

Patricia A. Peshka
Purchasing Agent



Joseph J. Solomon
Mayor

City of Warwick
Purchasing Division
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The following notice is to appear on the City of Warwick's website Wednesday, September 18, 2019. The website address is <http://www.warwickri.gov/bids>.

**CITY OF WARWICK
BIDS REQUESTED FOR**

Bid2020-177 Structural Firefighting Coats & Pants

Specifications are available in the Purchasing Division, Warwick City Hall, Monday through Friday, 8:30 AM until 4:30 PM on or after Wednesday, September 18, 2019.

Sealed bids will be received by the Purchasing Division, Warwick City Hall, 3275 Post Road, Warwick, Rhode Island 02886 up until 11:00 AM, Wednesday, October 2, 2019. The bids will be opened publicly commencing at 11:00 AM on the same day in the Lower Level Conference Room, Warwick City Hall.

Awards will be made on the basis of the lowest evaluated or responsive bid price. Please note that no bids can be accepted via email or fax.

The City of Warwick, in addition to soliciting bids in response to this bid, may consult, consider, and make an award for any and all open bid offers for a comparable unit as sought herein at the following websites:

RI State MPA: <http://www.purchasing.ri.gov/MPA/MPASearch.aspx>

NASPO: <https://www.naspo.org/>

NJPA (National Joint Powers Alliance): <https://www.njpacoop.org/cooperative-purchasing>

MHEC (Massachusetts Higher Education Consortium): <https://www.mhec.net/>

Individuals requesting interpreter services for the hearing impaired must notify the Purchasing Division at 401-738-2013 at least 48 hours in advance of the bid opening date.

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PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR BID

Acknowledgement of Addendum (if applicable)

Addendum Number	Signature of Bidder
_____	_____
_____	_____

COMPANY NAME: _____

COMPANY ADDRESS: _____

COMPANY ADDRESS: _____

BIDDER'S SIGNATURE: _____

BIDDER'S NAME (PRINT): _____

TITLE: _____ TEL. NO.: _____

EMAIL ADDRESS: _____*

*Please include your email address. Future bids will be emailed, unless otherwise noted.

II. AWARD AND CONTRACT:

The CITY OF WARWICK, acting as duly authorized through its Purchasing Agent/Finance Director/Mayor, accepts the above bid and hereby enters into a contract with the above party to pay the bid price upon completion of the project or receipt of the goods unless another payment schedule is contained in the specifications. All terms of the specifications, both substantive and procedural, are made terms of this contract.

DATE: _____
Bid2020-177

Purchasing Agent

PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR BID

CERTIFICATION & WARRANT FORM*

**This form must be completed and submitted with sealed bid.
Failure to do so will result in automatic rejection.**

Any and all bids shall contain a certification and warrant that they comply with all relevant and pertinent statutes, laws, ordinances and regulations, in particular, but not limited to Chapter 16- Conflicts of Interest, of the Code of Ordinances of the City of Warwick. Any proven violation of this warranty and representation by a bidder at the time of the bid or during the course of the contract, included, but not limited to negligent acts, either directly or indirectly through agents and/or sub-contractors, shall render the bidder's contract terminated and the bidder shall be required to reimburse the City for any and all costs incurred by the City, including reasonable attorney fees, to prosecute and/or enforce this provision.

Signature

Date

Company Name

Address

Address

***This form cannot be altered in any way**

**CITY OF WARWICK
NOTICE TO BIDDERS**

Bid2020-177 Structural Firefighting Coats & Pants

If you received this document from our homepage or from a source other than the City of Warwick Purchasing Division, please check with our office prior to submitting your bid to ensure that you have a complete package. The Purchasing Division cannot be responsible to provide addenda if we do not have you on record as a plan holder.

Bids received prior to the time of the opening will be securely kept, unopened. No responsibility will be attached to an officer or person for the premature opening of a bid not properly addressed and identified. No bids will be accepted via facsimile or email.

The opening of bids will be in the order established by the posted agenda and the agenda will continue uninterrupted until completion.

Once an item has been reached and any bids on that item has been opened, no other bids on that item will be accepted and any such bid will be deemed late.

The contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap for any position for which the employee or applicant is qualified and that in the event of non-compliance the City may declare the contractor in breach and take any necessary legal recourse including termination or cancellation of the contract.

A bidder filing a bid thereby certifies that no officer, agent, or employee of the City has a pecuniary interest in the bid or has participated in contract negotiations on the part of the City, that the bid is made in good faith without fraud, collusion, or connection of any kind with any other bidder for the same call for bids, and that the bidder is competing solely in his own behalf without connection with, or obligation to, any undisclosed person or firm.

All bids should be submitted with one (1) original and one (1) copy in a sealed envelope, which should read: *YOUR COMPANY NAME* plainly marked on the exterior of the envelope as well as "Bid2020-177 Structural Firefighting Coats & Pants."

Should you have any questions, please contact Asst. Chief Umbenhauer, Warwick Fire Department, at 401-468-4044.

All bids should be written in ink or typed. If there is a correction with whiteout, the bidder should initial the change.

Negligence on the part of the bidder in preparing the bid confers no rights for the withdrawal of the bid after it is open.

Any deviation from the specifications must be noted in writing and attached as part of the bid proposal. The bidder will indicate the item or part with the deviation and indicate how the bid will deviate from specifications.

