



**RETURN BIDS TO:  
RETOURNER LES SOUMISSIONS À:**

**Bid Receiving - PWGSC / Réception des  
soumissions - TPSGC**  
**11 Laurier St./ 11, rue Laurier**  
**Place du Portage, Phase III**  
**Core 0B2 / Noyau 0B2**  
**Gatineau, Québec K1A 0S5**  
**Bid Fax: (819) 997-9776**

**REQUEST FOR PROPOSAL  
DEMANDE DE PROPOSITION**

**Proposal To: Public Works and Government  
Services Canada**

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

**Proposition aux: Travaux Publics et Services  
Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

**Comments - Commentaires**

**Vendor/Firm Name and Address**

**Raison sociale et adresse du  
fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**

Clothing and Textiles Division / Division des vêtements et  
des textiles  
11 Laurier St./ 11, rue Laurier  
6A2, Place du Portage  
Gatineau, Québec K1A 0S5

<b>Title - Sujet</b> Liner, Parka/Trousers/Jacket	
<b>Solicitation No. - N° de l'invitation</b> M0077-16J111/A	<b>Date</b> 2017-02-08
<b>Client Reference No. - N° de référence du client</b> M0077-16J111	
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$PR-723-72406	
<b>File No. - N° de dossier</b> pr723.M0077-16J111	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2017-02-28</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Eastern Standard Time EST
<b>F.O.B. - F.A.B.</b> Specified Herein - Précisé dans les présentes <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input type="checkbox"/> <b>Other-Autre:</b> <input checked="" type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Gravel, Sylvie	<b>Buyer Id - Id de l'acheteur</b> pr723
<b>Telephone No. - N° de téléphone</b> (613) 240-7281 ( )	<b>FAX No. - N° de FAX</b> (819) 956-5454
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>  See herein/ Voir ci-inclus	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

<b>Delivery Required - Livraison exigée</b> See Herein	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>          <b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> <b>(type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>          <b>Signature</b>          <b>Date</b>	

---

## TABLE OF CONTENTS

### **PART 1 - GENERAL INFORMATION**

- 1.1 SECURITY REQUIREMENT
- 1.2 REQUIREMENT
- 1.3 DEBRIEFINGS
- 1.4 TRADE AGREEMENTS
- 1.5 CANADIAN CONTENT

### **PART 2 - BIDDER INSTRUCTIONS**

- 2.1 STANDARD INSTRUCTIONS, CLAUSES AND CONDITIONS
- 2.2 SUBMISSION OF BIDS
- 2.3 ENQUIRIES - BID SOLICITATION
- 2.4 APPLICABLE LAWS
- 2.5 SPECIFICATIONS AND STANDARDS
- 2.6 TECHNICAL DATA AND/OR VIEWING SAMPLE(S)
- 2.7 TRANSPORTATION COSTS INFORMATION

### **PART 3 - BID PREPARATION INSTRUCTIONS**

- 3.1 BID PREPARATION INSTRUCTIONS

### **PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION**

- 4.1 EVALUATION PROCEDURES
- 4.2 BASIS OF SELECTION
- 4.3 CONTRACT FINANCIAL SECURITY
- 4.4 SECURITY DEPOSIT DEFINITION

### **PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION**

- 5.1 CERTIFICATIONS REQUIRED WITH THE BID
- 5.2 CERTIFICATIONS PRECEDENT TO CONTRACT AWARD AND ADDITIONAL INFORMATION

### **PART 6 - RESULTING CONTRACT CLAUSES**

- 6.1 SECURITY REQUIREMENT
- 6.2 REQUIREMENT
- 6.3 STANDARD CLAUSES AND CONDITIONS
- 6.4 TERM OF CONTRACT
- 6.5 AUTHORITIES
- 6.6 PAYMENT
- 6.7 INVOICING INSTRUCTIONS
- 6.8 CERTIFICATIONS
- 6.9 APPLICABLE LAWS
- 6.10 PRIORITY OF DOCUMENTS
- 6.11 MATERIALS: CONTRACTOR'S TOTAL SUPPLY
- 6.12 PLANT CLOSING
- 6.13 PLANT LOCATION
- 6.14 SUBCONTRACTOR(S)
- 6.15 ORIGIN OF WORK - DISCLOSURE OF INFORMATION
- 6.16 PRE-PRODUCTION SAMPLES AND SUPPORTING DOCUMENTATION

- 6.17 TECHNICAL REQUIREMENTS DURING PRODUCTION
- 6.18 TECHNICAL REQUIREMENTS FOR THE OPTIONS
- 6.19 PATTERNS
- 6.20 VIEWING SAMPLES – GUIDANCE ONLY
- 6.21 VIEWING SAMPLES – RETURN TO SENDER
- 6.22 SPECIFICATIONS AND STANDARDS
- 6.23 FINANCIAL SECURITY

## **LIST OF ANNEXES**

### **ANNEX “A” - REQUIREMENT**

- 1. TECHNICAL REQUIREMENT
- 2. ADDRESSES
- 3. DELIVERABLES
- 4. “AS AND WHEN REQUESTED” QUANTITIES
- 5. OPTION QUANTITIES

### **ANNEX “B” - SPECIFICATION GS1045-299 DATED 2016-07-14 SPECIFICATION GS1045-315 DATED 2016-07-14 SPECIFICATION GS1045-356 DATED 2016-07-14**

---

## PART 1 - GENERAL INFORMATION

### 1.1 Security Requirement

There is no security requirement associated with this bid solicitation.

### 1.2 Requirement

The "Requirement" is detailed at Annex "A" of the resulting contract clauses.

### 1.3 Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

### 1.4 Trade Agreements

The requirement is subject to the provisions of the Agreement on Internal Trade (AIT).

### 1.5 Canadian Content

The requirement is subject to a preference for Canadian goods and/or services.

## PART 2 - BIDDER INSTRUCTIONS

### 2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the *Standard Acquisition Clauses and Conditions Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2016/04/04) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days  
Insert: 180 days

### 2.2 Submission of Bids

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

### 2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than seven (7) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is

eliminated, and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

## **2.4 Applicable Laws**

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidders.

## **2.5 Specifications and Standards**

### **2.5.1 Canadian General Standards Board (CGSB) - Standards**

A copy of the CGSB Standards referred to in the bid solicitation is available and may be purchased from:

Canadian General Standards Board  
Place du Portage III, 6B1  
11 Laurier Street  
Gatineau, Québec  
Telephone: (819) 956-0425 or 1-800-665-CGSB (Canada only)  
Fax: (819) 956-5740  
E-mail: [ncr.cgsb-ongc@pwgsc-tpsgc.gc.ca](mailto:ncr.cgsb-ongc@pwgsc-tpsgc.gc.ca)  
CGSB Website: <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-eng.html>

## **2.6 Technical Data and/or Viewing Sample(s)**

Technical data and viewing sample(s) (if applicable) may be viewed, by appointment only, at the following offices:

Public Works & Government Services Canada  
Supply Directorate  
6th floor  
1550 ave D'Estimauville  
Quebec, Que. G1J 0C7  
TEL: 418-649-2714  
FAX: 418-648-2209  
Attention: Micheline Naud ([micheline.naud@tpsgc-pwgsc.gc.ca](mailto:micheline.naud@tpsgc-pwgsc.gc.ca))

Public Works & Government Services Canada  
Place Bonaventure, South-East Portal  
800 de La Gauchetière Street West, 7th Floor  
Montreal, Quebec H5A 1L6  
TEL: 514-496-3404  
FAX: 514-496-3822  
Attention: Viviane Rouhault ([viviane.rouhault@tpsgc-pwgsc.gc.ca](mailto:viviane.rouhault@tpsgc-pwgsc.gc.ca))

Public Works & Government Services Canada  
Suite 480, 33 City Centre Drive  
Mississauga, Ont. L5B 2N5  
TEL: 905-615-2070  
FAX 905-615-2023  
Attention: Rosy Gupta ([rosy.gupta@tpsgc-pwgsc.gc.ca](mailto:rosy.gupta@tpsgc-pwgsc.gc.ca))

Public Works & Government Services Canada  
Suite 100, 167 Lombard Avenue  
P.O. Box 1408  
Winnipeg, Manitoba R3C 2Z1  
TEL: 204-983-3774  
FAX: 204-983-7796  
Attention: Bev Laurin (bev.laurin@tpsgc-pwgsc.gc.ca)

Public Works & Government Services Canada  
Telus Plaza North  
10025 Jasper Avenue, 5th Floor  
Edmonton, AB T5J 1S6  
TEL: (780) 497-3517  
FAX: (780) 497-3510  
Attention: Nicole Boucher (wst-pa-edm@tpsgc-pwgsc.gc.ca)

Public Works & Government Services Canada  
Pacific Region, SOSB, Industrial & Commercial Products  
219 - 800 Burrard Street  
Vancouver, B.C V6Z 0B9  
TEL: 604-775-7630 (Linda Harding) OR  
TEL: 604-658-2799 (Betty Chan)  
FAX: 604-775-7526  
Attention: Linda Harding (linda.harding@tpsgc-pwgsc.gc.ca)  
OR  
Attention: Betty Chan (betty.chang@tpsgc-pwgsc.gc.ca)

## 2.7 Transportation Costs Information

The Bidder is requested to provide the following information concerning transportation costs for the delivery of the units to destination:

- (a) shipping weight by unit; \_\_\_\_\_
- (b) number of items by unit; \_\_\_\_\_
- (c) cubic measurement by unit; \_\_\_\_\_
- (d) number of units per shipment: \_\_\_\_\_
- (e) name of shipping point; \_\_\_\_\_
- (f) recommended method of shipment and carrier \_\_\_\_\_
- (g) Unit cost per Destination: \_\_\_\_\_
- (h) Total cost \$ \_\_\_\_\_

The Bidder must include all transportation costs in their bid unit price at Annex A.

## PART 3 - BID PREPARATION INSTRUCTIONS

### 3.1 Bid Preparation Instructions

Canada requests that bidders provide their bid in separately bound sections as follows:

- Section I: Technical Bid (3 hard copies)
- Section II: Financial Bid (1 hard copy)
- Section III: Certifications (1 hard copy)
- Section IV: Additional Information (1 hard copy)

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that Bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation;

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process [Policy on Green Procurement](http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, Bidders should:

1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and

2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

3) Green Initiatives (for PWGSC information only)

Bidders are requested to provide details of their policies and practices in relation to the following initiatives:

- environmentally responsible manufacturing;
- environmentally responsible waste disposal;
- waste reduction;
- packaging;
- re-use strategies;
- recycling.

### Section I: Technical Bid

In their technical bid, Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work (reference pre-award sample, Part 4, Evaluation Procedures).

### Section II: Financial Bid

Bidders must submit their financial bid in accordance with the Basis of Payment. The total amount of Applicable Taxes must be shown separately.

#### 3.1.1 Electronic Payment of Invoices – Bid

If you are willing to accept payment of invoices by Electronic Payment Instrument, complete the following:

The Bidder accepts the following Electronic Payment Instrument:

( ) Direct Deposit (Domestic and International);

If the above is not completed, it will be considered as if the Electronic Payment Instrument is not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

#### 3.1.2 Exchange Rate Fluctuation

C3011T 2013/11/06 Exchange Rate Fluctuation

---

### Section III: Certifications

Bidders must submit the certifications required under Part 5.

### Section IV: Additional Information

#### 3.1.3 Origin of Work

For each line item, bidders must identify the name(s) of the country or countries where the apparel goods are cut (or knit to shape) and sewn, regardless of whether the work is to be performed by the Bidder or one of its subcontractor(s).

The following information must be provided for each location where any of the goods are cut (or knit to shape) or sewn:

Line Item number \_\_\_\_\_ Country: \_\_\_\_\_  
Line Item number \_\_\_\_\_ Country: \_\_\_\_\_  
Line Item number \_\_\_\_\_ Country: \_\_\_\_\_

(Bidders must add additional lines if there is more than one manufacturer or one country per line item.)

Bidders must immediately inform Canada in writing of any and all changes affecting the information provided under this clause during the entire bid validity period.

## PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

### 4.1 Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) The evaluation team will determine first if there are two or more bids with a valid Canadian Content certification. In that event, the evaluation process will be limited to the bids with the certification; otherwise, all bids will be evaluated. If some of the bids with a valid certification are declared non-responsive, or are withdrawn, and less than two responsive bids with a valid certification remain, the evaluation will continue among those bids with a valid certification. If all bids with a valid certification are subsequently declared non-responsive, or are withdrawn, then all the other bids received will be evaluated.

#### 4.1.1 Technical Evaluation

##### 4.1.1.1 Mandatory Technical Criteria

##### Pre-Award Sample (PAS) and Supporting Documentation

- 1) As part of the technical evaluation, to confirm a Bidder's capability of meeting the technical requirements, pre-award samples along with component samples and supporting documentation [laboratory test reports and Certificates of Compliance (CofC)] will be required from low bidders, after the bid closing date and from PWGSC's request.
- 2) The Bidder must deliver the required pre-award and component samples, test reports and certificates of compliance at no charge to Canada and must ensure that they are received within **65 calendar days** from PWGSC's request. If any supporting documentation (test report or CofC) is missing, the Contracting Authority will inform the Bidder in writing and provide the Bidder with two (2) working days from the request to submit the missing documentation. Failure to submit the supporting documentation

within the specified timeframe will result in the bid being declared non-responsive. However, failure to submit the required pre-award samples and component samples within 65 calendar days will result in the bid being declared non-responsive.

3) **Pre-award samples:** The following pre-award samples are required and must be properly identified with the size and the RCMP stock-item number.

Item	Size	Stock Number
Liner, Patrol Jacket	Large Regular	4020-458
Liner, Parka, Inclement	Large Regular	5035-452
Liner, Trousers, Inclement	Large Regular	5262-301

4) **Component samples:** The following component samples, as defined below, are required and must be representative of the components that will be used in production.

Component	Specification	Metres required
a) Shell Material I	All specifications Para. 4.1.1	¼ metre full width
b) Shell Material II	Specification 1045-356 Para. 4.1.2	¼ metre full width
c) Insulation	Specification 1045-299, 356, 315 (Table II-IIA)	¼ metre full width
d) * Insulation	Specification 1045-315 (Table IIB) if used	¼ metre full width

\* Component d) shall be submitted if using the insulation as per Table IIB.

**Definition - Component Sample:** A component sample is a piece or part used in the overall construction of the garment. The component requirement is indicated in the specification and the sample submitted shall adhere to the specification requirements.

5) The Bidders must ensure that the required pre-award samples and component samples are manufactured in accordance with the technical requirement and are fully representative of the bid submitted. The samples submitted by the Bidder will remain the property of Canada.

6) The pre-award and component samples will be evaluated for quality of workmanship and conformance to specified materials and measurements (except for the substitution as indicated below). Minor observations will not be a reason to reject the sample unless, in the opinion of the technical evaluator, they are considered to render the items unserviceable. However, only one deviation will result in the bid being declared non-responsive.

7) Substitution: The insulation used in the pre-award sample does not require the anti-microbial treatment (paragraph 4.1.2 of GS 1045-299, GS 1045-315 and paragraph 4.1.3 of GS 1045-356). However, should the Bidder be awarded the contract, all materials will be strictly in accordance with the technical requirement.

8) RCMP viewing samples will be provided to bidders who are requested to provide pre-award samples and are to be used for guidance for all factors not covered by the RCMP specification. The RCMP specification and pattern shall govern.

The viewing samples are not to be damaged or cut, but returned in the same condition as sent to the Bidder. The viewing samples should be returned to the RCMP with the pre-award samples. If the viewing samples are not returned with the pre-award samples, the Bidder will have fourteen (14) calendar days upon written notice from the Contracting Authority to return the viewing samples. Failure to return the viewing samples within that timeframe will result in the bid being declared non-responsive. Lost or damaged viewing samples shall be reimbursed to the RCMP for the cost of an acceptable replacement.

9) A base pattern of each item will also be provided to bidders who are requested to submit pre-award samples. The patterns are the property of the RCMP and must be returned to PWGSC with the pre-award samples. If a bidder fails to submit the pre-award samples within the specified time frame or chooses not to submit the pre-award samples, the patterns must be returned directly to the RCMP without delay.

10) **Supporting Documentation - Laboratory Analysis - Test Reports:** Laboratory analysis (as defined hereunder) of the product offered showing test reports for specific tests listed hereunder of physical properties detailed in the technical requirement must be provided with the pre-award & component samples. The test reports must be dated within **12 months** of the solicitation posting date. **All tests must be performed on the same material within a two-week period.**

Component	Required Documentation	Specification and Reference Paragraph
Shell Material I	Test report A) Table I test numbers 2 and 5-15	1045-299, Para. 4.1.1 1045-315, Para. 4.1.1 1045-356, Para. 4.1.1
Insulation	Test report B) Table II (IIA) test numbers 1-6 and 8	1045-299, Para. 4.1.2 1045-356, Para. 4.1.3 1045-315, Para. 4.1.2
Insulation	Test report C) * Table IIB test numbers 1-6 and 8 if used	1045-315, Para. 4.1.2

\*Test report C) shall be submitted if using the insulation as per Table IIB.

**Definition – Laboratory Analysis:** Test report documents signed and dated by a single certified independent testing facility, third-party accredited laboratory acceptable to the RCMP must include the test method, test conditions and test results performed to verify requirements as specified in the specification. Testing for each table must be performed in its entirety on the same garment and/or piece of material to adhere to all specified test methods and conditions.

11) **Supporting Documentation - Certificates of Compliance:** In addition, a Certificate of Compliance (as defined hereunder) is required with the pre-award/component samples for each of the components listed below. The **original** copy must be submitted. The Certificates of Compliance must be dated **within 18 months** of the solicitation posting date. When a component is found in multiple specifications only one CofC shall be submitted and will be acceptable for all specifications.

Component	Required Documentation	Specification and Reference Paragraph
Lining	CofC	1045-299, Para. 4.1.3 1045-315, Para. 4.1.3
Shell Material II	CofC	1045-356, Para. 4.1.2
Thread	CofC	1045-299, Para. 4.1.5 1045-315, Para. 4.1.5 1045-356, Para. 4.1.4

Dome Fastener	CofC	1045-299, Para. 4.1.6 1045-315, Para. 4.1.6 1045-356 Para. 4.1.5
Elastic Drawcord	CofC	1045-299, Para. 4.1.8 1045-315, Para. 4.1.7
Cord Lock	CofC	1045-299 Para. 4.1.9 1045-315, Para. 4.1.8
Slide Fastener Front	CofC	1045-299, Para. 4.1.12.1
Slide Fastener Front	CofC	1045-315, Para. 4.1.11.1
Slide Fastener Side Seam	CofC	1045-299, Para. 4.1.12.2 1045-315, Para. 4.1.11.2
Slide Fastener Inside Chest Pocket	CofC	1045-299, Para. 4.1.12.3 1045-315, Para. 4.1.11.3
Slide Fastener Fly Front	CofC	1045-356, Para. 4.1.9.1
Slide Fastener Side Seam	CofC	1045-356, Para. 4.1.9.2

**Definition - Certificate of Compliance:**

A Certificate of Compliance is defined, for this document, as an **original** signed and dated certification to confirm that a specified component or requirement adheres to the specification. The certification must be prepared, signed and dated by an official representative of the component manufacturer using company letterhead making reference to the specification number and paragraph number. It must specifically address the component or requirement and compliance can be shown by referring to a part number, by providing the component values, by providing a manufacturing data sheet to show technical compliance or by a description stating compliance to the requirement. In-house testing is acceptable to show compliance. Copying the specification word for word is not acceptable.

A separate certificate of compliance is required for each individual component or requirement. Multiple components supplied by the same component manufacturer may be submitted on one certificate of compliance as long as the paragraph numbers, the corresponding specification and the components are clearly identified. With this document, the bidder certifies that the product for which the certificate of compliance is issued is the same product used in the bid submission, or in the pre-award samples or in the pre-production samples, or in the production units as applicable.

The Bidder is to note that copies of invoices, purchase orders, packing slips and certificates of compliance for products or components that are not manufactured by the certifier are not suitable for use as a certificate of compliance.

12) Rejection of a pre-award or component sample or test report or certificate of compliance will result in the bid being declared non-responsive.

13) The requirement for pre-award and component samples, test reports and certificates of compliance will not relieve the successful bidder from submitting samples, test reports and certificates of compliance as required by the contract terms or from strictly adhering to the technical requirement of this Request for Proposal and any resultant contract.

#### **4.1.2. Financial Evaluation**

##### **4.1.2.1. Mandatory Financial Criteria**

- a. The Bidder must submit firm unit prices in Canadian dollars, applicable taxes are excluded, DDP (Destination as identified in Annex A) Incoterms 2000, transportation costs included, all applicable Customs Duties and Excise taxes included.
- b. The Bidder must submit firm unit pricing for all items at destination including for the options and "as and when requested" quantities (specials and regular sizes).

##### **4.1.2.2 SACC MANUAL CLAUSE**

A9033T 2012/07/16 Financial Capability

#### **4.2 Basis of Selection**

A bid must comply with all requirements of the bid solicitation and meet all mandatory technical and financial evaluation criteria to be declared responsive.

The responsive bid with the lowest evaluated aggregate price will be recommended for award of a contract (1 contract only). Evaluation will be established using the firm quantities, 100% of the option quantities and 100% of the "as and when requested" quantities (specials and regular sizes). For the financial evaluation of the "as & when requested" regular sizes only, the unit price that will be used will be determined by calculating the average of the unit prices submitted for each year.

#### **4.3 Contract Financial Security**

1. If this bid is accepted, the Bidder may be required to provide contract financial security, after the bid closing date and within 10 calendar days from receipt of a written request from the Contracting Authority.
  - (a) a security deposit as defined in clause "Security Deposit Definition" in the amount of up to ten percent (10%) of the contract price.
2. Security deposits in the form of government guaranteed bonds with coupons attached will be accepted only if all coupons that are unmaturing, at the time the security deposit is provided, are attached to the bonds. The Contractor must provide written instructions concerning the action to be taken with respect to coupons that will mature while the bonds are pledged as security, when such coupons are in excess of the security deposit requirement.
3. If Canada does not receive the required financial security within the specified period, Canada may, as its discretion, accept another offer, issue a new bid solicitation, award a contract or reject all the bids.

#### **4.4 Security Deposit Definition**

1. "security deposit" means
  - (a) a bill of exchange that is payable to the Receiver General for Canada, and certified by an approved financial institution or drawn by an approved financial institution on itself; or
  - (b) a Government guaranteed bond; or
  - (c) an irrevocable standby letter of credit, or
  - (d) such other security as may be considered appropriate by the Contracting Authority and approved by Treasury Board;
2. "approved financial institution" means
  - (a) any corporation or institution that is a member of the Canadian Payments Association;

- 
- (b) a corporation that accepts deposits that are insured by the Canada Deposit Insurance Corporation or the "Régie de l'assurance-dépôts du Québec" to the maximum permitted by law;
  - (c) a credit union as defined in paragraph 137(6) the *Income Tax Act*;
  - (d) a corporation that accepts deposits from the public, if repayment of the deposits is guaranteed by Canadian province or territory; or
  - (e) the Canada Post Corporation.
3. "government guaranteed bond" means a bond of the Government of Canada or a bond unconditionally guaranteed as to principal and interest by the Government of Canada that is:
- (a) payable to bearer;
  - (b) accompanied by a duly executed instrument of transfer of the bond to the Receiver General for Canada in accordance with the *Domestic Bonds of Canada Regulations*;
  - (c) registered in the name of the Receiver General for Canada.
4. "irrevocable standby letter of credit"
- (a) means any arrangement, however named or described, whereby a financial institution (the "Issuer"), acting at the request and on the instructions of a customer (the "Applicant"), or on its behalf,
    - (i) will make a payment to or to the order of Canada, as the beneficiary;
    - (ii) will accept and pay bills of exchange drawn by Canada;
    - (iii) authorizes another financial institution to effect such payment, or accept and pay such bills of exchange; or
    - (iv) authorizes another financial institution to negotiate, against written demand(s) for payment, provided that the conditions of the letter of credit are complied with.
  - (b) must state the face amount which may be drawn against it;
  - (c) must state its expiry date;
  - (d) must provide for sight payment to the Receiver General for Canada by way of the financial institution's draft against presentation of a written demand for payment signed by the authorized departmental representative identified in the letter of credit by his/her office;
  - (e) must provide that more than one written demand for payment may be presented subject to the sum of those demands not exceeding the face amount of the letter of credit;
  - (f) must provide that it is subject to the International Chamber of Commerce (ICC) Uniform Customs and Practice (UCP) for Documentary Credits, 2007 Revision, ICC Publication No. 600. Pursuant to the ICC UCP, a credit is irrevocable even if there is no indication to that effect; and
  - (g) must be issued (Issuer) or confirmed (Confirmer), in either official language, by a financial institution that is a member of the Canadian Payments Association and is on the letterhead of the Issuer or Confirmer. The format is left to the discretion of the Issuer or Confirmer.

## **PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION**

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

## **5.1 Certifications Required with the Bid**

Bidders must submit the following duly completed certifications as part of their bid.

### **5.1.1 Integrity Provisions - Declaration of Convicted Offences**

In accordance with the *Ineligibility and Suspension Policy* (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide with its bid the required documentation, as applicable, to be given further consideration in the procurement process.

### **5.1.2 Additional Certifications Required with the Bid**

#### **5.1.2.1 Canadian Content Certification**

SACC Manual clause [A3050T](#) (2014/11/27) Canadian Content Definition

#### **Rules of Origin - Apparel**

With reference to the Canadian Content Certification clause, apparel goods are considered to be Canadian goods according to the North American Free Trade Agreement Rules of Origin as follows:

Apparel goods classified in Chapters 61 and 62 of the Harmonized System that are both cut (or knit to shape) and sewn in Canada will be considered Canadian goods.

#### **Canadian Content Certification**

This procurement is conditionally limited to Canadian goods.

Subject to the evaluation procedures contained in the bid solicitation, bidders acknowledge that only bids with a certification that the good(s) offered are Canadian goods, as defined in clause A3050T, may be considered.

Failure to provide this certification completed with the bid will result in the good(s) offered being treated as non-Canadian goods.

The Bidder certifies that:

( ) the good(s) offered are Canadian goods as defined in paragraph 1 of clause A3050T.

#### **Plant Location**

Items will be manufactured at: \_\_\_\_\_

## **5.2 Certifications Precedent to Contract Award and Additional Information**

The certifications and additional information listed below should be submitted with the bid, but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame provided will render the bid non-responsive.

### **5.2.1 Integrity Provisions – Required Documentation**

In accordance with the *Ineligibility and Suspension Policy* (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process

### **5.2.2 Federal Contractors Program for Employment Equity - Bid Certification**

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](#) website

([http://www.esdc.gc.ca/en/jobs/workplace/human\\_rights/employment\\_equity/federal\\_contractor\\_program.page?&\\_ga=1.229006812.1158694905.1413548969](http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969)).

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of contract award.

### 5.2.3 Samples and Production Certification

The Bidder certifies that:

- ( ) the manufacturer that produced the pre-award samples will remain unchanged for the pre-production samples and full production of the contract quantity, including option quantities and "as and when requested" quantities (specials and regular sizes).

## PART 6 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

### 6.1 Security Requirements

There is no security requirement applicable to this Contract.

### 6.2 Requirement

The Contractor must provide the items detailed under "Requirement" at Annex A.

