

**KING WILLIAM COUNTY  
PROTECTIVE CLOTHING FOR STRUCTURAL FIREFIGHTING—COAT AND PANT**

**INVITATION FOR BIDS  
#IFB-2018-005**

King William County is now accepting competitive sealed bids for protective clothing for structural firefighting consisting of coats and pants for ten firefighters. Sealed bids will be received at the King William County Department of Financial Services until Friday, August 25, 2017 at 3:00 PM, at which time they will be publicly opened and read.

**I. SCOPE OF WORK**

- A. Bid shall comply with attached Detailed Technical Specifications for Protective Clothing for Structural Firefighting Coat and Pant in Attachment A. No exceptions. Attachment A shall be completed and returned with bid form in Attachment B.
- B. Turn out gear shall be delivered no later than three months after measurements are taken.
- C. Successful bidder shall work with Chief of Fire and Rescue and King William Volunteer Fire and Rescue to ensure conformity of color and structure for items ordered.

**II. INSTRUCTIONS TO BIDDERS**

- A. Sealed Bids must be delivered and addressed to the King William County Department of Financial Services, Attention: Beth Dandridge, 180 Horse Landing Road #4, King William, VA 23086 on or before the closing date and time of Friday, August 25, 2017 at 3:00 PM. Bids are to be submitted in sealed envelopes marked “**Sealed Bid – PROTECTIVE CLOTHING FOR STRUCTURAL FIREFIGHTING IFB 2018-005**”. Bids not received by this date and time will be deemed undelivered and not accepted. Any Bidder who wishes his bid to be considered is responsible for making certain that his bid is received at the stated location by the proper time. No oral, telegraphic, electronic, facsimile, or telephonic bids or modifications will be considered unless specified. The receiving time in the Department of Financial Services will be the governing time for acceptability of bids. Bids must bear original signatures and figures. Bids must be submitted on preprinted Bid Forms supplied by the County and duly executed in accordance with the instructions on the Bid Form. All prices and notations must be in ink or typewritten. Mistakes may be crossed out and corrections typed or printed adjacent to the mistake and initialed in ink by the person who signs bid. Prices shall be stated in units and quotations made separately on each item. In case of conflict, unit prices will govern. Where there is a conflict between words and figures, words will govern.
- B. Bids are opened publicly immediately after the stated deadline. Interested parties are invited to attend the bid opening. A tabulation of bids received will be available within a reasonable time after the bid opening. Bid results will be faxed or mailed to interested parties upon request.

C. Bidders' authorized representatives may withdraw bids only by written request received before the Bid Submittal Deadline. Unless otherwise stated in the published Invitation for Bids, Bidders may not withdraw their bids for a period of sixty calendar (60) days after the Bid Submittal Deadline.

D. By submitting a bid the bidder agrees and warrants that it has examined all the contract documents and if appropriate, the subject of the contract and where the specifications require a given result to be produced, that the specifications are adequate and the required results can be produced under the specifications in the contract. Omissions from the specifications shall not relieve the bidder from the responsibility of complying with the general terms of the contract as indicated by the specifications. Once the award has been made, failure to have read all the conditions, instructions and specifications of the contract will not be cause to alter the original contract or proposal or for the bidder to request additional compensation.

E. Bidders shall notify Beth Dandridge promptly of any error, omission, or inconsistency that may be discovered during examination of the solicitation. Requests for interpretation, correction, or clarification shall be made in writing either by mail to King William County Department of Financial Services c/o Beth Dandridge, 180 Horse Landing Road #4, King William, VA 23086 or faxed to (804) 769-4964 or by email to [bdandridge@kingwilliamcounty.us](mailto:bdandridge@kingwilliamcounty.us). All such notifications or questions shall arrive at least seven (7) working days before the Submittal Deadline. Any questions received after the deadline will not be addressed. Bidder's company name, address, phone and fax number, and contact person must be included with the questions or comments. Oral questions may be presented at any pre-bid conference held for this solicitation. All clarifications, corrections, or changes, to the solicitation documents will be made by Addendum *only*. Bidders shall not rely upon interpretations, corrections, or changes made in any other manner, whether by telephone, in person, or at a pre-bid conference. Interpretations, corrections, and changes shall not be binding on the County unless made by Addendum. All Addenda issued shall become part of the contract documents. Addenda will be provided to bidders by posting on the County's website. It is the Bidders sole responsibility to ascertain that it has received all Addenda issued for this solicitation. All Addenda must be acknowledged and returned on or before the Submittal Deadline, unless otherwise directed by an Addendum. For this solicitation comments or questions will be accepted in writing through the end of the business day Thursday, August 17, 2017. Written responses in the form of an addendum will be posted on the County's website, on or before Friday, August 18, 2017.

F. Potential bidders needing special assistance under the Americans with Disabilities Act shall contact Beth Dandridge at 804-769-4965 or [bdandridge@kingwilliamcounty.us](mailto:bdandridge@kingwilliamcounty.us). Every reasonable effort will be made to allow every qualified bidder to participate in the competitive process.

G. King William County reserves the right to accept or reject any or all bids or portions of any bid and to reissue said bid. The County reserves the right to waive irregularities provided they do not affect the price, quality, quantity or delivery schedule of what is offered.

H. King William County may make such reasonable investigations as deemed proper and necessary to determine the ability of a bidder to perform. The bidder shall furnish to the County all such information and data for this purpose as may be requested. The County reserves the right to inspect the bidder's physical facilities prior to award to satisfy questions regarding the bidder's

capabilities. Further, the County reserves the right to reject any bid if the evidence submitted by, or investigations of, such bidder fails to satisfy the County that such bidder is properly qualified to carry out the obligations of the contract.

I. By submitting a bid, bidders certify that their bids are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other bidder, supplier, manufacturer or subcontractor in connection with their bid and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.

J. Unless otherwise provided in this solicitation, the name of a certain brand, make or manufacturer does not restrict bidders to the specific brand, make or manufacturer named; it conveys the general style, type, character and quality of the article desired. Any article, which the County, in its sole discretion determines to be the equal of that specified, considering quality, workmanship, economy of operation and suitability for the purpose intended, may be accepted.

K. Bidders organized or authorized to transact business in the Commonwealth pursuant to Title 13.1 or Title 50 shall include the identification number issued to it by the State Corporation Commission. Any bidder that is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 or as otherwise required by law shall include a statement describing why the bidder or offeror is not required to be so authorized. A form for this purpose is included in this solicitation as Attachment D.

L. All bidders submitting a bid to the county are subject to the decision of the County as to the quality of what is offered, responsiveness of the bid or proposal and the responsibility of the bidder. The purchasing agent, administrator, or public body as the case may be, in their sole discretion, will evaluate bids and in all cases the decision made shall be final. Every bidder submitting a bid or proposal agrees to abide by the decisions of such officials and all the terms of the County purchasing policy as a condition precedent to the submission of the bid.

M. The following factors shall be considered in addition to price when determining the lowest responsible bidder and the responsiveness of the bid:

1. The ability, capacity and skill of the bidder to perform the contract or provide the service required;
2. Whether the bidder can perform the contract or provide the service promptly, or within the time specified, without delay or interference;
3. The character, integrity, reputation, judgement, experience, and efficiency of the bidder;
4. The quality of performance of previous contracts or services;
5. The previous and existing compliance by the bidder with laws and ordinances relating to the contract or service;
6. The sufficiency of financial resources and ability of the bidder to perform the contract or provide the service;
7. The quality, availability and adaptability of the goods or services to the particular use required;

8. The ability of the bidder to perform future maintenance and service for use of the subject of the contract;
9. The number and scope of conditions attached to the bid; and
10. Any other condition or criteria included in the request for bids or the instructions to bidders.

