



**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

Title - Sujet Outerwear, Consolidated	
Solicitation No. - N° de l'invitation M0077-15I106/A	Date 2016-03-01
Client Reference No. - N° de référence du client M0077-15I106	
GETS Reference No. - N° de référence de SEAG PW-\$\$PR-760-70425	
File No. - N° de dossier pr760.M0077-15I106	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2016-03-17	Time Zone Fuseau horaire Eastern Standard Time EST
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Richard, Josette	Buyer Id - Id de l'acheteur pr760
Telephone No. - N° de téléphone (819) 956-7288 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: ROYAL CANADIAN MOUNTED POLICE Warehouse Management Section 440 COVENTRY RD (East Door) OTTAWA Ontario K1A0T1 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

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

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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 under 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

This requirement is subject to the Agreement on Internal Trade (AIT).

1.5 Canadian Content

The requirement is limited to Canadian goods.

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) (<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](#) (2015/09/03) 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: 120 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 Viewing Samples

Viewing samples 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)

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)

Public Works & Government Services Canada
Suite 480, 33 City Centre Drive
Mississauga, Ont. L5B 2N5
TEL: 905-615-2070
FAX: 905-615-2023
Attention: Hodan A. Ahmed (hodan.a.ahmed@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) 497-3564
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
FAX: 604-775-7526
Attention: Linda Harding (linda.harding@pwgsc-tpsgc.gc.ca)

2.6 Viewing Patterns and Samples - Return to Sender

The viewing patterns and samples which may have been sent to you, are to be returned to the sender, if you are the unsuccessful Bidder. The viewing patterns and samples are not to be mutilated or cut, and must be returned in the same condition as sent to the Bidder. Lost or damaged viewing patterns and samples must be reimbursed to the RCMP for the cost of an acceptable replacement.

2.7 Specifications and Standards

2.7.1 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
CGSB Website: <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-eng.html>

2.8 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: \$ _____

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 (2 hard copies)
Section II: Financial Bid (2 hard copies)
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 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

3.1.2. 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: _____

(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) An evaluation team composed of representatives of Canada will evaluate the bids.

4.1.1 Technical Evaluation

4.1.1.1 Mandatory Technical Criteria

Pre-Award Sample(s) and Supporting Documentation

As part of the technical evaluation, to confirm a bidder's capability of meeting the technical requirements, one (1) pre-award sample of the each item listed in M.1, properly identified with the size and the RCMP stock-item number along with test reports (listed in M.2) and certification of compliance (listed in M.3) will be required after the bid closing date, upon a written request from PWGSC.

M.1 PRE-AWARD SAMPLES

PRE-AWARD SAMPLES	SIZE	RCMP STOCK NUMBER
Jacket, Patrol, Unisex	Large/Regular	4010-358
Trousers, Inclement	Large/Regular	5260-300
Stripe, Trousers Inclement, Navy	Large-XXL/Regular	5270-425
Parka, Inclement	Large/Regular	5030-351
Hood, Cold Weather, Parka, Inclement	Large/XLarge	3900-300
Jacket, High Visiblity	Large/Regular	3985-300

M.2 TEST REPORTS

The following test reports must be dated within 12 months of the solicitation posting date:

- a) **Test report** as per Table I for Shell Material I and II as per Specification 1045-310;
- b) **Test reports** as per Table II of Specification 1045-298, 1045-301, 1045-307 and 1045-310 – requirement 1 and 5 through 10;
- c) **Test reports** as per Table IV of Specification 1045-301 & 1045-310; and
- d) **Test reports** for Table II of Specification 1045-298, 1045-301, 1045-307 and 1045-310 for requirement 2 through 4 may be submitted if using the approved colour.

M.3 CERTIFICATES OF COMPLIANCE

The certificates of compliance (C of C) must be dated within 18 months of the solicitation posting date. When a component is found in multiple specifications only one Certificate of Compliance must be submitted and would be acceptable for all Specifications.

Components	Spec 1045-298		Spec 1045-301		Spec 1045-307		Spec 1045-310	
<i>Mesh Pocketing</i>	Para 4.1.5 Table III	C of C Required	N/A	N/A	Para 4.1.6 Table III	C of C required	Para 4.1.6 Table III	C of C required
<i>Thread</i>	Para 4.1.8	C of C Required	Para 4.1.6	C of C Required	Para 4.1.19	C of C Required	Para 4.1.5	C of C Required
<i>Slide Fastener (Front)</i>	Para 4.1.9.1	C of C Required	N/A	N/A	Para 4.1.14.1	C of C Required	Para 4.1.9.1	C of C Required
<i>Slide Fastener (Inside Front)</i>	Para 4.1.9.2 4.1.9.3	C of C Required	N/A	N/A	Para 4.1.14.2 4.1.14.3	C of C Required	Para 4.1.9.2 4.1.9.3	C of C Required
<i>Slide Fastener (Pockets)</i>	Para 4.1.9.4	C of C Required	N/A	N/A	Para 4.1.14.4	C of C Required	Para 4.1.9.5	C of C Required
<i>Slide Fastener (Sleeve pockets)</i>	Para 4.1.9.5	C of C Required	N/A	N/A	Para 4.1.14.5	C of C Required	Para 4.1.9.4	C of C Required
<i>Slide Fastener (Side Seam)</i>	Para 4.1.9.6	C of C Required	N/A	N/A	Para 4.1.14.6	C of C Required	Para 4.1.9.6	C of C Required
<i>Slide Fastener (Side Seam)</i>	N/A	N/A	Para 4.1.10.2	C of C Required	N/A	N/A	N/A	N/A
<i>Slide Fastener (Inside Pocket)</i>	Para 4.1.9.7	C of C Required	N/A	N/A	Para 4.1.14.7	C of C Required	Para 4.1.9.7	C of C Required
<i>Slide Fastener (Hood Snorkel)</i>	N/A	N/A	N/A	N/A	Para 4.1.14.8	C of C Required	N/A	N/A
<i>Slide Fastener (Front Fly)</i>	N/A	N/A	Para 4.1.10.1	C of C Required	N/A	N/A	N/A	N/A
<i>Hook and Loop tape</i>	Para 4.10	C of C Required	Para 4.1.9	C of C Required	Para 4.1.16	C of C Required	Para 4.1.10	C of C Required
<i>Elastic drawcord</i>	Para 4.1.11	C of C Required	N/A	N/A	Para 4.1.11	C of C Required	Para 4.1.11	C of C Required
<i>Cord locks</i>	Para 4.1.12.1	C of C Required	N/A	N/A	Para 4.1.12.1	C of C Required	Para 4.1.12.1	C of C Required
<i>Dome Fasteners</i>	Para 4.1.14	C of C Required	Para 4.1.7	C of C Required	Para 4.1.20	C of C Required	Para 4.1.14	C of C Required
<i>Webbing</i>	Para 4.1.17	C of C Required			Para 4.1.18	C of C Required	Para 4.1.17	C of C Required

Components	Spec 1045-298		Spec 1045-301		Spec 1045-307		Spec 1045-310	
<i>Retroreflective stripes and lettering</i>	N/A	N/A	Para 4.1.11	C of C when 3M Scotchlite tm 8725N is used	N/A	N/A	Para 4.1.7	C of C when 3M Scotchlite tm 8725N is used
<i>Insulation</i>	N/A	N/A	N/A	N/A	Para 4.1.7 Table IV	C of C Required	N/A	N/A
<i>Fleece Lining</i>	N/A	N/A	N/A	N/A	Para 4.1.4 Table V	C of C Required	N/A	N/A

The Bidder must ensure that the required pre-award samples are manufactured in accordance with the technical requirement and are fully representative of the bid submitted. Rejection of the pre-award samples will result in the bid being declared non-responsive.

The Bidder must deliver the required pre-award samples, test reports and certificates of compliance at no charge to Canada and must ensure that they are received within 90 calendar days from request. Failure to submit the required pre-award samples, test reports and certificates of compliance within the specified time frame will result in the bid being declared non-responsive. The samples submitted by the Bidder will remain the property of Canada.

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

The requirement for a pre-award 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.

In the event that the shell material is not available to the Bidder in the color requested and in a time frame to manufacture the pre-award sample, the substitutions identified below are acceptable. Also, the Bidder must include a letter explaining the substitution submitted with the pre-award sample, together with a statement that, should the Bidder be awarded the contract, all materials will be strictly in accordance with the technical requirement.

COMPONENT WAIVER/SUBSTITUTION(S):

- Para. 4.1.1 of Specification 1045-298, 1045-301 and 1045-307 may be different colour navy than the RCMP standard.
- Para. 4.1.1 of Specification 1045-310 may be a different colour fluorescent yellow than the RCMP standard.

Viewing Samples

An RCMP viewing sample will be provided to bidders who are requested to provide a pre-award sample and is to be used for guidance for all factors not covered by the RCMP specification. The RCMP specification must govern.

The viewing sample is not to be damaged or cut, but returned in the same condition as sent to the Bidder. The viewing sample should be returned to the RCMP with the Pre-Award Samples. If the

viewing sample is not returned with the Pre-Award Samples, the Bidder will have 14 calendar days upon written notice from the Contracting Authority to return the viewing sample. Failure to return the viewing sample within that timeframe will result in the bid being declared non-responsive. Lost or damaged viewing samples must be reimbursed to the RCMP for the cost of an acceptable replacement.

Patterns

A pattern for regular sizes only will be provided to bidder(s) who will be required to submit a pre-award sample. If the pattern is not returned with the pre-award Samples, the Bidder will have 14 calendar days upon written notice from the Contracting Authority to return the pattern. Failure to return the pattern within that timeframe will result in the bid being declared non-responsive. Lost or damaged patterns must be reimbursed to the RCMP for the cost of an acceptable replacement.

If a bidder fails to submit a pre-award sample within the specified time frame or chooses not to submit the pre-award sample, the pattern must be returned directly to the RCMP without delay.

TEST REPORT – DEFINITION

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 this 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.

CERTIFICATE OF COMPLIANCE-DEFINITION

A Certificate of Compliance is defined, for this document, as a 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 and corresponding specification and 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.