### 6.3 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

#### 6.3.1 General Conditions

2030 (2016/04/04), General Conditions - Goods (Higher Complexity), apply to and form part of the Contract.

### 6.4 Term of Contract

#### 6.4.1 Delivery Requested (Desirable) - Firm Quantity

The RCMP is requesting that the first shipment be made within **30 calendar days** from the date of the written notice of approval of the pre-production sample.

##### Delivery - Firm Quantity – Phased

The first delivery must be made within \_\_\_\_\_ calendar days from the date of the written notice of approval of the pre-production. The quantity delivered must be \_\_\_\_\_ units. The balance must be delivered at the rate of \_\_\_\_\_ units weekly after the first delivery until completion of the Contract.

##### Delivery Requested (Desirable) – Options 1 and 2

It is requested that the first delivery be made within **30 calendar days** from the date of the written notice of approval of the laboratory test reports and Certificates of Compliance submitted for the option, and after final delivery of the contract quantity.

---

**Delivery – Options 1 and 2**

The delivery of the option quantities must commence within \_\_\_\_\_ calendar days from the date of the written notice of approval of the laboratory test reports and Certificates of Compliance submitted for the options, and after final delivery of the contract quantity. The quantity delivered must be \_\_\_\_\_ units. The balance must be shipped at a rate of \_\_\_\_\_ units weekly after the first delivery until completion of the option quantity.

**6.4.1.4 Shipping Instructions - Delivery at Destination**

1. Goods must be consigned to the destination specified in the Contract and delivered:

Delivered Duty Paid (DDP) (destination identified in Annex A) Incoterms 2000 for shipments from commercial contractor.

**6.4.1.5 Packaging, Marking, Rejected Goods, Overrun and Underrun****Packaging**

Packing must be in accordance with standard commercial practice to ensure safe delivery at destination. Ten (10) units to be placed in plain shipping containers L-21" x W-17" x D-20".

**Marking**

- (a) Marking and labelling to be in accordance with the Specification.
- (b) Size, quantity and RCMP Stock Item Number to be indicated on single unit package, when specified.
- (c) Sizes, quantities and RCMP Stock Item Numbers to be indicated on carton.
- (d) Proper shipping documents must accompany each shipment. Packing slips must include the contract number, item description, size, RCMP stock item number and quantity per size being shipped.
- (e) Manufacturer's markings/advertisements will not appear on this item except on the inside label as per the specification/purchase description. Failure to comply with this article may result in rejection of goods upon inspection.

**Rejected Goods**

If any goods are rejected and are sold to commercial outlets, all RCMP markings and insignia must be removed before being turned over to the purchaser.

**Overrun/Underrun**

The quantities stated herein represent the quantities to be delivered in satisfaction of this requirement/contract. No overruns or underruns will be permitted. However, should the contractor experience an overrun, they must provide the details in writing to the Contracting Authority only after contracted quantities have been accepted by the RCMP. At their discretion, the Government may consider all or part of the overruns at a discount from the firm price on the original contract. Any unauthorized overruns will be returned to the contractor at their expense.

---

## 6.5 Authorities

### 6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Sylvie Gravel  
Public Works and Government Services Canada  
Acquisitions Branch  
Commercial and Consumer Products Directorate (CCPD)  
Clothing & Textiles Division  
Place du Portage, Phase III, 6A2  
11 Laurier Street  
Gatineau, Quebec K1A 0S5  
Telephone : 613-240-7281 Facsimile: 819-956-5454  
E-mail address: sylvie.gravel@tpsgc-pwgsc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

### 6.5.2 Technical Authority

The Technical Authority for this Contract is:

RCMP - Uniform & Equipment Program  
Policy, Design & Specification Section  
440 Coventry Road (Warehouse Bldg.)  
Ottawa, Ontario K1A 0R2

The Technical Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority, however the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

### 6.5.3 Contractor's Representative

#### General enquiries

Name: \_\_\_\_\_  
Telephone No.: \_\_\_\_\_  
Facsimile No.: \_\_\_\_\_  
-mail address: \_\_\_\_\_

#### Delivery follow-up

Name: \_\_\_\_\_  
Telephone No.: \_\_\_\_\_  
Facsimile No.: \_\_\_\_\_  
-mail address: \_\_\_\_\_

## **6.6 Payment**

### **6.6.1 Basis of Payment – Firm Unit Prices**

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid firm unit prices, as specified at Annex "A" for a cost of \$\_\_\_\_\_ (*amount to be inserted at contract award*). Customs duties are included and Applicable Taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

### **6.6.2 SACC Manual Clauses**

H1001C 2008/05/12 Multiple Payments

### **6.6.3 Electronic Payment of Invoices – Contract**

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

*(to be advised at contract)*

## **6.7 Invoicing Instructions**

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.
2. Invoices must be distributed as follows:
  - (a) The original and one (1) copy must be forwarded to the following address for certification and payment  
  
Royal Canadian Mounted Police  
Uniform & Equipment Program, 2nd floor  
Attn: Planning & Accounting Section  
440 Coventry Road (Warehouse Bldg.)  
Ottawa, Ontario K1A 0R2
  - (b) One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.
  - (c) One (1) copy must be forwarded to the consignee.

## **6.8 Certifications and Additional Information**

### **6.8.1 Compliance**

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

### **6.8.2 Federal Contractors Program for Employment Equity - Default by the Contractor**

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the

name of the Contractor will be added to the "[FCP Limited Eligibility to Bid](#)" list. The imposition of such a sanction by ESDC will constitute the Contractor in default as per the terms of the Contract.

### 6.8.3 SACC Manual Clauses

A3060C 2008/05/12 Canadian Content Certification

### 6.9 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

### 6.10 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- a) the Articles of Agreement;
- b) the general conditions 2030 (2016/04/04), General Conditions - Goods (Higher Complexity);
- c) Annex A, Requirement;
- d) Annex B, Specifications GS1045-299 dated 2017-07-14, GS1045-315 dated 2016-07-14 and GS1045-356 dated 2016-07-14;
- e) Patterns;
- f) Viewing Samples;
- g) the Contractor's bid dated \_\_\_\_\_

### 6.11 Materials: Contractor's Total Supply

The Contractor will be responsible for obtaining all materials required in the manufacture of the items specified. The delivery stated for the items allows the necessary time to obtain such materials.

### 6.12 Plant Closing

The Contractor's plant closing for Christmas and Summer holidays are as follows. During this time there will be no shipments.

YEAR 1:	Christmas Holiday	FROM _____	TO _____
	Summer Holiday	FROM _____	TO _____
YEAR 2:	Christmas Holiday	FROM _____	TO _____
	Summer Holiday	FROM _____	TO _____
YEAR 3:	Christmas Holiday	FROM _____	TO _____
	Summer Holiday	FROM _____	TO _____
YEAR 4:	Christmas Holiday	FROM _____	TO _____
	Summer Holiday	FROM _____	TO _____

### 6.13 Plant Location

Items will be manufactured at: \_\_\_\_\_

### 6.14 Subcontractor(s)

The following subcontractor(s) will be utilized in the performance of the contract.

Name of Company: \_\_\_\_\_

Location: \_\_\_\_\_

Value of subcontract: \$ \_\_\_\_\_

Nature of subcontracting work performed: \_\_\_\_\_

Subcontractors, other than those listed above, may not be utilized without the written permission of Canada.

#### 6.15 Origin of Work - Disclosure of Information

1. For each line item, the Contractor must specify the name(s) of all countries where the apparel goods are cut (or knit to shape) or sewn, regardless of whether the work is to be performed by the Contractor or one of its subcontractor(s).
2. The Contractor agrees that Canada may publicly disclose the information provided with respect to the countries of origin.
3. The Contractor must immediately inform Canada in writing of any and all changes affecting the information provided under this clause during the entire contract period.

#### 6.16 Pre-Production Sample (PPS) and Supporting Documentation

1. Unless a waiver is requested in writing by the Contractor to the Contracting Authority and granted by the RCMP Technical Authority, one pre-production sample of each of the items listed below is required for evaluation prior to production. The waiving of the PPS will be at the sole discretion of the Technical Authority. The Technical Authority will provide notification of the waiver in writing to the Contractor and Contracting Authority.

The PPS must be submitted to the RCMP Technical Authority for acceptance within **90 calendar days** from the date of contract award. The viewing samples, if provided, should accompany this package. The Contractor must deliver the required PPS transportation charges prepaid, and without charge to Canada. The PPS submitted by the Contractor will remain the property of Canada.

Item	Size	Stock Number
Liner, Patrol Jacket	Large Regular	4020-458
Liner, Parka, Inclement	Large Regular	5035-452
Liner, Trousers, Inclement	Large Regular	5262-301

#### 2. Supporting Documentation - Laboratory Analysis - Test Reports

In addition to providing the PPS, the Contractor must provide laboratory analysis (as defined hereunder) showing test reports for specific tests listed hereunder of physical properties detailed in the specifications. The testing must be performed on **production materials** and all tests must be performed on the same material within a two-week period. The test reports must be **dated after the contract award date** and must be submitted for evaluation within **90 calendar days** from the date of contract award and prior to full production.

Component	Required Test Report	Specification
Shell Material I	A) Table 1	1045-299, para. 4.1.1 1045-315, para. 4.1.1. 1045-356, para. 4.1.1
Insulation	B) Table II (IIA)	1045-299, para. 4.1.2 1045-356, para. 4.1.3 1045-315, para. 4.1.2.
Insulation	C) *Table IIB	1045-315, para. 4.1.2.

\*Test report C) must be submitted if using a different insulation as per Table IIB.

**Definition - Laboratory Analysis:** Test report documents signed and dated by a single certified independent testing facility, third-party accredited laboratory acceptable to the RCMP must include the test method, test conditions and test results performed to verify requirements as specified in the specification. Testing for each table must be performed in its entirety on the same garment and/or piece of material to adhere to all specified test methods and conditions.

3. If the PPS or any test report is rejected, the Contractor must submit a second PPS or test report within **21 calendar days** of notification of rejection from the Technical Authority. Rejection by the Technical Authority of the second PPS or test report submitted by the Contractor for failing to meet the contract requirements will be grounds for termination of the Contract for default.

4. The Technical Authority will notify the Contractor, in writing, of the full acceptance, conditional acceptance, or rejection of the PPS and test reports. A copy of the notification will also be provided by the Technical Authority to the Contracting Authority. The notice of the full acceptance or conditional acceptance does not relieve the Contractor from complying with all requirements and conditions of the Contract.

5. The Contractor must not commence production of the items and must not make any deliveries until the Contractor has received a written notification from the Technical Authority that the PPS and test reports are fully acceptable or conditionally acceptable. Any production of items before acceptance will be at the sole risk of the Contractor. If the PPS and test reports are accepted by either full acceptance or conditional acceptance, the Contractor must proceed with production as per the Contract requirements.

#### **6.17 Technical Requirements During Production**

1) In addition to the PPS, and if requested by the Technical Authority, the Contractor must submit one or more production samples, certificates of compliance and test reports at any time during the contracting/production stage. This requirement will be done in writing by the RCMP Technical Authority.

2) Rejection by the Technical Authority of the production sample or certificates of compliance or test reports submitted by the Contractor for failing to meet the contract requirements will be grounds for termination of the Contract for default.

#### **6.18 Technical Requirements for the Options Quantities**

1) The Contractor must provide laboratory test reports and Certificates of Compliance for each option exercised independently. These documents must be representative of the components used for the option quantities.

2) The test reports must be performed on production materials. The test reports must be dated within **90 calendar days** of the exercising of the option quantities and must be submitted to the Technical Authority for approval prior to beginning production of the option quantities. (Refer to paragraph 6.16.2 for the definition of Laboratory Analysis).

Component	Required Test Report	Specification
Shell Material I	A) Table I	1045-299, 1045-315, 1045-356
Insulation	B) Table II (IIA)	1045-299, 1045-315, 1045-356
Insulation	C) *Table IIB	1045-315

\*Test report C) must be submitted if using a different insulation as per Table IIB.

3) In addition, a Certificate of Compliance (as defined hereunder) is required before full production for each of the following components. The certificates of compliance must be dated **within 90 calendar days** of the exercising of the option quantities and must be submitted to the Technical Authority for approval prior to production of the option quantities.

When a component is found in multiple specifications only one CofC shall be submitted and will be acceptable for all specifications.

Component	Required Documentation	Specification and Reference Paragraph
Lining	CofC	1045-299, Para. 4.1.3 1045-315, Para. 4.1.3
Shell Material II	CofC	1045-356, Para. 4.1.2
Thread	CofC	1045-299, Para. 4.1.5 1045-315, Para. 4.1.5 1045-356, Para. 4.1.4
Dome Fastener	CofC	1045-299, Para. 4.1.6 1045-315, Para. 4.1.6 1045-356 Para. 4.1.5
Elastic Drawcord	CofC	1045-299, Para. 4.1.8, 1045-315, Para. 4.1.7
Cord Lock	CofC	1045-299 Para. 4.1.9 1045-315, Para. 4.1.8
Slide Fastener Front	CofC	1045-299, Para. 4.1.12.1
Slide Fastener Front	CofC	1045-315, Para. 4.1.11.1
Slide Fastener Side Seam	CofC	1045-299, Para. 4.1.12.2 1045-315, Para. 4.1.11.2
Slide Fastener Inside Chest Pocket	CofC	1045-299, Para. 4.1.12.3 1045-315, Para. 4.1.11.3
Slide Fastener Fly Front	CofC	1045-356, Para. 4.1.9.1
Slide Fastener Side Seam	CofC	1045-356, Para. 4.1.9.2

**Definition - Certificate of compliance:**

A Certificate of Compliance is defined, for this document, as an **original** signed and dated certification to confirm that a specified component or requirement adheres to the specification. The certification must be prepared, signed and dated by an official representative of the component manufacturer using company letterhead making reference to the specification number and paragraph number. It must specifically address the component or requirement and compliance can be shown by referring to a part number, by providing the component values, by providing a manufacturing data sheet to show technical compliance or by a description stating compliance to the requirement. In-house testing is acceptable to show compliance. Copying the specification word for word is not acceptable.

A separate certificate of compliance is required for each individual component or requirement. Multiple components supplied by the same component manufacturer may be submitted on one certificate of compliance as long as the paragraph numbers, the corresponding specification and the components are clearly identified. With this document, the Contractor certifies that the product for which the certificate of

compliance is issued is the same product used in the bid submission, or in the pre-award samples or in the pre-production samples, or in the production units as applicable.

The Contractor is to note that copies of invoices, purchase orders, packing slips and certificates of compliance for products or components that are not manufactured by the certifier are not suitable for use as a certificate of compliance.

4) Rejection by the Technical Authority of the test reports or Certificates of Compliance submitted by the Contractor for failing to meet the contract requirements will be grounds for termination of the Contract for default.

5) The Contractor must not commence production of the option quantities and must not make any deliveries until the Contractor has received a written notification from the Technical Authority that the test reports and Certificates of Compliance are fully acceptable or conditionally acceptable. Any production of the option quantities before acceptance will be at the sole risk of the Contractor. If the test reports or Certificates of Compliance are accepted by either full acceptance or conditional acceptance, the Contractor must proceed with production as per the Contract requirements.

#### **6.19 Patterns**

The full set of patterns either in individual sizes or as a graded nest will be provided by the RCMP to the Contractor following contract award (refer to Appendix A of the specifications GS1045-299, GS1045-315 and GS1045-356). The patterns are the property of the RCMP and must be returned directly to the RCMP upon completion of the contract.

#### **6.20 Viewing Samples - Guidance Only**

The viewing samples are to be used for guidance for all factors not covered by the RCMP specification. The RCMP specification and patterns shall govern.

#### **6.21 Viewing Samples - Return to Sender**

The viewing samples which may have been sent to the Contractor, are to be returned to the sender upon completion of Contract.

The viewing samples are not to be mutilated or cut, and must be returned in the same condition as sent to the Contractor.

#### **6.22 Specifications and Standards**

##### **6.22.1 Canadian General Standards Board (CGSB) - Standards**

A copy of the CGSB Standards referred to in the Contract is available and may be purchased from:

Canadian General Standards Board  
Place du Portage III, 6B1  
11 Laurier Street  
Gatineau, Québec  
Telephone: (819) 956-0425 or 1-800-665-CGSB (Canada only)  
Fax: (819) 956-5740  
E-mail: [ncr.cgsb-ongc@pwgsc-tpsgc.gc.ca](mailto:ncr.cgsb-ongc@pwgsc-tpsgc.gc.ca)  
CGSB Website: <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-eng.html>

#### **6.23 Financial Security**

1. Canada may convert the security deposit to the use of Canada if any circumstance exists which would entitle Canada to terminate the Contract for default, but any such conversion will not constitute termination of the Contract.

2. Where Canada so converts the security deposit:

(a) the proceeds will be used by Canada to complete the Work according to the conditions of the Contract, to the nearest extent that it is feasible to do so and any balance left will be returned to the Contractor on completion of the warranty period; and

(b) if Canada enters into a Contract to have the Work completed, the Contractor will:

(i) be considered to have irrevocably abandoned the Work; and

(ii) remain liable for the excess cost of completing the Work if the amount of the security deposit is not sufficient for such purpose. "Excess cost" means any amount over and above the amount of the Contract Price remaining unpaid together with the amount of the security deposit.

3. If Canada does not convert the security deposit to the use of Canada before completion of the contract period, Canada will return the security deposit to the Contractor within a reasonable time after such date.

4. If Canada converts the security deposit for reasons other than bankruptcy, the financial security must be reestablished to the level of the amount stated above so that this amount is continued and available until completion of the contract period.

## **ANNEX "A"** **REQUIREMENT**

### **1. TECHNICAL REQUIREMENT**

The Contractor is required to provide Canada for the Royal Canadian Mounted Police (RCMP) with Liners for the Patrol Jacket, for the Inclement Parka and for the Inclement Trousers. The liners are to be manufactured in accordance with the RCMP specifications listed below, the patterns and the viewing samples:

- G.S.1045-299 dated 2016-07-14 for the Liner, Patrol Jacket;
- G.S.1045-315 dated 2016-07-14 for the Liner, Inclement Parka; and
- G.S. 1045-356 dated 2016-07-14 for the Liner, Inclement Trousers.

### **2. DESTINATION & INVOICING ADDRESS**

<b>Destination Address</b>	<b>Invoicing Address</b>
Royal Canadian Mounted Police Uniform & Equipment Program 440 Coventry Road, East Door Ottawa, Ontario K1K 2C4	Royal Canadian Mounted Police Uniform & Equipment Program, 2nd Floor Attn.: Planning & Accounting Section 440 Coventry Road (Warehouse Bldg.) Ottawa, Ontario K1A 0R2

### **3. DELIVERABLES**

#### **Firm Quantity**

<b>Item</b>	<b>Description</b>	<b>Firm Quantity</b>	<b>Unit of Issue</b>	<b>Firm Unit Price, DDP, Transportation costs included, Applicable taxes extra</b>
1	4020 Liner, Patrol Jacket, Unisex	1,155	Each	\$ _____
2	5035 Liner, Inclement Parka	730	Each	\$ _____

#### **Size Roll - Item 1 – Liner, Patrol Jacket**

<b>Stock Number</b>	<b>Size</b>	<b>Quantity (each)</b>
4020-221	S-SHORT	90
4020-400	XS-REGULAR	30
4020-416	S-REGULAR	75
4020-437	M-REGULAR	345
4020-458	L-REGULAR	390
4020-479	XL-REGULAR	30
4020-491	XXL-REGULAR	30
4020-503	XXXL-REGULAR	30
4020-643	M-TALL	30
4020-664	L-TALL	30
4020-685	XL-TALL	30
4020-717	XXXL-TALL	45

**Priority in production and delivery for size: S-Short, M-Reg, L-Reg**

Solicitation No. - N° de l'invitation  
M0077-16J111/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur  
pr723

Client Ref. No. - N° de réf. du client  
M0077-16J111

File No. - N° du dossier  
pr723.M0077-16J111

CCC No./N° CCC - FMS No./N° VME

---

**Size Roll - Item 2 – Liner, Inclement Parka**

Stock Number	Size	Quantity (each)
5035-202	XS-SHORT	100
5035-218	S-SHORT	80
5035-404	XS-REGULAR	70
5035-420	S-REGULAR	150
5035-436	M-REGULAR	270
5035-606	S-TALL	40
5035-686	XXXL-TALL	20

**Priority in production and delivery for size: XS-Short, XS-Reg, S-Reg, M-Reg, S-Tall**

**“As and When Requested” Quantity - Regular sizes**

Item	Description	Estimated Quantity  (estimated total for 4 years)	Unit of Issue	Firm Unit Price, DDP, Transportation costs included, Applicable taxes extra
3	4020-000 Liner, Patrol Jacket, Unisex (Regular sizes)	500	Each	Year 1 \$ _____ Year 2 \$ _____ Year 3 \$ _____ Year 4 \$ _____
4	5035-000 Liner, Inclement Parka, (Regular sizes)	500	Each	Year 1 \$ _____ Year 2 \$ _____ Year 3 \$ _____ Year 4 \$ _____
5	5262-000 Liner, Inclement Trousers, (Regular sizes)	2,000	Each	Year 1 \$ _____ Year 2 \$ _____ Year 3 \$ _____ Year 4 \$ _____

Year 1 – Firm unit price if ordered within 12 months from contract award  
Year 2 – Firm unit price if ordered within 13-24 months from contract award  
Year 3 – Firm unit price if ordered within 25-36 months from contract award  
Year 4 – Firm unit price if ordered within 37-48 months from contract award

**“As and When Requested” Quantity - Special sizes**

Item	Description	Estimated Quantity	Unit of Issue	Firm Unit Price, DDP, Transportation costs included, Applicable taxes extra
6	4021-100 Liner, Patrol Jacket, Unisex (special sizes)	100	Each	\$ _____
7	5036-000 Liner, Inclement Parka, (special sizes)	50	Each	\$ _____
8	5264-000 Liner, Inclement Trousers, (special sizes)	50	Each	\$ _____

**OPTION 1**

Item	Description	Estimated Quantity	Unit of Issue	Firm Unit Price, DDP, Transportation costs included, Applicable taxes extra
9	Liner, Patrol Jacket	800	Each	\$ _____
10	Liner, Inclement Parka,	600	Each	\$ _____

**OPTION 2**

Item	Description	Estimated Quantity	Unit of Issue	Firm Unit Price, DDP, Transportation costs included, Applicable taxes extra
11	Liner, Patrol Jacket	800	Each	\$ _____
12	Liner, Inclement Parka	600	Each	\$ _____

**4. “AS AND WHEN REQUESTED” QUANTITIES – Items 3 to 8**

Under this Contract, the Contractor is required to provide certain goods to Canada on an “as and when requested” basis. Except as expressly provided in this Contract, Canada is not obliged to request any such goods under this Contract and this Contract does not represent a commitment to purchase such goods exclusively from the Contractor. The quantity of “as and when requested” goods specified under items 3 to 8 is only an approximation of requirements.

RCMP may issue orders for “as and when requested” quantity directly to the Contractor detailing the exact quantities of goods being ordered and the delivery date during the effective period and in accordance with the predetermined conditions.

Order will be made on Form 942 or on a RCMP order form.

The period for placing “as and when requested” orders will be **48 months** from contract award date.

Insofar as specials are concerned, the RCMP will provide a completed pattern adapted to the individual's special measurements, and/or an individual measurement form providing the individual's special measurements. The Contractor shall specify their preference prior to beginning production. The manufacturer is responsible to make the garment according to the finished garment measurements when using the measurement form. If the manufacturer requires additional measurements, the Technical Authority shall be notified prior to starting the specials. In addition to the label information as specified in corresponding specification, the following information is required; the members' name, Reg. number and order number. This information can be added to the same label or a separate label.

Specials are to be shipped separately and identified as "SPECIALS" on the packing slip and invoices.

Delivery of the "as & when requested" quantity for regular sizes:

The RCMP is requesting that the first delivery of the "as & when requested" quantity for regular sizes be made within **30 calendar days** from receipt of the order document.

The Contractor will make the first delivery within \_\_\_\_\_ calendar days from receipt of the order document. The quantity delivered must be \_\_\_\_\_ units. The balance must be delivered at the rate of \_\_\_\_\_ units weekly after the first delivery until completion of the order.

Delivery of the "as & when requested" quantity for special sizes:

The RCMP is requesting that delivery of special sizes be made within **30 calendar days** from receipt of the order document.

The Contractor will make the delivery of special sizes within \_\_\_\_\_ calendar days from receipt of the order document.

Deliveries made against orders of the "as and when requested" quantities will be inspected by the Consignee at destination.

**Financial Limitation**

The total cost to Canada resulting from orders of "as and when requested" quantities must not exceed the sum of \$\_\_\_\_\_ (*to be established at contract*), applicable taxes extra, unless otherwise authorized in writing by the Contracting Authority. The Contractor must not be obligated to perform any work or services or supply any articles in response to orders which would cause the total cost to Canada to exceed the said sum, unless an increase is so authorized.

**5. OPTION QUANTITIES - Items 9 to 12**

The Contractor grants to Canada the irrevocable option to acquire the goods described under items 9 to 12 under the same terms and conditions and at the prices stated in the Contract. Two (2) options may be exercised for a minimum quantity of 700 units up to a maximum of 1,400 units per option distributed amongst the items.

The options may only be exercised by the Contracting Authority and will be evidenced through a contract amendment. One (1) amendment per option may be issued.

The Contracting Authority may exercise the option as follows:

Option 1: within **24 months** from the contract award date by sending a written notice to the Contractor.

Option 2: within **36 months** from the contract award date by sending a written notice to the Contractor.

The size roll will be provided if and when the option is exercised.

Solicitation No. - N° de l'invitation  
M0077-16J111/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur  
pr723

Client Ref. No. - N° de réf. du client  
M0077-16J111

File No. - N° du dossier  
pr723.M0077-16J111

CCC No./N° CCC - FMS No./N° VME

---

## **ANNEX “B”**

**SPECIFICATION GS1045-299 DATED 2016-07-14**

**SPECIFICATION GS1045-315 DATED 2016-07-14**

**SPECIFICATION GS1045-356 DATED 2016-07-14**

(see attached documents)



Royal Canadian Mounted Police  
Gendarmerie royale du Canada

Doc. no: G.S. 1045-299  
Date: 2016-07-14

# Specification

## Liner, Patrol, Unisex

This document has 25 pages including the drawings.

This document was created in English.

The document is available in English and French.

☒ English/Anglais  
Français/French

The photograph on this page is for reference only.



## Modifications

[illegible]

## **RCMP VIEWING SAMPLE**

A viewing sample, when available, will be supplied to the successful bidder.

This will be used to guide manufacturer in all factors not covered by this specification or referred to therein. Variation from the specification may appear in the sample in which case the specification shall govern.

It may be obtained from:

Royal Canadian Mounted Police  
ATTN: Uniform & Equipment Program  
(440 Coventry Road, Warehouse Building)  
1200 Vanier Parkway  
Ottawa, Ontario  
K1A 0R2

It will be sent “prepaid” and is to be returned “prepaid”.

The viewing sample shall be returned to the RCMP in the same condition as received by the manufacturer. Lost or damaged viewing samples shall be replaced by an identical item or the RCMP shall be reimbursed for the cost of an acceptable replacement.