N. The firm, corporation or individual name of the bidder must be signed in ink to any proposals or bids submitted. In the case of a corporation, the title of the officer signing must be stated and each officer must be thereunto duly authorized. In the case of a partnership, the signature of at least one of the partners must follow the firm name using the term "member of the firm" or "general partner".

O. If the lowest acceptable bid exceeds available funds, the County may negotiate with the low bidder to obtain a contract price within available funds. The negotiations shall be confined to a reduction in the contract price and shall not deal with changes in the contract requirements.

P. The contract will be awarded or the bids rejected as soon as reasonably possible, but not later than sixty (60) days after the date of opening bids, unless the period for acceptance is otherwise extended at the request of the County and agreed to in writing by one or more bidders who wish to remain in consideration. Upon award of the contract to a bidder, such bidder shall enter into the contract by executing the contract and by furnishing any bonds for payment and performance specified herein and Certificate(s) of Insurance required to be procured by the contractor within ten (10) calendar days after the date of the award or within such further time as the County may allow. Failure by the successful bidder to enter into a written contract and furnish required bonds and certificates within the allotted time shall cause the successful bidder to forfeit the full amount of any required bid guarantee to the County. A notice to proceed will be issued by the County within five (5) days of execution of the contract and furnishing of required documentation by the successful bidder.

Q. A Certificate(s) of Insurance shall be required within ten (10) days of the date of the award or before start of work, whichever comes first, demonstrating insurance coverage as specified in the contract documents. The certificate(s) must contain a provision stating that the coverages will not be canceled unless a minimum of fifteen (15) days prior written notice has been given to the County and be accompanied by necessary endorsements of the referenced policies.

R. The successful bidder will be responsible for obtaining all licenses and permits necessary to perform the work specified in the Scope of Work unless otherwise specifically stated in these instructions.

### **III. SPECIFIC TERMS & CONDITIONS**

A. The proposed contract is enclosed and contains the terms and conditions that will be binding on the successful bidder. The final format must be approved as to form by the County Attorney.

B. Insurance requirements are listed in Attachment C. The successful bidder/contractor certifies that the contractor and any subcontractors will maintain the insurance coverage required during the entire term of the contract and that all insurance will be provided by insurance companies authorized to sell insurance by the Virginia State Corporation Commission.

C. Contract amount will be due upon completion and written acceptance of the work by the County and will be paid within 21 days of contractor's invoice.

#### **IV. GENERAL TERMS & CONDITIONS**

A. In accord with Section 2.2 – 4343.1 of the Code of Virginia, King William County does not discriminate against faith-based organizations in procuring goods or services and both the County and any contracted faith-based organization will comply with the provisions of that section.

B. During the performance of any contract issued pursuant to this bid, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability or other basis prohibited by state law related to employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
2. The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, will state that such Contractor is an equal opportunity employer.
3. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.

The Contractor will include the provisions of the foregoing paragraphs 1, 2 and 3 in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

C. With the following exceptions, procurement documents are subject to the Virginia Freedom of Information Act:

1. Cost estimates relating to a proposed procurement transaction prepared by or for the County shall not be open to public inspection.
2. Bid and proposal records shall be open to public inspection only after award of the contract. Any bidder or offeror may be allowed to inspect the bid or proposal records after bid opening or after the evaluation and negotiation of proposals are completed, and prior to award unless the County decides not to accept any bids or not to accept any of the proposals and to reopen the contract.
3. Trade secrets or proprietary information submitted to the County are not subject to disclosure if requested by the person submitting such information prior to or upon

submission of the data or other materials. Any such request must identify what is to be protected and state the reasons therefor.

4. Any inspection of procurement transaction records under this section shall be subject to reasonable restrictions imposed by the Purchasing Agent to insure security and integrity of the records.

D. By submitting a bid, bidders certify that they do not and will not, during the performance of an awarded contract, knowingly employ an unauthorized alien as defined in the Federal Immigration Reform and Control Act of 1986.

E. During the performance of and awarded contract, the contractor agrees to (i) provide a drug-free workplace for the contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the contractor that the contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this paragraph, "drug-free workplace" means a site for the performance of work done in connection with a specific contract awarded to a contractor pursuant to this bid, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.

F. Any business entity including those described in Subparagraph K of the Instructions to Bidders that enters into a contract shall not allow its existence to lapse or its certificate of authority or registration to transact business in the Commonwealth, if so required under Title 13.1 or Title 50, to be revoked or cancelled at any time during the term of the contract.

G. King William County (Federal I.D. #54-6001376) is exempt from Federal, State and local taxes. Taxes included on invoices will be deducted from the payment amount. Tax-exempt forms will be completed for a vendor upon request.

H. The contractor agrees to indemnify, defend, and hold harmless King William County, its governing body, officers, employees, and insurance carriers, individually and collectively, from all losses, claims, suits, demands, expenses, subrogation, attorneys' fees, or actions of any kind or nature resulting from personal injury to any person (including bodily injury and death), or damage to any property, arising or alleged to have arisen out of Contractor's negligent acts, errors, omissions, related to the provision of services and/or products specified under the contract provided that such liability is not attributable to the County's sole negligence. The amount and type of insurance coverage requirements set forth herein, or lack thereof, will in no way be construed as limiting the scope of indemnity as stated in this paragraph.

**V. SPECIAL PROVISIONS FOR MATERIALS & EQUIPMENT**

- A. Authorized Distributor: Successful Bidder must be an authorized distributor for the product he offers, or with his bid he must submit documentation from an authorized distributor that he has purchased the specified product/equipment from that distributor and that the distributor will honor all of the manufacturer's warranties.
- B. Compliance with OSHA: Successful Bidder warrants that all item(s) offered comply with all applicable Federal and the State Occupational Safety and Health Act, laws, standards and regulations, and that Bidder will indemnify and hold the King William County harmless for any failure to so conform.
- C. Manufacturer & Model Number: Bidder must state the manufacturer name and model number of each item proposed.
- D. New and Unused: Unless specifically provided to the contrary in the solicitation, all materials and equipment shall be new and unused and of the current production year.
- E. Samples: For evaluation purposes, samples may be requested from any Bidder. Samples shall be provided at no charge unless Bidder indicates on his bid the exact charge for samples. The County reserves the right to consume samples for testing purposes. The County may retain samples until delivery and acceptance of contracted items. Bidder shall remove samples at his expense within (30) days of request by the County. After delivery, random samples may be submitted to a commercial laboratory, or other inspection agency, for testing to determine if they conform to the specifications. In cases where tests indicate the samples do not meet specifications, the cost of the testing shall be borne by the contractor. When tests indicate the materials do not meet specifications, the County reserves the right to cancel the award and purchase the goods in the open market at the expense of the vendor.
- F. Warranty, Manufacturer: Manufacturer shall fully warrant all materials and equipment furnished under the terms of this contract against defects in material and workmanship for a period of not less than one year from the date of final acceptance by the County. While under warranty, manufacturer shall repair or replace inoperable materials or equipment in a timely manner to minimize the disruption of County operations. A copy or description of the manufacturer's warranty shall accompany each bid for the item(s) proposed, detailing the scope and length of the warranty. Where the successful Bidder is also the manufacturer of the materials or equipment provided under this contract, the Manufacturer's Warranty requirement will supersede the Successful Bidder Warranty requirement of this solicitation.