4.1.2 Financial Evaluation

4.1.2.1 Mandatory Financial Criteria

- a) The Bidder must submit firm unit price(s) 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 and all destinations including options and "as and when requested" quantities (specials and flexibles).

4.1.2.2 SACC MANUAL CLAUSE

A9033T 2012/07/16 Financial Capability

4.2 Basis of Selections

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 for all items, and 100% of the option quantities) and 100% of the "as and when requested" quantities (specials and flexibles). For the financial evaluation of the "as & when requested" regular size 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 unmatured, 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 Declaration of Convicted Offences

As applicable, pursuant to subsection Declaration of Convicted Offences of section 01 of the Standard Instructions, the Bidder must provide with its bid, a completed Declaration Form (<http://www.tpsgc-pwgsc.gc.ca/ci-if/formulaire-form-eng.html>), to be given further consideration in the procurement process.

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 – List of Names

Bidders who are incorporated, including those bidding as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Bidder.

Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, must provide the name of the owner(s).

Bidders bidding as societies, firms or partnerships do not need to provide lists of names.

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 (http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml) available from Employment and Social Development Canada (ESDC) - Labour's website.

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.

Canada will also have the right to terminate the Contract for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list during the period of the Contract.

The Bidder must provide the Contracting Authority with a completed Appendix 1 entitled Federal Contractors Program for Employment Equity - Certification, before contract award. If the Bidder is a Joint Venture, the Bidder must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

5.2.3 Additional Certifications Precedent to Contract Award

5.2.3.1 Canadian Content Certification

5.2.3.1.1 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 limited to 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: _____

5.2.3.2 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.

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 the "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 (2015/09/03), General Conditions - Goods (Higher Complexity), apply to and form part of the Contract.

6.4 Term of Contract

6.4.1 Delivery Requested - Firm Quantity

The RCMP is requesting that the first shipment be made within 52 calendar days from the date of the written notice of approval of the pre-production samples. All firm deliverables are requested complete by **November 30, 2016**.

6.4.1.1 Delivery - Firm Quantity – Phased

a) 3900 – Hood, Cold Weather, Parka, Inclement (identified as item 01 in Annex A)

The first delivery must be made within _____ calendar days from the date of the written notice of approval of the pre-production samples or production samples. 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.

b) 3985 – Jacket, High Visibility (identified as item 02 in Annex A)

The first delivery must be made within _____ calendar days from the date of the written notice of approval of the pre-production samples or production samples. 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.

c) 4010 – Jacket, Patrol Unisex (identified as item 03 in Annex A)

The first delivery must be made within _____ calendar days from the date of the written notice of approval of the pre-production samples or production samples. 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.

d) 5030 – Parka, Inclement (identified as item 04 in Annex A)

The first delivery must be made within _____ calendar days from the date of the written notice of approval of the pre-production samples or production samples. 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.

e) 5260 –Trousers, Inclement (identified as item 05 in Annex A)

The first delivery must be made within _____ calendar days from the date of the written notice of approval of the pre-production samples or production samples. 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.

f) 5270 – Stripe, Trousers Inclement, Blue (identified as item 06 in Annex A)

The first delivery must be made within _____ calendar days from the date of the written notice of approval of the pre-production samples or production samples. 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.

6.4.1.2 Delivery - Options

The RCMP is requesting that delivery be made within **60** calendar days from the date of the written notice of approval of the submitted certificates of compliance and test reports, for the option, and after final delivery of the contract quantity or the previous option quantities.

a) 3900 – Hood, Cold Weather, Parka, Inclement (identified as item 15 and 21 in Annex A)

The first delivery must be made within _____ calendar days from the date of the written notice of approval of the submitted certificates of compliance and test reports, for the option, and after final delivery of the contract quantity or the previous option quantities. 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.

b) 3985 – Jacket, High Visibility (identified as item 16 in Annex A)

The first delivery must be made within _____ calendar days from the date of the written notice of approval of the submitted certificates of compliance and test reports, for the option, and after final delivery of the contract quantity or the previous option quantities. 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.

c) 4010 – Jacket, Patrol Unisex (identified as item 17 and 22 in Annex A)

The first delivery must be made within _____ calendar days from the date of the written notice of approval of the submitted certificates of compliance and test reports, for the option, and after final delivery of the contract quantity or the previous option quantities. 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.

d) 5030 – Parka, Inclement (identified as item 18 and 23 in Annex A)

The first delivery must be made within _____ calendar days from the date of the written notice of approval of the submitted certificates of compliance and test reports, for the option, and after final delivery of the contract quantity or the previous option quantities. 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.

e) 5260 –Trousers, Inclement (identified as item 19 and 24 in Annex A)

The first delivery must be made within _____ calendar from the date of the written notice of approval of the submitted certificates of compliance and test reports, for the option, and after final delivery of the contract quantity or the previous option quantities. 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.

f) 5270 – Stripe, Trousers Inclement, Blue (identified as item 20 in Annex A)

The first delivery must be made within _____ calendar days from the date of the written notice of approval of the submitted certificates of compliance and test reports, for the option, and after final delivery of the contract quantity or the previous option quantities. 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.

6.4.2 Shipping Instructions - Delivery at Destination

1. Goods must be consigned to the destination specified in the Contract and delivered:
 - (a) Delivered Duty Paid (DDP) (Ottawa, Ontario) Incoterms 2000 for shipments from commercial contractor.

6.4.3 Packaging, Marking, Rejected Goods, Overrun and Underrun

(1) Packaging

Packing must be in accordance with standard commercial practice to ensure safe delivery at destination.

- (a) **Items 3985/4010/5030 (Jacket, Patrol, Hi-Vis/Jacket, Patrol, Unisex/Parka, Inclement, Unisex):** Fifteen (15) units to be placed in plain shipping containers L-21" x W-17" x D-20".
- (b) **Item 3900 (Hood, Cold Weather):** Twenty-five (25) units to be placed in plain shipping containers L-23" x W-17" x D-10". This item must not be packaged in plastic bags.
- (c) **Item 5260 (Trousers, Inclement):** Twenty (20) units to be placed in plain shipping containers L-23" x W-14.5" x D-14.5".
- (d) **Items 5265/5270/5275 (Stripe, Trousers, Inclement, Blue/Yellow/Fluorescent):** Thirty-five (35) units to be placed in plain shipping containers L-21.5" x W-14.5" x D-4".

(2) Marking

- (a) Marking and labelling shall be in accordance with the Specifications.
- (b) Size and RCMP Stock Item Number to be indicated on merchandise, if item consists of more than one piece (pair, set) each piece to be marked.
- (c) Size, quantity and RCMP Stock Item Number to be indicated on single unit package, when specified.
- (d) Sizes, quantities and RCMP Stock Item Numbers to be indicated on carton.
- (e) 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.
- (f) Manufacturer's markings/advertisements must 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.

(3) 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.

(4) 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:

Josette Richard

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 : 613-462-4128 Facsimile: 819-956-5454
E-mail address: josette.richard@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

The person responsible for :

General enquiries

Name: _____
Telephone No.: _____
Facsimile No.: _____
E-mail address: _____

Delivery follow-up

Name: _____
Telephone No.: _____
Facsimile No.: _____
E-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 in 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

6.7 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
Email: _____ (to be inserted at contract award)

- (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

6.8.1 Compliance

The continuous compliance with the certifications provided by the Contractor in its bid and the ongoing cooperation in providing additional information are conditions of the Contract. Certifications are subject to verification by Canada during the entire period of the Contract. If the Contractor does not comply with any certification, fails to provide the additional information, or if it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

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 (2015/09/03), General Conditions - Goods (Higher Complexity);
c) Annex A, Requirement;
d) Specifications - Annex B, C, D, E;

- e) Patterns;
f) the Contractor's bid dated _____.

6.11 Materials: Contractor's Total Supply and Government Available Material

The Contractor will be responsible for obtaining all materials required in the manufacture of the items specified, including those materials specified as being Government available and which must be purchased from the Government. The delivery stated herein 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

Summer Holiday	FROM _____	TO _____
Christmas Holiday	FROM _____	TO _____

Year 2

Summer Holiday	FROM _____	TO _____
Christmas Holiday	FROM _____	TO _____

Year 3

Summer Holiday	FROM _____	TO _____
Christmas Holiday	FROM _____	TO _____

Year 4

Summer Holiday	FROM _____	TO _____
Christmas 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

- 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).
- The Contractor agrees that Canada may publicly disclose the information provided with respect 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 Samples (PPS) and Supporting Documentation

1. The Contractor must provide one pre-production sample of each of the following items as detailed below in Table 1, accompanied by the viewing sample and patterns, if applicable, to the Technical Authority for acceptance. The pre-production samples are due to the Technical Authority within 52 calendar days from date of contract award.

TABLE 1

DESCRIPTION	SIZE	RCMP STOCK NUMBER
Jacket, Patrol, Unisex	Large/Regular	4010-358
Trousers, Inclement	Large/Regular	5260-300
Stripe, Trousers Inclement, Navy	Large-XXL/Regular	5270-425
Parka, Inclement	Large/Regular	5030-351
Hood, Cold Weather, Parka, Inclement	Large/XLarge	3900-300
Jacket, High Visibility	Large/Regular	3985-300

2. If any of the pre-production samples are rejected, the Contractor must submit a second pre-production sample of the item within 30 calendar days of notification of rejection from the Technical Authority.
3. If any of the pre-production samples are accepted by either full acceptance or conditional acceptance, the Contractor must proceed with production as per the Contract requirements.
4. Rejection by the Technical Authority of the second pre-production sample 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 carry out all required inspection and tests to verify conformance to the technical requirements of the Contract.
6. In addition to providing the pre-production samples, the Contractor must provide a copy of pre-production test reports to the Contracting Authority and Technical Authority, transportation charges prepaid, and without charge to Canada.
 - i. Test reports based on production yardage are required 120 calendar days after contract award date for evaluation prior to full production. Rejection by the Technical Authority of the test reports submitted by the Contractor for failing to meet the contract requirement will be grounds for termination of the Contract for default.
 - ii. The following test reports must be dated after contract award. The test must be performed on production materials and must be submitted to the Technical Authority for approval prior to beginning production:
 - a) **Test reports** as per Table I for Shell Material I and II as per Specification 1045-310;
 - b) **Test reports** as per Table II of Specification 1045-298, 1045-301, 1045-307 and 1045-310;
 - c) **Test reports** as per Table IV of Specification 1045-301 and 1045-310; and

- d) **Test reports** for Retroreflective stripes and lettering as per Para. 4.1.7 of Specification 1045-310 which is also a requirement for Para. 4.1.11 of Specification 1045-301.