The IRS Form W-9 available on www.warwickri.gov should be completed and submitted with the bid if the bidder falls under IRS requirements to file this form.

For a bid to be awarded to a corporation, limited liability company or other legal entity, prior to commencing work under the awarded bid, that corporation, company or legal entity may be required to provide to the Purchasing Agent a **Certificate of Good Standing** dated no more than thirty (30) days prior to the date upon which the bid approval was made.

The successful bidder will provide said **Certificate of Good Standing** (if required) within ten (10) calendar days after notification or the City reserves the right to rescind said award.

Prices to be held firm December 12, 2019 through December 11, 2020. Term contracts may be extended for one (1) additional term upon mutual agreement unless otherwise stated.

The contractor must carry sufficient liability insurance and agree to indemnify the city against all claims of any nature, which might arise as a result of his operations or conduct of work.

The City is exempt from the payment of the Rhode Island Sales Tax under the 1956 General Laws of the State of Rhode Island, 44-18-30, Paragraph I, as amended.

The Purchasing Agent reserves the right to reject any and all bids, to waive any minor deviations or informalities in the bids received, and to accept the bid deemed most favorable to the interest of the City.

The successful bidder must comply with all Rhode Island Laws applicable the public works projects, including, but not limited to provisions of Chapter 13 of Title 37 of the Rhode Island General Laws, pertaining to prevailing wage rates, and all other applicable local, state and federal laws.

The City reserves the right to terminate the contract or any part of the contract in the best interests of the City, upon 30-day notice to the contractor. The City will incur no liability for materials or services not yet ordered if it terminates in the best interests of the City. If the City terminates in the interests of the City after an order for materials or services have been placed, the contractor will be entitled to compensation upon submission of invoices and proper proof of claim, in that proportion which its services and products were satisfactorily rendered or provided, as well as expenses necessarily incurred in the performance of work up to time of termination.

No extra charges for delivery, handling or other services will be honored. All claims for damage in transit will be the responsibility of the successful bidder. Deliveries must be made during normal working hours unless otherwise agreed upon.

All costs directly or indirectly related to the preparation of a response to this solicitation, or any presentation or communication to supplement and/or clarify any response to this solicitation which may be required or requested by the City of Warwick will be the sole responsibility of and will be borne by the respondent.

If the respondent is awarded a contract in accordance with this solicitation and if the respondent fails or refuses to satisfy fully all of the respondents obligations thereunder, the City of Warwick will be entitled to recover from the respondent any losses, damages or costs incurred by the City as a result of such failure or refusal.

The City reserves the right to award in part or full and to increase or decrease quantities in the best interest of the City.

Any quantity reference in the bid specifications are estimates only, and do not represent a commitment on the part of the City of Warwick to any level of billing activity. It is understood and agreed that the agreement will cover the actual quantities ordered during the contract period.

The City reserves the right to rescind award for non-compliance to bid specifications.

The successful bidder must adhere to all City, State and Federal Laws, where applicable.

Warwick Fire Department
Request for Bids

Structural Firefighting Coat and Pants

The City of Warwick Fire Department is seeking bids for the purchase of Structural Firefighting Coat and Pants compliant with NFPA 1971, 2018 edition, and related accessories.

All prices will remain in effect (1) year from date of award with the option of an additional term. All prices are to include shipping and handling charges. Products are to be shipped to Warwick Fire Department, 111 Veterans Memorial Drive, Warwick, RI 02886.

EXCEPTIONS TO SPECIFICATIONS

Any and all exceptions to the below specifications must be clearly stated for each specification listed. Use additional pages for exceptions, if necessary.

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.

	GENERAL REQUIREMENTS	Meets Requirements		
		Yes	No	Exception
a	<p>All garments produced must meet or exceed the criteria set forth in the current edition of NFPA 1971 STANDARD ON PROTECTIVE ENDEMBLES 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.</p> <p>All components and composites used in the construction of garments must be third party tested, certified and listed for compliance to NFPA 1971. The label of the third party tester must denote certification.</p> <p>The manufacturer must be registered to the ISO Standard 9001 to assure a satisfactory level of quality.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
b	<p>Each garment must include instructions on how to access the User Information Guide with information required by NFPA 1971.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>

	<p>This guide must include:</p> <p>(a) Pre-use information:</p> <ul style="list-style-type: none"> · 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. <p>(b) Preparation for use:</p> <ul style="list-style-type: none"> · Sizing/adjustment. · Recommended storage practices <p>(c) Inspection:</p> <ul style="list-style-type: none"> · Inspection frequency and details. <p>(d) Don/Doff:</p> <ul style="list-style-type: none"> · Donning and doffing procedures. · Sizing and adjustment procedures. · Interface issues. <p>(e) Use:</p> <ul style="list-style-type: none"> · Proper use consistent with NFPA 1500, Standard on Fire Department, Occupational Safety and Health Program, and 29 CFR 1910, 132. <p>(f) Maintenance and Cleaning:</p> <ul style="list-style-type: none"> · 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. <p>(g) Retirement and Disposal</p> <ul style="list-style-type: none"> · Retirement and disposal criteria and considerations. <p>(h) Drag Rescue Device (DRD)</p> <ul style="list-style-type: none"> · Use, inspection, maintenance, cleaning and retirement of the DRD. 			
c	<p>There must be a PDF417, two dimensional bar code label permanently affixed to each garment for tracking purposes. The bar code must contain a minimum of the following information:</p> <p>a. unique serial number</p>	<p>Yes</p> <p><input type="checkbox"/></p>	<p>No</p> <p><input type="checkbox"/></p>	<p>Exception</p> <p><input type="checkbox"/></p>