**SPECIFICATION**  
**LINER, PATROL, UNISEX**

**1. Definition**

- 1.1 This specification shall govern the manufacture and inspection of Liner, Patrol, Unisex. The items covered under this specification with stock numbers are as follows:
  - i. 4020 Liner, Patrol, Unisex / Doublure de blouson de patrouille unisexe;
  - ii. 4021-100 Liner, Patrol, Unisex Special / Doublure de blouson de patrouille unisexe, tailles spéciales.
- 1.2 The specification, pattern, viewing sample or other information issued in connection therewith may only be used for specific enquiries, solicitations, or orders placed on behalf of the Royal Canadian Mounted Police.
- 1.3 This specification supersedes all previous specifications for Liner, Patrol, Unisex.
- 1.4 This specification has been translated into French from this original English language document.

**2. Applicable Specifications**

- 2.1 The following publications are applicable to this specification and to the issues in effect on the date of the solicitation, unless otherwise specified.
- 2.2 CAN/CGSB 4.2 Textile Test Methods; 14-2005, 5.1-M90 (R2013), 6-2013, 12.3-2005 (R2013), 18.3-97 (R2010), 19.1-2004 (R2013), 22-2004, 23-M90 (R2013), 26.2-94 (R2012), 36-M89 (R2013), 37-2002 (R2013), 58-2004.
- 2.3 CAN/CGSB 4.131-93, Thread, Polyester, Polyester-Covered.
- 2.4 FED-STD-191A, Federal Standard, Textile Test Methods, FED-STD191-5206.
- 2.5 ASTM, American Society for Testing and Materials, Method D3776/D3776M-09a (2013), D4966-12<sup>e1</sup>, D4970/D4970M-10<sup>e1</sup>, D737-04 (2012).
- 2.6 AATCC American Association of Textile Chemists and Colorists - Technical Manual Methods; 8-2013 and 100-2012.

2.7 ISO, International Standards Organization Textile Test methods; ISO 105-B02:2014, ISO 13937-1:2000, ISO 11092:2014, ISO 4920:1981, ISO 7211-2:1984, ISO 20743:2013 and ISO 6330:2012.

2.8 CAN/CGSB 86.1-2003 Care Labelling of Textiles

### 3. **General Requirements**

3.1 The article or material covered by this specification shall be free from material and manufacturing defects that may affect its appearance or serviceability. In all particulars not covered by this specification or contract documents, production shall be equivalent in all respects to the pattern and viewing sample.

3.2 **Design** – The Liner, Patrol, Unisex shall be a waist-length jacket, designed to be worn in conjunction with the Jacket, Patrol, Unisex. The liner shall be constructed from a nylon, DWR-coated, down proof material and interlined with polyester insulation. It shall be equipped with a front slide fastener for attachment to the Jacket, Patrol, Unisex. This liner is not intended to be worn as a stand-alone garment. Therefore, the slider portion of the front slide fastener shall be applied facing towards the inside of the liner. Both inside fronts shall have chest pockets with slide fasteners for closure. The side seams shall have slide fasteners from the sleeve underarm to waist hem for ventilation and weapon access.

### 4. **Detailed Requirements**

#### 4.1 **Components**

4.1.1 **Shell Material** – The shell material shall be 100% down proof, plain weave nylon, 30 denier, black in colour, with a one-sided calendered finish meeting the requirements outlined in Table I.

4.1.2 **Insulation** – The insulation shall be 100% polyester and shall be provided with a polyester scrim. An antimicrobial agent in the form of silver nanoparticle with binder shall be applied to the insulation as a preventive agent to odor, fungi, bacteria and viruses. The insulation shall meet the requirements outlined in Table II.

- 4.1.3 **Lining (Collar)** – The lining shall be 100% polyester, warp knit with a brushed finish on one side. It shall be black in colour and meet the requirements outlined in Table III. Rentex style #2890D is known to meet the requirement.
- 4.1.4 **Sleeve Binding** – The binding shall be an 80% nylon/ 20% spandex knit, black in colour, 4.5 cm ± 0.2 cm wide binding.
- 4.1.5 **Thread** – The thread shall be polyester wrap, polyester core, Tex 40, Class B of matching colour, meeting CAN/CGSB 4.131-93.
- 4.1.6 **Dome Fastener** – The dome fastener shall be a standard type 24 line fastener. All metal parts shall be brass with a 15 mm matte black, powder coated cap. Only Universal SW61 shall be used.
- 4.1.7 **Elastic** – The elastic shall be heavy-duty nylon or polyester, black in colour, 2.5 cm in width, with maximum elongation of 130% and full recovery.
- 4.1.8 **Elastic Drawcord** – The drawcord shall be round, braided polyester elastic, black in colour, 2.4 mm diameter, with a maximum elongation of 135% and full recovery. Cansew style EBR C-38 is known to meet the requirement.
- 4.1.9 **Cord Lock** – The cord lock shall be a low-profile cord lock cylinder, acetal composition, spring-loaded and black in colour. It shall come with a maximum diameter of 13 mm and a maximum depth of 11.2 mm. Texfast style S217B is known to meet the requirement.
- 4.1.10 **Eyelets** – The eyelets shall be made of brass or aluminium with a black enamel finish and a 5-6 mm diameter hole.
- 4.1.11 **Grosgrain Ribbon** – The ribbon shall be nylon grosgrain ribbon, black in colour and come in two sizes. Size one shall range in width from 6 mm to 1 cm and size two shall range in width from 1.9 cm to 2.5 cm.
- 4.1.12 **Slide Fasteners**
- 4.1.12.1 **Front Slide Fastener** – The front fastener shall be an open-end separator, black in colour, injection molded with a DA automatic slider. The slide fastener shall be sized according to Table IV. The right front slide fastener shall have the insert pin. The left front slide fastener shall have the retaining box and slider with the front

facing the inside of the liner. Only Vislon YKK 5VS, 26590 VSO56 9/16 shall be used.

4.1.12.2 **Side Seam Slide Fastener** – The side seam fastener shall be coil type, black in colour with three DA large hole sliders. The slide fastener shall be sized according to Table IV. There shall be three sliders; the two closest to the underarm shall be in a head to head position and the third slider shall open from the bottom upwards as shown in drawing 3. Only YKK 13016 CIFMC 56/6/6 DA8LH E/DA8LH E/DA8LH E 5/8 \*P-TOP\*B-B\*H-H\* shall be used.

4.1.12.3 **Inside Chest Pocket Slide Fastener** – The pocket fastener shall be closed-end coil type with DF non-locking slider, black in colour, with long pull tabs. The slide fastener shall be sized according to Table IV. Only YKK 12430 CIFIC 51 DFL1 E 5/8 shall be used.

4.2 **Size and Dimensions** – Liner, Patrol, Unisex, to this specification shall be supplied in sizes specified by the RCMP to the dimensions given in the scale of measurements and drawings. The garment components shall be shaped, dimensioned and positioned according to the pattern components and requirements outlined in Appendix A.

#### 4.3 **Construction**

4.3.1 **Stitching** – All stitching shall be lockstitch Type 301 or lock-chain stitch Type 401 with three to four stitches per centimeter. The beginning and ending of all stitching shall be securely backstitch, tacked, unless secured by other stitching. Both armhole and underarm seams shall be stitched and serge-seamed. Care shall be taken to minimize unsightly gathering and puckering.

4.3.2 **Body** – All components of the liner shall be assembled with the calendered side of the shell material facing the insulation. The insulation shall be cut using the pattern pieces provided. Each piece of insulation shall be serged to the calendered side of the shell material prior to construction.

4.3.2.1 **Back** – The back of the garment shall be made of shell material specified in para. 4.1.1 and with insulation specified in para. 4.1.2. One layer of the insulation shall be sandwiched between the outer shell material layers. The completed back shall be shaped and dimensioned per the drawings and patterns. There shall be one liner attachment tab positioned at the centre back neckline per drawing 2. The attachment tab shall be constructed from size two grosgrain ribbon specified in para. 4.1.11,

with a finished length of 5 cm - 6.5 cm. The liner attachment tab shall come with a dome fastener (male side and female component) per para. 4.1.6, each positioned on the gross grain 1 cm from their respective ends to provide a place to hold when opening.

- 4.3.2.2 **Front** – The liner front shall be made from shell material specified in para. 4.1.1, and with insulation material specified in para. 4.1.2. One insulation layer shall be sandwiched between the outer shell material layers. Both right and left fronts shall have inside chest pockets positioned per the patterns and shall come with slide fasteners specified in para. 4.1.12.3 in lengths specified in Table IV. The inside left and inside right fronts shall have pen pockets constructed from shell material and sized per the pattern. The pen pockets shall be sewn securely to the centre front seams as shown in drawing 4. The centre front shall be equipped with a front slide fastener outlined in para. 4.1.12.1, in lengths specified in Table IV for the attachment to the corresponding jacket. The slider and retaining box shall be sewn to the left front and the insert pin shall be sewn to the right front as shown in drawing 4. All sliders shall be equipped with ribbon pulls specified in para 4.3.9. A male dome fastener, specified in para. 4.1.6, shall be applied to the jacket front at the hem for the attachment of the side seam strap. Two labels specified in para. 4.3.10 and 4.3.11 shall be sewn to the lower left portion of the inside front. All front components shall be constructed per the drawings, patterns and viewing sample.
- 4.3.2.3 **Back Hem Channel** – The back hem facing shall be sewn face side out to the back hem to create a hem channel for the elastic drawcord. It shall be shaped and dimensioned per the pattern. The hem channel shall have two eyelets per para. 4.1.10, 4 cm from the left side seam as identified in drawing 4. An elastic drawcord specified in para. 4.1.8 shall be securely attached to the right side seam and threaded through the hem channel. It shall continue through the cord lock specified in para. 4.1.9 and through the eyelet to the outside of the hem channel and back through the second eyelet. It shall continue back through the cord lock where the drawcord shall be knotted. When assembled completely, the cord lock shall be hidden in the channel with only the looped end of the elastic drawcord showing per drawing 4. Care shall be taken to ensure that the eyelets are reinforced and installed securely.
- 4.3.2.4 **Inside Pockets** – The inside left and right fronts shall have interior chest pockets made from shell material specified in para. 4.1.1 and secured with slide fasteners per para. 4.1.12.3. The pockets shall be constructed and positioned per the patterns and pattern templates.

- 4.3.3 **Side Seams** – Both side seams, from the sleeve underarm to the hem, shall be equipped with slide fasteners specified in para 4.1.12.2, in lengths specified in Table IV. There shall be three sliders. The two closest to the underarm shall be in a head-to-head position. The third slider shall open from the bottom upwards as shown in drawing 3. All sliders shall be equipped with ribbon pulls specified in para 4.3.9. The side seam hem shall have an elastic closure strap specified in para. 4.3.4 constructed per drawing 3.
- 4.3.4 **Side Seam Closure Strap** – There shall be a side seam closure strap at the side seam hem with a finished measurement of 9 cm  $\pm$  .5 cm. It shall be constructed from doubled 2.5 cm wide elastic specified in para. 4.1.7 and shall be sewn to the lower back side seam opening toward the front. The side seam closure strap shall be equipped with a female dome fastener specified in para. 4.1.6 for closure.
- 4.3.5 **Sleeve and Sleeve Binding** – The sleeves shall be constructed from material specified in para. 4.1.1 and one layer of insulation specified in para. 4.1.2. The binding specified in para. 4.1.4 shall be securely sewn to the bottom of the sleeve to a finished width of 1 cm. The sleeves with binding shall conform in all respects to the drawings and patterns.
- 4.3.6 **Sleeve Loop** – The sleeve loops shall be constructed from size one grosgrain ribbon specified in para 4.1.11. The loops shall have a finished length of 5-6 cm. The loops shall be sewn securely into the cuff binding at the underarm seam per drawing 2. The sleeve loops shall be used as an attachment to the patrol jacket.
- 4.3.7 **Collar** – The collar shall be made from shell material specified in para. 4.1.1, from insulation material specified in para. 4.1.2, and lined with lining specified in para 4.1.3. The insulation specified in para. 4.1.2 shall be sewn to the outer shell material with the scrim facing the lining. It shall then be stitched to the lining specified in para. 4.1.3. The brushed side of the lining shall face out. The collar shall conform in all respects to the drawings and patterns.
- 4.3.8 **Coat Hanger Loop** – A 6 cm long coat hanger loop, constructed from size one grosgrain ribbon specified in para. 4.1.11 shall be centred at the neck in accordance with drawing 4 and the viewing sample.
- 4.3.9 **Slide Fastener Ribbon Pulls** – All ribbon pulls shall be constructed with size one grosgrain ribbon specified in para. 4.1.11. The ribbon shall be applied to the hole of the slide fastener pull in a way that allows the ribbon pulls to be removed and

reapplied without damage to the slide or ribbon. The ribbon pull should be 5 cm  $\pm$  0.5 cm in length when finished and 4 cm  $\pm$  0.5 cm attached to the slide fastener.

4.3.10 **Identification Label** – Each liner patrol unisex shall have a blank label 7.5 x 2 cm applied separately below the marking and cleaning label used for the inscription of the wearer's name.

4.3.11 **Marking and Cleaning Instructions Label** – Each patrol liner shall have a durable label positioned and sewn to the bottom right front as shown in drawing 4. The text shall be printed in permanent inks of a contrasting colour and shall withstand at least 50 washes with no change in appearance. All text except for the RCMP stock number shall be in size 6 font. The RCMP stock number shall appear in size 8 font. The manufacturer's identification shall not appear anywhere on the garment except where indicated on the garment label. The label shall contain the following information in English and French:

1. Item name in English as written in para. 1.1.
2. Item name in French as written in para. 1.1.
3. RCMP stock number – reference contract documents. (Ex. 4020 000)
4. Size and height group of the article, combining the size designation referenced in the English and French contract documents. (Ex. L/R - G/R)
5. Date of manufacture, in numeric format year/month (Ex. 2001/11)
6. Manufacturer identification (Company name or number).
7. Print information as shown below.

1		
2		
3		
4		
5		
6		
7	Machine wash - cool (30°C)	Laver à la machine – à l'eau froide (30°C)
	<b>Do Not</b> use fabric softener or chlorine bleach	<b>Ne pas</b> utiliser d'agent assouplissant ni d'agent de blanchiment
	Tumble dry- low ( <b>Do Not</b> use dryer sheets)	Sécher par culbutage – à basse température ( <b>Ne pas</b> utiliser d'assouplissant en feuilles)
	Steam iron - low	Repasser à la vapeur - à basse température
	DO NOT DRY CLEAN	NE PAS NETTOYER À SEC

## 5. **Quality Assurance Provisions**

- 5.1 **Responsibility for Inspection** – Unless otherwise stipulated in the contract, it is the prime contractor's responsibility to satisfy the RCMP Uniform and Equipment Program that the material and services being supplied conform to this specification. This may be accomplished by performing the tests indicated in this specification or by demonstrating to the satisfaction of the RCMP Uniform and Equipment Program that the specified manufacturing standards have been met. The contractor shall use any independent, North American ISO 9001 certified and ISO 17025 “Textile” certified testing facilities. CTT Group Inc. is known to meet this requirement.
- 5.2 The RCMP Uniform and Equipment Program reserves the right to perform any inspection considered necessary to ensure that material and services conform to the specified requirements. For the purpose of inspection, a portion of each delivery may be put to tests that could destroy the articles. No portion shall exceed two percent or two out of any delivery under 100 articles. If found to be inferior or not in accordance with this specification, all destroyed articles shall be replaced by others of proper quality and pattern at the expense of the contractor. The entire delivery may also be rejected if articles previously rejected due to non-repairable defects are redelivered for inspection.
- 5.3 The contractor will be promptly notified when any articles are not accepted and such articles will be returned at the contractor's risk and expense.

## 6. **Scale of Measurement Definitions and Location References**

(Refer to the Scale of Measurements and drawing 1)

- 6.1 **Chest Circumference (total circumference)** – When placed flat, the chest circumference shall be the distance across the jacket, measured at the lowest point of the armholes. The result shall be doubled to measure total circumference (A).
- 6.2 **Bottom Circumference (total circumference)** – When placed flat, the bottom shall be measured across the lowest jacket edge. The result shall be doubled to measure total circumference (B).
- 6.3 **Front Length** – The length shall be the distance measured from the bottom of the collar to the hem at front (C).
- 6.4 **Side Length** – The length shall be the distance measured from the base of the armhole to the bottom edge of the fabric hem at the side (D).
- 6.5 **Full Shoulder Width** – The distance measured at the shoulder seam from neckline to armhole (E).
- 6.6 **Sleeve Length Overarm** – The overarm sleeve length shall be the distance from the armhole at the shoulder seam to the bottom edge of the sleeve cuff (F).
- 6.7 **Sleeve Length Underarm** – The underarm sleeve length shall be the distance under sleeve from the armhole to the bottom edge of the sleeve cuff (G).
- 6.8 **Sleeve Cuff Circumference (Relaxed)** – When placed flat, the sleeve cuff shall be measured at the bottom edge of the sleeve. The result shall be doubled to measure total circumference (H).
- 6.9 **Back Length** – The length shall be the distance measured from the bottom of the collar at the back to the hem (J).
- 6.10 **Back Width** – When placed flat, the distance measured across the back from armhole to armhole measured 15.5 cm down from the centre back collar (K).
- 6.11 **Collar Length** – Collar length shall be measured from the collar edge at the center front, around the jacket back at the neck seam, to the opposite collar edge (L).

SCALE OF MEASUREMENTS

All measurements are in centimeters unless otherwise indicated															
SIZE DESIGNATION		BODY MEASUREMENTS			FINISHED GARMENT MEASUREMENTS										
Height Group	Size	Chest		Chest Circumference	Bottom Circumference	Front Length (Bottom of collar to hem)	Side Seam Length (underarm to hem)	Full Shoulder Width (Shoulder seam from neckline to armhole)	Sleeve Length		Cuff Circumference (Relaxed)	Back Length (Bottom of collar at back to hem)	Back Width	Collar Length (Edge to edge)	
		Inches	cm						Overarm (Shoulder seam to cuff)	Underarm (Underarm seam to cuff)					
X Short	XXS	31" - 33"	79 - 84	102.5	93	36	15	14	49.5	47.5	18	49	41	41	
	XS	34" - 36"	86 - 91	110	100.5	38	16	15	51.25	48.5	19	51	43.5	43	
	S	37" - 39"	94 - 99	117.5	108	40	17	16	53	49.5	20	53	46	45	
	M	40" - 42"	102 - 107	125	115.5	42	18	17	54.75	50.5	21	55	48.5	47	
	L	43" - 45"	109 - 114	132.5	123	44	19	18	56.5	51.5	22	57	51	49	
	XL	46" - 48"	117 - 122	140	130.5	46	20	19	58.25	52.5	23	59	53.5	51	
	2XL	49" - 51"	124 - 129	147.5	138	48	21	20	60	53.5	24	61	56	53	
	3XL	52" - 54"	132 - 137	155	145.5	50	22	21	61.75	54.5	25	63	58.5	55	
	4XL	55" - 57"	140 - 145	162.5	153	52	23	22	63.5	55.5	26	65	61	57	
	5XL	58" - 60"	147 - 152	170	160.5	54	24	23	65.25	56.5	27	67	63.5	59	
Short	XXS	31" - 33"	79 - 84	102.5	93	41	20	14	53.5	51.25	18	54	41	41	
	XS	34" - 36"	86 - 91	110	100.5	43	21	15	55.25	52.25	19	56	43.5	43	
	S	37" - 39"	94 - 99	117.5	108	45	22	16	57	53.25	20	58	46	45	
	M	40" - 42"	102 - 107	125	115.5	47	23	17	58.75	54.25	21	60	48.5	47	
	L	43" - 45"	109 - 114	132.5	123	49	24	18	60.5	55.25	22	62	51	49	
	XL	46" - 48"	117 - 122	140	130.5	51	25	19	62.25	56.25	23	64	53.5	51	
	2XL	49" - 51"	124 - 129	147.5	138	53	26	20	64	57.25	24	66	56	53	
	3XL	52" - 54"	132 - 137	155	145.5	55	27	21	65.75	58.25	25	68	58.5	55	
	4XL	55" - 57"	140 - 145	162.5	153	57	28	22	67.5	59.25	26	70	61	57	
	5XL	58" - 60"	147 - 152	170	160.5	59	29	23	69.25	60.25	27	72	63.5	59	
		TOLERANCES ±			3	3	2	1.5	1	1.5	1	2	1.5	1.5	
		MEASUREMENT LOCATION			A	B	C	D	E	F	G	H	J	K	L

## SCALE OF MEASUREMENTS

All measurements are in centimeters unless otherwise indicated														
SIZE DESIGNATION		BODY MEASUREMENTS		FINISHED GARMENT MEASUREMENTS										
Height Group	Size	Chest		Chest Circumference	Bottom Circumference	Front Length (Bottom of collar to hem)	Side Seam Length (underarm to hem)	Full Shoulder Width (Shoulder seam from neckline to armhole)	Sleeve Length		Cuff Circumference (Relaxed)	Back Length (Bottom of collar at back to hem)	Back Width	Collar Length (Edge to edge)
		Inches	cm						Overarm (Shoulder seam to cuff)	Underarm (Underarm seam to cuff)				
Regular	XXS	31" - 33"	79 - 84	102.5	93	46	25	14	57.5	55	18	59	41	41
	XS	34" - 36"	86 - 91	110	100.5	48	26	15	59.25	56	19	61	43.5	43
	S	37" - 39"	94 - 99	117.5	108	50	27	16	61	57	20	63	46	45
	M	40" - 42"	102 - 107	125	115.5	52	28	17	62.75	58	21	65	48.5	47
	L	43" - 45"	109 - 114	132.5	123	54	29	18	64.5	59	22	67	51	49
	XL	46" - 48"	117 - 122	140	130.5	56	30	19	66.25	60	23	69	53.5	51
	2XL	49" - 51"	124 - 129	147.5	138	58	31	20	68	61	24	71	56	53
	3XL	52" - 54"	132 - 137	155	145.5	60	32	21	69.75	62	25	73	58.5	55
	4XL	55" - 57"	140 - 145	162.5	153	62	33	22	71.5	63	26	75	61	57
	5XL	58" - 60"	147 - 152	170	160.5	64	34	23	73.25	64	27	77	63.5	59
Tall	XXS	31" - 33"	79 - 84	102.5	93	51	30	14	61.5	58.75	18	64	41	41
	XS	34" - 36"	86 - 91	110	100.5	53	31	15	63.25	59.75	19	66	43.5	43
	S	37" - 39"	94 - 99	117.5	108	55	32	16	65	60.75	20	68	46	45
	M	40" - 42"	102 - 107	125	115.5	57	33	17	66.75	61.75	21	70	48.5	47
	L	43" - 45"	109 - 114	132.5	123	59	34	18	68.5	62.75	22	72	51	49
	XL	46" - 48"	117 - 122	140	130.5	61	35	19	70.25	63.75	23	74	53.5	51
	2XL	49" - 51"	124 - 129	147.5	138	63	36	20	72	64.75	24	76	56	53
	3XL	52" - 54"	132 - 137	155	145.5	65	37	21	73.75	65.75	25	78	58.5	55
	4XL	55" - 57"	140 - 145	162.5	153	67	38	22	75.5	66.75	26	80	61	57
	5XL	58" - 60"	147 - 152	170	160.5	69	39	23	77.25	67.75	27	82	63.5	59
TOLERANCES ±				3	3	2	1.5	1	1.5	1.5	1	2	1.5	1.5
MEASUREMENT LOCATION				A	B	C	D	E	F	G	H	J	K	L

## SCALE OF MEASUREMENTS

All measurements are in centimeters unless otherwise indicated														
SIZE DESIGNATION		BODY MEASUREMENTS			FINISHED GARMENT MEASUREMENTS									
Height Group	Size	Chest		Chest Circumference	Bottom Circumference	Front Length (Bottom of collar to hem)	Side Seam Length (underarm to hem)	Full Shoulder Width (Shoulder seam from neckline to armhole)	Sleeve Length		Cuff Circumference (Relaxed)	Back Length (Bottom of collar at back to hem)	Back Width	Collar Length (Edge to edge)
		Inches	cm						Overarm (Shoulder seam to cuff)	Underarm (Underarm seam to cuff)				
X Tall	XXS	31" - 33"	79 - 84	102.5	93	56	35	14	65.5	62.5	18	69	41	41
	XS	34" - 36"	86 - 91	110	100.5	58	36	15	67.25	63.5	19	71	43.5	43
	S	37" - 39"	94 - 99	117.5	108	60	37	16	69	64.5	20	73	46	45
	M	40" - 42"	102 - 107	125	115.5	62	38	17	70.75	65.5	21	75	48.5	47
	L	43" - 45"	109 - 114	132.5	123	64	39	18	72.5	66.5	22	77	51	49
	XL	46" - 48"	117 - 122	140	130.5	66	40	19	74.25	67.5	23	79	53.5	51
	2XL	49" - 51"	124 - 129	147.5	138	68	41	20	76	68.5	24	81	56	53
	3XL	52" - 54"	132 - 137	155	145.5	70	42	21	77.75	69.5	25	83	58.5	55
	4XL	55" - 57"	140 - 145	162.5	153	72	43	22	79.5	70.5	26	85	61	57
	5XL	58" - 60"	147 - 152	170	160.5	74	44	23	81.25	71.5	27	87	63.5	59
XX Tall	XXS	31" - 33"	79 - 84	102.5	93	61	40	14	69.5	66.25	18	74	41	41
	XS	34" - 36"	86 - 91	110	100.5	63	41	15	71.25	67.25	19	76	43.5	43
	S	37" - 39"	94 - 99	117.5	108	65	42	16	73	68.25	20	78	46	45
	M	40" - 42"	102 - 107	125	115.5	67	43	17	74.75	69.25	21	80	48.5	47
	L	43" - 45"	109 - 114	132.5	123	69	44	18	76.5	70.25	22	82	51	49
	XL	46" - 48"	117 - 122	140	130.5	71	45	19	78.25	71.25	23	84	53.5	51
	2XL	49" - 51"	124 - 129	147.5	138	73	46	20	80	72.25	24	86	56	53
	3XL	52" - 54"	132 - 137	155	145.5	75	47	21	81.75	73.25	25	88	58.5	55
	4XL	55" - 57"	140 - 145	162.5	153	77	48	22	83.5	74.25	26	90	61	57
	5XL	58" - 60"	147 - 152	170	160.5	79	49	23	85.25	75.25	27	92	63.5	59
TOLERANCES ±				3	3	2	1.5	1	1.5	1	2	1.5	1.5	
MEASUREMENT LOCATION				A	B	C	D	E	F	G	H	J	K	L