7. The pre-production samples submitted by the Contractor will remain the property of Canada.
8. The Technical Authority will notify the Contractor, in writing, of the full acceptance, conditional acceptance, or rejection of the pre-production samples. A copy of this 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.
9. The Contractor must not commence or continue with production of the items and must not make any deliveries until the Contractor has received a written notification from the Technical Authority that the pre-production samples are fully acceptable or conditionally acceptable. Any production of items before pre-production sample acceptance will be at the sole risk of the Contractor.
10. The pre-production samples may not be required if the Contractor is currently in production. The request for waiver of pre-production samples must be made by the Contractor in writing to the Contracting Authority. The waiving of this requirement will be at the sole discretion of the Technical Authority and will be evidenced through a contract amendment.

CERTIFICATE OF COMPLIANCE-DEFINITION

A Certificate of Compliance is defined, for this document, as a 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 and corresponding specification and 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.

TEST REPORT – DEFINITION

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 this specification.

Testing for each table shall be performed in its entirety on the same garment and/or piece of material. To adhere to all specified test methods and conditions.

6.17 Technical Requirements during Production

The RCMP has the right to request one or more production samples and request of certificates of compliance and test reports at its discretion at any time during the contracting/production stage. This requirement will be done in writing by the RCMP Technical Authority.

Rejection by the Technical Authority of the production sample/test reports/certificates of compliance 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 Option Quantities and “As & When” Requested Quantities (Regular sizes only)

The Contractor must provide Certificate of compliance documents and test reports for each option exercised independently under the terms of the contract. These documents must be representative of the components used for the option quantities and/or the “as & when requested” quantity.

6.18.1 Test Reports: The following test reports must be submitted to the Technical Authority for approval **within 120 days** from the contract amendment date exercising the option for evaluation prior to production of the option quantity and/or the “as & when requested” quantity. The test reports must also be dated after the contract amendment date, if exercising the option, or after the order date of the “as & when requested” quantity.

- a) **Test reports** as per Table I for Shell Material I and II as per Specification 1045-310;
- b) **Test reports** as per Table II of Specification 1045-298, 1045-301, 1045-307 and 1045-310;
- c) **Test reports** as per Table IV of Specification 1045-301 and 1045-310; and
- d) **Test reports** for Retroreflective stripes and lettering as per Para. 4.1.7 of Specification 1045-310 which is also a requirement for Para. 4.1.11 of Specification 1045-301.

6.18.2 Certificate of Compliance: The following Certificate of Compliance must be submitted to the Technical Authority for approval **within 120 days** from the contract amendment date exercising the option, for evaluation prior to production of the option quantity and/or the “as & when requested” quantity. The Certificates of Compliance must also be dated after the contract amendment date, if exercising the option, or after the order date of the “as & when requested” quantity, as applicable.

When a component is found in multiple specifications only one Certificate of Compliance must be submitted and would be acceptable for all Specifications.

Components	Spec 1045-298		Spec 1045-301		Spec 1045-307		Spec 1045-310	
<i>Mesh Pocketing</i>	Para 4.1.5 Table III	C of C Required	N/A	N/A	Para 4.1.6 Table III	C of C required	Para 4.1.6 Table III	C of C required
<i>Thread</i>	Para 4.1.8	C of C Required	Para 4.1.6	C of C Required	Para 4.1.19	C of C Required	Para 4.1.5	C of C Required
<i>Slide Fastener (Front)</i>	Para 4.1.9.1	C of C Required	N/A	N/A	Para 4.1.14.1	C of C Required	Para 4.1.9.1	C of C Required
<i>Slide Fastener (Inside Front)</i>	Para. 4.1.9.2 4.1.9.3	C of C Required	N/A	N/A	Para 4.1.14.2 4.1.14.3	C of C Required	Para 4.1.9.2 4.1.9.3	C of C Required

Components	Spec 1045-298		Spec 1045-301		Spec 1045-307		Spec 1045-310	
<i>Slide Fastener (Pockets)</i>	Para 4.1.9.4	C of C Required	N/A	N/A	Para 4.1.14.4	C of C Required	Para 4.1.9.5	C of C Required
<i>Slide Fastener (Sleeve pockets)</i>	Para 4.1.9.5	C of C Required	N/A	N/A	Para 4.1.14.5	C of C Required	Para 4.1.9.4	C of C Required
<i>Slide Fastener (Side Seam)</i>	Para 4.1.9.6	C of C Required	N/A	N/A	Para 4.1.14.6	C of C Required	Para 4.1.9.6	C of C Required
<i>Slide Fastener (Side Seam)</i>	N/A	N/A	Para 4.1.10.2	C of C Required	N/A	N/A	N/A	N/A
<i>Slide Fastener (Inside Pocket)</i>	Para 4.1.9.7	C of C Required	N/A	N/A	Para 4.1.14.7	C of C Required	Para 4.1.9.7	C of C Required
<i>Slide Fastener (Hood Snorkel)</i>	N/A	N/A	N/A	N/A	Para 4.1.14.8	C of C Required	N/A	N/A
<i>Slide Fastener (Front Fly)</i>	N/A	N/A	Para 4.1.10.1	C of C Required	N/A	N/A	N/A	N/A
<i>Hook and Loop tape</i>	Para 4.1.10	C of C Required	Para 4.1.9	C of C Required	Para 4.1.16	C of C Required	Para 4.1.10	C of C Required
<i>Elastic drawcord</i>	Para 4.1.11	C of C Required	N/A	N/A	Para 4.1.11	C of C Required	Para 4.1.11	C of C Required
<i>Cord locks</i>	Para 4.1.12.1	C of C Required	N/A	N/A	Para 4.1.12.1	C of C Required	Para 4.1.12.1	C of C Required
<i>Dome Fasteners</i>	Para 4.1.14	C of C Required	Para 4.1.7	C of C Required	Para 4.1.20	C of C Required	Para 4.1.14	C of C Required
<i>Webbing</i>	Para 4.1.17	C of C Required			Para 4.1.18	C of C Required	Para 4.1.17	C of C Required
<i>Retroreflective stripes and lettering</i>	N/A	N/A	Para 4.1.11	C of C when 3M Scotchlite tm 8725N is used	N/A	N/A	Para 4.1.7	C of C when 3M Scotchlite tm 8725N is used
<i>Insulation</i>	N/A	N/A	N/A	N/A	Para 4.1.7 Table IV	C of C Required	N/A	N/A
<i>Fleece Lining</i>	N/A	N/A	N/A	N/A	Para 4.1.4 Table V	C of C Required	N/A	N/A

6.19 Viewing Patterns and Samples - Return to Sender

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

The viewing patterns and samples are not to be mutilated or cut, and must be returned in the same condition as sent to the Contractor. Lost or damaged viewing patterns and samples must be reimbursed to the RCMP for the cost of an acceptable replacement.

6.20 Viewing Samples – Guidance Only

The viewing sample is to be used for guidance for all factors not covered by the RCMP specification. The RCMP specification shall govern.

6.21 Specifications and Standards

6.21.1 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
CGSB Website: <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-eng.html>

6.22 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

A.1 TECHNICAL REQUIREMENT

The Contractor is required to provide Canada for the Royal Canadian Mounted Police (RCMP) with outerwear apparel, in accordance with the specifications identified in Annex B, C, D and E, all dated 2015-07-09 and the available patterns and viewing samples.

A.2 ADDRESSES

Destination Address	Invoicing Address
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

A.3 DELIVERABLES

A.3.1 Firm Quantity

Item	Item Description	Unit of Issue	Destination	Firm Quantity	Firm Unit Price, DDP, Transportation costs included, Applicable taxes extra
01	3900 – Hood, Cold Weather, Parka, Inclement	Each	Ottawa	1300	\$ _____
02	3985 – Jacket, High Visibility	Each	Ottawa	165	\$ _____
03	4010 – Jacket, Patrol Unisex	Each	Ottawa	3615	\$ _____
04	5030 – Parka, Inclement	Each	Ottawa	630	\$ _____
05	5260 –Trousers, Inclement	Each	Ottawa	220	\$ _____
06	5270 – Stripe, Trousers Inclement, Blue	Each	Ottawa	385	\$ _____

A.3.1.1 Size Roll

Item Description	RCMP Stock #	Size	Firm Qty
3900 – Hood, Cold Weather, Parka, Inclement	3900-100	XXS/XS	50
	3900-200	S/M	500
	3900-300	L/XL	650
	3900-400	XXL/XXXL	100
3985 – Jacket, High Visibility	3985-010	S-SHORT	90
	3985-020	M-SHORT	60
	3985-660	XXXL-TALL	15

Item Description	RCMP Stock #	Size	Firm Qty
4010 – Jacket, Patrol Unisex	4010-100	XS-SHORT	60
	4010-121	S-SHORT	60
	4010-300	XS-REGULAR	60
	4010-316	S-REGULAR	180
	4010-337	M-REGULAR	705
	4010-358	L-REGULAR	915
	4010-379	XL-REGULAR	405
	4010-391	XXL-REGULAR	105
	4010-402	XXXL-REGULAR	45
	4010-543	M-TALL	180
	4010-564	L-TALL	390
	4010-585	XL-TALL	345
	4010-606	XXL-TALL	105
	4010-617	XXXL-TALL	60
5030 – Parka, Inclement	5030-101	XS-SHORT	60
	5030-117	S-SHORT	30
	5030-181	XXL-SHORT	30
	5030-303	XS-REGULAR	60
	5030-319	S-REGULAR	150
	5030-335	M-REGULAR	210
	5030-351	L-REGULAR	90
5260 –Trousers, Inclement	5260-001	XS-SHORT	60
	5260-015	S-SHORT	60
	5260-100	S-REGULAR	100
5270 – Stripe, Trousers Inclement, Blue	5270-110	XS-M/S	105
	5270-425	L-XXL/R	175
	5270-635	L-XXL/T	105

