness™ provides mechanical leverage for dragging a downed and incapacitated structural firefighter from a life-threatening environment. The design of the DRD enables the rescuer to drag the downed firefighter in line with the axis of the firefighter's skeletal frame, in order to decrease the risk of further injury.

Shall receive Reflective Trim set vertical down flap of fallen man harness, 4 rows lockstitch.

Trim shall be of 3" Ventilated Scotchlite II (triple trim) of red/orange

**HANGER LOOP**

An external hanger loop constructed of a double layer of outer shell material and reinforced with two 42-stitch bartacks shall be provided on the outside of the coat at the collar seam. It shall be designed to provide long service and shall not tear or separate from the coat when the coat is hung by the hanger loop, loaded evenly with a weight of 80 lbs., and allowed to hang for one minute.

**THERMAL REINFORCED YOKE**

A layer of Tencate Gray Semper Dri (3.0 oz./sq. yd. non-fluorinated durable water repellent (DWR) treated Chambray (meta-aramid spun) face cloth quilted to two layers of meta-aramid /para-aramid spun lace (Total weight +/- 6.0-6.8 oz./sq. yd)) shall be positioned between the moisture barrier and thermal liner for extra thermal protection in a high heat and compression area of the coat. It shall be sewn to the inside of the upper back portion of the thermal liner across the upper back from the back shoulder and collar seams 7" down, over the tops of shoulders and down the front approximately 4" ending at the armhole.

**SHELL YOKE REINFORCEMENT**

A layer of Semper Dri™ face cloth quilted to araflo/E-89 (Total weight +/- 6.0-6.8 oz./sq. yd)) shall be sewn to the inside of the outer shell upper back portion and sleeve 8" in length and 12" across the sleeve.

**SHOULDER CAPS**

A 4" wide area at the top of the shoulders extending 6" from the collar seam shall be capped with outer shell material for abrasion resistance and thermal protection. For additional thermal protection and cushioning, one layer of uninterrupted 1/8" thick, fire retardant closed-cell foam shall be oriented between the outer shell and the shoulder cap reinforcement.

**ELBOW FLEXIBILITY**

The sleeve shall have an insert throughout all layers that shall provide a natural bend in the sleeve. The elbow shall have an insert throughout all layers that shall provide a natural bend in the sleeve. This elbow shall include shaped pieces and darts to create free movement with few restrictions. The insert shall consist of two layers of outer shell material for abrasion resistance and thermal protection.

**ELBOW PADDING**

In addition to reinforcement, elbows shall be padded using one layer of uninterrupted 1/8" thick, fire retardant closed-cell foam. The reinforcement material shall be oriented between the outer shell and elbow insert reinforcement.

**SLEEVE WELL**

A combination Chambray face cloth quilted to two layers of AraFlo E89 and one layer of breathable CROSSTECH® Black (Type 2F) moisture barrier leader shall be sewn no more than 1" back from the combination liner sleeve end to form a sleeve well. A 3/4" wide strip of loop fastener shall be sewn full circumference to the end of the thermal liner leader to help secure the combination liner to the outer shell. A CROSSTECH® Black (Type 2F) moisture barrier leader shall be sewn no more than 1" back from the combination liner sleeve end. This leader shall be approximately 4" in length and end with a gathering of 1" elastic. This sleeve well shall prevent water and hazardous materials from entering the sleeve when arms are in a raised position.

The combination liner sleeve ends shall be inserted into the outer shell sleeve ends by means of lining up and attaching the zipper of the combination liner sleeve end with the corresponding zipper of the outer shell cuff. This method of combination liner attachment shall prevent any gaps from occurring between the combination liner and sleeve well during a full range of motion. The combination liner shall extend to within 1" of the sleeve ends.

**WRISTLETS**

An internal wristlet shall consist of a 2-ply knit of 48% meta-aramid /48% para-aramid and 4% Spandex for superior recovery. Wristlet to be a combination of natural and khaki colors producer dyed, and treated with an extremely durable non-fluorinated durable water repellent (DWR) water resistant alloy. The wristlet shall not be less than 6" with a 5/8"x4 3/4" meta-aramid webbing thumb loop. Wristlets shall be double stitched and bound to the moisture barrier/thermal liner providing extended thermal and slash protection.