	<p>b. item description (brand, model, material color) c. lot information (date of mfg., size, etc.) d. material description e. the standard to which the garment is compliant</p> <p>The bar code must be able to withstand customary wash and wear cycles. The PDF417 bar code must incorporate a minimum of a 30% "error correction" capability.</p>			
d	<p>Coats must be made available in even chest sizes with corresponding sleeve lengths available in short, regular, and long. Pant sizes must be made available in even waist sizes with inseam lengths available in extra short, short, regular and long. Male and female sizing available.</p> <p>Each coat length must 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 pants.</p> <p>Sizing must be performed utilizing a "sizing set" consisting of each of the sizes available for manufacture. The use of a tape measure for fitting will not be acceptable.</p>	<p>Yes <input type="checkbox"/></p>	<p>No <input type="checkbox"/></p>	<p>Exception <input type="checkbox"/></p>
e	<p>Each garment must have a limited lifetime warranty against defects in material and workmanship.</p>	<p>Yes <input type="checkbox"/></p>	<p>No <input type="checkbox"/></p>	<p>Exception <input type="checkbox"/></p>
f	<p>The garment composite, consisting of the outer shell, moisture barrier and thermal liner, must provide a Thermal Protective Performance (TPP) of not less than 42 when tested in accordance with NFPA 1971 standard.</p> <p>The garment composite, consisting of the outer shell, moisture barrier and thermal liner, must provide a Total Heat Loss (THL) of not less than 250 when tested in accordance with NFPA 1971 standard.</p> <p>The Heat Transfer Index rating must be 25 seconds for the shoulder when measured at 2 psi (pounds per square inch) and 25 seconds for the knee when measured at 8 psi.</p>	<p>Yes <input type="checkbox"/></p>	<p>No <input type="checkbox"/></p>	<p>Exception <input type="checkbox"/></p>
g	<p>All outer shell stress points, including top and bottom pocket corners, pocket flap corners, top and bottom of storm flap/fly must be reinforced using a 42 stitch minimum bar tack.</p>	<p>Yes <input type="checkbox"/></p>	<p>No <input type="checkbox"/></p>	<p>Exception <input type="checkbox"/></p>
h	<p>Each garment must 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.</p>	<p>Yes <input type="checkbox"/></p>	<p>No <input type="checkbox"/></p>	<p>Exception <input type="checkbox"/></p>

	Do Not Remove This Label THIS GARMENT MEETS THE GARMENT REQUIREMENTS OF NFPA 1971, STANDARD ON PROTECTIVE ENSEMBLE FOR STRUCTURAL FIRE FIGHTING, 2018 EDITION			
i	Each Coat and Pant must be packaged in a dark plastic bag in order to provide protection during shipping and prior to first use	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
j	Online training must be available meeting NFPA 1500 training requirements on the safe use of the (garments, helmet, boots, gloves, hood). This online training must include: - Personal Responsibility of the Individual Fire Fighter - Purpose and Limitations - Structural PPE Construction, Features, and Functions - Routine Inspection - Donning and Doffing - Proper Fit and Overlap - Using Your PPE Safely - How Fire Fighting Affects the Body - Routine Cleaning of PPE - Assembly and Disassembly of PPE - Storage - Useful Life and Retirement of PPE Additionally, online training satisfying NFPA 1851 training requirements on advanced inspection, advanced cleaning and basic repairs (turnouts and helmets) must be available.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
TECHNICAL SPECIFICATION - COAT		Meets Requirements		
1	COAT CONSTRUCTION: The coat must design of a 3-panel construction in all layers offering an “athletic cut” fit design. For optimum comfort and mobility an inverted pleat on each side where back front and back body panel pieces meet must be incorporated. Each pleat must begin at the back of each shoulder and must extend vertically down the side of the coat. A combination moisture barrier/thermal liner must include a corresponding 1" inward dynamic fold approximately 1.5" from each sleeve seam at the shoulder. This fold must provide for coat expansion when extending arms forward and must interface with the inverted pleats of the outer shell to maximize mobility and function of the outer shell and thermal liner.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>