A.3.2 “As and When Requested (Flexible) ” Quantities (Regular and Special Sizes)

Item	Description	Unit of Issue	Estimated Quantity	Firm Unit Price, DDP, Transportation costs included, Applicable taxes extra
07	4010 – Jacket, Patrol Unisex (Regular)	Each	500	Year 1 \$ _____ Year 2 \$ _____ Year 3 \$ _____ Year 4 \$ _____

Item	Description	Unit of Issue	Estimated Quantity	Firm Unit Price, DDP, Transportation costs included, Applicable taxes extra
08	5030 – Parka, Inclement (Regular)	Each	300	Year 1 \$ _____ Year 2 \$ _____ Year 3 \$ _____ Year 4 \$ _____
09	3901 – Hood, Cold Weather, Parka, Inclement (Special)	Each	10	\$ _____
10	3986 – Jacket, High Visibility (Special)	Each	15	\$ _____
11	4011 – Jacket, Patrol Unisex (Special)	Each	100	\$ _____
12	5031 – Parka, Inclement (Special)	Each	50	\$ _____
13	5261 –Trousers, Inclement (Special)	Each	50	\$ _____
14	5266 – Yellow, Stripe Inclement; or 5271 – Blue, Stripe Inclement; or 5276 – Fluorescent, Stripe Inclement (all Special)	Each	15	\$ _____

Year 1 – Firm Unit Price if flexible stock is ordered within 12 months from contract award;
Year 2 – Firm Unit Price if flexible stock is ordered within 13-24 months from contract award;
Year 3 – Firm Unit Price if flexible stock is ordered within 25-36 months from contract award;
Year 4 – Firm Unit Price if flexible stock is ordered within 37-48 months from contract award.

A.3.3 OPTION QUANTITIES

A.3.3.1 OPTION 1

Item	Description	Unit of Issue	Estimated Quantity	Firm Unit Price, DDP, Transportation costs included, Applicable taxes extra
15	3900 – Hood, Cold Weather, Parka, Inclement	Each	500	\$ _____
16	3985 – Jacket, High Visibility	Each	100	\$ _____
17	4010 – Jacket, Patrol Unisex	Each	1500	\$ _____
18	5030 – Parka, Inclement	Each	500	\$ _____
19	5260 –Trousers, Inclement	Each	500	\$ _____
20	5270 – Stripe, Trousers Inclement, Blue	Each	250	\$ _____

A.3.3.2 OPTION 2

Item	Description	Unit of Issue	Estimated Quantity	Firm Unit Price, DDP, Transportation costs included, Applicable taxes extra
21	3900 – Hood, Cold Weather, Parka, Inclement	Each	500	\$
22	4010 – Jacket, Patrol Unisex	Each	1500	\$
23	5030 – Parka, Inclement	Each	500	\$
24	5260 –Trousers, Inclement	Each	500	\$

A.4 “AS AND WHEN REQUESTED” QUANTITIES – (identified as items 7 through 14)

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 7 through 14 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 adapted to the individual's special measurements in a WORD document (see Annex F). The Contractor must specify their preference prior to beginning production of the special order.

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 must 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.

The RCMP is requesting that delivery of the “as & when requested” quantity for regular sizes be made within **52 calendar days** after receipt of order document.

Delivery of regular sizes will be made within _____ calendar days after receipt of order document.

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

Delivery of special sizes will be made within _____ calendar days after receipt of 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.

A.5 OPTION QUANTITIES - (identified as Items 15 through 24)

The Contractor grants to Canada the irrevocable option to acquire the goods described under items 15 through 24 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 50% of the estimated quantity up to a maximum quantity of 100% of the estimated quantity for each item distributed amongst the sizes. 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 36 months from the contract award date by sending a written notice to the Contractor.

Option 2: within 48 months from the contract award date by sending a written notice to the Contractor.

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

A.6 GOVERNMENT AVAILABLE MATERIAL (GAM)

The following government available material is required for the manufacture of these items and must be purchased from the RCMP.

FOB RCMP STORE - OTTAWA:

NOTE: Any unused GAM with RCMP/"Police" markings are to be returned to the RCMP for a refund (if applicable) upon completion of this contract. Any GAM damaged in production is to be reported and returned to the RCMP immediately. Replacement of GAM damaged in production is available at a cost to the Supplier as listed below.

- a. 8653-100 Police Patch, Reflective, Large (for use on contract items 4010, 4011-100, 5030 and 5131-000) at \$83.51/50 pk (1 each)
- b. 8654-100 Police Patch, Reflective, Small (for use on contract items 4010, 4011-100, 5030 and 5131-000) at \$47.09/50 pk (1 each)
- c. 2135-108 Badge, Shoulder, Police (for use on contract items 4010, 4011-100, 3985, 3986-000, 5030 and 5031-000) at \$0.31ea (2 each)

Solicitation No. - N° de l'invitation
M0077-151106/A
Client Ref. No. - N° de réf. du client
M0077-151106

Amd. No. - N° de la modif.
File No. - N° du dossier
pr760. M0077-151106

Buyer ID - Id de l'acheteur
pr760
CCC No./N° CCC - FMS No./N° VME

d. 8750-100 Coyote Strips (for use on contract items 3900 and 3901-000) at \$37.23ea.

The material must be paid in advance of shipment by certified cheque (please add the GST or the HST as applicable). Make cheque payable to Receiver General for Canada.

The cheque must be forwarded to the:

RCMP - Uniform and Equipment Program
Attn: Planning & Accounting Section
440 Coventry Rd, Warehouse Bldg.
Ottawa, Ontario K1A 0R2
Shipping instructions to be included with order.

**APPENDIX 1 TO PART 5 – BID SOLICITATION - FEDERAL
CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY – CERTIFICATION**

I, the Bidder, by submitting the present information to the Contracting Authority, certify that the information provided is true as of the date indicated below. The certifications provided to Canada are subject to verification at all times. I understand that Canada will declare a bid non-responsive, or will declare a contractor in default, if a certification is found to be untrue, whether during the bid evaluation period or during the contract period. Canada will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with any request or requirement imposed by Canada may render the bid non-responsive or constitute a default under the Contract.

For further information on the Federal Contractors Program for Employment Equity visit [Employment and Social Development Canada \(ESDC\)-Labour's](#) website.

Date: _____ (YYYY/MM/DD) (If left blank, the date will be deemed to be the bid solicitation closing date.)

Complete both A and B.

A. Check only one of the following:

- ☐ A1. The Bidder certifies having no work force in Canada.
- ☐ A2. The Bidder certifies being a public sector employer.
- ☐ A3. The Bidder certifies being a [federally regulated employer](#) being subject to the [Employment Equity Act](#).
- ☐ A4. The Bidder certifies having a combined work force in Canada of less than 100 employees (combined work force includes: permanent full-time, permanent part-time and temporary employees [temporary employees only includes those who have worked 12 weeks or more during a calendar year and who are not full-time students]).
- A5. The Bidder has a combined workforce in Canada of 100 or more employees; and

- ☐ A5.1. The Bidder certifies already having a valid and current [Agreement to Implement Employment Equity](#) (AIEE) in place with ESDC-Labour.

OR

- ☐ A5.2. The Bidder certifies having submitted the [Agreement to Implement Employment Equity](#) (LAB1168) to ESDC-Labour. As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity (LAB1168), duly signing it, and transmit it to ESDC-Labour.

B. Check only one of the following:

- ☐ B1. The Bidder is not a Joint Venture.

OR

- ☐ B2. The Bidder is a Joint Venture and each member of the Joint Venture must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification. (Refer to the Joint Venture section of the Standard Instructions)

ANNEX B

SPECIFICATION - G.S. 1045-298, JACKET, PATROL UNISEX

dated 2015-07-09



Royal Canadian Mounted Police
Gendarmerie royale du Canada

Doc. no: G.S. 1045-298

Date: 2015-07-09

Specification

Jacket, Patrol, Unisex

This document has 38 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.



RCMP VIEWING SAMPLE

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

This will be used for the guidance of the 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
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

JACKET, PATROL, UNISEX

1. Definitions

- 1.1 This specification shall govern the manufacture and inspection of Jacket, Patrol, Unisex. The specific item covered under this specification with stock number is as follows:
 - i. 4010 Jacket, Patrol, Unisex / Blouson de patrouille unisexe
 - ii. 4011-100 Jacket, Patrol, Unisex, Special / Blouson de patrouille unisexe, tailles spéciales
- 1.2 This specification, pattern, drawing, 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 RCMP Jacket, 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.
- 2.3 CAN/CGSB 4.131-93, Thread, Polyester, Polyester or Cotton Covered.
- 2.4 FED-STD-191A, Federal Standard, Textile Test Methods.
- 2.5 ASTM, American Society for Testing and Materials, Method D3776/D3776M-09a (2013), D2097-03 (2010), D413-98, D3886-99 (2013), D4966-12, D1424-09 (2013), D5034-09 (2013), D5169-98 (2015), D5170-98 (2015) and F392/F392M-11.

- 2.6 AATCC-8-2013, 61-2013, 118-2013 and 135-2012, American Association of Textile Chemists and Colorists - Technical Manual.
- 2.7 ISO 105-B02:2014, ISO 13937-1:2000, International Standards Organization.
- 2.8 BS 3424-26: 1990, Method 29A, British Standards Institution.
- 2.9 RCMP Specification, G.S.1045-266, Badges Woven Item - Badge, Shoulder, Cloth, Police.
- 2.10 RCMP Purchase Description, PD-PE-93, Police Patch, Reflective, Large & Small.
- 2.11 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 imperfections or blemishes such as 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 Jacket, Patrol, Unisex shall be a loose fitting, waist length jacket designed to be worn in conjunction with a removable fleece jacket. The shell is constructed from a 3-layer material with a WMVP (waterproof moisture vapour permeable) membrane. The 3-layer fabric construction does not require a lining when made up into a garment. The jacket shall be waterproof with all seams permanently seam sealed unless otherwise stated.

4. **Detail Requirements**

4.1 **Components**

- 4.1.1. **Shell Material I** - The shell material I shall be plain weave 100% nylon, Type 6.6. The color shall be dark navy blue, meeting the approved color swatch, with a durable water repellent finish. An appropriate heat-set process shall be applied to the shell material in order to be prepared for the lamination of the waterproof moisture vapour permeable membrane as specified in Para. 4.1.2.