**Table I**  
**Shell Material Test Requirements**

	TEST	RCMP REQUIREMENTS	TEST METHOD
1	Colour	Black	
2	Fibre Content	100% nylon Warp 30 denier Weft 30 denier	<ul style="list-style-type: none"> <li>CAN/CGSB 4.2 No. 14-2005</li> </ul>
3	Weave	Plain	Visual
4	Calendering	One side	Visual
5	Mass	48 g/m <sup>2</sup> ± 3 g/m <sup>2</sup>	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 5.1-M90 (2013)</li> <li>ASTM D3776/D3776M-09a (2013) Option C</li> </ul>
6	Yarns per cm	Warp - 65 min. Weft - 50 min.	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 6-2013</li> <li>ISO 7211-2:1984</li> </ul>
7	Tearing Strength - Elmendorf Method	Warp – 8.5 N min Weft – 6.6 N min	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 12.3-2005 (R2013)</li> <li>ISO 13937-1:2000</li> </ul>
8	Abrasion Resistance - Martindale Method (Determination of Specimen Breakdown)	No breakdown after 150,000 at 12 kPa	<ul style="list-style-type: none"> <li>ASTM D-4966-12<sup>e1</sup> Option 1</li> </ul>
9	Dimensional Change in Domestic Laundering (cool wash 30°C)	Warp: 2% max Weft: 2% max	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 58-2004, VI, E (delicate), 3</li> </ul>
10	Air Permeability	1 cm <sup>3</sup> /cm <sup>2</sup> x s-1 max	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 36-M89 (R2013)</li> <li>ASTM D737-04 (2012)</li> </ul>
11	Resistance to Surface Wetting - Spray Method	90 after 5 washes or better	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 26.2-94 (R2012)</li> <li>ISO 4920:1981</li> </ul>
12	Colourfastness to Light	Equal to AATCC Standard L4 or better	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No.18.3-97 (R2010)</li> <li>ISO 105-B02:2014 North American exposure conditions Method 3</li> </ul>
13	Colourfastness to Crocking	Dry: Grade 4 or better Wet: Grade 4 or better	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No.22-2004</li> <li>AATCC 8-2013</li> </ul>
14	Colourfastness to Perspiration	Grade 4 or better	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 23-M90 (R2013)</li> </ul>
15	Colourfastness to Laundering (cool wash 30°C)	Grade 4 or better	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No.19.1-2004 (R2013) Test No. 5</li> </ul>

**Table II**  
**Insulation Test Requirements**

	TEST	RCMP REQUIREMENTS	TEST METHOD
1	CLO - Batt and Scrim	<i>Initial</i> 2.0 (min.) After 5 Washes 1.7 (min.)	<ul style="list-style-type: none"> <li>ISO11092:2014 <u>Washing</u> -</li> <li>ISO6330:2012 Wash (7B) Dry Procedure F</li> </ul>
2	Fabric Thickness - Batt and Scrim	<i>Initial:</i> 14 mm (max.) <i>After 5 Washes:</i> Maximum loss 20% of initial value	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 37-2002 (R2013) <u>Washing</u> -</li> <li>ISO6330:2012 Wash (7B) Dry Procedure F</li> </ul>
3	Fibre content	100% micro denier polyester with binder fibre and acrylic resin	
4	Stiffness (Drape) Cantilever Bending Method	Length 2 cm (max.) Width 2 cm (max.)	<ul style="list-style-type: none"> <li>FED-STD-191 5206</li> </ul>
5	Resistance to Pilling	4 (min.)	<ul style="list-style-type: none"> <li>ASTM D4970/D4970M-10<sup>e1</sup> After 1000 cycles Tested with the face of batt against shell material layer</li> </ul>
6	Dimensional Change in Laundering - Batt and Scrim  <i>After 5 Washes</i>	Warp: 3% (max.) Weft: 3% (max.) The difference in the dimensional change between the batt and scrim shall not exceed 3%.	<ul style="list-style-type: none"> <li>ISO6330:2012 Wash (7B) Dry Procedure F</li> </ul>
7	Anti-Microbial Agent Silver Nano Particle Additive with Binder	95 % killed within 24 hour	<ul style="list-style-type: none"> <li>AATCC 100-2012</li> <li>ISO 20743:2013 Tested for s. aureus, e. coli, k. pneumonia</li> </ul>
8	Compression Recovery	91% (min.)	<ul style="list-style-type: none"> <li>Procedure described below</li> </ul>
<p>The insulation's compression recovery shall be determined by the following procedure.</p> <ol style="list-style-type: none"> <li>1. A cloth specimen shall be measured for thickness using a 64 cm<sup>2</sup> pressure foot at a pressure of 0.07kPa.</li> <li>2. The specimen shall be compressed under a suitable template (not less than 127 mm by 127 mm) for a period of 60 minutes at a pressure of 7.0 kPa. The specimen shall be at least 50 mm larger in length and width than the template.</li> <li>3. The template and the weight shall be removed and the specimen allowed to relax for 3 minutes. Immediately after the 3 minute relaxation period, the thickness shall be measured again at the pressure of 0.07 kPa.</li> <li>4. The compressional recovery shall be calculated as follows:</li> </ol> $\text{Compression recovery percentage} = \left( \frac{\text{thickness of specimen after compression}}{\text{thickness of specimen before compression}} \right) \times 100$			

**Table III**  
**Lining Test Requirements**

REQUIREMENT			TEST METHOD
1	Colour	Black	
2	Knit	Warp	
3	Fiber Content	100% Polyester	<ul style="list-style-type: none"> <li>CAN/CGSB 4.2 No. 14-2005</li> </ul>
4	Mass	127 g/m <sup>2</sup> ± 6 g/m <sup>2</sup> (121 - 133)	<ul style="list-style-type: none"> <li>CAN/CGSB 4.2 No.5.1-M90 (R2013)</li> <li>ASTM D3776/D3776M-09a (2013) Option C</li> </ul>
5	Colourfastness to Light	Equal to AATCC Standard L3 or better	<ul style="list-style-type: none"> <li>CAN/CGSB 4.2 No.18.3-97 (R2010)</li> <li>ISO 105-B02:2014 North American exposure conditions Method 3</li> </ul>
6	Colourfastness to Crocking	Dry: Grade 4 or better Wet: Grade 3 or better	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No.22-2004 (2013)</li> <li>AATCC 8-2013</li> </ul>
7	Colourfastness to Laundering (cool wash 30°C)	Colour change Grey Scale 4 or better Staining cotton - Grey Scale 4 or better Staining polyester – Grey Scale 3 or better	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 19.1-2004 (R2013) Test 5</li> </ul>
8	Dimensional Change to Domestic Washing <i>After 5 cycles</i>	Warp 5% (max.) Weft 5% (max.)	<ul style="list-style-type: none"> <li>CAN/CGSB 4.2 No. 58-2004, VI, E (delicate), 3</li> </ul>

**Table IV**  
**Slide Fastener Lengths**

All measurements in inches									
Height Group	Sizes	Front	Chest Pocket	Side Seam	Height Group	Sizes	Front	Chest Pocket	Side Seam
X Short	XX Small	13½	5	13	Tall	XX Small	19½	5	19
	X Small	14½	5	13		X Small	20	5	19
	Small	15	5½	13		Small	21	5½	19
	Medium	15½	5½	14		Medium	22	5½	20
	Large	16½	6	14		Large	22½	6	20
	X Large	17½	6	15		X Large	23½	6	21
	2X Large	18	6½	15		2X Large	24	6½	21
	3X Large	19	6½	15		3X Large	25	6½	21
	4X Large	20	7	16		4X Large	25½	7	22
	5X Large	20½	7	16		5X Large	26	7	22
Short	XX Small	15½	5	15	X Tall	XX Small	21½	5	21
	X Small	16	5	15		X Small	22	5	21
	Small	17	5½	15		Small	23	5½	21
	Medium	18	5½	16		Medium	24	5½	22
	Large	18½	6	16		Large	24½	6	22
	X Large	19½	6	17		X Large	25½	6	23
	2X Large	20	6½	17		2X Large	26	6½	23
	3X Large	21	6½	17		3X Large	27	6½	23
	4X Large	22	7	18		4X Large	27½	7	24
	5X Large	22½	7	18		5X Large	28½	7	24
Regular	XX Small	17½	5	17	XX Tall	XX Small	23½	5	23
	X Small	18	5	17		X Small	24	5	23
	Small	19	5½	17		Small	25	5½	23
	Medium	20	5½	18		Medium	25½	5½	24
	Large	20½	6	18		Large	26½	6	24
	X Large	21½	6	19		X Large	27	6	25
	2X Large	22	6½	19		2X Large	28	6½	25
	3X Large	23	6½	19		3X Large	29	6½	25
	4X Large	24	7	20		4X Large	29½	7	26
	5X Large	24½	7	20		5X Large	30½	7	26

## Appendix A

### **Sealed Pattern Identifier**

Paper patterns are available from the RCMP Uniform and Equipment Program, Ottawa Ontario. Firms requested to produce Pre-contract Award Samples will be provided with the base pattern only. The full set of patterns either in individual sizes or as a graded nest will, be provided to the successful bidder after the contract is awarded.

The paper patterns include seam allowances and/or placement templates. Shrinkage has not been included in any pattern piece. It is the responsibility of the manufacturer to make allowances for shrinkage in order to meet the scale of measurements included in this specification. Contractors may make changes required to suit their production process, however, the design and grade shall not be affected or changed.

All patterns are property of the RCMP and must be returned upon completion of the contract.

### **Material and Cutting Legend**

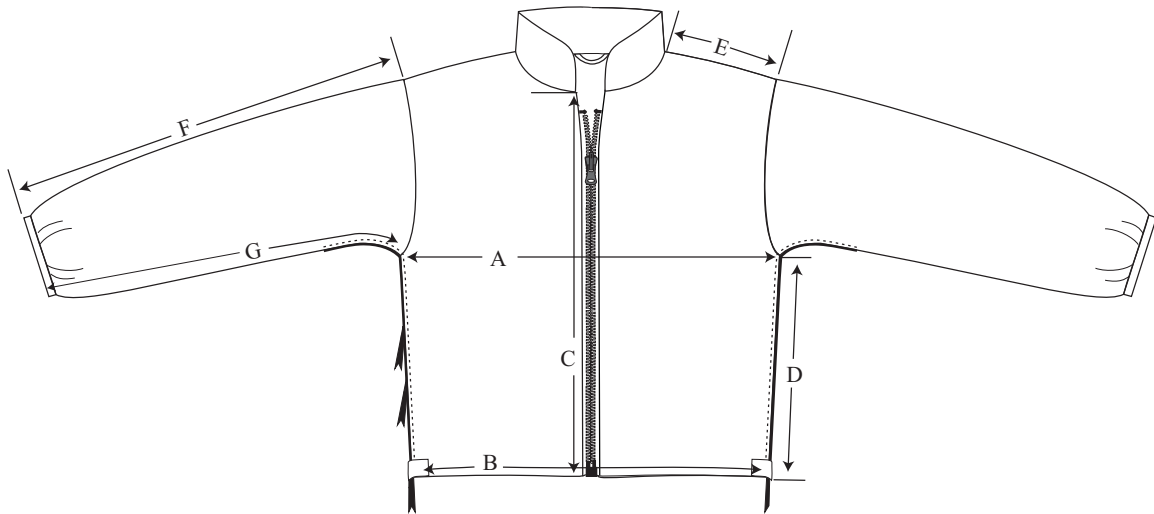
Shell Material	para. 4.1.1
Insulation	para. 4.1.2
Lining	para. 4.1.3
Cut 1 Single	Cut 1
Cut 1 Pair	Cut 2
Cut 2 Paired	Cut 4
(RSU)	Right Side Up

**Pattern Component Cutting Guide**

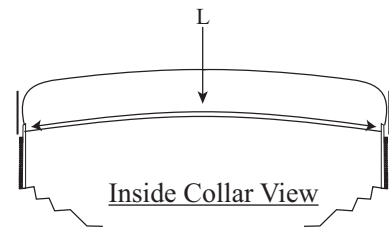
This design has 16 pattern components.

<b>Pattern Component</b>	<b>Nomenclature</b>	<b>Quantity to Cut</b>	<b>Material</b>
1 of 16	Back	1 Single	Shell Material
2 of 16	Back – Insulation	1 Single	Insulation
3 of 16	Back – Inside	1 Single	Shell Material
4 of 16	Front	1 Paired	Shell Material
5 of 16	Front – Insulation	1 Paired	Insulation
6 of 16	Front – Inside	1 Paired	Shell Material
7 of 16	Sleeve	2 Paired	Shell Material
8 of 16	Sleeve – Insulation	1 Paired	Insulation
9 of 16	Pocket – Top Piece	1 Paired	Shell Material
10 of 16	Pocket – Bottom Piece	1 Paired	Shell Material
11 of 16	Pen Loop	1 Paired	Shell Material
12 of 16	Hem Facing – Back	1 Single	Shell Material
13 of 16	Hem Facing – Front	1 Paired	Shell Material
14 of 16	Collar	1 Single RSU	Shell Material
15 of 16	Collar – Insulation	1 Single	Insulation
16 of 16	Collar – Lining	1 Single RSU	Lining

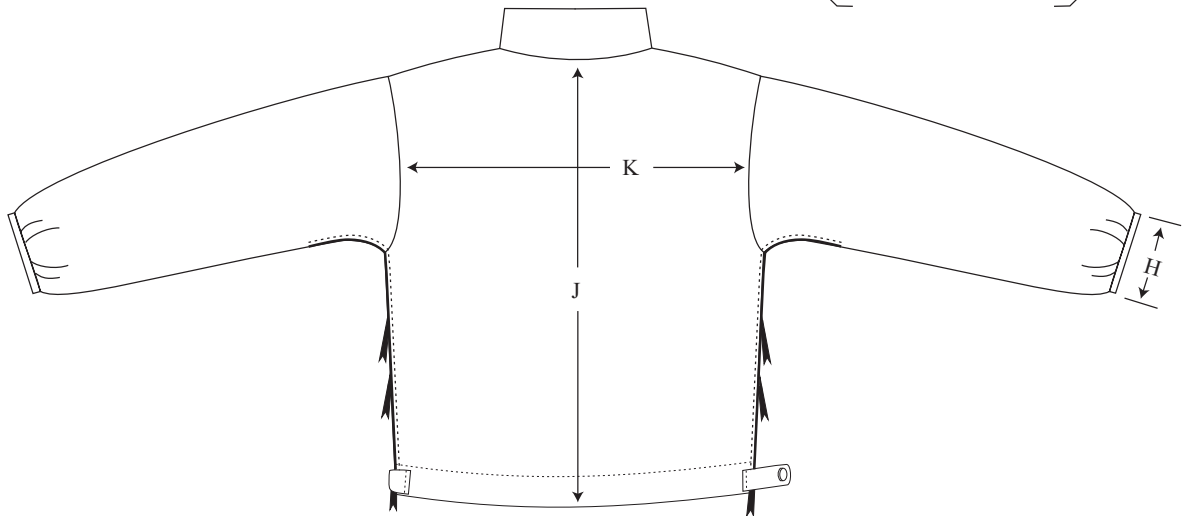
Measurement Location Chart  
Dwg. 1



Front View



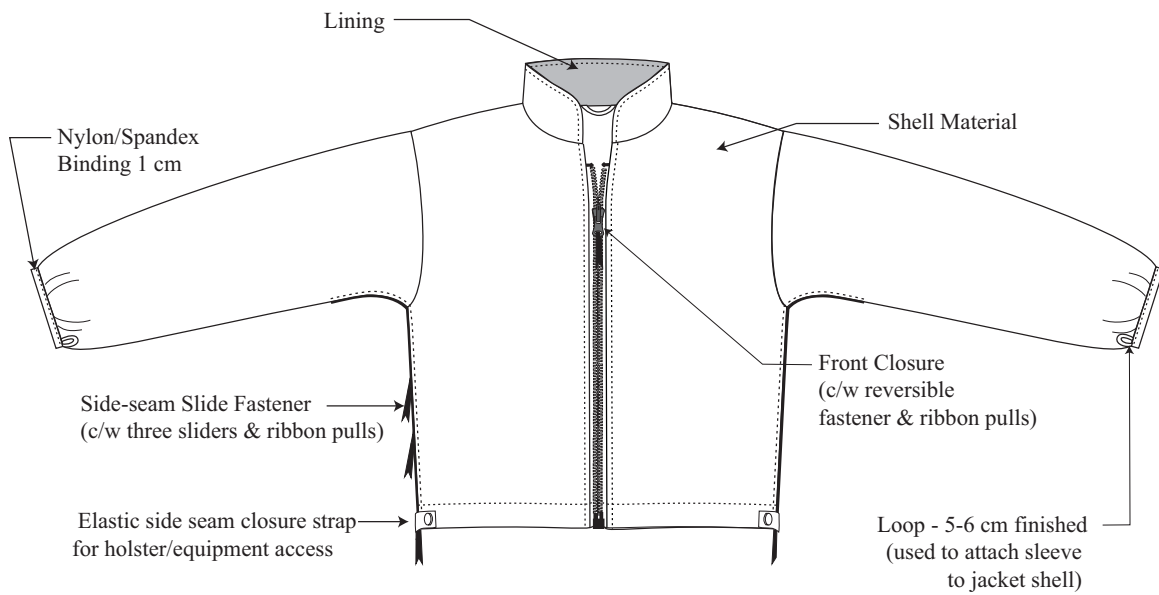
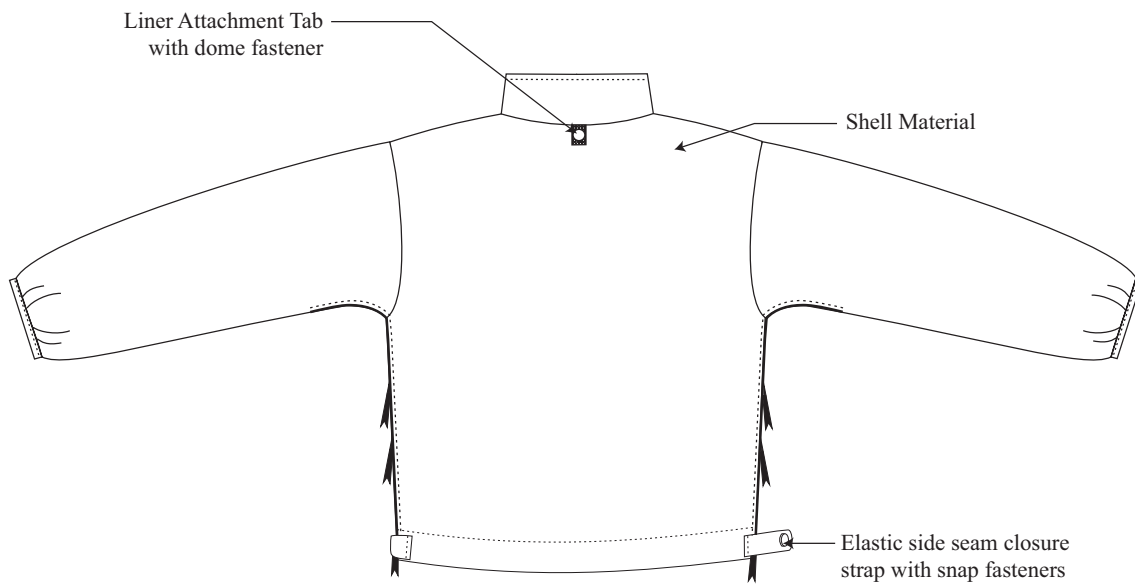
Inside Collar View



Rear View

NOT TO SCALE

Dwg. 2

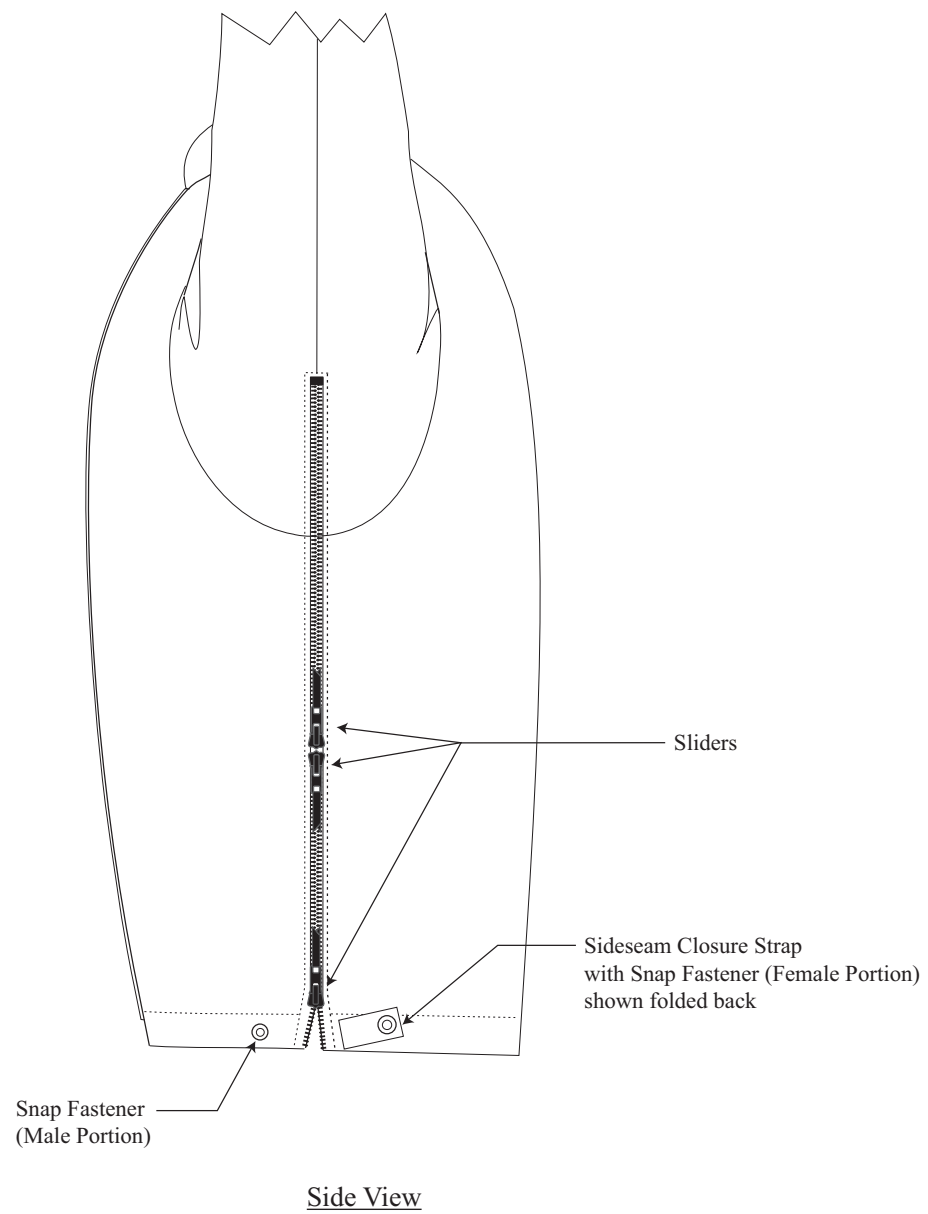
Front ViewRear View

NOT TO SCALE

All measurements are shown in centimeters.

 $\pm 0.5$  cm tolerance acceptable unless otherwise indicated.

Underarm Detail  
Dwg. 3

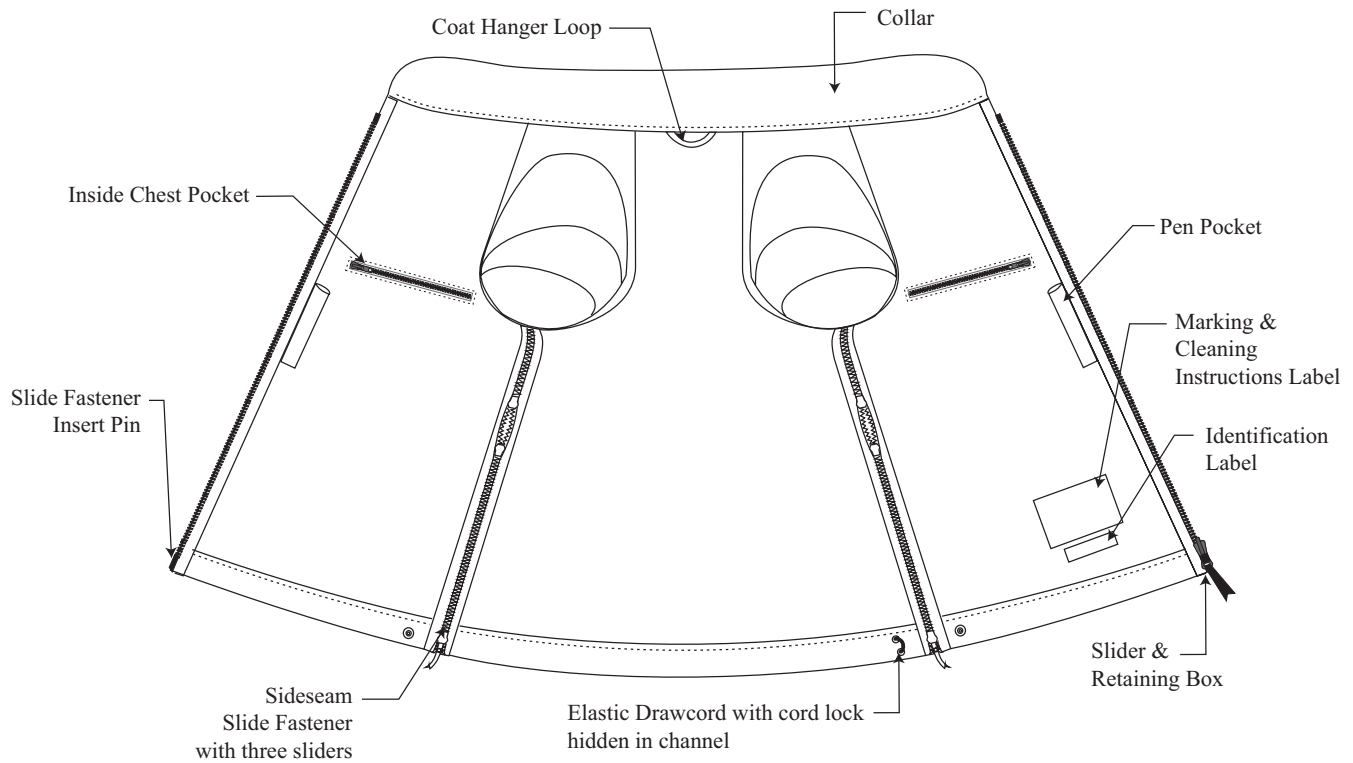


NOT TO SCALE

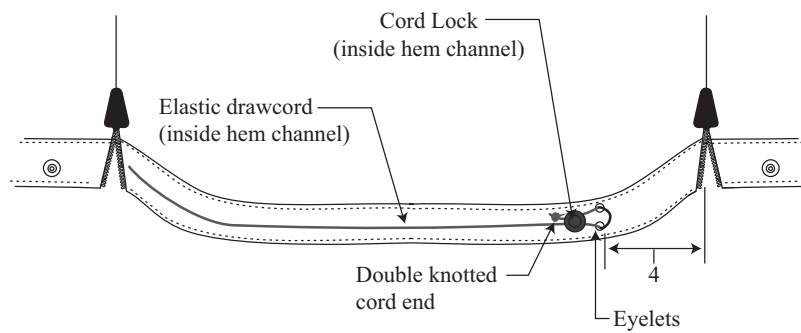
All measurements are shown in centimeters.

± 0.5 cm tolerance acceptable unless otherwise indicated.

Inside Liner  
Dwg. 4



Inside Liner View



Back Hem Channel - Inside View

NOT TO SCALE

All measurements are shown in centimeters.

± 0.5 cm tolerance acceptable unless otherwise indicated.



Royal Canadian Mounted Police  
Gendarmerie royale du Canada

Doc. no: G.S. 1045-315  
Date: 2016-07-14

## Specification

### Liner, Parka, Inclement

This document has 26 pages including the drawings.

This document was created in English.

The document is available in English and French.

☒ English/Anglais  
Français/French

The photograph on this page is for reference only.



## Modifications

[illegible]

## **RCMP VIEWING SAMPLE**

A viewing sample, when available, will be supplied to the successful bidder.