2	<p>COAT OUTER SHELL MATERIAL: The outer shell must be constructed of +/- 6.5 oz./sq. yd 65% Kevlar®/35% Nomex® twill weave with extremely durable FPPE water resistant Teflon® FPPE alloy.</p> <p>Fabric Color must be gold</p>	<p>Yes</p> <input type="checkbox"/>	<p>No</p> <input type="checkbox"/>	<p>Exception</p> <input type="checkbox"/>
3	<p>COAT LINER & MOISTURE BARRIER</p> <p>THERMAL LINER: The thermal liner must be comprised of Glide Ice™ high-lubricity, stress reducing, filament/spun face cloth weighing 3.6 oz/sq/yd. The Nomex filament yarns must represent no less than 60% of the face cloth's composition and must be positioned in the warp direction of the weave in order to optimize their slippery characteristics on the face. Spun yarns comprised of 30% Nomex and 10% Lenzing FR with superior wicking characteristics must be used to promote moisture management within the garment. The Glide Ice™ face cloth must be quilted to one layer of apertured (11-13 apertures/sq. inch) spunlace aramid (85% NOMEX®/15% KEVLAR®) weighing approximately 1.5 oz./sq. yd with a Teflon® finish to promote minimal moisture stored in the garment microclimate as well as promote rapid drying. An additional layer of 3.0+ oz./sq. yd. NOMEX® Chambray face cloth with a Teflon finish must be positioned toward the outer shell. This layer provides additional thermal insulation should be treated with a Teflon finish to promote minimal moisture storage in the garment as well as promote rapid drying (Total weight +/- 8.0 oz./sq. yd.)</p> <p>MOISTURE BARRIER: NOMEX® substrate laminated to a lightweight breathable, Teflon membrane; weighing 5 oz./sq. yd. The liner must have one 8.5" x 9" internal pocket which must be made of black outer shell material. The liner pocket must be located on the left side of coat liner.</p> <p>QUILT THERMAL LINER CONSTRUCTION: The two-piece moisture barrier must be completely 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 must be sealed as required by NFPA 1971. The moisture barrier/thermal liner must finish no more than 1" from the cuffs and 2" from the hem.</p> <p>The vented moisture barrier must have a circumferential opening at the torso mid-section with a two-inch overlap and</p>	<p>Yes</p> <input type="checkbox"/>	<p>No</p> <input type="checkbox"/>	<p>Exception</p> <input type="checkbox"/>

	<p>bartack reinforcement.</p> <p>MOISTURE BARRIER/THERMAL LINER ATTACHMENT: Completely Removable: The moisture barrier/thermal liner must be completely detachable from the outer shell for ease of cleaning by the use of zippers and snaps. There must be a zipper and two snaps down each front facing, a zipper must also be located around the entire neck opening. In addition, there must zipper at each sleeve end.</p> <p>All moisture barrier seams must be sealed as required by NFPA 1971.</p>			
4	<p>DRAG RESCUE DEVICE:</p> <p>The Fire Fighter Recovery Harness™ must be constructed of a one and one-half inch wide KEVLAR® strap that must be installed between the outer shell and the thermal liner. This harness must 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" x 2" loop attached to the outer shell. This strap is then secured under a 2.25" x 5.25" flap that is sewn in at the neck /collar area. Two pieces 1" x 2" loop must be set vertically on shell to align with two pieces of 1" x 2" hook set vertically to the underside of the flap. The harness is also held in proper alignment by means of a 2" x 2" piece of loop placed on the inside of the outer shell underneath the chest trim that corresponds to a piece of 1.5"x 2" hook located on the harness. Two 1" x 3.5" self-fabric straps with 1" x 2" hook on one end and 1" x 2" loop on other end must be set to coat in the shoulder cap area to keep straps in proper position for use.</p>	<p>Yes</p> <input type="checkbox"/>	<p>No</p> <input type="checkbox"/>	<p>Exception</p> <input type="checkbox"/>
5	<p>REFLECTIVE TRIM: All trim must be sewn with four rows lockstitch 301, minimum six stitches/inch for most secure trim attachment.</p> <p>Ventilated Trim must be of Diamond Reflexite, lime/yellow, perforated with 0.08 mm holes (114 per square inch) to provide a conduit for the release of vapor that can occur when moisture is heated and the trim compressed.</p> <p>Coat trim must be applied as follows: New York Pattern: One 3" strip must be set full circumference at the bottom sweep of the outer shell; one 3" strip must be set around each sleeve approximately 2" above the cuff; one 3" strip must be set around each sleeve just above the elbow; one 3" strip must be set full circumference at the chest.</p>	<p>Yes</p> <input type="checkbox"/>	<p>No</p> <input type="checkbox"/>	<p>Exception</p> <input type="checkbox"/>

	Reflective Trim must be set vertically down flap of drag rescue device, 4 rows lockstitch.			
6	<p>COAT COLLAR:</p> <p>MOISTURE BARRIER/THERMAL LINER CONSTRUCTION: The liner collar must be a layer of self-material and a layer of STEDAIR 4000. The design must be compatible with the outer shell so that the liner does not buckle, pull, or otherwise restrict body motion.</p> <p>The left and right fronts of the liner collar must be attached to the facings at the front closure of the outer shell. The neck of the liner collar must 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 STEDAIR 4000 and 1.75" self-material extension must be sewn the full length of the neck with two pieces of 1" loop for attachment to shell collar. The self-material extension must overlap the shell collar to prevent exposure of the hook and loop. Collar closure must 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.</p> <p>COLLAR: The 3" split collar must consist of two piece construction shaped for comfort. The collar must be configured such that when the collar is raised it must 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 must be fully lined with a layer of STEDAIR 4000. The shell collar must provide proper interface with the liner to insure no moisture penetration through the collar seam to the inside of coat. The shell collar must have two pieces 1" hook along top edge for liner attachment. The collar must be attached to the liner facing using 1" hook. Collar must be of such design so as not to interfere with SCBA face masks, or helmet.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
7	<p>COAT INNER YOKE REINFORCEMENT: A layer of 3.0 oz./sq. yd. Teflon® treated Chambray (NOMEX® spun) face cloth quilted to two layers of NOMEX®/Kevlar® spunlace (Total weight +/- 6.0-6.8 oz./sq. yd) must be positioned between the moisture barrier and thermal liner for extra thermal protection in a high heat and compression area of the coat. It must be sewn to the inside of the upper back portion of the thermal liner across the upper</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>