- 4.1.2. **Shell Material I, Laminated** – The shell material shall be laminated in a 3-layer format with a membrane, which after lamination provides a high level of water resistance/waterproofness and breathability. The outer layer shall consist of shell material as specified in Para. 4.1.1, with the membrane as the middle layer, and a black, 100% nylon or polyester warp tricot knit fabric with a maximum weight of 55 g/m², as the inner layer. The layers shall be joined together by a suitable lamination process. The membrane when laminated to the shell material shall meet the test requirements outlined in Table I and Table II forming part of this specification. The laminated shell materials shall not show any visible signs of delamination or loss of film during the garments useful life (approximately 5 years). The fabric shall be capable of having its sewn seams, seam-sealed with an appropriate tape, in a waterproof, durable fashion. Materials not meeting these requirements will be cause for rejection. Delamination is defined as any irreparable separation of the bonded layers of the Laminated Shell Material(s).
- 4.1.3. **Seam Sealing Tape** – The 3-layer composite fabric shall be seamed using a compatible nylon or polyester seam-sealing tape with the 3-layer shell fabric and sealed-seams meeting the requirements outlined in Table I forming part of this specification. The tape on the sealed seams shall not peel off and/or wear during the projected life span of the garment.
- 4.1.4. **Back Yoke Lining Material** - The back yoke lining material shall be 70 denier 100% nylon, weighing between 60-70 g/m², black in colour or to match the shell material.
- 4.1.5. **Mesh Pocketing** - The pocketing shall be a polyester, warp knit mesh, black in colour or to match the shell material, meeting the requirements outlined in Table III. Tek-Knit “XPTAR004” is known to meet the requirement.
- 4.1.6. **Reflective Police Patches** – The RCMP stock item number 8653-100, Police Patch, Reflective, Large and RCMP stock item number 8654-100, Police Patch, Reflective, Small shall be purchased from the RCMP.
- 4.1.7. **Shoulder Badges** - The RCMP stock item number 2135-108, Badge, Shoulder, Police shall be purchased from the RCMP.
- 4.1.8. **Thread** - The thread shall be polyester wrap, polyester core, Tex 50, Class B of matching colour, meeting CAN/CGSB 4.131-93.

4.1.9 Slide Fasteners - Lengths - Measurements in Inches

Height Group	Sizes	Front	Inside Front	Side Seam	Sleeve Pocket	Chest Pocket	Lower Front Pocket	Inside Pocket
X Short	XX Small	17½"	13½"	13"	7"	5"	5½"	7"
	X Small	18½"	14½"	13"	7"	5"	5½"	7"
	Small	19"	15"	13"	7"	5½"	5½"	7"
	Medium	20"	15½"	14"	7"	5½"	5½"	7"
	Large	21"	16½"	14"	7"	6"	5½"	7"
	X Large	21½"	17½"	15"	7"	6"	5½"	7"
	2X Large	22½"	18"	15"	7"	6"	5½"	7"
	3X Large	23"	19"	15"	7"	6"	5½"	7"
	4X Large	24"	20"	16"	7"	6"	5½"	7"
	5X Large	25"	20½"	16"	7"	6"	5½"	7"
Short	XX Small	19½"	15½"	15"	7"	5"	6½"	7"
	X Small	20½"	16"	15"	7"	5"	6½"	7"
	Small	21"	17"	15"	7"	5½"	6½"	7"
	Medium	22"	18"	16"	7"	5½"	6½"	7"
	Large	23"	18½"	16"	7"	6"	6½"	7"
	X Large	23½"	19½"	17"	7"	6"	6½"	7"
	2X Large	24½"	20"	17"	7"	6"	6½"	7"
	3X Large	25"	21"	17"	7"	6"	6½"	7"
	4X Large	26"	22"	18"	7"	6"	6½"	7"
	5X Large	27"	22½"	18"	7"	6"	6½"	7"
Regular	XX Small	21½"	17½"	17"	8"	5"	8"	7"
	X Small	22½"	18"	17"	8"	5"	8"	7"
	Small	23"	19"	17"	8"	5½"	8"	7"
	Medium	24"	20"	18"	8"	5½"	8"	7"
	Large	25"	20½"	18"	8"	6"	8"	7"
	X Large	25½"	21½"	19"	8"	6"	8"	7"
	2X Large	26½"	22"	19"	8"	6"	8"	7"
	3X Large	27"	23"	19"	8"	6"	8"	7"
	4X Large	28"	24"	20"	8"	6"	8"	7"
	5X Large	29"	24½"	20"	8"	6"	8"	7"
Tall	XX Small	23½"	19½"	19"	8"	5"	8"	7"
	X Small	24½"	20"	19"	8"	5"	8"	7"
	Small	25"	21"	19"	8"	5½"	8"	7"
	Medium	26"	22"	20"	8"	5½"	8"	7"
	Large	27"	22½"	20"	8"	6"	8"	7"
	X Large	27½"	23½"	21"	8"	6"	8"	7"
	2X Large	28½"	24"	21"	8"	6"	8"	7"
	3X Large	29"	25"	21"	8"	6"	8"	7"
	4X Large	30"	25½"	22"	8"	6"	8"	7"
	5X Large	31"	26"	22"	8"	6"	8"	7"
X Tall	XX Small	25½"	21½"	21"	8"	5"	8"	7"
	X Small	26½"	22"	21"	8"	5"	8"	7"
	Small	27"	23"	21"	8"	5½"	8"	7"
	Medium	28"	24"	22"	8"	5½"	8"	7"
	Large	29"	24½"	22"	8"	6"	8"	7"
	X Large	29½"	25½"	23"	8"	6"	8"	7"
	2X Large	30½"	26"	23"	8"	6"	8"	7"
	3X Large	31"	27"	23"	8"	6"	8"	7"
	4X Large	32"	27½"	24"	8"	6"	8"	7"
	5X Large	32½"	28½"	24"	8"	6"	8"	7"
XX Tall	XX Small	27½"	23½"	23"	8"	5"	8"	7"
	X Small	28½"	24"	23"	8"	5"	8"	7"
	Small	29"	25"	23"	8"	5½"	8"	7"
	Medium	30"	25½"	24"	8"	5½"	8"	7"
	Large	31"	26½"	24"	8"	6"	8"	7"
	X Large	31½"	27"	25"	8"	6"	8"	7"
	2X Large	32"	28"	25"	8"	6"	8"	7"
	3X Large	33"	29"	25"	8"	6"	8"	7"
	4X Large	34"	29½"	26"	8"	6"	8"	7"
	5X Large	34½"	30½"	26"	8"	6"	8"	7"

- 4.1.9.1 **Slide Fastener - Front** - Shall be an open-end separator, black in colour, injection molded, DA automatic slider, Vislon® YKK 26500 VSO 56 9/16 (only).
- 4.1.9.2 **Slide Fastener - Right Inside Front** - (To be used for the attachment of a removable fleece jacket) - Shall consist of ½ (half) of an open-end slide fastener with the retaining box and slider; it shall be injection molded, with a DA automatic slider, black in colour, Vislon® YKK 26590 VSO 56 9/16 (only).
- 4.1.9.3 **Slide Fastener - Left Inside Front** - (To be used for the attachment of a removable fleece jacket) Shall consist of ½ (half) of an open-end slide fastener with the insert pin and shall be injection molded, black in colour, Vislon® YKK 26590 VSO 56 9/16 (Left Hand Pin Insertion) (only).
- 4.1.9.4 **Slide Fastener - Upper & Lower Front Pockets** - Shall be a closed end coil type slide fastener with a DF non-lock slider, black in colour, with long pull tabs, YKK 12430 CIFIC 51 DFL1 E 5/8 (only).
- 4.1.9.5 **Slide Fastener - Upper Sleeve Pocket** - Shall be a closed end coil type slide fastener with a DF non-lock slider, black in colour, YKK 12824 CIFIC 51 DFW1 E 5/8 (only).
- 4.1.9.6 **Slide Fastener - Side Seam** - Shall be water repellent, black in colour, with the tape treated with a strong water repellent finish and a coated back of polyurethane. It shall be closed-ended with double sliders arranged in a head-to-head relation, Aqua Guard YKK 37330 CIT4MC 56/6/6 DA8LH E/DA8LH E/DA8LH E 5/8*TS-BTM*B-B*H-H* (only).
- 4.1.9.7 **Slide Fastener - Inside Pockets** - The inside pocket slide fasteners shall be black in colour, woven-in style, DA automatic slider, YKK 20054 CFC 456 DA E 9/16 *E-BTM-2* (only).
- 4.1.10 **Hook and Loop Tape** - The hook and loop tape shall be woven nylon, black in colour, with a high life cycle. The combined hook and loop shall have no less than 8 P.S.I length-wise shear strength with initial peel strength of not less than 1 P.I.W. when tested to ASTM D5169-98 (2015), standard test method for shear strength [dynamic method] of hook and loop touch fasteners and ASTM D5170-98 (2015), standard test method for peel strength ["T" method] of hook and loop touch fasteners."