**CUFFS**

The extended cuff of the sleeve shall be reinforced with a binding of black polymer coated aramid not less than 3" in total width for abrasion resistance and thermal protection. The cuff shall attach to the liner with a thermoplastic zipper. Additionally, one leather tab with female snap fastener shall be set in the cuff to attach the outer shell to the liner.

**THERMAL FRONT PANEL CONSTRUCTION**

There shall be continuous thermal and moisture protection around the entire torso including the storm flap. To ensure this protection, as well as reduce potential for wicking moisture to the inside of liner, both right and left inside front facings of the coat outer shell shall incorporate neoprene coated polycotton extending from collar to hem.

## COAT FRONT CLOSURE DESIGN

The complete outer shell coat front closure design shall consist of a FRONT CLOSURE SYSTEM completely protected by an OUTSIDE STORM FLAP which shall have its own, independent STORM FLAP CLOSURE SYSTEM.

## STORM FLAP

A storm flap measuring not less than 2.5" wide, nor less than 22" in length on regular back length gear shall be set on the outside of the right side of the coat opening for maximum thermal protection and clear drainage. The inner lining of the storm flap shall be Gore RT7100™ PTFE moisture barrier meeting all requirements for moisture barriers sandwiched between two layers of outer shell fabric.

## FRONT/STORM FLAP CLOSURES

The front closure shall consist of a thermoplastic zipper with a 1 3/4" polymer coated aramid tab added to the left bottom for fast closure and exit. The storm flap closure shall close via magnetic connection. The magnetic closure shall extend the full length of the outer storm flap eliminating all exposed frontal zippers.

1 BLACK PCA zipper pull for coat closure zipper or facemask pocket zipper

## HANDWARMER POCKETS

. A 9" x 9" Semi-bellow and handwarmer combination pocket that expands by means of side and bottom gussets to a thickness of 2" in back only and 0" in front. The pocket shall be set at the bottom of the coat hem and reflective trim shall be set on each pocket.

- There shall be a 6" opening on the rear side of the bellow of the pocket.
- Pocket shall be lined inside with Semper Dri™ (3.0 oz./sq. yd.), a durable water repellent treated Chambray (META-ARAMID spun) face cloth quilted to two layers of META-ARAMID/PARA-ARAMID spun lace (total weight +/- 6.0-6.8 oz./sq. yd.) thermal liner material and have a PARA-ARAMID twill backer.

. Pocket and flap shall be set with stitch 301, seam Ssb-2 with each corner of pocket and top corners of flap reinforced with bartacks for additional strength. Drainage of moisture to be provided by brass eyelets.

. Each pocket flap shall measure 10" wide by 3" high in front and 5" high in rear. Each flap shall incorporate a 1" by 2" polymer coated aramid pull tab for easy opening. The corner under this tab shall be reinforced with two layers of Lite-N-Dri™ for stability.

. A hook and loop closure system shall be set with two pieces of 1.5" x 3" loop fastener set horizontally on the outside edge of the pocket opening with corresponding 1.5" x 3" hook fastener set vertically on the underside of the flap.

. Shall be located on the front right and left bottom of the coat.

## RADIO POCKECT

- One 4" wide x 9" deep full bellows radio pocket that expands by means of side and front gussets to a thickness of 2" in front and back.
- Pocket and flap shall be set with stitch 301, seam Ssb-2 with the top and bottom pocket corners and top corners of flap reinforced with a minimum 42-stitch bar tack. A brass eyelet shall provide drainage of moisture.

· Pocket flap shall be 5” x 5” with antenna notch on flap.

· The pocket shall be fully lined on all 3 sides inside the pocket with polycotton lining and self-fabric 5" up on the outside of the pocket.

· The pocket flap shall close to the pocket top using 1 piece of 2"x 3" loop on the pocket and 1 piece of 2"x 3" hook on the flap vertically.