	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.			
8	COAT SHOULDER REINFORCEMENT: A 4" wide area at the top of the shoulders extending 6" from the collar seam must be capped with outer shell material for abrasion resistance and thermal protection.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
9	COAT ELBOW REINFORCEMENT: The elbow must have an insert throughout all layers that must provide a natural bend in the sleeve. This elbow must include shaped pieces and darts to create free movement with few restrictions. The insert must consist of two layers of outer shell material for abrasion resistance and thermal protection.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
10	COAT CUFF REINFORCEMENT: The extended cuff of the sleeve must be reinforced with a binding of outer shell material not less than 3" in total width for abrasion resistance and thermal protection. One leather tab with female snap fastener must be set in the cuff to attach outer shell to liner.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
11	COAT WRISTLETS: An internal wristlet must consist of a 2-ply knit of 48% NOMEX®/48% KEVLAR® and 4% Spandex. Wristlet to be combination of natural and bronze colors producer dyed by DuPont, and with extremely durable Teflon® water resistant alloy not less than 8" extending completely over the palm with a thumbhole preventing the wristlet from sliding back. Wristlets must be double stitched and bound to the moisture barrier/thermal liner providing extended thermal and slash protection.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
12	COAT WATER WELL: A combination Chambray face cloth quilted to two layers of AraFlo E89 and one layer of breathable STEDAIR 4000 moisture barrier leader must be sewn no more than 1" back from the combination liner sleeve end to form a sleeve well. A STEDAIR 4000 moisture barrier leader must be sewn no more than 1" back from the combination liner sleeve end. This leader must be approximately 4" in length and end with a gathering of 1" elastic. This sleeve well must prevent water and hazardous materials from entering the sleeve when arms are in a raised position. The combination liner sleeve ends must be inserted into the outer shell sleeve ends by means of lining up a zipper. This method of liner attachment must prevent any gaps from	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>

	occurring between the combination liner and sleeve well during a full range of motion. The combination liner must extend to within 1" of the sleeve ends.			
13	<p>COAT POCKETS: 9"x 7" Semi-bellow and handwarmer pocket combination that expands by means of side and bottom gussets to a thickness of 2" in back only and 0" in front. The pocket must be set at the bottom of the coat hem and reflective trim must be set on each pocket. There must be a 6" opening on the rear side of the bellow of the pocket</p> <p>Pocket must be lined inside with fleece thermal liner material and have a KEVLAR® twill backer.</p> <p>Pocket and flap must be set with stitch 301, seam Ssb-2 with each corner of pocket opening and top corners of flap reinforced with bar tacks for additional strength. Drainage of moisture to be provided by brass eyelets.</p> <p>Each pocket flap must measure 10" wide by 3" high in front and 5" high in rear. Each flap must incorporate a 1" by 2" polymer coated aramid pull tab for easy opening. The corner under this tab must be reinforced with two layers of silicone based padding for stability.</p> <p>A hook and loop closure system must 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.</p> <p>Item Location - Located on left and right of the front bottom.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
14	<p>COAT POCKET – RADIO POCKET: One 3.5" 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.</p> <p>Pocket and flap must 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 must provide drainage of moisture.</p> <p>Pocket flaps must be 4.5"x 5". Pocket must be fully lined all 3 sides inside pocket with polycotton lining.</p> <p>Pocket flap must close to the pocket top using 1 piece of 1"x 2" loop on pocket horizontally and 1 piece of 1"x 2" hook on flap vertically. Pocket flap must include a notch on the flap to</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>

	accommodate an antenna. Item Location - Located on the left side of the chest.			
15	MIC TAB: There must be a 1" X 3" triple layer self -fabric mic tab attached with bar tacks on each side. Bar tacks must be a minimum 42-stitch bar tack. Item Location - Located on the left chest above radio pocket	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
16	MIC TAB: There must be a 1" X 3" triple layer self -fabric mic tab attached with bar tacks on each side. Bar tacks must be a minimum 42-stitch bar tack Item Location - Located on storm flap at a 1 O'clock Angle	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
17	FLASHLIGHT STRAP: There must be a 1" x 8.5" self fabric flashlight holder x-stitched to the outer shell of coat. Strap must have 1"x 2" hook applied to one end of the strap and 1"x 2" loop applied to opposite end of strap. There must be a 703 hook applied to outer shell 5" above the self fabric strap. It must be securely fastened to the coat by means of a self fabric strap looped through the end of the 703 hook and bartacked to the outer shell. Item Location - Located on right chest	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
18	FLASHLIGHT TAB: There must be a 1" X 3" triple layer self -fabric flashlight tab attached with bar tacks on each side. Bar tacks must be a minimum 42-stitch bar tack Item Location - Located on the left chest, 3" above the flashlight strap. (top of strap to top of tab measurement)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
19	HANGER LOOP: An external hanger loop constructed of a double layer of outer shell material and reinforced with two 42-stitch bartacks must be provided on the outside of the coat at the collar seam. It must be designed to provide long service and must 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.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
20	COAT CLOSURE SYSTEM:	Yes	No	Exception