ATTACHMENT A

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Detailed Technical Specifications  
for  
Protective Clothing for Structural Firefighting  
Coat and Pant

This specification dated August 3, 2017 supersedes, modifies and replaces all previous editions.

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King William Fire & Rescue  
7936 Richmond Tappahannock Hwy  
Aylett, VA 23009

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## **LEGAL RIGHT TO SPECIFY**

The Fire Department (for the remainder of this section referred to as the “specifier”) chooses to exercise its Legal Right to Specify as determined by the U.S. Supreme Court’s affirmation of the decision handed down in the case of Whitten Corp. vs. Paddock, by the U.S. District Court of Massachusetts, the First Federal District Court, which in effect states:

- 1) That as trained professionals, specifiers make informed judgments on products that they feel best serve their needs. Also, that proprietary specifications (if chosen) DO NOT violate any antitrust laws. Technically, very few brands of material or equipment are exactly alike, and if the specifier wants to limit the specification to one source, he has the right to do so and enforce it.
- 2) Only the specifier has the responsibility and judgment for determining whether a proposed substitution is an “or equal”.
- 3) That from start to finish in the purchasing process, only the specifier can ultimately decide if another desirable product is available in lieu of the specification.
- 4) Finally, that the courts concluded “the burden is on the supplier or manufacturer, who has NOT been specified, to convince the specifier that their product is equal for the purpose of a particular project”.

The specifier has determined that this product specification shall represent the product to which all offerings shall be compared. Due to the fact that firefighting is an ULTRAHAZARDOUS, UNAVOIDABLY DANGEROUS activity, only trained Fire Department personnel with specific knowledge in the area of Personal Protective Equipment shall be allowed to make the final determining decision on the selection of the appropriate product to serve the Fire Department’s needs.

### **1.0 PURPOSE AND SCOPE**

This specification defines the minimum requirements for structural firefighter personal protective equipment (PPE) providing limited protection as defined by NFPA 1971, *Standard on Protective Ensemble for Structural Fire Fighting*, Latest Edition. In the absence of comment on a particular point, industry standard practice shall be presumed to prevail. Every exception to specifications must be clearly spelled out at the time of bid.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

### **2.0 UNITS OF MEASURE**

Current NFPA standards applicable to this product specification express values for measurement requirements in SI (metric-based) units, followed by US (inch-pound) approximate equivalents in parentheses. For the convenience of the fire department, this product specification *reverses the order* and presents the more familiar US approximation first, followed by the SI requirement in parentheses.

### **3.0 CERTIFICATION**

The manufacturer must certify that the garments proposed in its bid meet or exceed all requirements of NFPA 1971. The manufacturer must also list and label this product with Underwriters Laboratories Inc. (UL) or Safety Equipment Institute (SEI), as the third party certification organization prescribed in NFPA 1971. All certification testing and test preconditioning must have

been performed by an ISO 17025-certified laboratory. UL, SEI or a UL Authorized Client Test Data Program laboratory will fulfill this requirement.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

The manufacturer shall be registered to ISO 9001, *Quality Management Systems – Requirements, 2000*.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**4.0** WARRANTY

The manufacturer must provide a lifetime warranty against defects in materials and workmanship with the bid package.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**5.0** PRODUCT COUNTRY OF ORIGIN

For liability reasons, garments must be manufactured in the United States of America or Canada by companies with their assets and incorporation within the United States of America or Canada.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**6.0** LABELING REQUIREMENTS

Labels shall be permanently and integrally printed onto materials that meet all the requirements for labels of NFPA 1971. The garment shall be clearly labeled to fully identify the material content of all three layers: outer shell, moisture barrier and thermal liner.

In addition, each separable outer shell component shall be labeled in an obvious location including the size, date of manufacturer and an individualized serial number and bar code that matches the corresponding garment liner.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**7.0** CARE INSTRUCTIONS

The manufacturer shall provide a user information guide for the garments, which complies with user information requirements of NFPA 1971. Topics shall include, but not necessarily be limited to: pre-use information, preparation for use, inspection frequency and details, don/doff, use consistent with NFPA 1500, maintenance and cleaning, and retirement and disposal criteria and considerations.

This document shall be packaged with each garment along with a specification summary sheet describing garment custom options, sizing and production details. This written information shall be in complete compliance with NFPA 1971 requirements, and shall reference same.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**8.0** TRACEABILITY PROGRAM

The manufacturer shall have in place a computer maintained traceability program that provides for the assignment of a production control number to each garment. The traceability program must be capable of tracing the garment through production, from the bolts of cloth used in all three layers of the garment composite construction, to the assignment of the garment to the individual firefighter. This production control number shall be visibly located on the garment label and on other protected areas of garment.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**9.0** PATENT CONSIDERATIONS

The Bidder, without exception, shall indemnify and save harmless the Purchaser and its employees from liability of any nature and kind, including cost and expenses for or on account of any copyrighted, patented or un-patented invention, process, or article manufactured or used in the performance of the contract, including its use by the Purchaser. If the Bidder uses any design, device, or materials covered by letters, patent or copyright, it is mutually agreed and understood without exception that the bid prices shall include all royalties or costs arising from the use of such design, device, or materials in any way involved in the work.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**10.0** SIZING

To ensure a perfect fit, sizing shall be determined by actual measurements taken of the firefighter by a trained measurement specialist, or sizing try-ons, or both. Sizing measurements shall be taken according to a schedule and location(s) mutually agreed between the manufacturer and the department.

Garments shall be available in custom sizing as follows: coat chest in 2-inch (5.1 cm) increments, coat sleeve in 0.5-inch (1.3 cm) increments, coat back length in 1-inch (2.5 cm) increments, pant waist in 2-inch (5.1 cm) increments and pant inseam in 1-inch (2.5 cm) increments. A full range of women’s sizing, on women’s patterns, must also be available. Each sleeve and inseam length shall provide 100% gradation from shoulder to wrist, and from hip to ankle, to provide proper fit for individual arm and leg lengths. Pattern tailoring to custom-fit neck, bicep, hip/seat and thigh circumferences must also be provided, when needed, at no additional charge. Neither Small-Medium-Large-Extra Large sizing nor women’s garments cut to men’s patterning are considered acceptable, since proper fit facilitates mobility and minimizes stress.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**11.0** SELF-BINDING

Liner and moisture barrier shall be stitched together and turned, then topstitched, to create a self binding edge. The extra bulk of separate binding material is specifically prohibited.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**12.0** THREAD

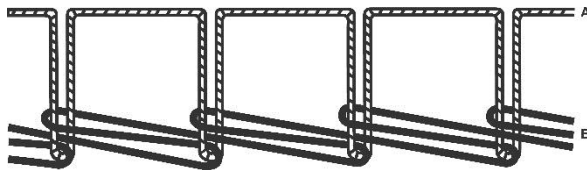
All thread used in structural seams shall be Nomex® of minimum Tex size T-70. Light colored garments and trim areas shall feature yellow thread. Black and dark garments shall feature black thread. Tan or bronze colored garments shall feature tan thread.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**13.0** STITCH METHODS

**13.1** MAJOR A & B SEAMS

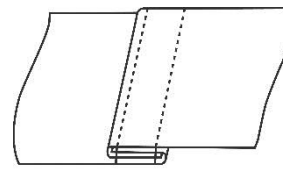
Except for the collar Major A seam, which is single-needle lock stitched three times, all Major A & B seams (as defined by NFPA 1971) shall be double stitched, double feld throughout all three layers (outer shell, moisture barrier and thermal liner), and shall be made with Nomex® thread, minimum Tex size T-90. Detailed stitch and seam type requirements are shown below.