- 4.1.11 **Elastic Drawcord** - The drawcord shall be round braided polyester elastic, black in colour, 2.4 mm, with maximum elongation of 135% and full recovery. Cansew style #EBR C-38 is known to meet the requirement.
- 4.1.12 **Cord Locks**
- 4.1.12.1 **Cord Locks** - The cord locks shall be low profile cord lock cylinder, spring loaded in acetyl composition, black in colour. It shall come in two sizes. The cord lock for the hem channel shall be shaped with a maximum diameter of 13 mm and a maximum depth of 11.2 mm. Texfast style #S217B is known to meet the requirement. The cord lock for the hood shall be shaped with a maximum diameter of 15.5 mm and a maximum depth of 12.5 mm. Texfast style #S217A is known to meet the requirement.
- 4.1.12.2 **Toggle Lock** - The lock shall be oval shaped with a maximum length of 30 mm and a maximum width of 9 mm, with two 4 mm holes, acetyl composition, and black in colour. It may be of sew on or clamp-on version.
- 4.1.13 **Eyelets** - The eyelets shall be black in colour with a 5-6 mm diameter hole, brass or aluminum.
- 4.1.14 **Dome Fastener** - The dome fastener shall be a standard type 24 ligne fastener. All metal parts to be brass with a 15 mm matte black, powder coated cap. Universal SW61 (only).
- 4.1.15 **Elastic** - The elastic shall be heavy duty nylon or polyester, black in colour, with maximum elongation of 130% and full recovery. It shall come in two widths, 2.5 cm and 4 cm. The elastic measuring 2.5 cm shall be used in a double layer for the side seam closure strap. The elastic measuring 4 cm shall be used for the sleeve cuff.
- 4.1.16 **Grosgrain Ribbon** - Shall be nylon grosgrain ribbon, black in colour and come in two widths, 6 mm and 1 cm.
- 4.1.17 **Webbing, Microphone Strap** - The webbing shall be a durable nylon webbing, luggage quality, black in colour measuring 2.54 cm (1") wide and 0.04" ± 0.01" thick. It shall have a minimum tensile strength of 1000 lbs. as per Federal Standard 191-5206 test method #4108. Tape Craft #N0015-1"-YD001-352 is known to meet the requirements.

- 4.2 **Size and Dimensions** - Jacket, Patrol, Unisex, to this specification shall be supplied in the sizes specified by the RCMP and to the dimensions given in the scale of measurements and drawings forming part of this specification. The garment components shall be shaped, dimensioned and positioned in accordance with the pattern components and pattern requirements as outlined in Appendix “A” forming part of this specification.
- 4.3 **Construction**
- 4.3.1 **Stitching and Seam Sealing** - All stitching shall be lockstitch. There shall be not less than three or more than four stitches per centimetre. The beginning and ending of all stitching shall be securely backstitch tacked, unless secured by other stitching. All seams and points where stitching penetrates the shell materials shall be permanently sealed on the inside with the appropriate seam-sealing tape as per Para. 4.1.3. Care shall be taken to ensure that the tape cross-over points where seams join are doubly covered and bonded securely so as to ensure water-resistance. Any sealed seams showing any form of delamination or any non-bonded or peeling seams shall be a cause for rejection.
- 4.3.2 **Body**
- 4.3.2.1 **Back & Back Yoke** - The body shall be made from shell material, as specified in Para. 4.1.2 and shall have a two piece back with ‘beaver tail’ type extension. There shall be a large ‘hide away’ police patch, constructed from the shell material as specified in Para. 4.1.2 and a reflective police patch as per Para. 4.1.6. It shall be shaped and dimensioned as per the patterns and applied to the back yoke. The back yoke shall be faced with lining as specified in Para. 4.1.4 and stitched from side seam to side seam as shown in drawing # 6 and seam sealed appropriately to ensure waterproofness. The back and back yoke when finished shall be shaped and dimensioned as per the pattern and viewing sample.
- 4.3.2.2 **Back Hem Channel** - The back hem facing shaped and dimensioned as per the pattern shall be sewn face side out, to the bottom of the jacket back to create a hem channel for the elastic drawcord. The hem channel shall have two eyelets as per Para. 4.1.13, 4 cm from the left side seam as identified in drawing # 5. An elastic drawcord as specified in Para. 4.1.11 shall be securely attached into the right side seam and threaded through the hem channel. It shall continue through the smaller cord lock as specified in Para. 4.1.12.1, and through the eyelet outside the hem channel. It shall be threaded through the toggle lock as specified in Para. 4.1.12.2 and back through a 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 and the toggle lock showing as per drawings # 3.

- 4.3.2.3 **Front** - The jacket shall be equipped with a center front slide fastener length as specified in Para 4.1.9 and the bottom ends of the slide fasteners shall be bar tacked as per drawing # 3. The front shall have two front storm flaps with dome fasteners for closure. The front shall have four pockets, two upper and two lower pockets, all with slide fasteners and flaps. The outer front yoke extension shall be manufactured in a way to create a pocket flap with a dome fastener in order to close the zippered chest pockets. Under the outer right front yoke flap, there shall be a small “hide away” reflective police patch and above the pocket flap shall be an 8.5 cm x 2.5 cm piece of loop tape as specified in Para. 4.1.10 for the name tag. Both outer left and right front yoke shall be equipped with webbing as specified in Para. 4.1.17, measuring 2.5 cm x 5 cm for the microphone loop. All components of the front shall be constructed as per the patterns and drawings.
- 4.3.2.4 **Chest Pockets** - The jacket shall have two upper front pockets with slide fasteners as specified in Para. 4.1.9.4 and lengths outlined in Para. 4.1.9. Each chest pocket shall have flaps created from the front yoke extension pattern piece which shall be dimensioned in accordance with the patterns and drawing # 2. The slider shall be in a position closest to the center front when closed. Ribbon pulls as specified in Para. 4.3.12 shall be applied to the sliders. Applied to the top right front flap, shall be a small ‘hide away’ reflective patch constructed from shell material and a reflective police patch as per Para. 4.1.6 and drawing # 6. The reflective police patch shall be sewn on top of the pull-down with the side edges folded under. The centre front of the front yoke piece when sewn to create a pocket flap shall be secured with a dome fastener as specified in Para. 4.1.14. There shall be two inside pockets constructed out of mesh material as specified in Para. 4.1.5 secured with a slide fastener as specified in Para. 4.1.9.7 and lengths as specified in Para. 4.1.9. There shall be two labels sewn through the mesh inner pocket bag with the Identification label and Marking and Cleaning Instruction as shown in the drawing # 3.
- 4.3.2.5 **Lower Pockets** - The jacket shall have two lower front pockets with slash openings and flaps. Both lower pockets shall have slide fasteners as specified in Para. 4.1.9.4, lengths as specified in Para. 4.1.9. Ribbon pulls as specified in Para. 4.3.12 shall be applied to the sliders. The slider shall be in an upright position when the pocket is closed. The pocket bags shall be constructed from mesh

material as specified in Para. 4.1.5 dimensioned and positioned as per the patterns and drawings.

- 4.3.2.6 **Under Fly Front & Front Storm Flaps** - The under fly front shall be fitted with two injection molded slide fasteners, length as specified in Para. 4.1.9. One is for the front closure and one is for the attachment of the removable fleece. The jacket front slide fastener, as specified in Para. 4.1.9.1, shall be inserted in a way to have the slider and retaining box on the left front with a ribbon pull as specified in Para. 4.3.12 and the insert pin attached on the right front. The left front storm flap shall have five dome fasteners (female portion) as specified in Para. 4.1.14, which align with the male portions attached to the right front storm flap as per drawing # 3. There shall be $\frac{1}{2}$ (half) of a slide fastener attached to the right facing and $\frac{1}{2}$ (half) of a slide fastener attached to the left facing to be used for the attachment of a removable fleece jacket. The $\frac{1}{2}$ (half) attached to the front right inside facing, as specified in Para. 4.1.9.2, shall consist of the retaining box and slider which shall begin 2 cm below the collar seam for all sizes. The $\frac{1}{2}$ (half) attached to the left inside front as specified in Para. 4.1.9.3 shall consist of the insert pin and begin 2 cm below the collar seam for all sizes, as shown in drawing # 3. The bottom ends of all the slide fasteners shall be bar tacked as per drawing # 3. An external pen pocket measuring 2 cm after folding in half shall be constructed from a single layer of shell material. It shall be sewn to the left chest only directly under the top storm flap between the front slide fastener and storm flap. The pen pocket shall be dimensioned and positioned as per the patterns and drawing # 3.
- 4.3.3 **Side Seams** - Both side seams from sleeve underarm to hem shall be equipped with a water-resistant slide fastener as specified in Para. 4.1.9.6, and lengths as specified in Para. 4.1.9 and the bottom ends of the slide fasteners shall be bar tacked as per drawings # 3 & # 5. The slide fastener, when applied, shall be covered by the shell material. There shall be 3 sliders, the two closest to the underarm should be in a head to head position and the third shall be opening from the bottom upwards as shown in drawing # 5. All sliders shall be equipped with ribbon pulls as specified in Para. 4.3.12. The seam tape, when applied, shall extend into the front and back hem facing so that no tape ends are visible as shown in drawing # 3. The side seam hem shall have an elastic closure strap as specified in Para. 4.3.13, measuring 2.5 cm wide constructed as per drawing # 5.
- 4.3.4 **Collar** - The collar, made of material as specified in Para. 4.1.2, is to be designed as per the patterns. There shall be three dome fasteners (male portion) as specified in Para. 4.1.14 for the attachment of the detachable hood.

- 4.3.5 **Detachable Hood** - The hood shall be constructed from shell material as specified in Para. 4.1.2, with all sewn seams, seam-sealed. It shall be constructed in a way to have double adjustment for height and width, with an elastic drawcord as specified in Para. 4.1.11 and large size cord locks as specified in Para. 4.1.12.2. The hood shall be secured to the collar with 3 (three) dome fasteners as specified in Para. 4.1.14 with the female portion applied to the hood and the corresponding male portion to the collar. Eyelets as per Para. 4.1.13 shall be applied to each side of the hood side fronts for the insertion of the elastic drawcord. The elastic drawcord shall be threaded through the inside channel continuing through the eyelet with cord locks applied as per drawing # 4. A label identifying the corresponding hood size shall be sewn to the bottom back facing mid back position or centered on the facing as shown in drawing # 4.
- 4.3.6 **Sleeve & Sleeve Cuffs** - The jacket shall have a three piece sleeve with an upper sleeve pocket constructed from shell material as specified in Para. 4.1.2. All sleeve seams with exception of the underarm seam shall be top stitched using a 2 mm gauge. The sleeves shall have a 9 cm adjustment strap with a 4.5 cm x 2.5 cm piece of hook tape as specified in Para. 4.1.10 for adjustability. The cuff shall be 4 cm wide with a 12 cm x 2.5 cm piece loop tape to secure the adjustment strap. The cuff shall be partially elasticized using 4 cm wide elastic as specified in Para. 4.1.15. The elasticized area of the cuff shall have two rows of top stitching to anchor the elastic. The sleeves and cuffs shall be shaped and dimensioned as per the patterns and viewing sample.
- 4.3.7 **Shoulder Straps** – The shoulder straps shaped and dimensioned in accordance with the patterns and drawing # 4, shall be made from two layers of shell material as specified in Para. 4.1.2. They shall be sewn into the sleeve-head and positioned as per the pattern and viewing sample. The shoulder strap shall be secured to the jacket shoulder with the dome fastener specified in Para. 4.1.14.
- 4.3.8 **Upper Sleeve Pocket** - Both sleeves shall have an upper sleeve pocket constructed from shell material with a slide fastener as specified in Para. 4.1.9.5. When in a closed position, the slider shall be facing toward the shoulder as shown in drawing # 2. Ribbon pulls as specified in Para. 4.3.12 shall be applied to the sliders. There shall be two rows of topstitching around the slide fastener, using 2 mm gauge and 6 mm gauge. The sleeve pocket shall be sewn to the sleeve, top-stitched using a 2 mm gauge and seam sealed appropriately to ensure waterproofness. The upper sleeve pocket shall be constructed in accordance with the patterns and drawings of this specification.