	<p>THERMAL FRONT PANEL CONSTRUCTION: There must 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 inside of liner, both right and left inside front facings of the coat outer shell must incorporate outer shell fabric extending from collar to hem.</p> <p>COAT FRONT CLOSURE DESIGN: The complete outer shell coat front closure design must consist of a front closure system completely protected by an outside storm flap which must have its own, independent storm flap closure system.</p> <p>STORM FLAP: A storm flap measuring not less than 2.5" wide, nor less than 22" in length must 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 must be STEDAIR 4000 moisture barrier meeting all requirements for moisture barriers sandwiched between two layers of outer shell fabric.</p> <p>FRONT/STORM FLAP CLOSURES: The front closure must consist of a thermoplastic zipper with a 1 3/4" polymer coated aramid tab added to left bottom for fast closure and exit. The storm flap closure must consist of double-stitched 1.5" wide hook and loop attachment with hook fastener sewn on the left front of the coat, and corresponding loop fastener sewn on the inner side of the outer storm flap. The hook and loop closure must extend the full length of the outer storm flap eliminating all exposed frontal hardware.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21	<p>LINER INSPECTION SYSTEM: There must be an 11" opening located on the coat liner system at the center right front 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 must be one piece 1" x 4" loop sewn to the back side of the liner system with a piece of 1.5" x 3" hook sewn to the inside of the outer shell to ensure proper alignment when installing the liner system into the outer shell. This Liner Inspection System is completely hidden when the liner is properly installed into the outer shell.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
22	<p>EMBLEM: There must be a 2"x3" American Flag patch, with stars in the upper left corner, sewn to the coat.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>

	Item Location - Located on the shoulder left sleeve			
23	<p>SEWN ON LETTERING: There must be 3" lime yellow Scotchlite letters, sewn-on.</p> <p>Lettering must be WARWICK</p> <p>Location for Lettering - Located across the yoke</p>	<p>Yes</p> <input type="checkbox"/>	<p>No</p> <input type="checkbox"/>	<p>Exception</p> <input type="checkbox"/>
24	<p>SEWN ON LETTERING: There must be 2" lime yellow Scotchlite letters, sewn-on.</p> <p>Lettering must be FF ID</p> <p>Location for Lettering – Located on shoulder of right sleeve.</p>	<p>Yes</p> <input type="checkbox"/>	<p>No</p> <input type="checkbox"/>	<p>Exception</p> <input type="checkbox"/>
TECHNICAL SPECIFICATION – PANT		Meets Requirements		
25	<p>PANT CONSTRUCTION: The pant must have a low rise waist offering an “athletic cut” fit design.</p> <p>RADIAL INSEAM BAND: A radial banded insert must continuously from the top of knee on one leg, through the crotch area to the top of the opposite knee. The elimination of crotch seam is intended to reduce tension in the crotch area to give added comfort and to help to alleviate stress to extend the useful life of the gear. Also, there should be 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 pant. 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.</p> <p>WAISTBAND: The waist of the pants must be reinforced on the inside with 1-ply of outer shell fabric material not less than 1.5" in width. The pant waist must be contour shaped for better comfort and hemmed to provide strength with the independent waistband, which must then be double stitched to the outer shell.</p>	<p>Yes</p> <input type="checkbox"/>	<p>No</p> <input type="checkbox"/>	<p>Exception</p> <input type="checkbox"/>
26	<p>PANT OUTER SHELL MATERIAL: The outer shell must be constructed of +/- 6.5 oz./sq. yd 65% Kevlar®/35% Nomex® twill weave with extremely durable FPPE water resistant Teflon® FPPE alloy.</p>	<p>Yes</p> <input type="checkbox"/>	<p>No</p> <input type="checkbox"/>	<p>Exception</p> <input type="checkbox"/>

	Fabric color must be gold.			
27	<p>PANT LINER & MOISTURE BARRIER:</p> <p>THERMAL LINER: The thermal liner must be comprised of Glide Ice™ high-lubricity, stress reducing, filament/spun face cloth weighing 3.6 oz/sq/yd. The Nomex filament yarns must represent no less than 60% of the face cloth's composition and must be positioned in the warp direction of the weave in order to optimize their slippery characteristics on the face. Spun yarns comprised of 30% Nomex and 10% Lenzing FR with superior wicking characteristics must be used to promote moisture management within the garment. The Glide Ice™ face cloth must be quilted to one layer of apertured (11-13 apertures/sq. inch) spunlace aramid (85% NOMEX®/15% KEVLAR®) weighing approximately 1.5 oz./sq. yd with a Teflon® finish to promote minimal moisture stored in the garment microclimate as well as promote rapid drying. An additional layer of 3.0+ oz./sq. yd. NOMEX® Chambray face cloth with a Teflon finish must be positioned toward the outer shell. This layer provides additional thermal insulation and is treated with a Teflon finish to promote minimal moisture storage in the Garment as well as promote rapid drying (Total weight +/- 8.0 oz./sq. yd.)</p> <p>MOISTURE BARRIER: NOMEX® substrate laminated to a lightweight breathable, Teflon membrane; weighing 5 oz./sq. yd.</p> <p>MOISTURE BARRIER/THERMAL LINER CONSTRUCTION: Design must 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 must be constructed of 3.0 oz./sq. yd. Teflon® treated Chambray (NOMEX® spun) face cloth quilted to two layers of NOMEX®/Kevlar® spunlace (Total weight +/- 6.8 oz./sq. yd.). The waist of the moisture barrier/thermal liner must 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 must be positioned between the moisture barrier and thermal liner at the knee.</p>	<p>Yes</p> <input type="checkbox"/>	<p>No</p> <input type="checkbox"/>	<p>Exception</p> <input type="checkbox"/>