This will be used to guide manufacturer in all factors not covered by this specification or referred to therein. Variation from the specification may appear in the sample in which case the specification shall govern.

It may be obtained from:

Royal Canadian Mounted Police  
ATTN: Uniform & Equipment Program  
(440 Coventry Road, Warehouse Building)  
1200 Vanier Parkway  
Ottawa, Ontario  
K1A 0R2

It will be sent “prepaid” and is to be returned “prepaid”.

The viewing sample shall be returned to the RCMP in the same condition as received by the manufacturer. Lost or damaged viewing samples shall be replaced by an identical item or the RCMP shall be reimbursed for the cost of an acceptable replacement.

**SPECIFICATION**  
**LINER, PARKA, INCLEMENT**

**1. Definition**

- 1.1 This specification shall govern the manufacture and inspection of Liner, Parka, Inclement. The items covered under this specification with stock numbers are as follows:
  - i. 5035 Liner, Parka, Inclement / Doublure pour parka pour intempéries;
  - ii. 5036-000 Liner, Parka, Inclement Special / Doublure pour parka pour intempéries, tailles spéciales.
- 1.2 The specification, pattern, viewing sample or other information issued in connection therewith may only be used for specific enquiries, solicitations, or orders placed on behalf of the Royal Canadian Mounted Police.
- 1.3 This specification supersedes all previous specifications for Liner, Parka, Inclement.
- 1.4 This specification has been translated into French from this original English language document.

**2. Applicable Specifications**

- 2.1 The following publications are applicable to this specification and to the issues in effect on the date of the solicitation, unless otherwise specified.
- 2.2 CAN/CGSB 4.2 Textile Test Methods; 14-2005, 5.1-M90 (R2013), 6-2013, 12.3-2005 (R2013), 18.3-97 (R2010), 19.1-2004 (R2013), 22-2004, 23-M90 (R2013), 26.2-94 (R2012), 36-M89 (R2013), 37-2002 (R2013), 58-2004.
- 2.3 CAN/CGSB 4.131-93, Thread, Polyester, Polyester-Covered.
- 2.4 FED-STD-191A, Federal Standard, Textile Test Methods, FED-STD191-5206.
- 2.5 ASTM, American Society for Testing and Materials, Method D3776/D3776M-09a (2013), D4966-12<sup>e1</sup>, D4970/D4970M-10<sup>e1</sup>, D737-04 (2012).
- 2.6 AATCC American Association of Textile Chemists and Colorists - Technical Manual Methods; 8-2013 and 100-2012.

- 2.7 ISO, International Standards Organization Textile Test methods; ISO 105-B02:2014, ISO 13937-1:2000, ISO 11092:2014, ISO 4920:1981, ISO 7211-2:1984, ISO 20743:2013 and ISO 6330:2012.
- 2.8 CAN/CGSB 86.1-2003 Care Labelling of Textiles.

### 3. **General Requirements**

- 3.1 The article or material covered by this specification shall be free from material and manufacturing defects that may affect its appearance or serviceability. In all particulars not covered by this specification or contract documents, production shall be equivalent in all respects to the pattern and viewing sample.
- 3.2 **Design** - The Liner, Parka, Inclement shall be a three-quarter length liner, designed to be worn in conjunction with the Parka, Inclement. The liner shall be constructed from a nylon, DWR-coated, down proof material and interlined with polyester insulation. It shall be equipped with a front slide fastener for attachment to the parka shell. This liner is not intended to be worn as a stand-alone garment. Therefore, the slider portion of the front slide fastener shall be applied facing towards the inside of the liner. Both inside fronts shall have chest pockets with slide fasteners for closure. The side seams shall have slide fasteners from the sleeve underarm to hem for ventilation and weapon access.

### 4. **Detailed Requirements**

#### 4.1 **Components**

- 4.1.1 **Shell Material** – The shell material shall be, 100% down proof plain weave nylon, 30 denier, black in colour, with a one-sided, calendered finish meeting the requirements outlined in Table I.
- 4.1.2 **Insulation** – The insulation shall be 100% polyester and shall be provided with a polyester scrim. An anti-microbial agent in the form of silver nanoparticle with binder shall be applied to the insulation as a preventive agent to odor, fungi, bacteria and viruses. One layer of insulation for the sleeves shall be used to meet the requirements in Table IIA. One or two layers of insulation for the body shall be used to meet the requirements in Table IIB.

- 4.1.3 **Lining (Collar)** – The lining shall be 100% polyester, warp knit with a brushed finish on one side. It shall be black in colour and meet the requirements outlined in Table III. Rentex style #2890D is known to meet the requirement.
- 4.1.4 **Sleeve Binding** – The binding shall be an 80% nylon/ 20% spandex knit, black in colour, 4.5 cm  $\pm$  0.2 cm wide binding.
- 4.1.5 **Thread** – The thread shall be polyester wrap, polyester core, Tex 40, Class B of matching colour, meeting CAN/CGSB 4.131-93.
- 4.1.6 **Dome Fastener** – The dome fastener shall be a standard type 24 line fastener. All metal parts shall be brass with a 15 mm matte black, powder-coated cap. Only Universal SW61 shall be used.
- 4.1.7 **Elastic Drawcord** – The drawcord shall be round, braided, polyester elastic, black in colour, 2.4 mm diameter, with maximum elongation of 135% and full recovery. Cansew style EBR C-38 is known to meet the requirement.
- 4.1.8 **Cord Lock** – The cord lock shall be a low-profile cord lock cylinder, acetal composition, spring-loaded and black in colour. It shall come with a maximum diameter of 13 mm and a maximum depth of 11.2 mm. Texfast style S217B is known to meet the requirement.
- 4.1.9 **Eyelets** – The eyelets shall be made of brass or aluminium with a black enamel finish. They shall come in two sizes: 5-6 mm diameter hole and 7-8 mm diameter hole.
- 4.1.10 **Grosgrain Ribbon** – Shall be nylon grosgrain ribbon, black in colour and come in in two sizes. Size one shall range in width from 6 mm to 1 cm and size two shall range in width from 1.9 cm to 2.5 cm.
- 4.1.11 **Slide Fasteners**
- 4.1.11.1 **Front Slide Fastener** – The front fastener shall be an open-end separator, black in colour, injection molded with a DA automatic slider. The slide fastener shall be sized according to Table IV. The right front slide fastener shall have the insert pin. The left front slide fastener shall have the retaining box and slider with the front facing the inside of the liner. Only Vislon® YKK 5VS, 26590 VSO56 9/16 shall be used.

- 4.1.11.2 **Side Seam Slide Fastener** – The side seam fastener shall be coil type, black in colour with three DA large hole sliders. The slide fastener shall be sized according to Table IV. There shall be three sliders; the two closest to the underarm shall be in a head to head position and the third shall open from the bottom upwards, as shown in drawing 3. Only YKK 13016 CIFMC 56/6/6 DA8LH E/DA8LH E/DA8LH E 5/8 \*P-TOP\*B-B\*H-H\* shall be used.
- 4.1.11.3 **Inside Chest Pocket Slide Fastener** – The pocket fastener shall be closed-end coil type with DF non-locking slider, black in colour, with long pull tabs. The slide fastener shall be sized according to Table IV. Only YKK 12430 CIFC 51 DFL1 E 5/8 shall be used.
- 4.2 **Size and Dimensions** – Liner, Parka, Inclement, to this specification shall be supplied in sizes specified by the RCMP to the dimensions given in the scale of measurements and drawings. The garment components shall be shaped, dimensioned and positioned according to the pattern components and requirements outlined in Appendix A.
- 4.3 **Construction**
- 4.3.1 **Stitching** – All stitching shall be lockstitch Type 301 or lock-chain stitch Type 401 with three to four stitches per centimeter. The beginning and ending of all stitching shall be securely backstitch, tacked, unless secured by other stitching. Both armhole and underarm seams shall be stitched and serge-seamed. Care shall be taken to minimize unsightly gathering and puckering.
- 4.3.2 **Body and Sleeves** – The body and sleeves of the liner shall be assembled with the calendered side of the shell material facing the insulation. The insulation shall be cut using the pattern pieces provided. Each piece of insulation shall be serged to the calendered side of the shell material prior to construction. One or two layers of insulation shall be used to meet the requirements as specified in para. 4.1.2.
- 4.3.2.1 **Back** – The back of the garment shall be made of shell material specified in para. 4.1.1 and with insulation material specified in para. 4.1.2. If one layer of insulation is used, it shall be sandwiched between the outer shell materials. If two layers of insulation is used, each layer shall be serged to the calendered side of the shell material with the scrim facing inside. The completed back shall be shaped and dimensioned per the patterns and viewing sample. There shall be one liner attachment tab positioned at the centre back neckline per drawing 2. The attachment tab shall be constructed from size two grosgrain ribbon specified in para. 4.1.11, with a finished length of 5 cm - 6.5 cm. The liner attachment tab shall come with a

dome fastener (male side and female component) per para. 4.1.6, each positioned on the gross grain 1 cm from their respective ends to provide a place to hold when opening.

4.3.2.2 **Front** – The liner front shall be made from shell material specified in para. 4.1.1 and with insulation material specified in para. 4.1.2. If one layer of insulation is used, it shall be sandwiched between the outer shell materials. If two layers of insulation is used, each layer shall be serged to the calendered side of the shell material with the scrim facing inside. Both right and left fronts shall have inside chest pockets positioned per the patterns and shall come with slide fasteners specified in para. 4.1.11.3 in lengths specified in Table IV. The inside left and inside right fronts shall have pen pockets constructed from shell material and sized per the pattern. The pen pockets shall be sewn securely to the centre front seams as shown in drawing 4. The centre front shall be equipped with a front slide fastener outlined in para. 4.1.11.1, in lengths specified in Table IV for attachment to the corresponding parka shell. Caution shall be taken to ensure that the slider portion and its retaining box are sewn to the left front, facing the inside of the parka, and that the insert pin portion is sewn to the right front as shown in drawing 4. All sliders shall be equipped with ribbon pulls specified in para 4.3.8. Two labels specified in para. 4.3.9 and 4.3.10 shall be sewn to the lower left portion of the inside front. All front components shall be constructed per the patterns, drawings and viewing sample.

4.3.2.3 **Waist Channel** – A channel shall be positioned at waist level according to the patterns. The channel shall be created by applying the pattern pieces provided to the wrong side of the inside front and inside back according to drawing 4. When completed, the channel shall be stitched through all layers and shall be fully adjustable with elastic drawcord specified in para. 4.1.7. Each left and right front waist channels shall have two eyelets specified in para. 4.1.9 positioned vertically, 1.5 cm from each other 4 cm  $\pm$  .5 cm from the centre front (including slide fastener) per drawing 4. The back inside waist channel shall have two eyelets positioned vertically 1.5 cm from each other and 3 cm from the left side seam. The elastic drawcord in the front waist channel shall continue through the cord lock specified in para. 4.1.8 and through the eyelet outside the cord channel at the centre front. It shall be threaded back through the second eyelet outside the waist channel. It shall continue back through the cord lock where the drawcord shall be knotted. The elastic drawcord for the back waist channel shall be threaded through the hem channel, cord lock and the eyelets, as done in the front. It shall finish 3 cm from the left side seam. Once assembled, the cord locks shall be hidden in the channel with only the looped end of the elastic drawcord showing per drawing 4. Care shall be taken to ensure that eyelets are reinforced and installed securely.

- 4.3.2.4 **Inside Pockets** – The inside left and right fronts shall have interior chest pockets made from shell material specified in para. 4.1.1 and secured with slide fasteners per para. 4.1.11.3. The inside pocket bags shall be securely fastened to the centre fronts. The pockets shall be constructed and positioned per the patterns and pattern templates.
- 4.3.3 **Side Seams** – Both side seams, from the sleeve underarm to the hem, shall be equipped with slide fasteners specified in para. 4.1.11.2, in lengths specified in Table IV. There shall be three sliders. The two closest to the underarm shall be in a head-to-head position and the third shall open from the bottom upwards, as shown in drawing 3. All sliders shall be equipped with ribbon pulls specified in para. 4.3.8. There shall be six liner attachment tabs constructed from size two grosgrain ribbon specified in para. 4.1.10 folded in half to make a double layer. The liner attachment tabs shall have a finished length of 4 cm and be positioned per the patterns and drawing 3. Each liner attachment tab shall come with a dome fastener (male side) specified in para. 4.1.6. Care shall be taken to ensure correct placement of the attachment tabs in order for liner to attach correctly to parka.
- 4.3.4 **Sleeve and Sleeve Binding** – The sleeves shall be constructed from material specified in para. 4.1.1 and one layer of insulation specified in para. 4.1.2. The binding specified in para. 4.1.4 shall be securely sewn to the bottom of the sleeve to a finished width of 1 cm. The sleeves with binding shall conform in all respects to the drawings and patterns.
- 4.3.5 **Sleeve Loop** – The sleeve loops shall be constructed from size one grosgrain ribbon specified in para 4.1.10. The loops shall have a finished length of 5 - 6 cm. The loops shall be sewn securely into the cuff binding at the underarm seam per drawing 2. The sleeve loops shall be used as an attachment to the parka.
- 4.3.6 **Collar** – The collar shall be made from shell material specified in para. 4.1.1, from insulation material specified in para. 4.1.2 and lined with lining specified in para 4.1.3. The insulation specified in para. 4.1.2 shall be sewn to the outer shell material with the scrim facing the lining. It shall then be stitched to the lining specified in para. 4.1.3. The brushed side of the lining shall face out. The collar shall conform in all respects to the drawings and patterns.
- 4.3.7 **Coat Hanger Loop** - A 6 cm long coat hanger loop, constructed from size one grosgrain ribbon specified in para. 4.1.10 shall be centred at the neck in accordance with drawing 4 and the viewing sample.

- 4.3.8 **Slide Fastener Ribbon Pulls** – All ribbon pulls shall be constructed with size one grosgrain ribbon specified in para. 4.1.10. The ribbon shall be applied to the hole of the slide fastener pull in a way that allows the ribbon pulls to be removed and reapplied without damage to the slide or ribbon. The ribbon pull should be 5 cm  $\pm$  0.5 cm in length when finished and 4 cm  $\pm$  0.5 cm attached to the slide fastener.
- 4.3.9 **Identification Label** – Each parka liner shall have a blank label 7.5 x 2 cm applied separately below the marking and cleaning label for inscription of the wearer's name.
- 4.3.10 **Marking and Cleaning Instructions Label** – Each parka liner shall have a durable label positioned and sewn to the bottom right front as shown in drawing 4. The text shall be permanent inks of a contrasting colour and shall withstand at least 50 washes with no apparent change in appearance. All text except for the RCMP stock number shall be in size 6 font. The RCMP stock number shall appear in size 8 font. The manufacturer's identification shall not appear anywhere on the garment except where indicated on the label. The label shall contain the following information in English and French:
1. Item name in English as written in para. 1.1.
  2. Item name in French as written in para. 1.1.
  3. RCMP stock number - reference contract documents. (Ex. 5035 000)
  4. Size and height group of the article, combining the size designation referenced in the English and French contract documents. (Ex. L/R – G/R).
  5. Date of manufacture, in numeric format year/month (Ex. 2001/11)
  6. Manufacturer identification (Company name or number).
  7. Print information as shown below.

1		
2		
3		
4		
5		
6		
7	Machine wash - cool (30°C)	Laver à la machine – à l’eau froide (30 °C)
	<b>Do Not</b> use fabric softener or chlorine bleach	<b>Ne pas</b> utiliser d’agent assouplissant ni d’agent de blanchiment
	Tumble dry- low ( <b>Do Not</b> use dryer sheets)	Sécher par culbutage – à basse température ( <b>Ne pas</b> utiliser d’assouplissant en feuilles)
	Steam iron - low	Repasser à la vapeur - à basse température
	DO NOT DRY CLEAN	NE PAS NETTOYER À SEC

## 5. Quality Assurance Provisions

- 5.1 **Responsibility for Inspection** – Unless otherwise stipulated in the contract, it is the prime contractor's responsibility to satisfy the RCMP Uniform and Equipment Program that the material and services being supplied conform to this specification. This may be accomplished by performing the tests indicated in this specification or by demonstrating to the satisfaction of the RCMP Uniform and Equipment Program that specified manufacturing standards have been met. The contractor shall use any independent, North American ISO 9001 certified and ISO 17025 “Textile” certified testing facilities. CTT Group Inc. is known to meet this requirement.
- 5.2 The RCMP Uniform and Equipment Program reserves the right to perform any inspection considered necessary to ensure that material and services conform to the specified requirements. For the purpose of inspection, a portion of each delivery may be put to tests that could destroy the articles. No portion shall exceed two percent or two out of any delivery under 100 articles. If found to be inferior or not in accordance with this specification, all destroyed articles shall be replaced by others of proper quality and pattern at the expense of the contractor. The entire delivery may also be rejected if articles previously rejected due to non-repairable defects are redelivered for inspection.
- 5.3 The contractor will be promptly notified when any articles are not accepted and such articles will be returned at the contractor's risk and expense.

## 6. **Scale of Measurement Definitions and Location References**

(Refer to the Scale of Measurements and drawing 1)

- 6.1 **Chest Circumference (total circumference)** – When placed flat, the chest circumference shall be the distance across the jacket, measured at the lowest point of the armholes. The result shall be doubled to measure total circumference (A).
- 6.2 **Bottom Circumference (total circumference)** – When placed flat, the bottom shall be measured across the lowest jacket edge. The result shall be doubled to measure total circumference (B).
- 6.3 **Front Length** – The length shall be the distance measured from the bottom of the collar to the hem at front (C).
- 6.4 **Full Shoulder Width** – The distance measured at the shoulder seam from neckline to armhole (D).
- 6.5 **Sleeve Length Overarm** – The overarm sleeve length shall be the distance from the armhole at the shoulder seam to the bottom edge of the sleeve cuff (E).
- 6.6 **Sleeve Length Underarm** – The underarm sleeve length shall be the distance under sleeve from the armhole to the bottom edge of the sleeve cuff (F).
- 6.7 **Sleeve Cuff Circumference (Relaxed)** – When placed flat, the sleeve cuff shall be measured at the bottom edge of the sleeve. The result shall be doubled to measure total circumference (G).
- 6.8 **Back Length** – The length shall be the distance measured from the bottom of the collar at the back to the hem (H).
- 6.9 **Back Width** – When placed flat, the distance measured across the back from armhole to armhole measured 15.5 cm down from the centre back collar (J).
- 6.10 **Collar Length** – Collar length shall be measured from the collar edge at the center front, around the jacket back at the neck seam, to the opposite collar edge (K).

## SCALE OF MEASUREMENTS

All measurements are in centimeters unless otherwise indicated													
SIZE DESIGNATION		BODY MEASUREMENTS		FINISHED GARMENT MEASUREMENTS									
Height Group	Size	Chest		Chest Circumference	Bottom Circumference	Front Length (Bottom of collar to hem)	Full Shoulder Width (Shoulder seam from neckline to armhole)	Sleeve Length		Cuff Circumference (Relaxed)	Back Length (Bottom of collar at back to hem)	Back Width	Collar Length (Edge to edge)
		Inches	cm					Overarm (Shoulder seam to cuff)	Underarm (Underarm seam to cuff)				
X Short	XXS	31" - 33"	79 - 84	102.5	102.5	56	14	49.5	47.5	18	63	41	41
	XS	34" - 36"	86 - 91	110	110	58	15	51.25	48.5	19	65	43.5	43
	S	37" - 39"	94 - 99	117.5	117.5	60	16	53	49.5	20	67	46	45
	M	40" - 42"	102 - 107	125	125	62	17	54.75	50.5	21	69	48.5	47
	L	43" - 45"	109 - 114	132.5	132.5	64	18	56.5	51.5	22	71	51	49
	XL	46" - 48"	117 - 122	140	140	66	19	58.25	52.5	23	73	53.5	51
	2XL	49" - 51"	124 - 129	147.5	147.5	68	20	60	53.5	24	75	56	53
	3XL	52" - 54"	132 - 137	155	155	70	21	61.75	54.5	25	77	58.5	55
	4XL	55" - 57"	140 - 145	162.5	162.5	72	22	63.5	55.5	26	79	61	57
	5XL	58" - 60"	147 - 152	170	170	74	23	65.25	56.5	27	81	63.5	59
Short	XXS	31" - 33"	79 - 84	102.5	102.5	61	14	53.5	51.25	18	68	41	41
	XS	34" - 36"	86 - 91	110	110	63	15	55.25	52.25	19	70	43.5	43
	S	37" - 39"	94 - 99	117.5	117.5	65	16	57	53.25	20	72	46	45
	M	40" - 42"	102 - 107	125	125	67	17	58.75	54.25	21	74	48.5	47
	L	43" - 45"	109 - 114	132.5	132.5	69	18	60.5	55.25	22	76	51	49
	XL	46" - 48"	117 - 122	140	140	71	19	62.25	56.25	23	78	53.5	51
	2XL	49" - 51"	124 - 129	147.5	147.5	73	20	64	57.25	24	80	56	53
	3XL	52" - 54"	132 - 137	155	155	75	21	65.75	58.25	25	82	58.5	55
	4XL	55" - 57"	140 - 145	162.5	162.5	77	22	67.5	59.25	26	84	61	57
	5XL	58" - 60"	147 - 152	170	170	79	23	69.25	60.25	27	86	63.5	59
TOLERANCES ±				3	3	2	1	1.5	1.5	1	2	1.5	1.5
MEASUREMENT LOCATION				A	B	C	D	E	F	G	H	J	K

## SCALE OF MEASUREMENTS

All measurements are in centimeters unless otherwise indicated													
SIZE DESIGNATION		BODY MEASUREMENTS		FINISHED GARMENT MEASUREMENTS									
Height Group	Size	Chest		Chest Circumference	Bottom Circumference	Front Length (Bottom of collar to hem)	Full Shoulder Width (Shoulder seam from neckline to armhole)	Sleeve Length		Cuff Circumference (Relaxed)	Back Length (Bottom of collar at back to hem)	Back Width	Collar Length (Edge to edge)
		Inches	cm					Overarm (Shoulder seam to cuff)	Underarm (Underarm seam to cuff)				
Regular	XXS	31" - 33"	79 - 84	102.5	102.5	66	14	57.5	55	18	73	41	41
	XS	34" - 36"	86 - 91	110	110	68	15	59.25	56	19	75	43.5	43
	S	37" - 39"	94 - 99	117.5	117.5	70	16	61	57	20	77	46	45
	M	40" - 42"	102 - 107	125	125	72	17	62.75	58	21	79	48.5	47
	L	43" - 45"	109 - 114	132.5	132.5	74	18	64.5	59	22	81	51	49
	XL	46" - 48"	117 - 122	140	140	76	19	66.25	60	23	83	53.5	51
	2XL	49" - 51"	124 - 129	147.5	147.5	78	20	68	61	24	85	56	53
	3XL	52" - 54"	132 - 137	155	155	80	21	69.75	62	25	87	58.5	55
	4XL	55" - 57"	140 - 145	162.5	162.5	82	22	71.5	63	26	89	61	57
	5XL	58" - 60"	147 - 152	170	170	84	23	73.25	64	27	91	63.5	59
Tall	XXS	31" - 33"	79 - 84	102.5	102.5	71	14	61.5	58.75	18	78	41	41
	XS	34" - 36"	86 - 91	110	110	73	15	63.25	59.75	19	80	43.5	43
	S	37" - 39"	94 - 99	117.5	117.5	75	16	65	60.75	20	82	46	45
	M	40" - 42"	102 - 107	125	125	77	17	66.75	61.75	21	84	48.5	47
	L	43" - 45"	109 - 114	132.5	132.5	79	18	68.5	62.75	22	86	51	49
	XL	46" - 48"	117 - 122	140	140	81	19	70.25	63.75	23	88	53.5	51
	2XL	49" - 51"	124 - 129	147.5	147.5	83	20	72	64.75	24	90	56	53
	3XL	52" - 54"	132 - 137	155	155	85	21	73.75	65.75	25	92	58.5	55
	4XL	55" - 57"	140 - 145	162.5	162.5	87	22	75.5	66.75	26	94	61	57
	5XL	58" - 60"	147 - 152	170	170	89	23	77.25	67.75	27	96	63.5	59
TOLERANCES ±				3	3	2	1	1.5	1.5	1	2	1.5	1.5
MEASUREMENT LOCATION				A	B	C	D	E	F	G	H	J	K

## SCALE OF MEASUREMENTS

All measurements are in centimeters unless otherwise indicated													
SIZE DESIGNATION		BODY MEASUREMENTS		FINISHED GARMENT MEASUREMENTS									
Height Group	Size	Chest		Chest Circumference	Bottom Circumference	Front Length (Bottom of collar to hem)	Full Shoulder Width (Shoulder seam from neckline to armhole)	Sleeve Length		Cuff Circumference (Relaxed)	Back Length (Bottom of collar at back to hem)	Back Width	Collar Length (Edge to edge)
		Inches	cm					Overarm (Shoulder seam to cuff)	Underarm (Underarm seam to cuff)				
X Tall	XXS	31" - 33"	79 - 84	102.5	102.5	76	14	65.5	62.5	18	83	41	41
	XS	34" - 36"	86 - 91	110	110	78	15	67.25	63.5	19	85	43.5	43
	S	37" - 39"	94 - 99	117.5	117.5	80	16	69	64.5	20	87	46	45
	M	40" - 42"	102 - 107	125	125	82	17	70.75	65.5	21	89	48.5	47
	L	43" - 45"	109 - 114	132.5	132.5	84	18	72.5	66.5	22	91	51	49
	XL	46" - 48"	117 - 122	140	140	86	19	74.25	67.5	23	93	53.5	51
	2XL	49" - 51"	124 - 129	147.5	147.5	88	20	76	68.5	24	95	56	53
	3XL	52" - 54"	132 - 137	155	155	90	21	77.75	69.5	25	97	58.5	55
	4XL	55" - 57"	140 - 145	162.5	162.5	92	22	79.5	70.5	26	99	61	57
	5XL	58" - 60"	147 - 152	170	170	94	23	81.25	71.5	27	101	63.5	59
XX Tall	XXS	31" - 33"	79 - 84	102.5	102.5	81	14	69.5	66.25	18	88	41	41
	XS	34" - 36"	86 - 91	110	110	83	15	71.25	67.25	19	90	43.5	43
	S	37" - 39"	94 - 99	117.5	117.5	85	16	73	68.25	20	92	46	45
	M	40" - 42"	102 - 107	125	125	87	17	74.75	69.25	21	94	48.5	47
	L	43" - 45"	109 - 114	132.5	132.5	89	18	76.5	70.25	22	96	51	49
	XL	46" - 48"	117 - 122	140	140	91	19	78.25	71.25	23	98	53.5	51
	2XL	49" - 51"	124 - 129	147.5	147.5	93	20	80	72.25	24	100	56	53
	3XL	52" - 54"	132 - 137	155	155	95	21	81.75	73.25	25	102	58.5	55
	4XL	55" - 57"	140 - 145	162.5	162.5	97	22	83.5	74.25	26	104	61	57
	5XL	58" - 60"	147 - 152	170	170	99	23	85.25	75.25	27	106	63.5	59
TOLERANCES ±				3	3	2	1	1.5	1.5	1	2	1.5	1.5
MEASUREMENT LOCATION				A	B	C	D	E	F	G	H	J	K