· 1 Female (logo) and 1 Male snap set centered in loop on pocket and hook-on flap. Located on left chest

**FACE MASK POCKET**

· 7.5" wide x 9" high x 5" deep SCBA facemask pocket shall be constructed of outer shell material

· The pocket closure shall consist of a 17" thermos plastic zipper set on the left side of the pocket. Drainage of moisture shall be provided by brass eyelets.

· BLACK leather zipper pulls for each facemask pocket zipper pull.

· Located on the right chest. Top of FMP to be next to the shoulder seam.

**AMERICAN FLAG**

There shall be a 2”x3” American Flag patch, (Stars on upper right corner) location is on Right upper sleeve

**COAT SNAP ATTACHMENT**

5- .5x2" self-fabric straps with end bartacked to shell and opposite end loose with 1 female non-logo snap. 1 strap at center back, 1 at each side seam, and 1 centered between each side seam and middle back hem. 5 male snaps on liner to align with the female snaps.

**FLASHLIGHT STRAP**

2x13" self-fabric glove strap with 1-piece 2x3.5" hook on one end, 1-piece 2x3.5" loop on opposite end, strap to be X-stitched & tack all 4 corners of X-stitch. - LEFT CHEST - DIRECTLY BELOW RP; SET VERTICAL: HOOK TO PULL UP TOWARD RP

· 1x10" 2-layer self-fabric flashlight strap X stitched to shell w/ 1X4" hook and loop. LEFT CHEST - JUST ABOVE CHEST TRIM & AS CLOSE TO RIGHT SIDE OF RP AS POSSIBLE

· 1x4.5" Self-fabric radio strap with 1x1" hook on one side and 1x1" loop on the opposite side. Bartack to shell at center of strap. PLACE ON BACK SIDE OF COLLAR; DIRECTLY ABOVE DRD; SET VERTICALLY; LOOP TO PULL UP FROM HOOK

**MIC TAB**

. .75x3" self-fabric mic tab with hard leather inside bartack each end. Location- LEFT CHEST - 2.5" ABOVE RADIO PKT

· .75x3" self-fabric mic tab with hard leather inside bartack each end. Location-RIGHT CHEST - ON FRONT TOP OF FMP, HORIZONTAL ALIGN WITH MT ABOVE RADIO PKT

· 1x1.5" Self-fabric mic tab bartacked at each end. Location- LEFT CHEST - BETWEEN RADIO PKT & SF 3" ABOVE FLS

**LETTER PATCH**

5x18" contoured 2-layer self-fabric one line letter patch to be attached to hem of coat with 1.5x18" hook sewn to top edge of 5x18" patch and 1.5x18" loop sewn with while thread through the trim to coat back inside at hem also 1 male snap at top corners of letter patch & 2 female logo snaps on inside of shell to align with the male snaps Location _ Hem with Sewn On 3" Lime/Yellow 3M™ Scotchlite™ Letters stating Firefighter's Last Name: (Up to 14 Letters)

4x15" 1 line letter patch sewn to shell at yoke. With Sewn On 3" Lime/Yellow 3M™ Scotchlite™ Letters stating **VCFPD**

**SHELL YOKE REINFORCEMENT**

A layer of Semper Dri (3.0 oz./sq. yd. Teflon® treated Chambray (NOMEX® spun) face cloth quilted to araflo/E-89 (Total weight +/- 6.0-6.8 oz./sq. yd)) shall be sewn to the inside of the outer shell upper back portion and sleeve 8" in length and 12" across the sleeve.

## EXHIBIT A:

**PPE STRUCTURAL PANT**

**PANT CONSTRUCTION**

The pants shall have a low-rise waist V-Fit design with a two-inch PARA-ARAMID belt.

**BELT**

Two-inch-wide PARA-ARAMID belt with 2" self-locking thermoplastic buckle with quick-release mechanism.