	<p>QUILT THERMAL LINER CONTRUCTION: The moisture barrier must be completely sewn to a Teflon® treated NOMEX® 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 must be sealed as required by NFPA 1971. The moisture barrier/thermal liner must finish no more than 3" from the pant cuffs.</p> <p>COMPETELY REMOVEABLE: The moisture barrier/thermal liner must be completely detachable from the outer shell for ease of cleaning by using snaps and zippers. Nine evenly spaced snaps must secure the liner to the integral waistband. Zippers must secure the liner and attached at each leg end.</p>			
28	<p>REFLECTIVE TRIM: All trim must be sewn with four rows lockstitch 301, minimum six stitches/inch for most secure trim attachment.</p> <p>Ventilated Trim must be of 3" Diamond Reflexite, lime/yellow, perforated with 0.08 mm holes (114 per square inch) to provide a conduit for the release of vapor that can occur when moisture is heated and the trim compressed.</p> <p>Pant trim must be applied as follows: one strip set full Circumference around the bottom of the cuff 3" from the bottom cuff.</p>	<p>Yes</p> <input type="checkbox"/>	<p>No</p> <input type="checkbox"/>	<p>Exception</p> <input type="checkbox"/>
29	<p>PANT FLY CLOSURE:</p> <p>STORM FLY/CLOSURE: The outer shell must have an overlapping fly front running the full length of the fly on the left side. The flap must not be less than 2.5" wide at the waistband. The bottom of the fly must be reinforced with a 42 stitch bartack.</p> <p>The storm fly must be held closed along its length by means of a hook and loop fastener closure 1.5" minimum width, 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. The storm fly must be outer shell material, lined with a 3.5" strip of STEDAIR 4000 moisture barrier material to prevent wicking.</p> <p>THERMAL FLY ASSEMBLY: The moisture barrier/thermal liner must be constructed</p>	<p>Yes</p> <input type="checkbox"/>	<p>No</p> <input type="checkbox"/>	<p>Exception</p> <input type="checkbox"/>

	with an extension on the left side at the waist of all layers of the fly opening to assure continuous thermal and moisture protection. This overlap must be positioned between the layers of the outside storm fly. A thermoplastic zipper must be sewn to the moisture barrier/thermal liner to engage corresponding zipper on the underside of the outside storm fly.			
30	<p>TAKE UP STRAPS: Two waist straps must be sewn and bar tacked 2 ½" down from the top of the waistband. One strap must be installed on the right side and one on the left side constructed out of one piece of shell material folded to two layers and sewn to form a 1" wide strap. The back strap must be a minimum of 10" in length and must be affixed to the pant by means of two bartacks approximately ½" apart.. The front take up straps must have a 5/8" nickel plated postman style slide buckle which must be threaded through the five inch in length strap folded to form two layers and affixed by means of two bartacks ½" apart. The strap is sewn to form an attachment strap approximately 2 ½" in length designed for quick take up adjustment.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
31	<p>TAKE UP STRAP: A hook and dee ring closure must be used for quick one motion closing at the waist. The hook must be 2.5" in length, made of a zinc non ferrous metal alloy and weigh 1.2 oz. +/- 5%. It must be securely fastened to the pant by means of a 5/8" wide, treated leather take up strap looped through the rear of the buckle and triple riveted to the pant shell with leather backed rivets. The dee must be made of a non ferrous metal alloy 2" long x 1 1/16" wide and secured by two leather backed rivets to the leading edge of fly flap.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
32	<p>PANT KNEE REINFORCEMENT: The knee must have an insert throughout all layers that must provide a natural bend in the leg. This knee must include cut outs, shaped pieces, and darts to create free movement with few restrictions. The insert must consist of black polymer coated aramid for abrasion resistance and thermal protection. For added thermal protection, an additional layer of uninterrupted 1/8" thick, fire retardant closed-cell foam must be positioned between the moisture barrier and thermal liner.</p> <p>In addition to reinforcement, knees must be padded using one layer of uninterrupted 1/8" thick, fire retardant closed-cell foam. This reinforcement material must be oriented between the outer shell and knee insert reinforcement.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
33	<p>PANT CUFF REINFORCEMENT: The cuff area of the pant must be reinforced with a binding of</p>	Yes	No	Exception