Stitch Type 401

*Stitch Type 401*

*Double lockstitch, as defined by  
ASTM D 6193-97*



Seam Type LSc-2 (Modified)

*Modified Seam Type LSc-2*

*Double feld seam, modified only to ensure that  
both stitch lines penetrate all layers of cloth at  
joining, otherwise as defined by  
ASTM D 6193-97*

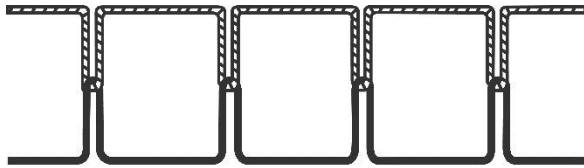
Also, all moisture barrier seams shall be tape-sealed to meet all requirements of the NFPA 1971 Liquid Penetration Resistance Test.

Does Your Bid Comply With All Aspects Of This Section?

For Outer Shell:	Yes _____	No _____
For Thermal Lining:	Yes _____	No _____
For Moisture Barrier:	Yes _____	No _____

**13.2** MINOR SEAMS

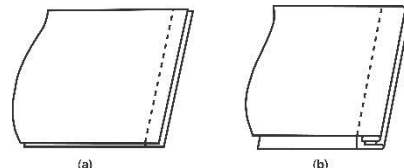
Most Minor seams, such as storm shields and mated hems, shall also be stitched with the specified Nomex thread. Detailed stitch and seam type requirements are shown below.



Stitch Type 301

*Stitch Type 301*

*Lockstitch as defined by ASTM D 6193-97*



(a)

(b)

Seam Type SSae-2

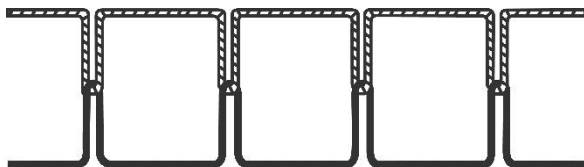
*Seam Type SSae-2*

*As defined by ASTM D 6193-97, shown (a) before and (b) after required turning*

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**13.3 POCKETS**

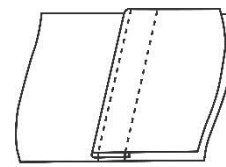
Flat garment pockets shall be stitched with the specified Nomex® thread. Detailed stitch and seam type requirements are shown below.



Stitch Type 301

*Stitch Type 301*

*Lockstitch as defined by ASTM D 6193-97*

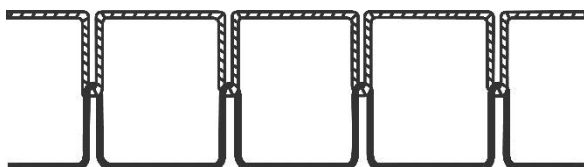


Seam Type LSd-2

*Seam Type LSd-2*

*As defined by ASTM D 6193-97*

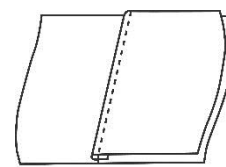
3-Dimensional pocketing shall feature these same construction details, but the reinforced single stitch Seam Type LSd-1 may be substituted for LSd-2. Detailed seam type requirements are shown below.



Stitch Type 301

*Stitch Type 301*

*Lockstitch as defined by ASTM D 6193-97*



Seam Type LSd-1

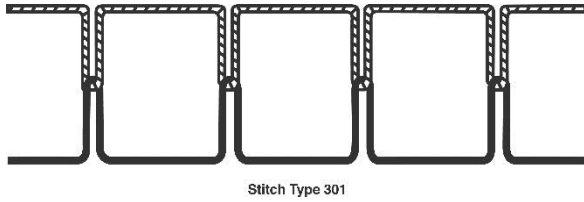
*Seam Type LSd-1*

*As defined by ASTM D 6193-97*

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**13.4** TRIM AND DANGER LABELS

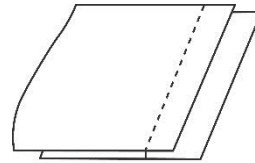
Trim and DANGER labels shall be stitched with the specified Nomex® thread. Detailed stitch and seam type requirements are shown below.



Stitch Type 301

*Stitch Type 301*

*Lockstitch as defined by ASTM D 6193-97*



Seam Type SSbd-1

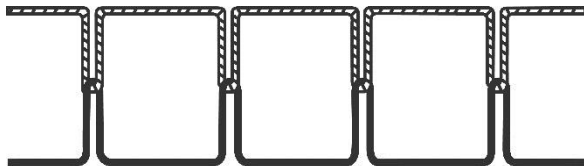
*Seam Type SSbd-1*

*As defined by ASTM D 6193-97*

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**13.5** SINGLE LAYER HEMMING AND FINISHING

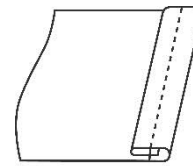
Single layer hemming and finishing shall be stitched with the specified Nomex® thread. Detailed stitch and seam type requirements are shown below.



Stitch Type 301

*Stitch Type 301*

*Lockstitch as defined by ASTM D 6193-97*



Stitch Type EFb-1

*Seam Type EFb-1*

*As defined by ASTM D 6193-97*

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**14.0** POCKETS

When exterior pockets are specified, the following requirements shall apply to all such custom option specified exterior pockets:

All pockets and flaps shall be reinforced at the top corners with bar tack stitching.

All pockets shall be reinforced with an extra layer of NFPA-certified outer shell, moisture barrier, or other NFPA-certified reinforcement material for extra durability. The exact location of the reinforcements shall be identified in the custom options section(s).

All pockets shall have a means to drain water and shall have a means of closure.

All pocket closures shall be made either with hook and loop fastener tape a minimum of 1.5 inches (3.8 cm) wide, with a flap, or with snaps. The specific placement of the closure system shall be outlined in the custom options sections.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**15.0** **TAILORED GRADING OF GARMENT LININGS**

All garment layers and Cold Weather Accessory Linings shall be graduated in size to fit within in each other in the overall composite without causing bunching or binding when the garment is worn.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**16.0** **POINTS OF STRESS**

All points of stress shall be reinforced with sturdy bartacks. Rivets are not acceptable because of their potential for rust and electrical or heat conduction.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**17.0** **ASSET TRACKING SERVICES**

Upon request, the manufacturer shall be capable of providing a Windows-compatible software program for the tracking of care, cleaning and maintenance of the department's PPE.

This tracking program shall meet or exceed all record-keeping requirements of standard NFPA 1851, *Standard on Selection, Care, and Maintenance of Structural Fire Fighting Protective Ensembles*, Latest Edition

Labels on each separable part of the garment shall include a standard style interleaved 2 of 5 barcode containing (at a minimum) an individualized serial number for asset tracking purposes.