**Table I**  
**Shell Material Test Requirements**

	TEST	RCMP REQUIREMENTS	TEST METHOD
1	Colour	Black	
2	Fibre Content	100% nylon Warp 30 denier Weft 30 denier	<ul style="list-style-type: none"> <li>CAN/CGSB 4.2 No. 14-2005</li> </ul>
3	Weave	Plain	Visual
4	Calendering	One side	Visual
5	Mass	48 g/m <sup>2</sup> ± 3 g/m <sup>2</sup>	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 5.1-M90 (2013)</li> <li>ASTM D3776/D3776M-09a (2013) Option C</li> </ul>
6	Yarns per cm	Warp - 65 min. Weft - 50 min.	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 6-2013</li> <li>ISO 7211-2:1984</li> </ul>
7	Tearing Strength - Elmendorf Method	Warp – 8.5 N min Weft – 6.6 N min	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 12.3-2005 (R2013)</li> <li>ISO 13937-1:2000</li> </ul>
8	Abrasion Resistance - Martindale Method (Determination of Specimen Breakdown)	No breakdown after 150,000 at 12 kPa	<ul style="list-style-type: none"> <li>ASTM D-4966-12<sup>e1</sup>- Option 1</li> </ul>
9	Dimensional Change in Domestic Laundering (cool wash 30°C)	Warp: 2% max Weft: 2% max	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 58-2004, VI, E (delicate), 3</li> </ul>
10	Air Permeability	1 cm <sup>3</sup> /cm <sup>2</sup> x s-1 max	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 36-M89 (R2013)</li> <li>ASTM D737-04 (2012)</li> </ul>
11	Resistance to Surface Wetting - Spray Method	90 after 5 washes or better	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 26.2-94 (R2012)</li> <li>ISO 4920:1981</li> </ul>
12	Colourfastness to Light	Equal to AATCC Standard L4 or better	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No.18.3-97 (R2010)</li> <li>ISO 105-B02:2014 North American exposure conditions Method 3</li> </ul>
13	Colourfastness to Crocking	Dry: Grade 4 or better Wet: Grade 4 or better	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No.22-2004</li> <li>AATCC 8-2013</li> </ul>
14	Colourfastness to Perspiration	Grade 4 or better	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 23-M90 (R2013)</li> </ul>
15	Colourfastness to Laundering (cool wash 30°C)	Grade 4 or better	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No.19.1-2004 (R2013) Test No. 5</li> </ul>

**Table IIA**  
**Insulation Test Requirements**

	TEST	RCMP REQUIREMENTS	TEST METHOD
1	CLO - Batt and Scrim	<i>Initial</i> 2.0 (min.) After 5 Washes 1.7 (min.)	<ul style="list-style-type: none"> <li>ISO11092:2014 <u>Washing</u> -</li> <li>ISO6330:2012 Wash (7B) Dry Procedure F</li> </ul>
2	Fabric Thickness - Batt and Scrim	<i>Initial:</i> 14 mm (max.) <i>After 5 Washes:</i> Maximum loss 20% of initial value	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 37-2002 (R2013) <u>Washing</u> -</li> <li>ISO6330:2012 Wash (7B) Dry Procedure F</li> </ul>
3	Fibre content	100% micro denier polyester with binder fibre and acrylic resin	
4	Stiffness (Drape) Cantilever Bending Method	Length 2 cm (max.) Width 2 cm (max.)	<ul style="list-style-type: none"> <li>FED-STD-191 5206</li> </ul>
5	Resistance to Pilling	4 (min.)	<ul style="list-style-type: none"> <li>ASTM D4970/D4970M-10<sup>e1</sup> After 1000 cycles Tested with the face of batt against shell material layer</li> </ul>
6	Dimensional Change in Laundering - Batt and Scrim  <i>After 5 Washes</i>	Warp: 3% (max.) Weft: 3% (max.) The difference in the dimensional change between the batt and scrim shall not exceed 3%.	<ul style="list-style-type: none"> <li>ISO6330:2012 Wash (7B) Dry Procedure F</li> </ul>
7	Anti-Microbial Agent Silver Nano Particle Additive with Binder	95 % killed within 24 hour	<ul style="list-style-type: none"> <li>AATCC 100-2012</li> <li>ISO 20743:2013 Tested for s. aureus, e. coli, k. pneumonia</li> </ul>
8	Compression Recovery	91% (min.)	<ul style="list-style-type: none"> <li>Procedure described below</li> </ul>
<p>The insulation's compression recovery shall be determined by the following procedure.</p> <ol style="list-style-type: none"> <li>1. A cloth specimen shall be measured for thickness using a 64 cm<sup>2</sup> pressure foot at a pressure of 0.07kPa.</li> <li>2. The specimen shall be compressed under a suitable template (not less than 127 mm by 127 mm) for a period of 60 minutes at a pressure of 7.0 kPa. The specimen shall be at least 50 mm larger in length and width than the template.</li> <li>3. The template and the weight shall be removed and the specimen allowed to relax for 3 minutes. Immediately after the 3 minute relaxation period, the thickness shall be measured again at the pressure of 0.07 kPa.</li> <li>4. The compressional recovery shall be calculated as follows:</li> </ol> $\text{Compression recovery percentage} = \left( \frac{\text{thickness of specimen after compression}}{\text{thickness of specimen before compression}} \right) \times 100$			

**Table IIB**  
**Insulation Test Requirements**

	TEST	RCMP REQUIREMENTS	TEST METHOD
1	CLO - Batt and Scrim	<i>Initial</i> 4.0 (min.) <i>After 5 Washes</i> 3.4 (min.)	<ul style="list-style-type: none"> <li>ISO11092:2014 <u>Washing</u> -</li> <li>ISO6330:2012 Wash (7B) Dry Procedure F</li> </ul>
2	Fabric Thickness - Batt and Scrim	<i>Initial:</i> 35 mm (max.) <i>After 5 Washes:</i> Maximum loss 20% of initial value	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 37-2002 (R2013) <u>Washing</u> -</li> <li>ISO6330:2012 Wash (7B) Dry Procedure F</li> </ul>
3	Fibre content	100% micro denier polyester with binder fibre and acrylic resin	
4	Stiffness (Drape) Cantilever Bending Method	Length 5 cm (max.) Width 5 cm (max.)	<ul style="list-style-type: none"> <li>FED-STD-191 5206</li> </ul>
5	Resistance to Pilling	4 (min.)	<ul style="list-style-type: none"> <li>ASTM D4970/D4970M-10<sup>el</sup> After 1000 cycles Tested with the face of batt against shell material layer</li> </ul>
6	Dimensional Change in Laundering - Batt and Scrim  <i>After 5 Washes</i>	Warp: 3% (max.) Weft: 3% (max.) The difference in the dimensional change between the batt and scrim shall not exceed 3%.	<ul style="list-style-type: none"> <li>ISO6330:2012 Wash (7B) Dry Procedure F</li> </ul>
7	Anti-Microbial Agent Silver Nano Particle Additive with Binder	95 % killed within 24 hour	<ul style="list-style-type: none"> <li>AATCC 100-2012</li> <li>ISO 20743:2013 Tested for s. aureus, e. coli, k. pneumonia</li> </ul>
8	Compression Recovery	91% (min.)	<ul style="list-style-type: none"> <li>Procedure described below</li> </ul>
<p>The insulation's compression recovery shall be determined by the following procedure.</p> <ol style="list-style-type: none"> <li>1. A cloth specimen shall be measured for thickness using a 64 cm<sup>2</sup> pressure foot at a pressure of 0.07kPa.</li> <li>2. The specimen shall be compressed under a suitable template (not less than 127 mm by 127 mm) for a period of 60 minutes at a pressure of 7.0 kPa. The specimen shall be at least 50 mm larger in length and width than the template.</li> <li>3. The template and the weight shall be removed and the specimen allowed to relax for 3 minutes. Immediately after the 3 minute relaxation period, the thickness shall be measured again at the pressure of 0.07 kPa.</li> <li>4. The compressional recovery shall be calculated as follows:</li> </ol> $\text{Compression recovery percentage} = \left( \frac{\text{thickness of specimen after compression}}{\text{thickness of specimen before compression}} \right) \times 100$			

**Table III**  
**Lining Test Requirements**

REQUIREMENT			TEST METHOD
1	Colour	Black	
2	Knit	Warp	
3	Fiber Content	100% Polyester	<ul style="list-style-type: none"> <li>• CAN/CGSB 4.2 No. 14-2005</li> </ul>
4	Mass	127 g/m <sup>2</sup> ± 6 g/m <sup>2</sup> (121 - 133)	<ul style="list-style-type: none"> <li>• CAN/CGSB 4.2 No.5.1-M90 (R2013)</li> <li>• ASTM D3776/D3776M-09a (2013) Option C</li> </ul>
5	Colourfastness to Light	Equal to AATCC Standard L3 or better	<ul style="list-style-type: none"> <li>• CAN/CGSB 4.2 No.18.3-97 (R2010)</li> <li>• ISO 105-B02:2014</li> </ul> <p>North American exposure conditions Method 3</p>
6	Colourfastness to Crocking	Dry: Grade 4 or better Wet: Grade 3 or better	<ul style="list-style-type: none"> <li>• CAN/CGSB-4.2 No.22-2004 (2013)</li> <li>• AATCC 8-2013</li> </ul>
7	Colourfastness to Laundering (cool wash 30°C)	Colour change Grey Scale 4 or better Staining cotton - Grey Scale 4 or better Staining polyester – Grey Scale 3 or better	<ul style="list-style-type: none"> <li>• CAN/CGSB-4.2 No. 19.1-2004 (R2013) Test 5</li> </ul>
8	Dimensional Change to Domestic Washing <i>After 5 cycles</i>	Warp 5% (max.) Weft 5% (max.)	<ul style="list-style-type: none"> <li>• CAN/CGSB 4.2 No. 58-2004, VI, E (delicate), 3</li> </ul>

**Table IV**  
**Slide Fastener Lengths**

All measurements in inches									
Height Group	Sizes	Front	Chest Pocket	Side Seam	Height Group	Sizes	Front	Chest Pocket	Side Seam
X Short	XX Small	13½	5	16½	Tall	XX Small	19½	5	22½
	X Small	14½	5	16½		X Small	20	5	22½
	Small	15	5½	16½		Small	21	5½	22½
	Medium	15½	5½	18		Medium	22	5½	24
	Large	16½	6	18		Large	22½	6	24
	X Large	17½	6	18½		X Large	23½	6	24½
	2X Large	18	6½	18½		2X Large	24	6½	24½
	3X Large	19	6½	18½		3X Large	25	6½	24½
	4X Large	20	7	20		4X Large	25½	7	26
	5X Large	20½	7	20		5X Large	26	7	26
Short	XX Small	15½	5	18½	X Tall	XX Small	21½	5	24½
	X Small	16	5	18½		X Small	22	5	24½
	Small	17	5½	18½		Small	23	5½	24½
	Medium	18	5½	20		Medium	24	5½	26
	Large	18½	6	20		Large	24½	6	26
	X Large	19½	6	20½		X Large	25½	6	26½
	2X Large	20	6½	20½		2X Large	26	6½	26½
	3X Large	21	6½	20½		3X Large	27	6½	26½
	4X Large	22	7	22		4X Large	27½	7	28
	5X Large	22½	7	22		5X Large	28½	7	28
Regular	XX Small	17½	5	20½	XX Tall	XX Small	23½	5	26½
	X Small	18	5	20½		X Small	24	5	26½
	Small	19	5½	20½		Small	25	5½	26½
	Medium	20	5½	22		Medium	25½	5½	28
	Large	20½	6	22		Large	26½	6	28
	X Large	21½	6	22½		X Large	27	6	28½
	2X Large	22	6½	22½		2X Large	28	6½	28½
	3X Large	23	6½	22½		3X Large	29	6½	28½
	4X Large	24	7	24		4X Large	29½	7	30
	5X Large	24½	7	24		5X Large	30½	7	30

## Appendix A

### **Sealed Pattern Identifier**

Paper patterns are available from the RCMP Uniform and Equipment Program, Ottawa Ontario. Firms requested to produce Pre-contract Award Samples will be provided with the base pattern only. The full set of patterns, either in individual sizes or as a graded nest, will be provided to the successful bidder after the contract is awarded.

The paper patterns include seam allowances and/or placement templates. Shrinkage has not been included in any pattern piece. It is the responsibility of the manufacturer to make allowances for shrinkage in order to meet the scale of measurements included in this specification. Contractors may make changes required to suit their production process, however, the design and grade shall not be affected or changed.

All patterns are the property of the RCMP and must be returned upon completion of the contract.

### **Material and Cutting Legend**

Shell Material	para. 4.1.1
Insulation	para. 4.1.2
Lining	para. 4.1.3
Cut 1 Single	Cut 1
Cut 1 Pair	Cut 2
Cut 2 Paired	Cut 4
(RSU)	Right Side Up
*	Depends on the choice of insulation used.

### **Pattern Component Cutting Guide**

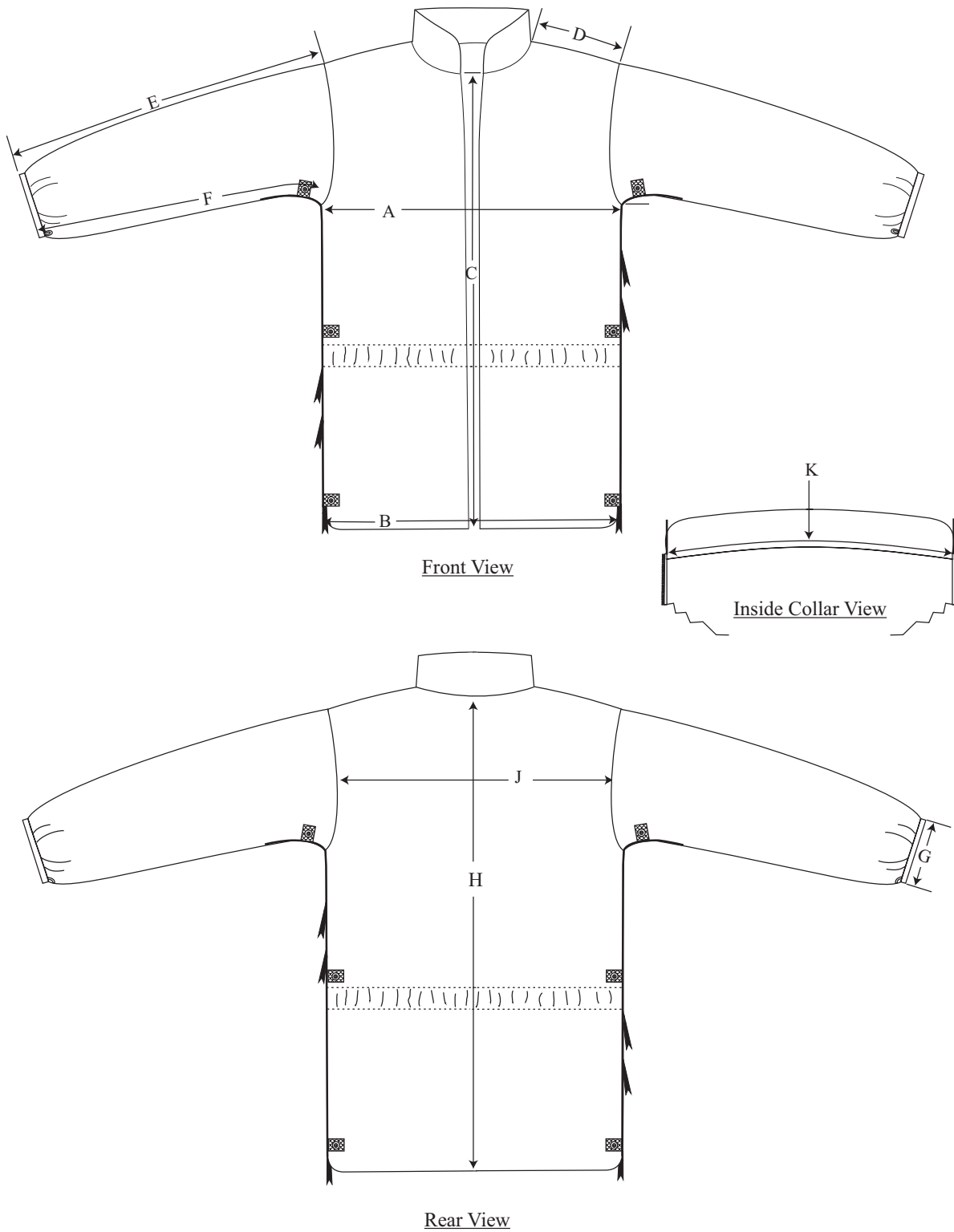
This design has 14 pattern components. A pattern piece for edge binding is not included.

Pattern Component	Nomenclature	Quantity to Cut	Material
1 of 14	Back	1 Single	Shell Material
2a of 14	Back – Insulation	1 Paired *	Insulation
2b of 14	Back – Insulation	1 Single *	Insulation
3 of 14	Back – Inside	1 Single	Shell Material
4 of 14	Front	1 Paired	Shell Material
5a of 14	Front – Insulation	2 Paired *	Insulation
5b of 14	Front – Insulation	1 Paired *	Insulation
6 of 14	Front – Inside	1 Paired	Shell Material

**Pattern Component Cutting Guide**

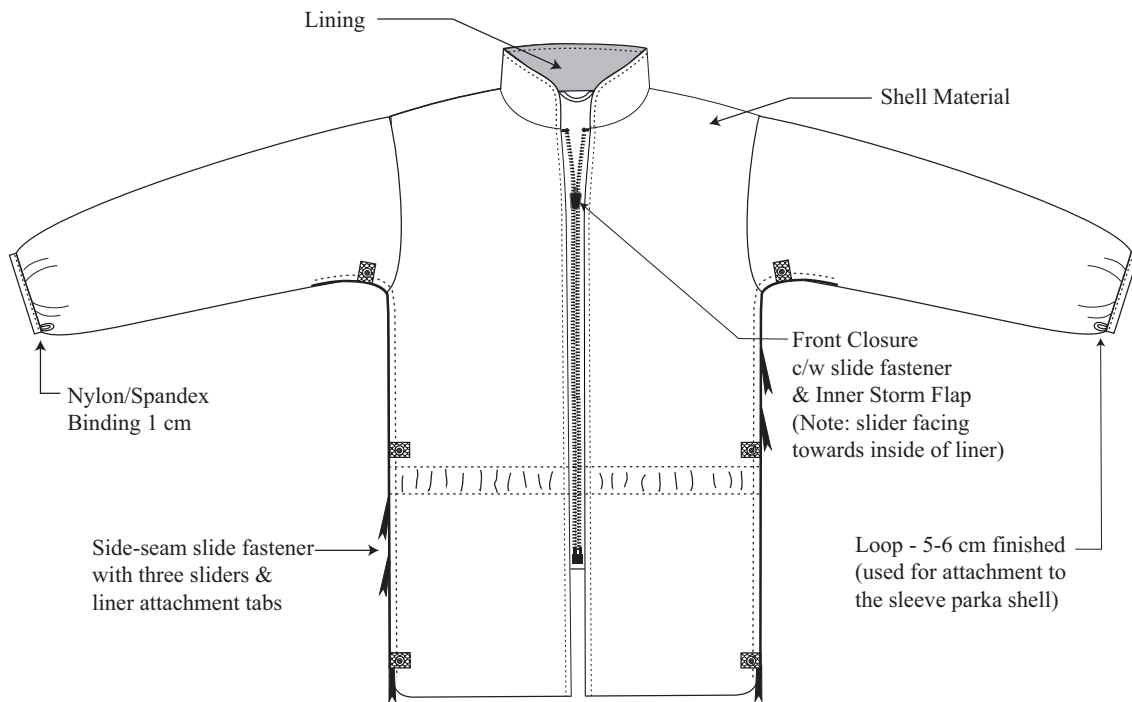
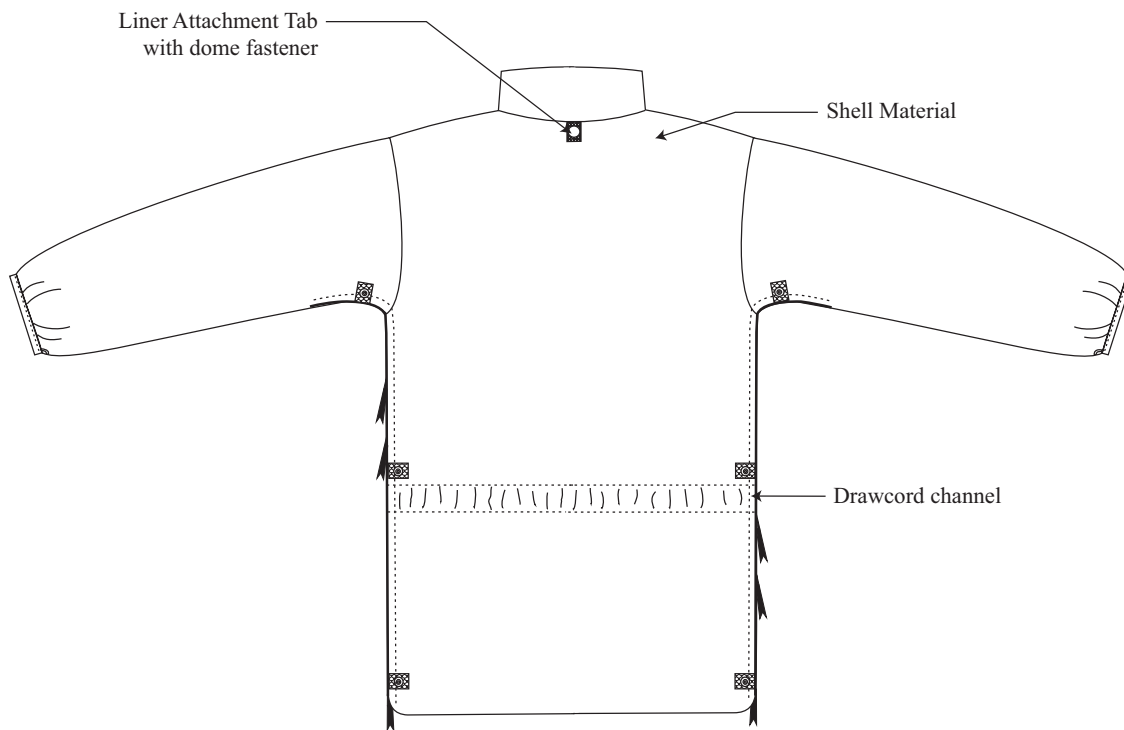
<b>Pattern Component</b>	<b>Nomenclature</b>	<b>Quantity to Cut</b>	<b>Material</b>
7 of 14	Sleeve	2 Paired	Shell Material
8 of 14	Sleeve – Insulation	1 Paired	Insulation
9 of 14	Pocket – Top Piece	1 Paired	Shell Material
10 of 14	Pocket – Bottom Piece	1 Paired	Shell Material
11 of 14	Pen Loop	1 Paired	Shell Material
12 of 14	Collar	1 Single RSU	Shell Material
13 of 14	Collar – Insulation	1 Single	Insulation
14 of 14	Collar – Lining	1 Single RSU	Lining

Measurement Location Chart  
Dwg. 1



NOT TO SCALE

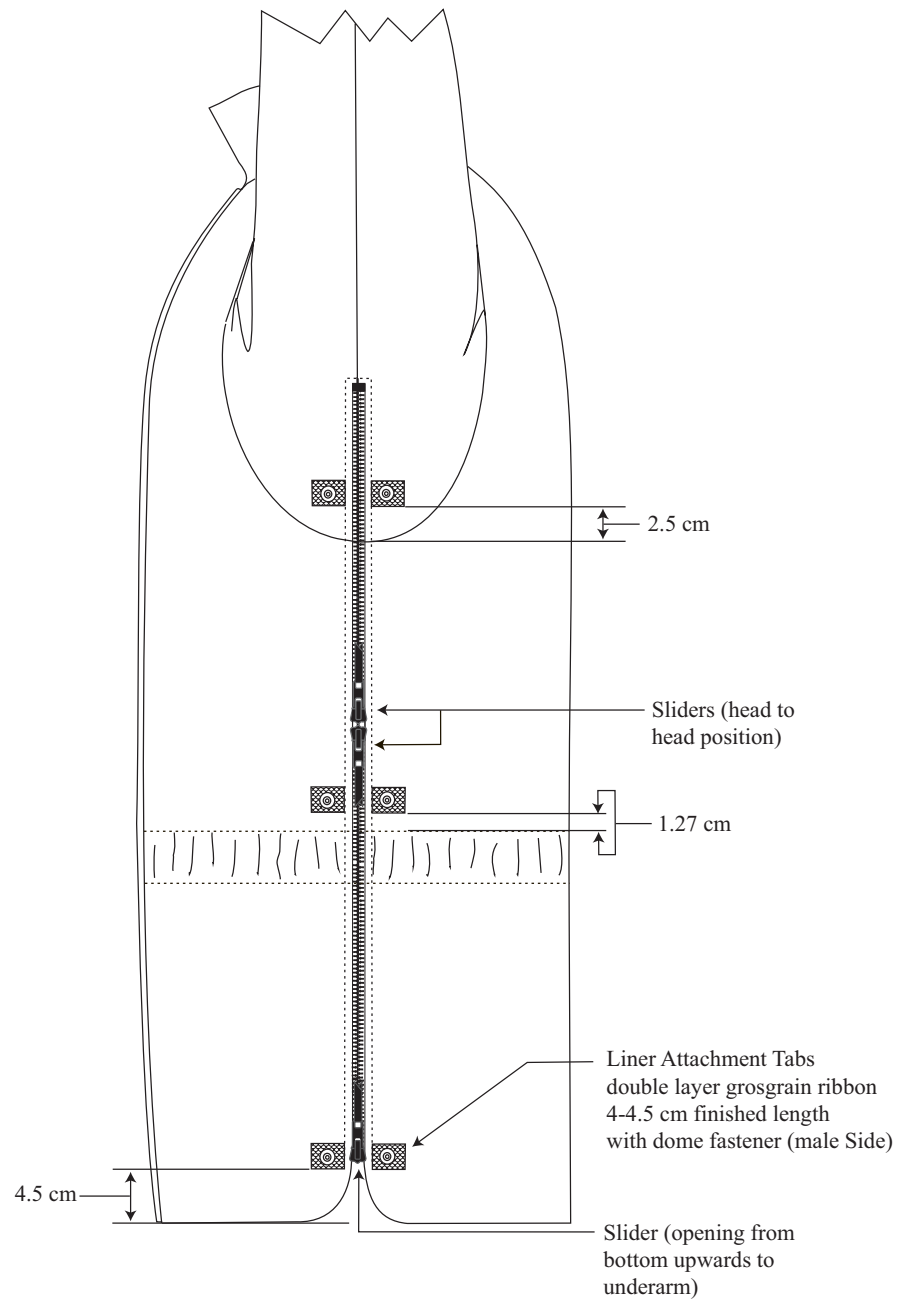
Dwg. 2

Front ViewRear View

NOT TO SCALE

All measurements are shown in centimeters.

 $\pm 0.5$  cm tolerance acceptable unless otherwise indicated.