**MOISTURE BARRIER/THERMAL LINER CONSTRUCTION**

Design shall be compatible with the outer shell so that the liner does not buckle, pull, or otherwise restrict body motion. To deter the wicking of moisture up the thermal liner leg the bottom nine inches of each thermal leg shall be constructed of Semper Dri™ (3.0 oz./sq. yd. non-fluorinated durable water repellent (DWR) treated Chambray (meta-aramid spun) face cloth quilted to two layers of meta-aramid /para-aramid spun lace (Total weight +/- 6.8 oz./sq. yd.)). The waist of the moisture barrier/thermal liner shall be secured to the waist of the outer shell such that when donning the pant, a leg may not be accidentally caught between the outer shell and its inner linings along the waist and between the legs of the pant. For added thermal protection to the knee, an additional layer of 1/8"" thick, fire retardant closed-cell foam shall be positioned between the moisture barrier and thermal liner at the knee.

The moisture barrier shall be completely sewn to a non-fluorinated durable water repellent (DWR) treated meta-aramid facecloth at its perimeter. The moisture barrier substrate/facecloth combination will be sewn to the quilted thermal liner at its perimeter with the breathable membrane-oriented inward toward the thermal liner and away from the outer shell. The quilted thermal liner will be oriented toward the wearer. All moisture barrier seams shall be sealed as required by NFPA 1971. The moisture barrier/thermal liner shall finish no more than 3"" from the pant cuffs

## MOISTURE BARRIER/THERMAL LINER ATTACHMENT

**Completely Removable:** The moisture barrier/thermal liner shall be completely detachable from the outer shell for ease of cleaning by using snaps and hook and loop. Nine evenly spaced snaps shall secure the liner to the integral waistband; two snaps shall be set in leather leg tabs at each leg end and hook and loop on each side of fly facing.

## PANT LINER INSPECTION SYSTEM

There shall be an opening located on the pant liner system to the right side of the waist separating the thermal barrier and moisture barrier, approximately 12" in length. This opening will provide the ability to completely invert the pant liner to properly view the integrity of the entire liner system. There shall be a piece of 1" x 5" loop sewn to the moisture barrier 3" over from beginning of opening and a corresponding piece of 1.5" x 5" hook sewn to the inside of the outer shell to ensure proper alignment when installing the liner system into the outer shell. Liner Inspection System is completely hidden when the liner is properly installed into the outer shell.

## STORM FLY/CLOSURE

The outer shell shall have a sewn on overlapping fly front running the full length of the fly on the left side. The flap shall not be less than 5" wide at the waistband. The bottom of the fly shall be reinforced with one multi-stitch bartack.

Pant closure shall be provided by a thermoplastic zipper. The storm fly shall be held closed along its length by means of a hook and loop fastener closure 2" minimum width sewn with four rows lockstitch, along the leading edge for a distance of not less than 6" from the bottom of the fly closure to the waist area for proper alignment and secure closure. Additionally, one snap shall be positioned at the inside top of the fly.

The storm fly shall be outer shell material, lined with a 4” strip of moisture barrier material and Semper Dri™ (3.0 oz./sq. yd.), a durable water repellent finish treated Chambray (META-ARAMID spun) face cloth quilted to two layers of META-ARAMID/PARA-ARAMID spun lace (total weight +/- 6.0-6.8 oz./sq. yd).

1 female snap through center of fly & loop, 1 male snap through shell & hook.

## THERMAL FLY ASSEMBLY

The storm fly shall be outer shell material, lined with a 4" strip of pajama check CROSSTECH® moisture barrier material.

## WAISTBAND

The waist of the pants shall be reinforced on the inside with one ply of outer shell fabric material not less than 1.5" in width. The pant waist shall be contour shaped for better comfort and hemmed to provide strength with the independent waistband, which shall then be double stitched to the outer shell.

Eight suspender buttons shall be appropriately spaced around the waistband to accommodate the use of suspenders.

Three belt loops of two-layers of self-fabric, 4" wide by 3 1/2" high shall be double stitched to the pant shell and bartacked at all four corners. One loop at center back and one loop on each side.