The manufacturer must be capable of providing onsite or internet training to department personnel who are involved with the daily use of this tracking program, and if there is an additional cost involved for this service, the Bidder must disclose those costs at the time of bid.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**18.0** **REPAIRS AND ALTERATION SUPPORT**

The manufacturer shall furnish, free of charge, reasonable quantities of NFPA 1971-certified thread, materials and other supplies to allow the department to manage its own ongoing internal maintenance efforts. Also, the manufacturer shall provide on call at no charge, during normal business hours, a liaison for the repair department to assist the Fire Department on a telephone consultation basis, on all maintenance or repair questions that might arise. Additionally, the manufacturer shall agree to expedite, on its own cost-only basis, all repairs that must be performed at the manufacturer's plant, rather than in department, over the life of the contract.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**19.0 HIGH TEMPERATURES THERMAL INSULATING MATERIALS REQUIREMENT**

Because thermally stable materials are essential to maximizing protective performance in firefighters' PPE, and because NFPA only states "minimum" performance requirements, all thermal liner or thermal enhancing materials used in the garments shall also meet the following criteria after the 500 degree F oven test:

- 1) Material shall remain intact and flexible
- 2) No portion of the material shall crack, crumble or flake

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**20.0 BREATHABILITY REQUIREMENT**

Excluding where required by NFPA standard, necessary for functionality, or specifically called out in the custom option sections, all materials fabrics and reinforcements used in the construction of the garments shall be breathable and all moisture barrier material must be as specified in the Materials Section.

The breathability requirement includes but is not limited to: collar, chinstrap, storm shield, fly, water wells, front coat facings, and reinforcement cushioning where applicable.

Areas where non-breathability is allowed (absent Custom Option specifications): trim or other items placed externally on the arms that might need extra material to pass NFPA required Stored Energy Testing, hook and loop fastening, hardware or hardware backing, and pocket linings where used exterior to the outer shell.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**21.0 CONDUCTIVE AND COMPRESSIVE HEAT RESISTANCE (CCHR)**

Using breathable materials as outlined in the section titled Breathable Materials, there shall be: A minimum area of 4" x 4" (10.2 cm x 10.2 cm) at the shoulders and elbows that provide a minimum of 25 CCHR at 2 psi. with a minimum 6" x 6" (15.2 cm x 15.2 cm) area at the knees that provide 25 CCHR at 8 psi.

In all three of these compression areas at least a portion of the protective area shall be made from high temperature fiber based materials sewn to the thermal liner on the inside of the liner toward the moisture barrier.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_



**22.0 SEAM PROTECTION AT CUFFS**

At the coat and pant cuff Major A seams, the reflective trim shall stop just before the folding of the full field seam and for additional abrasion protection be covered by a sewn on strip of polymer coated Kevlar material laid on top of the Major A seam and covering each end of the trim.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**23.0 APPLICABLE DOCUMENTS**

The following standards in their active versions on the date of invitation for bid shall form a part of this specification to the extent specified herein.

<u>STANDARD</u>	<u>TITLE</u>
ASTM D 6193-97	Standard Practice for Stitches and Seams
NFPA 1500, Latest Edition	Standard on Fire Department Occupational Safety and Health Program
NFPA 1851, Latest Edition	Standard on Selection, Care, and Maintenance of Structural Fire Fighting Protective Ensembles
NFPA 1971, Latest Edition	Standard on Protective Ensemble for Structural Fire Fighting

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

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**COAT**

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To avoid liability and interface problems, coats and pants shall be procured from the same manufacturer.

**24.0 DESIGN CONCEPT (STYLING)**

The standard coat design shall be 6-inches (15.2 cm) longer at the rear hem than at the front hem and provide continuous and unbroken moisture barrier and thermal liner protection from the collar seam to the hem at the bottom of the coat tail. Each coat length shall be determined by each individual’s torso length to provide the coat-to-pant interface as defined by NFPA 1500. Coat design must interface properly with standard waist high bunker pants. To facilitate various body types the front to rear length differential shall be made available in 3-inch (7.5cm), 4-inch (10.0cm), 5-inch (12.5cm and 6-inch (15.0cm) “Tail Drops”.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**25.0 PATTERNING CONCEPT**

Garments shall feature a tailored three-piece body (with one-piece back) and one-piece, set-in sleeve construction throughout the outer shell, moisture barrier and thermal liner layers. One-piece garment body (either all layers or some layers) will not be considered acceptable since they cannot

be tailored to hard-to-fit personnel. Similarly, garments with seams in mid-back are not considered acceptable because of backbone irritation that can occur with SCBA use. To facilitate individual tailoring needs, the major A & B seams joining the one-piece back to the right and the left front body panels (outer shell and all interior layers) shall be located at the most lateral position when the coat is laid flat for inspection.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**26.0 PATTERNING REQUIREMENTS**

To assure maximum freedom of movement and reduce kinetic resistance with minimum garment weight and bulk, coat patterning shall include the following features:

- Degree of slope on shoulders shall be no more than 20%.
- Hydraulic Butterfly sleeve patterning having built-in underarm bellow with 85-degree Lift Up Release Action shall be provided to minimize coat hem rise.
- Sleeve attachment shall minimize shoulder lift and allow a full 360 degrees freedom of movement.
- Coat hem rise with overhead reach of both arms not to exceed 4-inch (10.2-cm) maximal extension on properly fitted garments.
- Shell-and-liner retraction at the cuff shall not exceed 1 inch (2.5 cm) when both arms are raised overhead. This helps eliminate wrist exposure.
- 10-inch (25.4-cm) chest over-sizing shall be provided.
- Coat sweep measurements must be consistent with the chest over-size at the hem.
- Reach when measured from cuff to cuff, with coat lying flat, and standard length sleeves extended to each side, shall be provided as detailed below.
- An alteration point at the hem that during manufacture allows the sweep dimension to be adjustable in two-inch (5.0cm) increments

<u>Chest Size</u>	<u>Standard Reach</u>
40 in (101.6 cm)	66 in (167.6 cm)
42 in (106.7 cm)	67 in (170.2 cm)
44 in (111.8 cm)	68 in (172.7 cm)
46 in (116.8 cm)	68 in (172.7 cm)

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**27.0 DRAG RESCUE DEVICE (DRD)**

Manufacturer shall supply an NFPA required and certified Drag Rescue Device with each coat. Each strap will be properly labeled with the chest size(s) the Rescue Strap is designed to fit.

Rescue Strap shall be designed in a fashion that it functionally provides a dynamic and articulated action and to eliminate excess strapping material hanging down the back when installed between the garment’s liner and outer shell.

The device shall be constructed using two components: a 1.75” (4.45 cm) Kevlar webbing grab handle; and a free-floating loop of Kevlar rope to go around each of the wearer’s arms/shoulder.

The grab loop shall extend upward and pass through a tunnel of outer shell and pass out through a reinforced slot in the coat outer shell just below the center rear of the collar seam. . The protruding grab loop shall then fold back down and be stored by hook and loop fastener.

The end of the garb loop shall be covered with an outer shell flap sewn below the held in place with hook & loop fastener to reduce the chances of snagging the grab loop by accident.

The Grab Handle shall be constructed of soft and pliable Kevlar webbing meeting the following specifications:

Description	100% Kevlar Double Plain Weave
Width	1.75” (4.45 dm)
Thickness	0.064" ± 0.010" (.163 cm ± .0254 cm)
Tensile	5,000 lb minimum (22.24 kN)

To facilitate comfort and safety the free-floating loop shall be constructed of soft and pliable Kevlar rope meeting the following specifications:

Description	100% Kevlar Tubular Plain Weave - Natural
Width	.038” (.097 cm)
Thickness	0.144" ± 0.005" (.366 cm ± .013 cm)
Tensile	3500 lb minimum (15.57 kN)

Rescue Strap shall be sewn with Kevlar thread

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

## **28.0 LINER ATTACHMENT**

The completed liner-moisture barrier assembly shall attach by means of four (4) evenly spaced glove snaps to each outer shell front facing to reduce weight, bulk and stiffness. To provide continuous moisture and pathogen protection at the front, the liner shall be positioned so it is sandwiched between the coat front facing and a breathable pathogen shield. The use of zippers or hook and loop fasteners in this area is not allowed due to their added weight, bulk and stiffness.