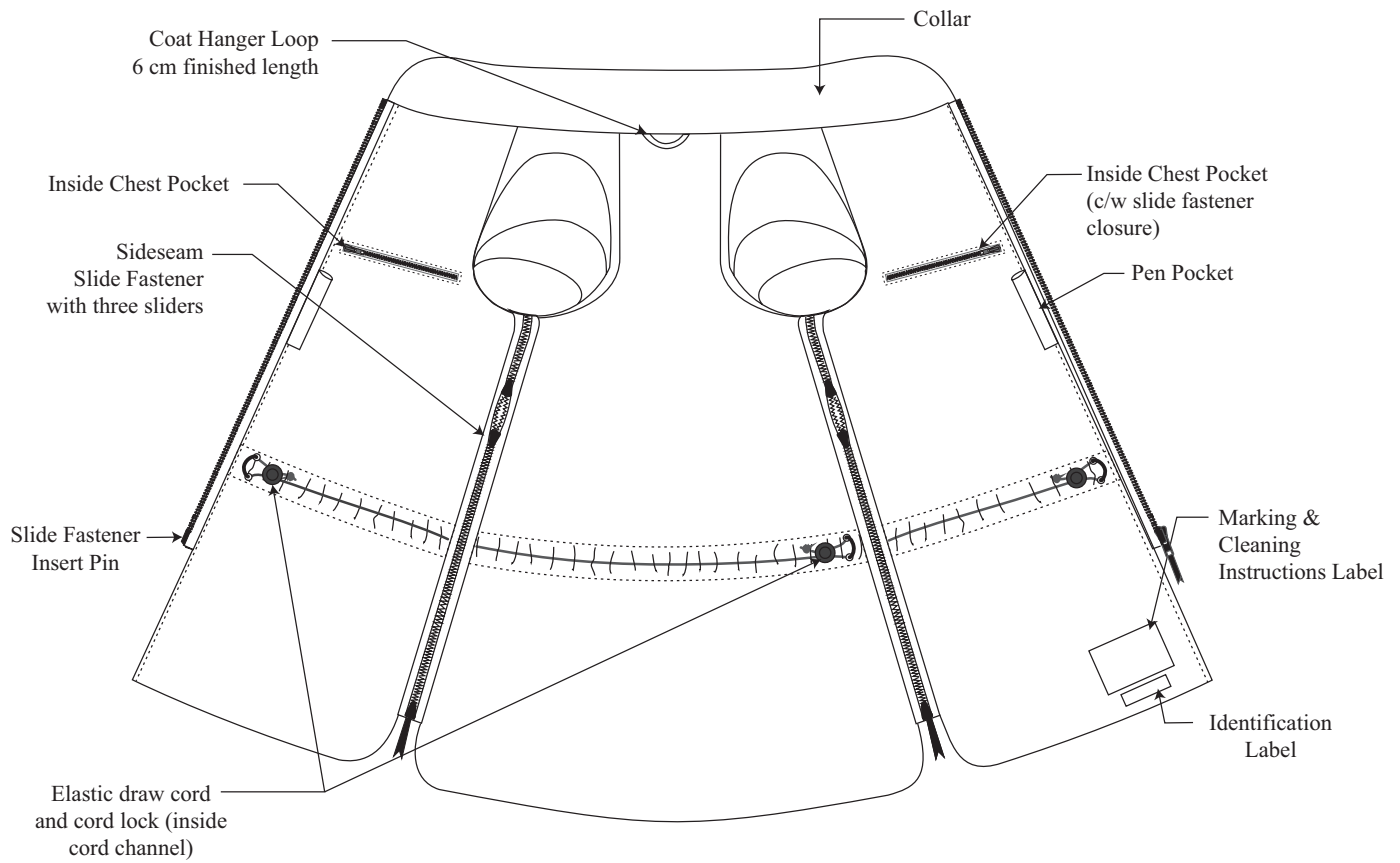
Underarm Side View Detail  
Dwg. 3Outer Side View

NOT TO SCALE

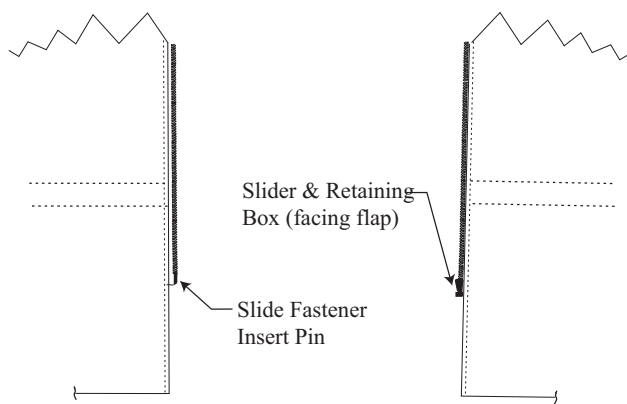
All measurements are shown in centimeters.

 $\pm 0.5$  cm tolerance acceptable unless otherwise indicated.

Inside Liner Detail  
Dwg. 4

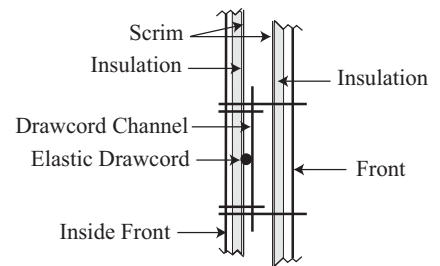


Inside Jacket View



Slide Fastener Detail  
Right Front (Front View)

Slide Fastener Detail  
Left Front (Front View)



Drawcord Channel Detail

NOT TO SCALE

All measurements are shown in centimeters.

± 0.5 cm tolerance acceptable unless otherwise indicated.



Royal Canadian Mounted Police  
Gendarmerie royale du Canada

Doc. no: G.S. 1045-356  
Date: 2016-07-14

## Specification

### Liner, Trousers Inclement

This document has 23 pages including the drawings.

This document was created in English.

The document is available in English and French.

☒ English/Anglais  
Français/French

The photograph on this page is for reference only.



## Modifications

[illegible]

## **RCMP VIEWING SAMPLE**

A viewing sample, when available, will be supplied to the successful bidder.

This will be used to guide manufacturer in all factors not covered by this specification or referred to therein. Variation from the specification may appear in the sample in which case the specification shall govern.

It may be obtained from:

Royal Canadian Mounted Police  
ATTN: Uniform & Equipment Program  
(440 Coventry Road, Warehouse Building)  
1200 Vanier Parkway  
Ottawa, Ontario  
K1A 0R2

It will be sent “prepaid” and is to be returned “prepaid”.

The viewing sample shall be returned to the RCMP in the same condition as received by the manufacturer. Lost or damaged viewing samples shall be replaced by an identical item or the RCMP shall be reimbursed for the cost of an acceptable replacement.

---

**SPECIFICATION**  
**LINER, TROUSERS, INCLEMENT**

**1. Definition**

- 1.1 This specification shall govern the manufacture and inspection of Liner, Trousers, Inclement. The items covered under this specification with stock numbers are as follows:
  - i. 5262 Liner, Trousers, Inclement / Doublure pour pantalons pour intempéries;
  - ii. 5264-000 Liner, Trousers, Inclement Special / Doublure pour pantalons pour intempéries, tailles spéciales.
- 1.2 The specification, pattern, viewing sample or other information issued in connection therewith may only be used for specific enquiries, solicitations, or orders placed on behalf of the Royal Canadian Mounted Police.
- 1.3 This specification supersedes all previous specifications for Liner, Trousers, Inclement.
- 1.4 This specification has been translated into French from this original English language document.

**2. Applicable Specifications**

- 2.1 The following publications are applicable to this specification and to the issues in effect on the date of the solicitation, unless otherwise specified.
- 2.2 CAN/CGSB 4.2 Textile Test Methods; 14-2005, 5.1-M90 (R2013), 6-2013, 12.3-2005 (R2013), 18.3-97 (R2010), 19.1-2004 (R2013), 22-2004, 23-M90 (R2013), 26.2-94 (R2012), 36-M89 (R2013), 37-2002 (R2013), 58-2004.
- 2.3 CAN/CGSB 4.131-93, Thread, Polyester, Polyester-Covered.
- 2.4 ASTM, American Society for Testing and Materials, Method D3776/D3776M-09a (2013), D4966-12<sup>e1</sup>, D4970/D4970M-10<sup>e1</sup>, D737-04 (2012).
- 2.5 AATCC American Association of Textile Chemists and Colorists - Technical Manual Method; 8-2013 and 100-2012.

- 2.6 FED-STD-191A, Federal Standard, Textile Test Methods, FED-STD191-5206.
- 2.7 ISO, International Standards Organization Textile Test methods; ISO 105-B02:2014, ISO 13937-1:2000, ISO 11092:2014, ISO 4920:1981, ISO 7211-2:1984, ISO 20743:2013 and ISO 6330:2012.
- 2.8 CAN/CGSB 86.1-2003 Care Labelling of Textiles.

### 3. **General Requirements**

- 3.1 The article or material covered by this specification shall be free from material and manufacturing defects that may affect its appearance or serviceability. In all particulars not covered by this specification or contract documents, production shall be equivalent in all respects to the pattern and viewing sample.
- 3.2 **Design** – The Liner, Trousers, Inclement shall be a liner, designed to be worn in conjunction with the Trousers, Inclement. This liner is not intended to be worn as a stand-alone garment. The liner shall be constructed from a nylon, DWR-coated, down proof material and interlined with polyester insulation. It shall be equipped with a front fly slide fastener. The side seams shall have two-way slide fasteners below the waistband to the hem for ventilation and weapon access.

### 4. **Detailed Requirements**

#### 4.1 **Components**

- 4.1.1 **Shell Material I** – The shell material I shall be 100% down proof, plain weave nylon, 30 denier, black in colour, with a one sided calendered finish meeting the requirements outlined in Table I.
- 4.1.2 **Shell Material II** – The shell material II shall be 100% Taslan nylon, 70 denier, black in colour, with a PU coated finish meeting the requirements outlined in Table III.
- 4.1.3 **Insulation** – The insulation shall be 100% polyester and shall be provided with a polyester scrim. An antimicrobial agent in the form of silver nanoparticle with binder shall be applied to the insulation as a preventive agent to odor, fungi, bacteria and viruses. The insulation shall meet the requirements outlined in Table II.

- 4.1.4 **Thread** – The thread shall be polyester wrap, polyester core, Tex. 40, Class B of matching colour, meeting CAN/CGSB-4.131-93.
- 4.1.5 **Dome Fastener** – The dome fastener shall be a standard type 24 line fastener. All metal parts to be brass with a 15 mm matte black, powder coated cap. Only Universal SW61 shall be used.
- 4.1.6 **Elastic** – The elastic shall be heavy-duty nylon or polyester, black in colour, 3.8 cm (1 ½ in.) wide with maximum elongation of 130% and full recovery.
- 4.1.7 **Interfacing** – The interlining shall be 100% polyester or polyester/rayon blend non-woven, with a mass of  $51 \text{ g/m}^2 \pm 5 \text{ g/m}^2$ .
- 4.1.8 **Grosgrain Ribbon** – The ribbon shall be nylon grosgrain ribbon, black in colour and come in two sizes. Size one shall range in width from 6 mm to 1 cm and size two shall range in width from 1.9 cm to 2.5 cm.
- 4.1.9 **Slide Fasteners**
- 4.1.9.1 **Fly Front Slide Fastener** – The fly fastener shall be one-way, closed-end, with an auto-locking slider, enamel finish and be black in colour. The slide fastener shall be sized according to Table IV. Only YKK (12410) C1FC 56 DA E 5/8 shall be used.
- 4.1.9.2 **Side Seam Slide Fastener** – The side fastener shall be two-way, closed-end, black in colour, with auto-locking LHD (large hole for threading zipper pull) sliders. The slide fastener shall be sized according to Table IV. Two sliders shall be arranged back to back, and one shall open from the bottom per the viewing sample and Drawing 3. Only YKK (13014) C1FMC 56/6 DALHD E 5/8\*TS-BTM\*B-B\* or (61351) 5CI CH 5/8\*200MTS/RL\* with 5CN DALHD slider auto-locking, enamel finish shall be used.
- 4.2 **Size and Dimensions** – Liner, Trousers, Inclement, to this specification shall be supplied in sizes specified by the RCMP to the dimensions given in the scale of measurements and drawings. The garment components shall be shaped, dimensioned and positioned according to the pattern components and requirements outlined in Appendix A.
- 4.3 **Construction**

- 4.3.1 **Stitching** – All stitching shall be lockstitch Type 301 or lock-chain stitch Type 401 with three to four stitches per centimeter. The beginning and ending of all stitching shall be securely backstitched, tacked, unless secured by other stitching. Both side and inside leg seams shall be stitched and serge-seamed. Care shall be taken to minimize unsightly gathering and puckering.
- 4.3.2 **Trouser** – All components of the liner shall be assembled with the calendered side of shell material I facing the insulation layer. The insulation shall be cut using the pattern pieces provided. Each piece of insulation shall be serged to the calendered side of the shell material prior to construction.
- 4.3.3 **Waistband** – The waistband, constructed from shell material I specified in para. 4.1.1, shall be 4.5 cm wide  $\pm 0.5$  cm when finished. It shall be fully elasticized with the opening at the front fly. The front fly shall be secured with a dome fastener per para. 4.1.5 centred on the waistband opening as shown in drawing 3. The waistband shall be constructed and dimensioned per the drawings and patterns.
- 4.3.4 **Front Fly Opening** – The front fly and the inner fly facing shall be constructed from shell material I specified in para. 4.1.1. The inner fly facing shall be lined with interfacing specified in para. 4.1.7 and shall be constructed and dimensioned per the pattern and viewing sample. The fly shall include a slide fastener specified in para. 4.1.9.1. The front fly shall be constructed and dimensioned per the drawings and patterns.
- 4.3.5 **Side Seams** – Both side seams shall be equipped with a slide fastener specified in para. 4.1.9.2. There shall be two sliders applied in a back to back position. The slider closest to the waist shall close up towards the waist area and the other slider shall close towards the hem per drawing 3. A ribbon pull, specified in para. 4.3.9, shall be applied to the slider closest to the waist. This slider shall start 8 cm  $\pm 0.5$  cm below the waistband. An inside storm flap shall be constructed from shell material I specified in para. 4.1.1. The inside flap shall be 3.7 cm wide and the full length of the side seam slide fastener. The full length of the storm flap shall be lined with interfacing specified in para. 4.1.7. There shall be a size two grosgrain ribbon per para. 4.1.8 applied to the storm flap to line up under the slide fastener teeth as shown in drawing 3. The completed side seam shall conform in all respects to the drawings, patterns and viewing sample.
- 4.3.6 **Legs** – There shall be a two-piece knee patch applied to the front of each leg at knee level. The knee patch shall be constructed from shell material II specified in para. 4.1.2 and outlined in Table III. There shall be pleats in the knee patch 5 mm in

depth directed toward the bottom of the leg at both the side seam and inseam. There shall be two rows of topstitching along the top and bottom of the patch using 1.5 and 8 mm gauge. The leg cuff shall be constructed from shell material I specified in para. 4.1.1 and shall be 4.5 cm  $\pm$  0.5 cm wide when finished. The cuff shall be fully elasticized with openings at the side seams. The completed knee patch and leg cuffs shall conform in all respects to the drawings and patterns.

- 4.3.7 **Back Seat Patch** – There shall be a reinforcement patch applied to the seat of the trousers starting 7.5 cm  $\pm$  0.5 cm below the bottom of the waistband in the back. It shall be constructed from shell material II specified in para. 4.1.2. There shall be two rows of topstitching along the top and bottom of the patch using 1.5 and 8 mm gauge. The completed patch shall conform in all respects to the drawings and patterns.
- 4.3.8 **Inside Lower Leg Patch** – A reinforcement patch shall be applied to the inside leg of the trousers starting from ankle cuff and covering the full width of the pant leg. The patch shall go from side seam to inseam on both the front and back leg. The patch shall be 25.5 cm  $\pm$  0.5 cm in length. It shall be constructed from shell material II specified in para. 4.1.2. There shall be two rows of topstitching along the top and bottom of the patch using 1.5 and 8 mm gauge. The completed patch shall conform in all respects to the drawings and patterns.
- 4.3.9 **Slide Fastener Ribbon Pulls** – All ribbon pulls shall be constructed with size one grosgrain ribbon specified in para. 4.1.8. The ribbon shall be applied to the hole of the slide fastener pull in a way that allows the ribbon pulls to be removed and reapplied without damage to the slide or ribbon. The ribbon pull shall be 5 cm  $\pm$  0.5 cm in length when finished and 4 cm  $\pm$  0.5 cm attached to the slide fastener.
- 4.3.10 **Identification Label** – Each trouser liner shall have a blank label measuring 7.5 x 2 cm. It shall be applied separately beside the marking and cleaning label used for inscription of the wearer's name.
- 4.3.11 **Marking & Cleaning Instructions Label** – Each trouser liner shall have a durable label positioned and sewn to the bottom right front as shown in drawing 3. The text shall be printed in permanent inks of a contrasting colour and shall withstand at least 50 washes with no change in appearance. All text except for the RCMP stock number shall be in size 6 font. The RCMP stock number shall appear in size 8 font. The manufacturers identification shall not appear anywhere on the garment except where indicated on the garment label. The label shall contain the following information in English and French:

1. Item name in English as written in para. 1.1.
2. Item name in French as written in para. 1.1.
3. RCMP stock number – reference contract documents. (Ex. 5262 000)
4. Size and height group of the article, combining the size designation referenced in the English and French contract documents. (Ex. L/R – G/R)
5. Date of manufacture, in numeric format year/month (Ex. 2001/11)
6. Manufacturer identification (Company name or number).
7. Print information as shown below.

1		
2		
3		
4		
5		
6		
7	Machine wash – cool (30°C)	Laver à la machine – à l'eau froide (30 °C)
	<b>Do Not</b> use fabric softener or chlorine bleach	<b>Ne pas</b> utiliser d'agent assouplissant ni d'agent de blanchiment
	Tumble dry- low ( <b>Do Not</b> use dryer sheets)	Sécher par culbutage – à basse température ( <b>Ne pas</b> utiliser d'assouplissant en feuilles)
	Steam iron – low	Repasser à la vapeur - à basse température
	DO NOT DRY CLEAN	NE PAS NETTOYER À SEC

## 5. **Quality Assurance Provisions**

- 5.1 **Responsibility for Inspection** – Unless otherwise stipulated in the contract, it is the prime contractor's responsibility to satisfy the RCMP Uniform and Equipment Program that the material and services being supplied conform to this specification. This may be accomplished by performing the tests indicated in this specification or by demonstrating to the satisfaction of the RCMP Uniform and Equipment Program that specified manufacturing standards have been met. The contractor shall use any independent, North American ISO 9001 certified and ISO 17025 “Textile” certified testing facilities. CTT Group Inc. is known to meet this requirement.
- 5.2 The RCMP Uniform and Equipment Program reserves the right to perform any inspection considered necessary to ensure that material and services conform to the specified requirements. For the purpose of inspection, a portion of each delivery may be put to tests that could destroy the articles. No portion shall exceed two percent or two out of any delivery under 100 articles. If found to be inferior or not in accordance with this specification, all destroyed articles shall be replaced by others of proper quality and pattern at the expense of the contractor. The entire delivery may also be rejected if articles previously rejected due to non-repairable defects are redelivered for inspection.
- 5.3 The contractor will be promptly notified when any articles are not accepted and such articles will be returned at the contractor's risk and expense.

## 6. **Scale of Measurement Definitions and Location References**

(Refer to the Scale of Measurements and Drawing 1)

- 6.1 **Waist Circumference (total circumference)** – When the waistband is closed, the waist shall be the total circumference from centre front to centre front at the centre of the waistband. There are two separate measurements: relaxed and stretched (A).
- 6.2 **Seat Circumference (total circumference)** – When placed flat, the seat shall be measured across the width of the trousers at the height of the fly bottom. The result shall be doubled to measure total circumference (B).
- 6.3 **Hem Circumference** – When placed flat, with the slide fastener opened, the hem shall be measured from one half of the slide fastener to the other half of the slide fastener at the bottom of the leg. There are two separate measurements: relaxed and stretched (C).
- 6.4 **Outseam Length** – The length shall be the distance measured from the bottom of the waistband to the hem following along the outseam. (D).
- 6.5 **Inseam Length** – The length shall be the distance measured from the crotch to the hem following along the inseam (E).
- 6.6 **Knee Circumference** – When placed flat, the knee shall be measured across the width of the leg at the bottom of the knee patch. The result shall be doubled to measure total circumference (F).
- 6.7 **Front Rise** – The measurement from the crotch to the bottom of the front waistband along the seam (G).
- 6.8 **Back Rise** – The measurement from the crotch to the bottom of the back waistband along the seam (H).

## SCALE OF MEASUREMENTS

All measurements are in centimeters unless otherwise indicated															
SIZE DESIGNATION		BODY MEASUREMENTS				FINISHED GARMENT MEASUREMENTS									
Trouser Inseam	Size	Waist		Seat		Waist Circumference Relaxed	Waist Circumference Stretched	Seat Circumference	Hem Circ. Stretched	Hem Circ. Relaxed	Out-seam	Inseam	Knee Circumference	Front Rise	Back Rise
X Short 26"-28" 66-71 cm	XX Small	23"-25"	58-63.5	28"-30"	71-76	56.5	80	91.5	50	31	86.6	67.4	54	20.6	32.25
	X Small	26"-28"	66-71	31"-33"	78.5-84	61.5	87.5	98.25	50.5	31.5	87.3	67.5	55.25	21.4	33
	Small	29"-31"	73.5-78.5	34"-36"	86-91	66.5	95	105	51	32	88	67.6	56.5	22.1	33.6
	Medium	32"-34"	81-86	37"-39"	94-99	71.5	102.5	111.75	51.5	32.5	88.8	67.7	57.75	22.9	34.5
	Large	35"-37"	89-94	40"-42"	101.5-106.5	76.5	110	118.5	52	33	89.5	67.8	59	23.6	35.1
	X Large	38"-40"	96.5-101.5	43"-45"	109-114	81.5	117.5	125.25	52.5	33.5	90.3	67.9	60.25	24.4	35.8
	2X Large	41"-43"	104-109	46"-48"	116.5-122	86.5	125	132	53	34	91	68.1	61.5	25.1	36.5
	3X Large	44"-46"	111.5-116.5	49"-51"	124.5-129.5	91.5	132.5	138.75	53.5	34.5	91.8	68.2	62.75	25.9	37.25
	4X Large	47"-49"	119-124.5	52"-54"	132-137	96.5	140	145.5	54	35	92.5	68.4	64	26.6	38
	5X Large	50"-52"	127-132	55"-57"	139.5-144.5	101.5	147.5	152.25	54.5	35.5	93.3	68.6	65.25	27.4	38.75
Short 28"-31" 71-78.5 cm	XX Small	23"-25"	58-63.5	28"-30"	71-76	56.5	80	91.5	50	31	94.6	72.4	54	23.6	35
	X Small	26"-28"	66-71	31"-33"	78.5-84	61.5	87.5	98.25	50.5	31.5	95.3	72.5	55.25	24.4	35.75
	Small	29"-31"	73.5-78.5	34"-36"	86-91	66.5	95	105	51	32	96	72.6	56.5	25.1	36.4
	Medium	32"-34"	81-86	37"-39"	94-99	71.5	102.5	111.75	51.5	32.5	96.8	72.7	57.75	25.9	37.25
	Large	35"-37"	89-94	40"-42"	101.5-106.5	76.5	110	118.5	52	33	97.5	72.8	59	26.6	37.9
	X Large	38"-40"	96.5-101.5	43"-45"	109-114	81.5	117.5	125.25	52.5	33.5	98.3	72.9	60.25	27.4	38.6
	2X Large	41"-43"	104-109	46"-48"	116.5-122	86.5	125	132	53	34	99	73.1	61.5	28.1	39.3
	3X Large	44"-46"	111.5-116.5	49"-51"	124.5-129.5	91.5	132.5	138.75	53.5	34.5	99.8	73.2	62.75	28.9	40
	4X Large	47"-49"	119-124.5	52"-54"	132-137	96.5	140	145.5	54	35	100.5	73.4	64	29.6	40.8
	5X Large	50"-52"	127-132	55"-57"	139.5-144.5	101.5	147.5	152.25	54.5	35.5	101.3	73.6	65.25	30.4	41.5
MEASUREMENT LOCATION		A		B		C		D		E		F		G	
TOLERANCES ±		3 cm		3 cm		1 cm		2.5 cm		2.5 cm		2 cm		2 cm	

## SCALE OF MEASUREMENTS

All measurements are in centimeters unless otherwise indicated															
SIZE DESIGNATION		BODY MEASUREMENTS				FINISHED GARMENT MEASUREMENTS									
Trouser Inseam	Size	Waist		Seat		Waist Circumference Relaxed	Waist Circumference Stretched	Seat Circumference	Hem Circ. Stretched	Hem Circ. Relaxed	Out-Seam	Inseam	Knee Circumference	Front Rise	Back Rise
Regular 31"-33" 78.5-84 cm	XX Small	23"-25"	58-63.5	28"-30"	71-76	56.5	80	91.5	50	31	102.6	77.4	54	26.6	37.8
	X Small	26"-28"	66-71	31"-33"	78.5-84	61.5	87.5	98.25	50.5	31.5	103.3	77.5	55.25	27.4	38.5
	Small	29"-31"	73.5-78.5	34"-36"	86-91	66.5	95	105	51	32	104	77.6	56.5	28.1	39.2
	Medium	32"-34"	81-86	37"-39"	94-99	71.5	102.5	111.75	51.5	32.5	104.8	77.7	57.75	28.9	40
	Large	35"-37"	89-94	40"-42"	101.5-106.5	76.5	110	118.5	52	33	105.5	77.8	59	29.6	40.7
	X Large	38"-40"	96.5-101.5	43"-45"	109-114	81.5	117.5	125.25	52.5	33.5	106.3	77.9	60.25	30.4	41.4
	2X Large	41"-43"	104-109	46"-48"	116.5-122	86.5	125	132	53	34	107	78.1	61.5	31.1	42.1
	3X Large	44"-46"	111.5-116.5	49"-51"	124.5-129.5	91.5	132.5	138.75	53.5	34.5	107.8	78.2	62.75	31.9	42.8
	4X Large	47"-49"	119-124.5	52"-54"	132-137	96.5	140	145.5	54	35	108.5	78.4	64	32.6	43.6
	5X Large	50"-52"	127-132	55"-57"	139.5-144.5	101.5	147.5	152.25	54.5	35.5	109.3	78.6	65.25	33.4	44.3
Tall 33"-35" 84-89 cm	XX Small	23"-25"	58-63.5	28"-30"	71-76	56.5	80	91.5	50	31	110.6	82.4	54	29.6	40.5
	X Small	26"-28"	66-71	31"-33"	78.5-84	61.5	87.5	98.25	50.5	31.5	111.3	82.5	55.25	30.4	41.25
	Small	29"-31"	73.5-78.5	34"-36"	86-91	66.5	95	105	51	32	112	82.6	56.5	31.1	41.9
	Medium	32"-34"	81-86	37"-39"	94-99	71.5	102.5	111.75	51.5	32.5	112.8	82.7	57.75	31.9	42.75
	Large	35"-37"	89-94	40"-42"	101.5-106.5	76.5	110	118.5	52	33	113.5	82.8	59	32.6	43.4
	X Large	38"-40"	96.5-101.5	43"-45"	109-114	81.5	117.5	125.25	52.5	33.5	114.3	82.9	60.25	33.4	44.1
	2X Large	41"-43"	104-109	46"-48"	116.5-122	86.5	125	132	53	34	115	83.1	61.5	34.1	44.8
	3X Large	44"-46"	111.5-116.5	49"-51"	124.5-129.5	91.5	132.5	138.75	53.5	34.5	115.8	83.2	62.75	34.9	45.5
	4X Large	47"-49"	119-124.5	52"-54"	132-137	96.5	140	145.5	54	35	116.5	83.4	64	35.6	46.3
	5X Large	50"-52"	127-132	55"-57"	139.5-144.5	101.5	147.5	152.25	54.5	35.5	117.3	83.6	65.25	36.4	47
MEASUREMENT LOCATION						A	A	B	C	C	D	E	F	G	H
TOLERANCES ±						3 cm	3 cm	3 cm	1 cm	1 cm	2.5 cm	2.5 cm	2 cm	2 cm	2 cm