	black polymer coated aramid not less than 2" in total width for greater strength, abrasion resistance, and thermal protection. In addition a 3" x 3 1/2" piece of reinforcement material must 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 must match the material used on the pants cuffs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34	BOOT CUT: The back portion of the cuff will gradually curve upward from each side seam to a maximum of 2" at the center back of the pant leg to prevent wear on the back of the cuff.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
35	LINER INSPECTION SYSTEM: There must be an opening located on the pant liner system to the right side of the waist separating the thermal barrier and moisture barrier, approximately 10" 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 must be a piece of 1" x 3" loop sewn to the moisture barrier 3" over from beginning of opening and a corresponding piece of 1.5" x 3" hook sewn to the inside of the outer shell to ensure proper alignment when installing the liner system into the outer shell. This Liner Inspection System is completely hidden when the liner is properly installed into the outer shell.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
36	SUSPENDER TABS: Four 2" wide self material suspender tabs with 1.75x3" leather reinforcement must be attached to waist with two on the front and two on the back. Each tab must have two male and two female snaps. Each tab must be reinforced with two bartacks on each tab.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
37	BELTS AND HARNESS LOOPS: There must be nine self-fabric belt loops, each made using two separate 1"x 3" straps that close with 1" x 2" hook with a female snap & loop with a male snap. Seven loops must be bartacked even at waist and two at crotch.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
38	ESCAPE BELT: The pant must have an escape belt, which is independently certified as meeting the belt requirements of NFPA 1983, Standard on Life Safety Rope and Equipment for Emergency Services. The escape belt must be comprised of Kevlar webbing with a hook and D-ring closure, graded for the waist size of the pants. The hook and dee closure system of the escape belt also serves as the positive front closure for the pants.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>

39	<p>TURN-OUT POCKETS – PANT: 9" wide x 10" high, outside full bellows pockets that expand by means of side and bottom gussets to a thickness of 2" in front and back. Pockets must be fully lined with KEVLAR® twill on all 4 sides inside of pocket; There must be two additional layers of KEVLAR® lined self-fabric on the shell side inside the pocket. First layer 6.5" high, second layer 4.5" high. Both layers stitched in 3" increments to create six tool compartments.</p> <p>Pocket and flap must 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 is to be provided by brass eyelets.</p> <p>Pocket flaps must be 5" x 10". Each flap must incorporate a 1" by 2" polymer coated aramid pull tab for easy opening. A hook and loop fastener closure system must be set with 2" x 9" loop fastener horizontally on the pocket and three pieces of 1.5" x 3" hook fastener vertically on the underside of the flap.</p> <p>Item Location - Located on each thigh.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>
40	<p>SUSPENDERS: Must feature four points of attachment, using self-fabric, leather-reinforced suspender tabs with snaps to a bunker pant.</p> <p>SUSPNDER DESIGN: Two front pull straps must be constructed as follows: 2" wide elastic polyester webbing must be fed through 2" metal loops and secured with a two-needle lock-stitch at one end. A black military finish steel double dee ring must be fed through the webbing. The other end of the webbing must be fed through a 2" wide thermo-plastic dee ring and secured with a two-needle lock-stitch. The dee ring must function as a pull strap for easily adjusting the suspenders for proper fit.</p> <p>Two 1" shoulder straps must be constructed as follows: 2" wide elastic polyester webbing must be fed through the top half of the steel double dee ring and secured with a two-needle lock-stitch. The top of each strap must be secured to the V-shaped shoulder pad with two-needle lock-stitch and two 42-stitch bartacks. Two back straps made of 2" wide elastic webbing must be joined with two-needle lock-stitch at the bottom of each V-shaped shoulder pad.</p> <p>Four 2" wide self-fabric suspender tabs with leather reinforcement, using 2 male and 2 female snaps for suspender attachment, must be required on pants for use of these</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Exception <input type="checkbox"/>

<p>suspenders. Two self-fabric suspender tabs must be attached to the back of the pant and to the front of the pant and reinforced with two bartacks each tab. Each self-fabric tab attached to the pants must be fed through each 2" metal loop on the suspenders.</p> <p>V-SHAPED SHOULDER PADS: Shoulder pads must be constructed of two layers of 1/8" thick, fire retardant closed-cell foam encapsulated in 7.5 oz. Black NOMEX®. Each shoulder pad must be 3" wide and 12" long ending in a 4" high back reinforcement pad.</p>			
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CITY OF WARWICK

BID AND CONTRACT FORM

TITLE OF SPECIFICATION: Bid2020-177 Structural Firefighting Coats & Pants

I. BID:

WHEREAS, the CITY OF WARWICK has duly asked for bids for performance of services and/or supply of goods in accordance with the above-indicated specifications.

The person or entity does irrevocably offer to perform the services and/or furnish the goods in accordance with the specifications, which are hereby incorporated by reference in exchange for the bid price.

This offer will remain open and irrevocable until the CITY OF WARWICK has accepted this bid or another bid on the specifications or abandoned the project.

The bidder agrees that acceptance by the CITY OF WARWICK will transform the bid into a contract. This bid and contract will be secured by Bonds, if required by the specifications.

Pricing Page as Follows

Continued next page

PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR BID

Bid2020-177Structural Firefighting Coats & Pants

Warwick Fire Department

Structural Firefighting Coats and Pants
PRICING PAGE

ITEM #	Description	Make and Model	PRICE
1	Structural Firefighting Coat		
2	Structural Firefighting Pant		
3	Replacement Suspenders (to be the same as would normally be included with pant purchase)		

Please specify details of the warranty offered:

Please specify the delivery period from sizing to delivery:

EXCEPTIONS TO SPECIFICATIONS

Any and all exceptions to the above specifications must be clearly stated for each specification listed. Use additional pages for exceptions, if necessary.