Liner sleeves shall be attached at the cuff by means of snaps on two (2) sets of Nomex tabbing per liner cuff. The male and female snap parts shall both be located on Nomex tabbing that is sewn to the liner at the cuff. A separate piece of Nomex tabbing shall be sewn to the shell cuff and fashioned as a loop without any snap hardware.

To provide continuous moisture protection and pathogen protection at the neck, the liner shall be positioned so that it is sandwiched between an outer-facing pathogen shield and an inside facing of the specified outer shell material. Attachment at the neck shall be by means of four (4) glove straps that penetrate only the layer of the attachment strip facing towards the liner, so that metal contact at a wearer’s neckline is completely eliminated.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**29.0 COAT CERTIFICATION LABEL ON LINER**

The coat certification label on the liner shall be affixed to the inside right body panel of the liner in a fashion to provide an inside liner pocket.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**30.0 COAT CERTIFICATION LABEL ON SHELL**

The coat label on the shell shall be affixed in a conspicuous location once the liner is removed.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**31.0 COLLAR**

The collar shall be of layered construction, consisting of a layer of waterproof moisture barrier and a layer of NFPA 1971-certified insulating material, sandwiched between two (2) layers of specified outer shell material. NFPA compliant collars shall be at least 3 inches (7.6 cm) high while CGSB compliant collars shall be at least 4 inches (10.2 cm) high. The design shall incorporate in its patterning a natural contour that will allow proper fit and performance in the standing (upright) or stowed position.

There shall be no vertical or horizontal seams or stitching in the body of the collar. The left outside of the collar shall have a sewn piece of 2-inch x 2-inch (5.0-cm x 5.0-cm) hook fastener tape for chinstrap-to-collar closure. The fastener tape shall be located rear ward far enough to allow for the location of a forward mounted microphone tab if so desired. Each collar shall be graded to individual coat sizes.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**32.0 CHIN STRAP**

The chinstrap shall be of layered construction identical to that of the collar configuration described in the previous paragraphs. Chinstrap shall be of a crescent shaped design with *minimum dimensions of:* 9 inches (22.5 cm) long across the top corners, 10.5 inches (26 cm) long across the bottom corners, and 3.5 inches (8.75 cm) in vertical height, measured at the center. The leading underside edge of the chinstrap shall have a 4.0-inch-wide (3.8 cm-wide) horizontal strip of loop fastener tape to ensure an adequately adjustable closure and to ensure passage of the Whole Garment Liquid Penetration Test.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**33.0 HANG-UP LOOP**

An 80-pound (36.3 kg) tear strength hang-up loop shall be provided at the interior collar seam. The loop shall be constructed of triple layers of the specified outer shell material, lockstitched to the coat. Webbing is not acceptable.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**34.0 SLEEVES**

To prevent stove-piping the sleeves shall be individually graded by coat size and sleeve length. For maximum freedom, the sleeve design shall feature extra full cut one-piece set-in sleeves with built-in bellows. To reduce the chances of possible top seam failure in that high thermal exposure area, the sleeve Major seams shall follow the underside of the arm and shall not cross over the outside of the elbow joint. Sleeve seam and sleeve attachment to coat body in all layers shall be 100% double fold and double stitched for maximum.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**35.0 INNER WRISTLET & WATERWELL**

Every coat shall feature a minimum 4.5-inch (11.4-cm) long, double-layer knit inner wristlets protected by a flame-resistant and moisture-resistant inner waterwell. The inner wristlet shall be sewn to the thermal liner sleeve end (not to the outer shell). The specified moisture barrier shall form an inner waterwell with an elastic gather sewn to the moisture barrier sleeve end.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**36.0 EXTERNAL WRISTLET**

Every coat shall feature a 2.5-inch (6.4 cm) long knit outer wristlet, which shall be mounted to the end of each outer shell sleeve to prevent liquid and debris movement up the sleeve between the outer shell and the moisture barrier/ thermal liner assembly.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**37.0 FRONT CLOSURE PROTECTIVE OVERLAP**

Two-inch-wide (5.1 cm-wide) panels of breathable moisture/ pathogen barrier and specified thermal liner materials shall be provided at coat front closure facings to preclude any type of break in the protective envelope. The entire circumference of a closed coat shall consist of specified shell, moisture barrier and thermal liner materials.

An additional layer of breathable moisture/ pathogen barrier material shall be sewn between the 2-inch-wide (5.1 cm-wide) panels and outer shell coat body for the entire length of coat front in a fashion to prevent liquid entry during the NFPA 1971 Whole Garment Liquid Penetration Test.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**38.0 COMPOSITE MATERIALS**

The specifier has determined the ONLY acceptable combination of materials. Any substitution of materials shall be grounds for immediate disqualification of bid without further consideration.

**38.1 OUTER SHELL**

Pioneer - Kevlar/Nomex Blend, 6.6 osy. Twill Weave - Black

**38.2 THERMAL LINING**

7.1 oz. calendared 100% spun 3.3 oz. Meta Aramid facecloth; 1 layer of 2.3 oz. E-89, and one layer 1.5 oz. E-89 (Berry Compliant)

**38.3 MOISTURE BARRIER**

3.2 oz/yd2 woven Nomex containing 2% carbon fibers, laminated to a PTFE membrane (Berry Compliant)

Does Your Bid Comply With All Aspects Of This Section?

For Outer Shell:	Yes _____	No _____
For Thermal Lining:	Yes _____	No _____
For Moisture Barrier:	Yes _____	No _____

**39.0 COAT CUSTOM OPTIONS TO BE PROVIDED**

Instructions in this custom options section that contradict earlier specifications or statements supersede those earlier specifications or statements as long as the required certifications are not compromised.

**\*\*REENGINEERED\*\***

**\*\*\* Revision 2 \*\*\***

- Std -Coat Cuffs
- Std -Inspection Port Liner
- Std-Liner detachable
- Std -SET Thermal Enhancement
- Std -Liner Label Pocket
- (R01) Std-Articulating Rapid Rescue Strap
- Std -Take Up Straps - 2 Postman
- Std -Trim Double-Stitched
- Trim -(4) NEW YORK -lime 2-tone Scotchlite (3")
- Back Patch - Pioneer - Black
- < KING WILLIAM
- FIRE RESCUE >11 -2" sewn letters -lime Scotchlite
- Hem Patch w/Velcro - Pioneer - Black
- FF LAST NAME (1st INITIAL when specified)
- Avg. 7 letters7 -2" sewn letters -lime Scotchlite
- (E11) Hooks & Dees/Zipper Interior - Pioneer - Black
- (Q02) LTO Comfort Chinstrap
- Black Knit Material on Comfort Chinstrap

Dead Air Panels  
Half Hi Bellows Pockets - Pioneer - Black - 7 x 9 x 1.5  
Handwarmers behind Bellows Pockets - Fleece  
Mic Tab - Pioneer - Black - left chest - 0.5 x 2.5  
Radio Pocket - Pioneer - Black - left chest - 7 x 3 x 2  
SL-90 Flashlight Clip - Pioneer- Black - right chest  
Sub Wristlets -Long Hybrid with tabs -Nomex - black

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

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## PANTS

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To avoid liability and interface problems, coats and pants shall be procured from the same manufacturer.