# SCALE OF MEASUREMENTS

All measurements are in centimeters unless otherwise indicated															
SIZE DESIGNATION		BODY MEASUREMENTS				FINISHED GARMENT MEASUREMENTS									
Trouser Inseam	Size	Waist		Seat		Waist Circumference Relaxed	Waist Circumference Stretched	Seat Circumference	Hem Circ. Stretched	Hem Circ. Relaxed	Out-Seam	Inseam	Knee Circumference	Front Rise	Back Rise
X Tall 35"-37" 89-94 cm	XX Small	23"-25"	58-63.5	28"-30"	71-76	56.5	80	91.5	50	31	118.6	87.4	54	32.6	43.25
	X Small	26"-28"	66-71	31"-33"	78.5-84	61.5	87.5	98.25	50.5	31.5	119.3	87.5	55.25	33.4	44
	Small	29"-31"	73.5-78.5	34"-36"	86-91	66.5	95	105	51	32	120	87.6	56.5	34.1	44.6
	Medium	32"-34"	81-86	37"-39"	94-99	71.5	102.5	111.75	51.5	32.5	120.8	87.7	57.75	34.9	45.5
	Large	35"-37"	89-94	40"-42"	101.5-106.5	76.5	110	118.5	52	33	121.5	87.8	59	35.6	46.1
	X Large	38"-40"	96.5-101.5	43"-45"	109-114	81.5	117.5	125.25	52.5	33.5	122.3	87.9	60.25	36.6	46.8
	2X Large	41"-43"	104-109	46"-48"	116.5-122	86.5	125	132	53	34	123	88.1	61.5	37.1	47.5
	3X Large	44"-46"	111.5-116.5	49"-51"	124.5-129.5	91.5	132.5	138.75	53.5	34.5	123.8	88.2	62.75	37.9	48.25
	4X Large	47"-49"	119-124.5	52"-54"	132-137	96.5	140	145.5	54	35	124.5	88.4	64	38.6	49
	5X Large	50"-52"	127-132	55"-57"	139.5-144.5	101.5	147.5	152.25	54.5	35.5	125.3	88.6	65.25	39.4	49.75
XX Tall 37"-39" 94-99 cm	XX Small	23"-25"	58-63.5	28"-30"	71-76	56.5	80	91.5	50	31	126.6	92.4	54	35.6	46
	X Small	26"-28"	66-71	31"-33"	78.5-84	61.5	87.5	98.25	50.5	31.5	127.3	92.5	55.25	36.4	46.75
	Small	29"-31"	73.5-78.5	34"-36"	86-91	66.5	95	105	51	32	128	92.6	56.5	37.1	47.3
	Medium	32"-34"	81-86	37"-39"	94-99	71.5	102.5	111.75	51.5	32.5	128.8	92.7	57.75	37.9	48.25
	Large	35"-37"	89-94	40"-42"	101.5-106.5	76.5	110	118.5	52	33	129.5	92.8	59	38.6	48.8
	X Large	38"-40"	96.5-101.5	43"-45"	109-114	81.5	117.5	125.25	52.5	33.5	130.3	92.9	60.25	39.6	49.5
	2X Large	41"-43"	104-109	46"-48"	116.5-122	86.5	125	132	53	34	131	93.1	61.5	40.1	50.25
	3X Large	44"-46"	111.5-116.5	49"-51"	124.5-129.5	91.5	132.5	138.75	53.5	34.5	131.8	93.2	62.75	40.9	51
	4X Large	47"-49"	119-124.5	52"-54"	132-137	96.5	140	145.5	54	35	132.5	93.4	64	41.6	51.75
	5X Large	50"-52"	127-132	55"-57"	139.5-144.5	101.5	147.5	152.25	54.5	35.5	133.3	93.6	65.25	42.4	52.5
MEASUREMENT LOCATION						A	A	B	C	C	D	E	F	G	H
TOLERANCES ±						3 cm	3 cm	3 cm	1 cm	1 cm	2.5 cm	2.5 cm	2 cm	2 cm	2 cm

**Table I**  
**Shell Material I Test Requirements**

	TEST	RCMP REQUIREMENTS	TEST METHOD
1	Colour	Black	
2	Fibre Content	100% nylon Warp 30 denier Weft 30 denier	<ul style="list-style-type: none"> <li>CAN/CGSB 4.2 No. 14-2005</li> </ul>
3	Weave	Plain	Visual
4	Calendering	One side	Visual
5	Mass	48 g/m <sup>2</sup> ± 3 g/m <sup>2</sup>	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 5.1-M90 (2013)</li> <li>ASTM D3776/D3776M-09a (2013) Option C</li> </ul>
6	Yarns per cm	Warp - 65 min. Weft - 50 min.	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 6-2013</li> <li>ISO 7211-2:1984</li> </ul>
7	Tearing Strength - Elmendorf Method	Warp – 8.5 N min Weft – 6.6 N min	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 12.3-2005 (R2013)</li> <li>ISO 13937-1:2000</li> </ul>
8	Abrasion Resistance - Martindale Method (Determination of Specimen Breakdown)	No breakdown after 150,000 at 12 kPa	<ul style="list-style-type: none"> <li>ASTM D-4966-12<sup>e1</sup>- Option 1</li> </ul>
9	Dimensional Change in Domestic Laundering (cool wash 30°C)	Warp: 2% max Weft: 2% max	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 58-2004, VI, E (delicate), 3</li> </ul>
10	Air Permeability	1 cm <sup>3</sup> /cm <sup>2</sup> x s-1 max	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 36-M89 (R2013)</li> <li>ASTM D737-04 (2012)</li> </ul>
11	Resistance to Surface Wetting - Spray Method	90 after 5 washes or better	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 26.2-94 (R2012)</li> <li>ISO 4920:1981</li> </ul>
12	Colourfastness to Light	Equal to AATCC Standard L4 or better	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No.18.3-97 (R2010)</li> <li>ISO 105-B02:2014 North American exposure conditions Method 3</li> </ul>
13	Colourfastness to Crocking	Dry: Grade 4 or better Wet: Grade 4 or better	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No.22-2004</li> <li>AATCC 8-2013</li> </ul>
14	Colourfastness to Perspiration	Grade 4 or better	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 23-M90 (R2013)</li> </ul>
15	Colourfastness to Laundering (cool wash 30°C)	Grade 4 or better	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No.19.1-2004 (R2013) Test No. 5</li> </ul>

**Table II**  
**Insulation Test Requirements**

	TEST	RCMP REQUIREMENTS	TEST METHOD
1	CLO - Batt and Scrim	<i>Initial</i> 2.0 (min.) After 5 Washes 1.7 (min.)	<ul style="list-style-type: none"> <li>ISO11092:2014 <u>Washing</u> -</li> <li>ISO6330:2012 Wash (7B) Dry Procedure F</li> </ul>
2	Fabric Thickness - Batt and Scrim	<i>Initial:</i> 14 mm (max.) <i>After 5 Washes:</i> Maximum loss 20% of initial value	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 37-2002 (R2013) <u>Washing</u> -</li> <li>ISO6330:2012 Wash (7B) Dry Procedure F</li> </ul>
3	Fibre content	100% micro denier polyester with binder fibre and acrylic resin	
4	Stiffness (Drape) Cantilever Bending Method	Length 2 cm (max.) Width 2 cm (max.)	<ul style="list-style-type: none"> <li>FED-STD-191 5206</li> </ul>
5	Resistance to Pilling	4 (min.)	<ul style="list-style-type: none"> <li>ASTM D4970/D4970M-10<sup>e1</sup> After 1000 cycles Tested with the face of batt against shell material layer</li> </ul>
6	Dimensional Change in Laundering - Batt and Scrim  <i>After 5 Washes</i>	Warp: 3% (max.) Weft: 3% (max.) The difference in the dimensional change between the batt and scrim shall not exceed 3%.	<ul style="list-style-type: none"> <li>ISO6330:2012 Wash (7B) Dry Procedure F</li> </ul>
7	Anti-Microbial Agent Silver Nano Particle Additive with Binder	95 % killed within 24 hour	<ul style="list-style-type: none"> <li>AATCC 100-2012</li> <li>ISO 20743:2013 Tested for s. aureus, e. coli, k. pneumonia</li> </ul>
8	Compression Recovery	91% (min.)	<ul style="list-style-type: none"> <li>Procedure described below</li> </ul>
<p>The insulation's compression recovery shall be determined by the following procedure.</p> <ol style="list-style-type: none"> <li>1. A cloth specimen shall be measured for thickness using a 64 cm<sup>2</sup> pressure foot at a pressure of 0.07kPa.</li> <li>2. The specimen shall be compressed under a suitable template (not less than 127 mm by 127 mm) for a period of 60 minutes at a pressure of 7.0 kPa. The specimen shall be at least 50 mm larger in length and width than the template.</li> <li>3. The template and the weight shall be removed and the specimen allowed to relax for 3 minutes. Immediately after the 3 minute relaxation period, the thickness shall be measured again at the pressure of 0.07 kPa.</li> <li>4. The compressional recovery shall be calculated as follows:</li> </ol> $\text{Compression recovery percentage} = \left( \frac{\text{thickness of specimen after compression}}{\text{thickness of specimen before compression}} \right) \times 100$			

**Table III**  
**Shell Material II Test Requirements**

	TEST	RCMP REQUIREMENTS	TEST METHOD
1	Colour	Black	
2	Fibre Content	100% nylon	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 14-2005</li> </ul>
3	Weave	Plain	Visual
4	PU Coating	One side	Visual
5	Mass	108 g/m <sup>2</sup> ± 5 g/m <sup>2</sup>	<ul style="list-style-type: none"> <li>CAN/CGSB 4.2 No.5.1-M90 (R2013)</li> <li>ASTM D3776/D3776M-09a (2013) Option C</li> </ul>
6	Yarns per cm	Warp - 42 min. Weft – 27 min.	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 6-2013</li> <li>ISO 7211-2:1984</li> </ul>
7	Breaking Strength - Grab	Warp – 550 N min Weft – 500 N min	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 9.2-M90 (R2013)</li> </ul>
8	Tearing Strength - Elmendorf Method	Warp – 20 N min Weft – 20 N min	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 12.3-2005 (R2013)</li> <li>ISO 13937-1:2000</li> </ul>
9	Abrasion Resistance - Martindale Method Part 2 (Determination of Specimen Breakdown)	No breakdown after 20,000 at 12 kPa	<ul style="list-style-type: none"> <li>ASTM D4966-12<sup>e1</sup> Option 1</li> </ul>
10	Dimensional Change in Domestic Laundering (cool wash 30°C)	Warp: 2.5% max Weft: 2.5% max	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 58-2004, VI, E (delicate), 3</li> </ul>
11	Resistance to Surface Wetting - Spray Method	100 Initial 80 after 5 washes or better	<ul style="list-style-type: none"> <li>CAN/CGSB-4.2 No. 26.2-94 (R2012)</li> <li>ISO 4920:1981</li> </ul>

**Table IV**  
**Slide Fastener Lengths**

All measurements in inches							
Height Group	Sizes	Front Fly	Side Seam	Height Group	Sizes	Front Fly	Side Seam
<b>X Short</b>	XX Small	6½	29½	<b>Tall</b>	XX Small	8	39½
	X Small	6½	30		X Small	8	39½
	Small	6½	30		Small	8	40
	Medium	6½	30½		Medium	8	40½
	Large	6½	31		Large	8	40½
	X Large	6½	31½		X Large	8	41
	2X Large	6½	31½		2X Large	8	41½
	3X Large	6½	32		3X Large	8	41½
	4X Large	6½	32½		4X Large	8	42
	5X Large	6½	32½		5X Large	8	42
<b>Short</b>	XX Small	7	33	<b>X Tall</b>	XX Small	8	42½
	X Small	7	33½		X Small	8	42½
	Small	7	33½		Small	8	43
	Medium	7	34		Medium	8	43½
	Large	7	34½		Large	8	43½
	X Large	7	35		X Large	8	44
	2X Large	7	35		2X Large	8	44½
	3X Large	7	35½		3X Large	8	44½
	4X Large	7	35½		4X Large	8	45
	5X Large	7	36		5X Large	8	45
<b>Regular</b>	XX Small	7½	36½	<b>XX Tall</b>	XX Small	8	45½
	X Small	7½	36½		X Small	8	45½
	Small	7½	37		Small	8	46
	Medium	7½	37		Medium	8	46½
	Large	7½	37½		Large	8	46½
	X Large	7½	37½		X Large	8	47
	2X Large	7½	38		2X Large	8	47½
	3X Large	7½	38½		3X Large	8	47½
	4X Large	7½	38½		4X Large	8	48
	5X Large	7½	39		5X Large	8	48

## Appendix A

### **Sealed Pattern Identifier**

Paper patterns are available from the RCMP Uniform and Equipment Program, Ottawa Ontario. Firms requested to produce Pre-contract Award Samples will be provided with the base pattern only. The full set of patterns either in individual sizes or as a graded nest, will be provided to the successful bidder after the contract is awarded.

The paper patterns include seam allowances, drill holes and/or placement templates. Shrinkage has not been included in any pattern piece. It is the responsibility of the manufacturer to make allowances for shrinkage in order to meet the scale of measurements included in this specification. Contractors may make changes required to suit their production process, however, the design and grade shall not be affected or changed.

All patterns are property of the RCMP and must be returned upon completion of the contract.

### **Material and Cutting Legend**

Shell Material I	para. 4.1.1
Shell Material II	para. 4.1.2
Insulation	para. 4.1.3
Interfacing	para. 4.1.7
Cut 1 Single	Cut 1
Cut 1 Pair	Cut 2
Cut 2 Paired	Cut 4

### **Pattern Component Cutting Guide**

This design has 15 pattern components.

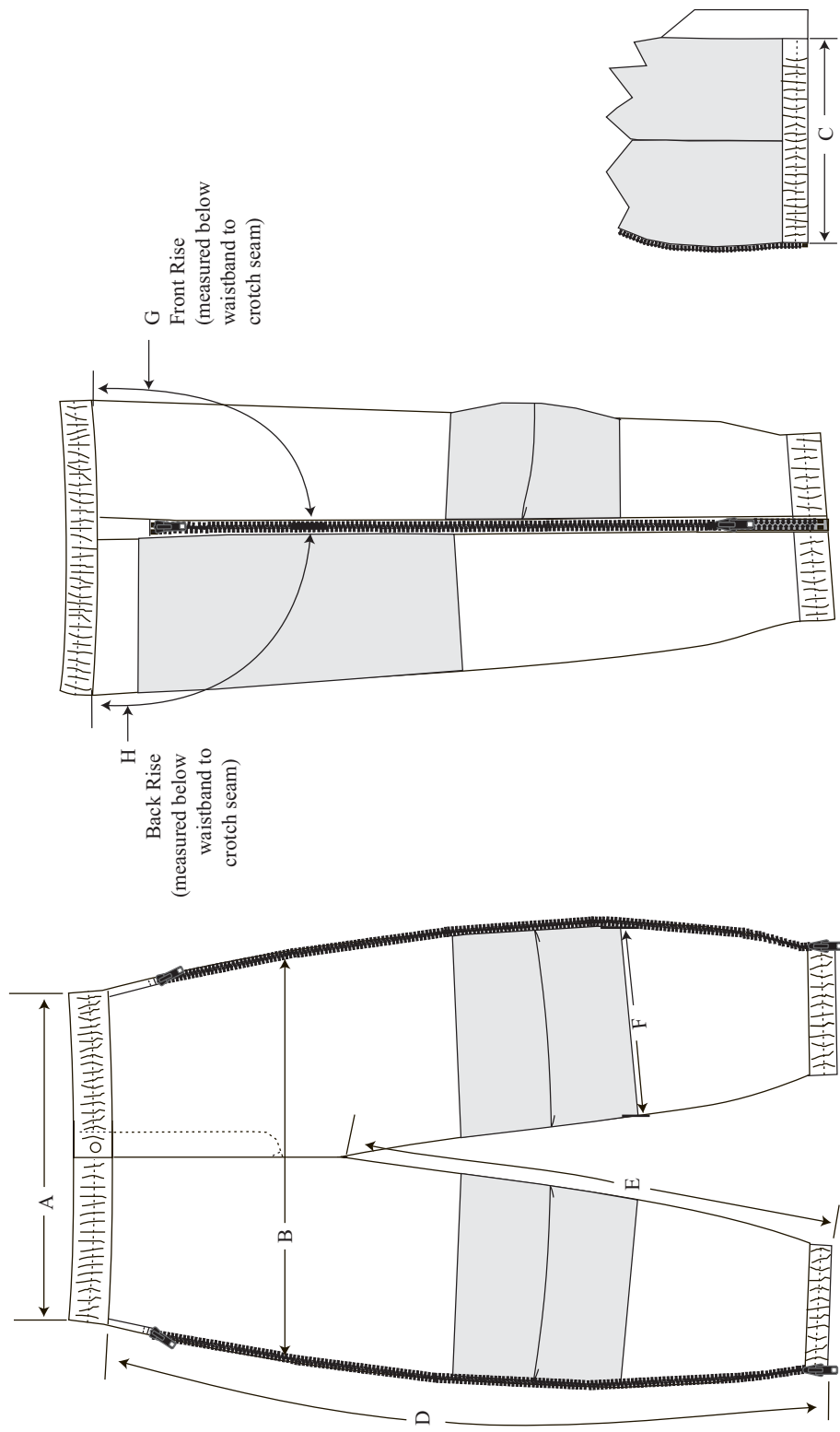
Pattern Component	Nomenclature	Quantity to Cut	Material
1 of 15	Back Pant	2 Paired	Shell Material I
2 of 15	Front Pant	2 Paired	Shell Material I
3 of 15	Back Pant – Insulation	1 Paired	Insulation
4 of 15	Front Pant – Insulation	1 Paired	Insulation
5 of 15	Waistband	1 Single	Shell Material I
6 of 15	Cuff at Hem	1 Paired	Shell Material I
7 of 15	Storm Flap - Inner	1 Paired	Shell Material I

**Pattern Component Cutting Guide**

<b>Pattern Component</b>	<b>Nomenclature</b>	<b>Quantity to Cut</b>	<b>Material</b>
8 of 15	Fly	1 Single	Shell Material I
9 of 15	Fly Curtain	1 Single	Shell Material I
10 of 15	Upper Slide Fastener Side Seam Piece	2 Paired	Shell Material I
11 of 15	Upper Knee Patch	1 Paired	Shell Material II
12 of 15	Lower Knee Patch	1 Paired	Shell Material II
13 of 15	Back Seat Patch	1 Paired	Shell Material II
14 of 15	Inside Lower Back Patch	1 Paired	Shell Material II
15 of 15	Inside Lower Front Patch	1 Paired	Shell Material II

Dwg. 1

Measurement Location Chart



Lower Leg Opening

Side View

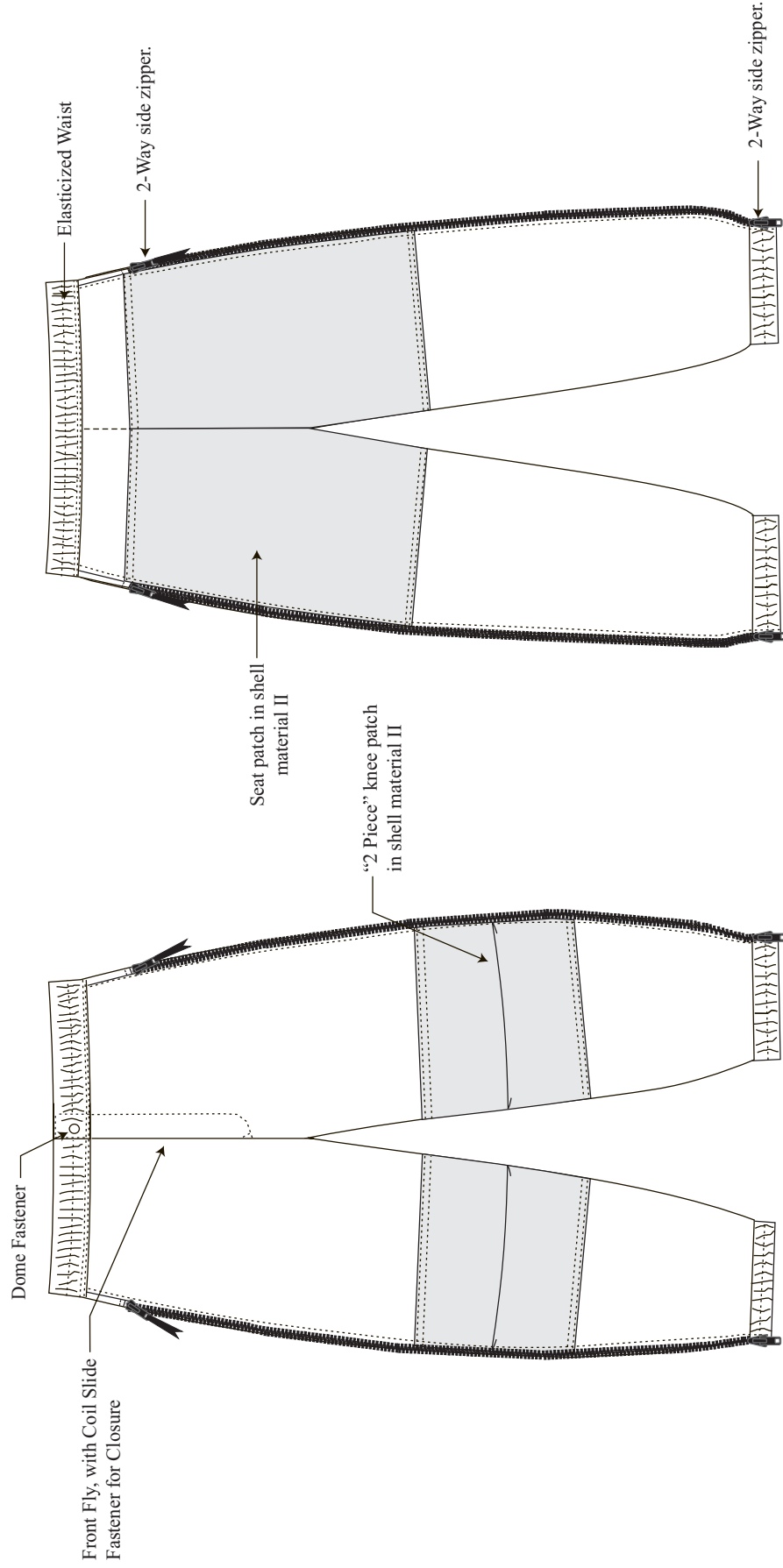
Front View

NOT TO SCALE

LINER, TROUSERS INCLEMENT

G.S.1045-356

Dwg. 2



Front View

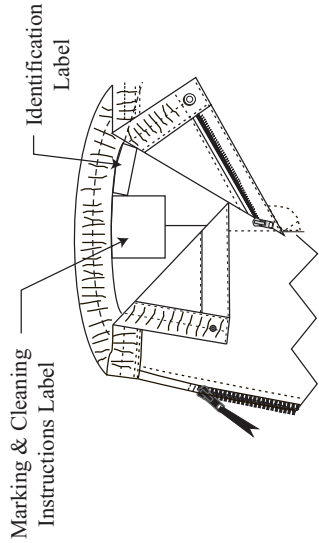
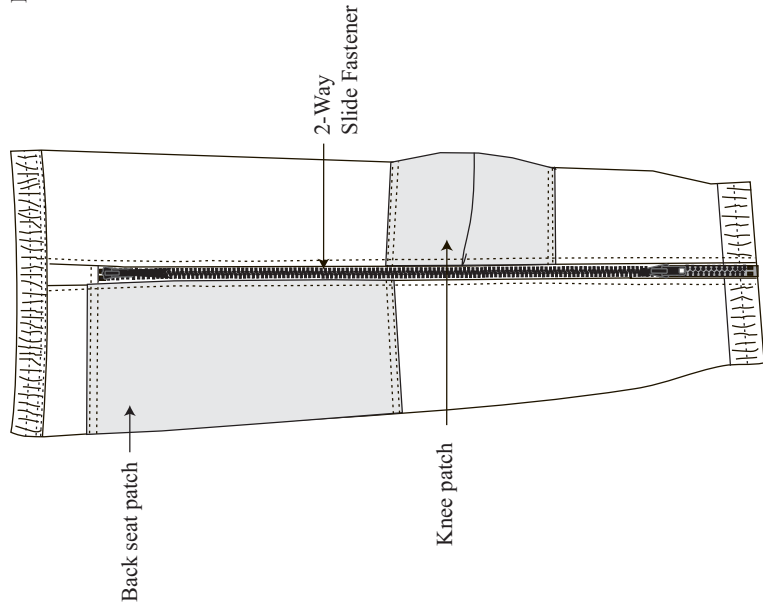
Back View

NOT TO SCALE

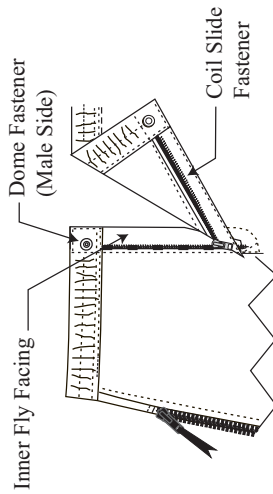
All measurements are shown in centimeters.

± 0.5 cm tolerance acceptable unless otherwise indicated.

Dwg. 3

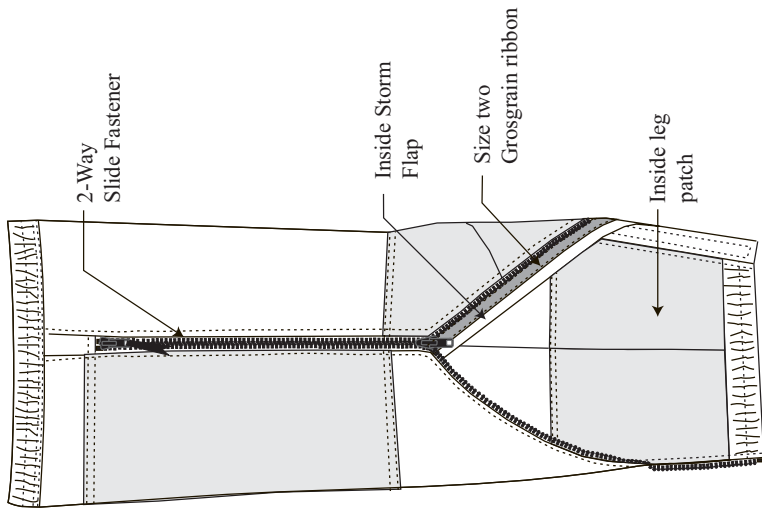


Waistband Inside View



Side View

Fly & Waistband Detail



Side View

NOT TO SCALE

All measurements are shown in centimeters.  
 $\pm 0.5$  cm tolerance acceptable unless otherwise indicated.