- 4.3.9 **'Hide Away' Reflective Police Patches** - The front and back 'hide away' patches shall be constructed of a single layer of shell material folded in half with raw ends turned inside and sewn. The finished length of the front 'hide away' shall be 13 cm x 6.5 cm wide and the back "hide away" shall be 30.5 cm x 10 cm with a reflective police patch as specified in Para. 4.1.6. Both ends of the police patch shall be folded under and applied to the top of the hide away pull-down. Both 'hide away' patches shall have loop tape as specified in Para. 4.1.10 attached to the back side for the patch to be concealed in a "hide away" position. All "hide away" patches shall be constructed as per drawing # 6.
- 4.3.10 **Shoulder Badges** - The RCMP shoulder badges specified in Para. 4.1.7 shall be sewn through the upper sleeve pocket only (not through the sleeve). The badge is to be centered on the sleeve-head 2.5 cm below the sleeve-head seam and attached with one row of stitching, as per the viewing sample.
- 4.3.11 **Coat Hanger** - A 6 cm long coat hanger, constructed from 6 mm wide grosgrain ribbon as specified in Para. 4.1.16 shall be centered at the neck in accordance with the viewing sample.
- 4.3.12 **Slide Fastener Ribbon Pulls** - All ribbon pulls shall be constructed with grosgrain ribbon 1 cm wide, as specified in Para. 4.1.16. The ribbon shall be applied to the hole of the slide fastener pull in a way that allows the ribbon pulls to be removed easily without damage and reapplied. The ribbon pull should be 5 cm \pm 0.5 cm in length when finished and attached to the slide fastener.
- 4.3.13 **Side Seam Closure Strap** - There shall be a side seam closure strap measuring 9 cm \pm .5 cm when finished, at the side seam hem. It shall be constructed from 2.5 cm wide elastic as specified in Para. 4.1.15, doubled and shall be sewn to the lower back side seam flipping toward the front, equipped with a female dome fastener for closure. The corresponding male dome fastener shall be applied to the jacket front at the hem.
- 4.3.14 **Identification Label** - Each jacket shall have a durable blank label 7.5 cm x 2 cm applied separately below the marking and cleaning label used for the inscription of the wearers' name.
- 4.3.15 **Marking & Cleaning Instructions Label** - Each jacket shall have a durable label positioned and sewn to the bottom of the inside pocket bag as shown in drawing # 3. The label information shall be as outlined below in a text no less than a size 8 font. The text shall be of permanent inks of a contrasting colour and shall withstand at least 50 washes showing no apparent change in appearance. The

label shall be completed in accordance with 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. 4010 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. Your manufacturer identification (Company name or number).
7. Print information as shown below.
8. Print information as shown below.
9. Print information as shown below.
10. Print information as shown below.
11. Print information as shown below.
12. Print information as shown below.

1		
2		
3		
4		
5		
6		
7	Machine wash - warm (40°C)	Laver à la machine – à l'eau tiède (40°C)
8	Do Not use fabric softener or chlorine bleach	Ne pas utiliser d'agent adoucissant ni d'agent de blanchiment
9	Tumble dry- medium (Do Not use dryer sheets)	Séchage par culbutage – à température moyenne (Ne pas utiliser d'assouplissant en feuilles)
10	Steam iron - low	Repassage à vapeur - à température basse
11	Dry clean - If professionally dry cleaned request clear distilled solvent rinse; request spray repellent.	Nettoyer à sec – demander un rinçage avec un solvant distillé clair et un traitement à l'aide d'un produit hydrofuge en aérosol.
12	Further care instructions: See Ordering Guide.	Instructions d'entretien supplémentaires: Voir le guide de commande.

Note: The manufacturer's identification shall not appear anywhere on the garment except on the garment label as indicated.

- 4.3.16 **Instruction Sheet** - Each completed jacket shall have an instruction sheet folded and inserted into the inside chest pocket bag, with the information included in Appendix 'B' English and French, forming a part of this specification.

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 specified in this specification or by demonstrating to the satisfaction of the RCMP, Uniform and Equipment Program that conformity to this specification of manufacturing processes is assured. The contractor must use any independent, North American, ISO 9001 certified and ISO 17025 "Textile" certified testing facilities. Note: CTT Group Inc., Quebec, is known to meet this requirement.
- 5.2 The RCMP, Uniform and Equipment Program reserve the right to perform any inspection considered necessary to ensure the material and services conform to the specified requirements. For the purpose of inspection, a portion of each delivery not exceeding two percent or two out of any number delivered under 100 may be put to tests that could destroy the articles. If found to be inferior or not in accordance with this specification, all articles so destroyed shall be replaced by others of proper quality and pattern at the expense of the contractor. The entire delivery may also be rejected if it is found that 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 No. 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 jacket bottom. The result shall be doubled to measure total circumference. (B).
- 6.3 **Front Length** - The length shall be the distance measured from the top 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 at the side to the hem. (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)** - 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 **Elbow Circumference** - The elbow shall be measured across the width of the sleeve in line with the seam of the sleeve patch. The result shall be doubled to measure total circumference. (J).
- 6.10 **Back Length** - The length shall be the distance measured from the bottom of the collar at the back to the hem. (K).
- 6.11 **Back Width** - When placed flat, the distance measured across the back from armhole to armhole at the yoke seam. (L).
- 6.12 **Collar Length** - The collar length shall be measured along the seam from slide fastener to slide fastener. (M).

SCALE OF MEASUREMENTS – Jacket Patrol Unisex

GARMENT MEASUREMENTS																
SIZE DESIGNATION		BODY MEASUREMENTS		Chest Circumference	Bottom Circumference	Front Length (top of collar to hem)	Side Seam Length (underarm to hem)	Full Shoulder Width (Shoulder seam from neckline to armhole)	Sleeve Length		Cuff Circumference	Elbow Circumference	Back Length (Bottom of collar at back to hem)	Back Width	Collar Length (zipper to zipper)	
Height Group	Size	Inches	Inches						Overarm (Shoulder seam to cuff)	Overarm (Shoulder seam to cuff)						
X Short	XXS	31" - 33"	79 - 84	109	96.5	48	20	14	51	50	24	44.5	56	39.5	47	
	XS	34" - 36"	86 - 91	116.5	104	50	21	15	53	51	25	47	58	42.5	49	
	S	37" - 39"	94 - 99	124	111.5	52	22	16	55	52	26	49.5	60	45.5	51	
	M	40" - 42"	102 - 107	131.5	119	54	23	17	57	53	27	52	62	48.5	53	
	L	43" - 45"	109 - 114	139	126.5	56	24	18	59	54	28	54.5	64	51.5	55	
	XL	46" - 48"	117 - 122	146.5	134	58	25	19	61	55	29	57	66	54.5	57	
	2XL	49" - 51"	124 - 129	154	141.5	60	26	20	63	56	30	59.5	68	57.5	59	
	3XL	52" - 54"	132 - 137	161.5	149	62	27	21	65	57	31	62	70	60.5	61	
	4XL	55" - 57"	140 - 145	169	156.5	64	28	22	67	58	32	64.5	72	63.5	63	
	5XL	58" - 60"	147 - 152	176.5	164	66	29	23	69	59	33	67	74	66.5	65	
	Short	XXS	31" - 33"	79 - 84	109	96.5	53	25	14	55	54	24	44.5	61	39.5	47
		XS	34" - 36"	86 - 91	116.5	104	55	26	15	57	55	25	47	63	42.5	49
S		37" - 39"	94 - 99	124	111.5	57	27	16	59	56	26	49.5	65	45.5	51	
M		40" - 42"	102 - 107	131.5	119	59	28	17	61	57	27	52	67	48.5	53	
L		43" - 45"	109 - 114	139	126.5	61	29	18	63	58	28	54.5	69	51.5	55	
XL		46" - 48"	117 - 122	146.5	134	63	30	19	65	59	29	57	71	54.5	57	
2XL		49" - 51"	124 - 129	154	141.5	65	31	20	67	60	30	59.5	73	57.5	59	
3XL		52" - 54"	132 - 137	161.5	149	67	32	21	69	61	31	62	75	60.5	61	
4XL		55" - 57"	140 - 145	169	156.5	69	33	22	71	62	32	64.5	77	63.5	63	
5XL		58" - 60"	147 - 152	176.5	164	71	34	23	73	63	33	67	79	66.5	65	
MEASUREMENT LOCATION				A	B	C	D	E	F	G	H	J	K	L	M	
TOLERANCES±				3 cm	3 cm	2 cm	1.5 cm	1 cm	1.5 cm	1 cm	2 cm	2 cm	1 cm	1 cm	1 cm	