### **40.0 DESIGN CONCEPT (STYLING)**

The pant shall be of a traditional waist-high-only design to facilitate full torso ventilation of front, rear and sides of trunk for maximum body cooling effect to help minimize firefighter heat stress. For this reason, other than waist-high pants shall not be considered acceptable or “equal,” since additional trunk wrapping traps heat and moisture, increasing heat stress buildup while also creating mechanical resistance when covering the natural torso flexion point of the waist.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

### **41.0 PATTERNING CONCEPT**

Garments shall feature a tailored four-piece body plus a one-piece, over-sized crotch diamond pattern in the outer shell, moisture barrier and thermal liner.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

### **42.0 PATTERNING REQUIREMENTS**

To assure maximum freedom of movement and reduced kinetic resistance with minimum garment weight and bulk, the pants patterning shall:

- Incorporate hydraulic, swivel action leg-to-torso interfaces.
- Incorporate an oversized diamond-shaped crotch insert, graded according to size, for maximum action stride, optimum stepping reach and no “in-crotch” seaming.
- In the outer seam hip area, in all three layers shall, incorporate convex seam technology to provide for generous seat expansion when squatting and crawling without creating unsightly bagginess.
- That the diamond extend from just above the left knee to just above the right knee, and be centered equally from front to rear. Width of diamond at top of crotch shall be approximately proportionally graded to waist size and inseam length.

- Ensure that pants rest in normal body line balance of 22 inches (55.9 cm) center distance at the cuff for 42 waist, 30 inseam pants.
- Provide for an alteration point at the hips so that during manufacture the hip dimension can be adjustable in two-inch (5.0cm) increments

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**43.0 SUSPENDER BUTTONS**

Eight (8) heavy duty, rust-resistant suspender buttons shall be positioned around the waist. Suspender buttons shall be mounted through waistband of triple layer outer shell material that is internally reinforced with an additional band of coated needlepunch aramid.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**44.0 LINER ATTACHMENT**

The moisture barrier and thermal liner assembly shall be attached to the outer shell at the waistband with seven (7) evenly-spaced glove snaps. Liners shall be attached at the cuff by means of snaps on two (2) sets of Nomex tabbing per liner cuff. The male and female snap parts shall both be located on Nomex tabbing that is sewn to the liner at the cuff. A separate piece of Nomex tabbing shall be sewn to the shell cuff and fashioned as a loop without any snap hardware.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**45.0 PANT CERTIFICATION LABEL ON LINER**

The pant certification label on the liner shall be affixed to the inner left hip area of the liner.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**46.0 PANT CERTIFICATION LABEL ON SHELL**

The pant label on the shell shall be affixed to the facing at the fly..

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**47.0 FLY FRONT**

The outer shell fly shall be lock stitched to the left side of the front opening and shall be in proportion to waist size and crotch rise in both length and width. Fly inner lining shall extend at least 2 inches (5.1 cm) to the left of the outer shell fly attachment seam and shall be constructed of certified breathable moisture barrier and thermal liner. The right front pant opening shall have an internal facing extending at least 2 inches (5.1 cm) to the right and constructed of specified fabric. In combination with the liner, the system shall offer 360-degree protection without gaps during movement of the outer shell moisture barrier and thermal liner. Closure shall be by means of a minimum 1.5-inch-wide (3.8-cm-wide) hook and loop fastener, and all construction techniques used



shall provide liquid penetration protection under the NFPA 1971 Whole Garment Liquid Penetration Test. The fly shall be graded to the waist size of garments and crotch rise.

Does Your Bid Comply With All Aspects Of This Section? Yes \_\_\_\_\_ No \_\_\_\_\_

**48.0 COMPOSITE MATERIALS**

The specifier has determined the ONLY acceptable combination of materials. Any substitution of materials shall be grounds for immediate disqualification of bid without further consideration.

**48.1 OUTER SHELL**

Pioneer - Kevlar/Nomex Blend, 6.6 osy. Twill Weave - Black

**48.2 THERMAL LINING**

7.1 oz. calendared 100% spun 3.3 oz. Meta Aramid facecloth; 1 layer of 2.3 oz. E-89, and one layer 1.5 oz. E-89 (Berry Compliant)

**48.3 MOISTURE BARRIER**

**3.2 OZ/YD2 WOVEN NOMEX CONTAINING 2% CARBON FIBERS, LAMINATED TO A PTFE MEMBRANE (BERRY COMPLIANT)**

Does Your Bid Comply With All Aspects Of This Section?

For Outer Shell:	Yes _____	No _____
For Thermal Lining:	Yes _____	No _____
For Moisture Barrier:	Yes _____	No _____

**49.0**

Instructions in this custom options section that contradict earlier specifications or statements supersede those earlier specifications or statements as long as the required certifications are not compromised. **\*\*REENGINEERED\*\***

\*\*\* Revision 1 \*\*\*

Std -Inspection Port Liner

Std -Liner Detachable

Std -Trim Double-Stitched

Trim -(7) NFPA -lime 2-tone Scotchlite (3")

(J04) Wide Fly - 2" Velcro w/Hook & Dee

(O03) Angled Cuffs - Arashield - Black

Pant Cuffs - Arashield - Black

BiFlex Heat Channel Knees -Pioneer - Black

Horizontal Strips in BiFlex knees to be Arashield - Black

Take Up Straps - 2 Postman - Pioneer - Black

Bellows Pocket -1 -Pants - Pioneer - Black - left leg - 9 x 9 x 1.5

Pocket (1) Lined with Kevlar - left leg

Bellows Pocket (1) w/ Universal Escape System Adaptation - right leg - 9 x 9 x 2

Snap Style Suspender Attachment

(H13) Harness Pants -NY Style -No Harness

Basic H-Back Suspenders w/ Snap Attach & Quick Adjust Install  
 Does Your Bid Comply With All Aspects Of This Section?    Yes    \_\_\_\_\_    No    \_\_\_\_\_

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**PERCENTAGE SPECIFICATION COMPLIANCE CALCULATIONS**

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	Total Number "Yes/No" Questions		
	Total Number of <b>Yes</b> Answers		
	Total Number of <b>No</b> Answers		
% Specification Compliance: [(Total Yes Answers) ÷ (Total Answers)] x 100%			%
<p>Each "No" answer requires a full written explanation.          Each "Yes/No" question not checked where provided will be considered a "No" answer.</p>			

**BID FORM  
ATTACHMENT B**

County of King William  
Department of Financial Services  
180 Horse Landing Road #4  
King William, Virginia 23086

The undersigned hereby proposes to supply all necessary materials, equipment, and labor required to supply ten coats and ten pants and complete corresponding work associated with this project as specified in IFB #2018-005 and to abide by all of the terms, conditions and specifications included in IFB #2018-005 for the price of:

Bid Price:     One Coat per specifications \$ \_\_\_\_\_

                  One Pant per specifications \$ \_\_\_\_\_

TOTAL COST:     \$ \_\_\_\_\_

[This Bid Form must be completed in blue or black ink or type written and executed by the duly authorized agent of the Bidder.]

Name and Address of Firm: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

BY: \_\_\_\_\_  
                  Signature in ink

Print Name: \_\_\_\_\_

TITLE: \_\_\_\_\_

Contact telephone No: \_\_\_\_\_

Email: \_\_\_\_\_

Federal Tax ID#: \_\_\_\_\_

## **INSURANCE SPECIFICATION ATTACHMENT C**

The intent of this insurance specification is to provide the coverage required and the limits expected for each type of coverage. With regard to the Automobile Liability and Commercial General Liability, the total amount of coverage can be accomplished through any combination of primary and excess/umbrella insurance. However, the total insurance protection provided for Commercial General Liability or for Automobile Liability, either individually or in combination with Excess/Umbrella Liability, must total \$1,000,000 per occurrence. This insurance shall apply as primary insurance with respect to any other insurance or self-insurance programs afforded the County of King William. The policies shall be endorsed to be primary with respect to the additional insured.