1x5.5" self-fabric strap folded over 2" and then end folded up 1.25" with 1.75" metal ring hanging from loop, bartacked to shell Location- RIGHT HIP SIDE - 4" DOWN FROM TOP OF WAIST

1 short leather take-up strap riveted, 703 snap hook, D-ring

1 pair self-fabric take-ups w/ long strap 1" x 9" and short strap 1" x 3" long. Short straps have 2 each nickel loops (total 4), long strap has hook & loop.

**RADIAL INSEAM BAND**

A radial banded insert runs continuously from the top of the knee on one leg, through the crotch area to the top of the opposite knee. The elimination of crotch seams reduces tension in the crotch area to give added comfort and helps to alleviate stress to extend the useful life of the gear. Also, there is an added insert piece in the design to help ensure that when the firefighter is kneeling or bending the leg of the garment bends in alignment with the leg so that the knee of the firefighter centers on the knee pad of the pants. It also helps to eliminate rubbing of the inseams of each leg against each other when the firefighter is working so that the risk of abrasion of the seams is minimized.

**KNEE FLEXIBILITY**

The knee shall have an insert throughout all layers that shall provide a natural bend in the leg. This knee shall include cut outs, shaped pieces, and darts to create free movement with few restrictions. The insert shall consist of black poly-coated aramid for abrasion resistance and thermal protection

**KNEE PADDING**

For added thermal protection, an additional layer of uninterrupted 1/8” thick, fire retardant closed-cell foam shall be positioned between the moisture barrier and thermal liner. For additional extended thermal protection, two layers of uninterrupted 1/8" thick, fire retardant closed-cell foam shall also be positioned between the reinforcement layer and outer shell.

**CUFFS**

The cuff area of the pants shall be reinforced with a binding of self-fabric not less than 2" in total width for greater strength, abrasion resistance, and thermal protection. In addition, a 3” x 3 ½” piece of reinforcement material shall be sewn on the inseam area of the pant leg above the pant cuff and below the pant trim, in order to provide extra abrasion protection. The material used on the kick shield shall match the material used on the pants cuffs.

polymer coated aramid Black

**SPLIT BELLOW POCKET**

10" wide x 8" & 10" deep outside full bellows pockets that expand by means of side and bottom gussets to a thickness of 2" in front and back. Pockets shall be split inside the pocket with a Kevlar® twill divider that is sewn to the back of the pocket with three snaps on the front to activate the divider. There shall be three snaps set inside the pocket to store the divider when not in use.

- Pockets shall be fully lined with polycoated aramid all 4 sides inside the pocket.

- Pocket and flap shall be set with stitch 301, seam Ssb-2 with the top and bottom pocket corners and top corners of flap reinforced with bar tacks for additional strength. Drainage of moisture to be provided by brass eyelets.
- Pocket flaps shall be 11"x 5".
- A hook and loop fastener closure system shall be set with two pieces 2" x 2" loop fastener horizontally on the pocket and two pieces of 2" x 2" hook fastener on the underside of the flap.
- Located on left thigh

**FULL BELOW POCKET**

10" wide x 8" & 10" deep outside full bellows pockets that expand by means of side and bottom gussets to a thickness of 2" in front and back.

- Pockets shall be reinforced with polycoated aramid lined 4" up inside all 4 sides
- Pocket and flap shall be set with stitch 301, seam Ssb-2 with the top and bottom pocket corners and top corners of flap reinforced with bar tacks for additional strength. Drainage of moisture to be provided by brass eyelets.
- Pocket flaps shall be 11"x 5".
- A hook and loop fastener closure system shall be set with two pieces 2" x 2" loop fastener horizontally on the pocket and two pieces of 2" x 2" hook fastener on the underside of the flap.
- Located on Right Thigh

**OPTIONAL ITEMS**

H-Back Quick Adjust Non-Stretch Suspenders with trim w/ 2" metal loops, Black

To be on WAISTBAND Four 2" wide self-material suspender tabs with 1.75x3" leather reinforcement. 2 male and 2 female logo snaps, attached to waist with 2 on the front and 2 on the back. Reinforced with 2 bartacks on each tab.