The successful bidder shall carry Commercial General Liability Insurance in the amount specified below, including contractual liability assumed by the successful bidder, and shall deliver a Certificate of Insurance together with necessary policy endorsements from carriers licensed to do business in the Commonwealth of Virginia. The Certificate shall show the County of King William named as an additional insured for the Commercial General Liability and Umbrella/Excess Liability coverage if such coverage is used to meet the specified amount of insurance. The contract includes the following indemnification agreement: “The contractor agrees to indemnify, defend, and hold harmless King William County, it’s governing body, officers, employees, and insurance carriers, individually and collectively, from all losses, claims, suits, demands, expenses, subrogation, attorneys’ fees, or actions of any kind or nature resulting from personal injury to any person (including bodily injury and death), or damage to any property, arising or alleged to have arisen out of Bidder’s negligent acts, errors, omissions, related to the provision of services and/or products specified under the contract provided that such liability is not attributable to the County’s sole negligence.”

The County makes no representation or warranty as to how the successful bidder’s insurance coverage responds or does not respond. Insurance coverages that are unresponsive to the above indemnification provisions do not limit the successful bidder’s responsibilities outlined in the contract.

Title 65.2 of the Code of Virginia requires every employer who regularly employs three or more full-time or part-time employees to purchase and maintain workers' compensation insurance. If you do not purchase a workers' compensation policy, a signed statement is required documenting that you are in compliance with Title 65.2 of the Code of Virginia.

### **LIMITS:**

Worker’s Compensation	State of Virginia Requirements (Note 3)
Commercial General Liability	\$1,000,000 per occurrence \$2,000,000 annual aggregate
Automobile Liability	\$1,000,000 per occurrence
Professional Liability (E/O)	\$1,000,000 per occurrence (If stated as being required in the Specific Terms & Conditions)

**VIRGINIA STATE CORPORATION COMMISSION  
IDENTIFICATION NUMBER REQUIRED  
ATTACHMENT D**

A bidder organized or authorized to transact business in the Commonwealth of Virginia pursuant to Title 13.1 or Title 50 of the Code of Virginia must include in its bid the identification number issued to it by the Virginia State Corporation Commission. Any bidder that is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 or as otherwise required by law shall include in its bid a statement describing why the bidder is not required to be so authorized.

Any bidder described in the immediately preceding paragraph that fails to provide the required information shall not receive an award unless a waiver of this requirement and the administrative policies and procedures established to implement this section is granted by the Purchasing Agent.

Identification # Issued by the State Corporation Commission: \_\_\_\_\_

If you are not required to be so authorized, please state reason:

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**SAMPLE CONTRACT  
ATTACHMENT E**

COUNTY OF KING WILLIAM

IFB No. \_\_\_\_\_

This Contract entered into this \_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_, by \_\_\_\_\_, hereinafter called the "Contractor" and the County of King William, hereinafter called the "County".

**WITNESSETH** that the Contractor and the County, in consideration of the mutual covenants, promises and agreements herein contained, agree as follows:

**SCOPE OF WORK:** The Contractor shall perform all required work and shall provide and furnish all labor, materials, necessary tools, equipment and other services to complete the work in strict conformance with the Contract Documents hereinafter enumerated.

**COMPENSATION AND METHOD OF PAYMENT:** The contract amount is \_\_\_\_\_ based upon the bid of Contractor accepted by County. The Contractor shall be paid by the County as stated in the Specific Terms and Conditions.

**TIME:** All work shall be completed within 120 days of issuance of the notice to proceed by County.

**WARRANTY:** In addition to any other warranties in this contract, the Contractor warrants that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or workmanship performed by the Contractor or any subcontractor or supplier at any tier. This warranty shall be effective for one (1) year from the date of final acceptance of the work.

The Contractor shall remedy, at the Contractor's expense, any failure to conform to the contract requirements, or any defect. In addition, the Contractor shall remedy, at the Contractor's expense, any damage to County owned or controlled real or personal property when the damage is the result of:

- (1) The Contractor's failure to conform to contract requirements; or
- (2) Any defects of equipment, material, workmanship or design furnished by the Contractor.

Contractor shall not be liable for the repair of any defect of material or design furnished by the County nor for the repair of any damage that results from any defect in County furnished material or design, nor from pre-existing structural defects.

Notwithstanding any provisions herein to the contrary, the warranty period relates only to the specific obligation of the Contractor to correct the work, and has no relationship to the time within which its obligation to comply with the contract may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to its obligation other than specifically to correct the work.

**INDEMNIFICATION:** The Consultant agrees to indemnify, defend, and hold harmless King William County, it's governing body, officers, employees, and insurance carriers, individually and

collectively, from all losses, claims, suits, demands, expenses, subrogation, attorneys' fees, or actions of any kind or nature resulting from personal injury to any person (including bodily injury and death), or damage to any property, arising or alleged to have arisen out of Consultant's negligent acts, errors, omissions, related to the provision of services and/or products specified under the contract provided that such liability is not attributable to the County's sole negligence. Compliance by the Consultant with the insurance provisions hereof shall not relieve Contractor from liability under this provision.

**MODIFICATION OF CONTRACT:** The County may, upon mutual agreement with the Contractor, issue written modifications/change orders to the terms of this contract, and within the general scope thereof, except that no modifications can be made which will result in an increase of the original contract price by a cumulative amount of more than \$25,000 or 25%, whichever is greater, without the advance approval of the Board of Supervisors. In making any modification, the resulting increase or decrease in cost for the modification shall be determined by one of the following methods as selected by the County.

- a. The written modification shall stipulate the mutually-agreed price for the specific addition to/deletion from the scope of work/specifications which shall be added to or deducted from the contract amount;
- b. The written modification shall stipulate the number of unit quantities added to/deleted from the contract and multiplied by the unit price which shall be added to or deducted from the contract amount;
- c. The written modification shall direct the Contractor to proceed with the work and to keep, and present in such form as the County may direct, a correct account of the cost of the change together with all vouchers therefore. The cost shall include an allowance for overhead and profit to be mutually agreed upon by the County and the Contractor.

**CONTRACT DOCUMENTS:** The Contract Documents shall consist of this signed Contract and the following component parts, all of which are hereby made a part hereof as if set out in full:

1. Advertisement for Bids
2. Invitation for Bids No. 2018-005 including all attachments thereto.
3. Bid Proposal
4. Certificate of Insurance
5. Notice to Proceed
6. Change Orders/Modifications (if any)

ADDENDA:

No. \_\_\_\_\_, dated \_\_\_\_\_  
No. \_\_\_\_\_, dated \_\_\_\_\_

**CLAIMS:** All contractual claims, whether for money or other relief, shall be submitted in writing no later than sixty (60) days after final payment; however written notice of the Contractor's intention to file such claim shall have been given at the time of the occurrence or the beginning of the work upon which the claim is based. All claims shall be made in accordance with Virginia Code Section 15.2-1243 et seq. and the Board shall render a final decision in writing with regard to any such claim, not later than sixty (60) days subsequent to receipt of any such claim in writing by the County Administrator.

**IN WITNESS WHEREOF**, the parties have caused this Contract to be duly executed intending to be bound thereby.

CONTRACTOR:

BY \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

COUNTY OF KING WILLIAM:

BY \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_