GARMENT MEASUREMENTS																
SIZE DESIGNATION		BODY MEASUREMENTS		Chest Circumference	Bottom Circumference	Front Length (top of collar to hem)	Side Seam Length (underarm to hem)	Full Shoulder Width (Shoulder seam from neckline to armhole)	Sleeve Length		Cuff Circumference	Elbow Circumference	Back Length (Bottom of collar at back to hem)	Back Width	Collar Length (zipper to zipper)	
Height Group	Size	Inches	Inches						Overarm (Shoulder seam to cuff)	Underarm (Underarm seam to cuff)						
Regular	XXS	31" - 33"	79 - 84	109	96.5	58	30	14	59	58	24	44.5	66	39.5	47	
	XS	34" - 36"	86 - 91	116.5	104	60	31	15	61	59	25	47	68	42.5	49	
	S	37" - 39"	94 - 99	124	111.5	62	32	16	63	60	26	49.5	70	45.5	51	
	M	40" - 42"	102 - 107	131.5	119	64	33	17	65	61	27	52	72	48.5	53	
	L	43" - 45"	109 - 114	139	126.5	66	34	18	67	62	28	54.5	74	51.5	55	
	XL	46" - 48"	117 - 122	146.5	134	68	35	19	69	63	29	57	76	54.5	57	
	2XL	49" - 51"	124 - 129	154	141.5	70	36	20	71	64	30	59.5	78	57.5	59	
	3XL	52" - 54"	132 - 137	161.5	149	72	37	21	73	65	31	62	80	60.5	61	
	4XL	55" - 57"	140 - 145	169	156.5	74	38	22	75	66	32	64.5	82	63.5	63	
	5XL	58" - 60"	147 - 152	176.5	164	76	39	23	77	67	33	67	84	66.5	65	
Tall	XXS	31" - 33"	79 - 84	109	96.5	63	35	14	63	62	24	44.5	71	39.5	47	
	XS	34" - 36"	86 - 91	116.5	104	65	36	15	65	63	25	47	73	42.5	49	
	S	37" - 39"	94 - 99	124	111.5	67	37	16	67	64	26	49.5	75	45.5	51	
	M	40" - 42"	102 - 107	131.5	119	69	38	17	69	65	27	52	77	48.5	53	
	L	43" - 45"	109 - 114	139	126.5	71	39	18	71	66	28	54.5	79	51.5	55	
	XL	46" - 48"	117 - 122	146.5	134	73	40	19	73	67	29	57	81	54.5	57	
	2XL	49" - 51"	124 - 129	154	141.5	75	41	20	75	68	30	59.5	83	57.5	59	
	3XL	52" - 54"	132 - 137	161.5	149	77	42	21	77	69	31	62	85	60.5	61	
	4XL	55" - 57"	140 - 145	169	156.5	79	43	22	79	70	32	64.5	87	63.5	63	
	5XL	58" - 60"	147 - 152	176.5	164	81	44	23	81	71	33	67	89	66.5	65	
MEASUREMENT LOCATION				A	B	C	D	E	F	G	H	J	K	L	M	
TOLERANCES±				3 cm	3 cm	2 cm	1.5 cm	1 cm	1.5 cm	1.5 cm	1 cm	2 cm	2 cm	1 cm	1 cm	

GARMENT MEASUREMENTS																
SIZE DESIGNATION		BODY MEASUREMENTS			Chest Circumference	Bottom Circumference	Front Length (top of collar to hem)	Side Seam Length (underarm to hem)	Full Shoulder Width (Shoulder seam from neckline to armhole)	Sleeve Length		Cuff Circumference	Elbow Circumference	Back Length (Bottom of collar at back to hem)	Back Width	Collar Length (zipper to zipper)
Height Group	Size	Inches	Inches	Overarm (Shoulder seam to cuff)						Underarm (Underarm seam to cuff)						
X Tall	XXS	31" - 33"	79 - 84	96.5	68	40	14	67	66	24	44.5	76	39.5	47		
	XS	34" - 36"	86 - 91	104	70	41	15	69	67	25	47	78	42.5	49		
	S	37" - 39"	94 - 99	111.5	72	42	16	71	68	26	49.5	80	45.5	51		
	M	40" - 42"	102 - 107	119	74	43	17	73	69	27	52	82	48.5	53		
	L	43" - 45"	109 - 114	126.5	76	44	18	75	70	28	54.5	84	51.5	55		
	XL	46" - 48"	117 - 122	134	78	45	19	77	71	29	57	86	54.5	57		
	2XL	49" - 51"	124 - 129	141.5	80	46	20	79	72	30	59.5	88	57.5	59		
	3XL	52" - 54"	132 - 137	149	82	47	21	81	73	31	62	90	60.5	61		
	4XL	55" - 57"	140 - 145	169	84	48	22	83	74	32	64.5	92	63.5	63		
	5XL	58" - 60"	147 - 152	176.5	86	49	23	85	75	33	67	94	66.5	65		
XX Tall	XXS	31" - 33"	79 - 84	96.5	73	45	14	71	70	24	44.5	81	39.5	47		
	XS	34" - 36"	86 - 91	104	75	46	15	73	71	25	47	83	42.5	49		
	S	37" - 39"	94 - 99	111.5	77	47	16	75	72	26	49.5	85	45.5	51		
	M	40" - 42"	102 - 107	119	79	48	17	77	73	27	52	87	48.5	53		
	L	43" - 45"	109 - 114	126.5	81	49	18	79	74	28	54.5	89	51.5	55		
	XL	46" - 48"	117 - 122	134	83	50	19	81	75	29	57	91	54.5	57		
	2XL	49" - 51"	124 - 129	141.5	85	51	20	83	76	30	59.5	93	57.5	59		
	3XL	52" - 54"	132 - 137	149	87	52	21	85	77	31	62	95	60.5	61		
	4XL	55" - 57"	140 - 145	169	89	53	22	87	78	32	64.5	97	63.5	63		
	5XL	58" - 60"	147 - 152	176.5	91	54	23	89	79	33	67	99	66.5	65		
MEASUREMENT LOCATION					A	B	C	D	E	F	G	H	J	K	L	M
TOLERANCES±					3 cm	3 cm	2 cm	1.5 cm	1 cm	1.5 cm	1.5 cm	1 cm	2 cm	2 cm	1 cm	1 cm

NOTE: All dimensions are in centimeters unless otherwise indicated.

TABLE I**Properties of Laminated Shell Material (with WMVP membrane & tricot backing)**

	Test	Test Method	Duration	Min. Value Shell Material I
1	Resistance of Materials to Water Vapour Diffusion	CAN CGSB 4.2 Method 49-M99, Option 1 *See test procedure #1	- Initial - After 5 launderings - After ageing (70°C & 95% RH for 168 hrs)	13 mm max.
2	Hydrostatic Resistance	CAN CGSB 4.2 Method 26.5 *See test procedure #2	- Initial - After 5 launderings	1240.2 kPa
3	Low Pressure Water Permeability	CAN CGSB 4.2 Method 26.3 * See test procedure #3	- Initial	No Leakage
		ASTM D2097-03 (2010) * See test procedure #4	- After Cold Flex Warp /Fill	No Leakage
		AATCC 135-2012/Test procedure 6 * See test procedure #5	- After 100 hours of Continuous Wet Flex (Agitation)	No Leakage
4	High Pressure Water Permeability	BS 3424: Part 26: 1990 Method 29A * See test procedure #6	- Initial	No Leakage
		BS 3424: Part 26: 1990 Method 29A * See test procedure #7	- After Unleaded Gasoline	No Leakage
		BS 3424: Part 26: 1990 Method 29A * See test procedure #7	- After DEET Insect Repellent	No Leakage
		BS 3424: Part 26: 1990 Method 29A * See test procedure #8	- After Synthetic Perspiration	No Leakage
5	Abrasion Resistance	ASTM D3886-99 (2013) Procedure: use No. 0 Emery Polishing Paper * See test procedure #9	- 3200 Cycles	No failure
SEAMS				
6	Seam Tape Durability	CAN CGSB 4.2 Method 26.3 * See test procedure #10	- Initial	No Leakage

		CAN CGSB 4.2 Method 26.3 ANSI/AATCC 135 * See test procedure #11	- After 10 laundry cycles	No Leakage
		CAN CGSB 4.2 Method 26.3 * See test procedure #12	- After 10 dry-clean cycles	No Leakage
7	Delamination	Visual	- During and after the above procedures in this table	No Delamination
8	Peel Strength N/23 mm	ASTM D413-98		8 N/23mm minimum

TEST PROCEDURES FOR TABLE I

1. The knit side of the laminated cloth shall face the water. The tests shall be completed as outlined in CAN/CGSB 4.2 Method 49-99, Option #1. The samples shall be conditioned at $21^{\circ}\text{C} \pm 1^{\circ}\text{C}$ ($69.8^{\circ}\text{F} \pm 2^{\circ}\text{F}$) and relative humidity shall be $65 \pm 2\%$. The test specimen shall be placed approximately equidistant between the dry airflow and the water cell. Four specimens shall be tested per condition. The tests shall be completed initial, after 5 launderings according to ISO 6330-2012 Method 2B-E and after ageing according to ASTM F392/F392M-11.
2. The water pressure shall be applied to the knit side of the laminated cloth. A taffeta fabric restraint conforming to MIL-C-21852F-TYPE III-CLASS1 PART#WJAAGNA should be placed on top of the sample against the face side of the laminated cloth.
3. The knit side of the laminated cloth shall contact the water. The hydrostatic head shall be 13.78 kPa (2.0 psi) and shall be held for 3 minutes. Leakage is defined as the appearance of water any place within the 11.43 cm (4.5") diameter test area. The test may be performed using any device which tests the same specimen area at the equivalent pressure. In case of dispute, the apparatus described in FED-STD-191A Method 5516 shall be used.
4. Ten warp and ten fill specimens 8.26 cm x 11.43 cm (3.25" x 4.5") shall be selected from each sample unit. The 8.26 cm (3.25") dimension is the test direction. Specimens shall be flexed for 20,000 cycles as specified in ASTM D2097-03 (2010) and as follows: Mark the knit side of each specimen with two lines 4.32 cm (1.7") apart and perpendicular to the test direction. The area between the lines is the test area and shall be centered on the knit side of the specimen. Wrap the specimens around fully extended pistons with the knit side out. The test area lines shall meet evenly and shall line up with the edges of the pistons. Clamp in place making sure the clamps are not in the test area. Check specimen for smoothness and tautness (wrinkles cause improper flexing). The distance between the pistons shall be 4.32 cm (1.7") in the open position and 1.27 cm (0.5") in the closed position as measured from the bottom of the upper piston and top of the lower piston. Place the test apparatus with mounted specimens in a test chamber at $-31.67^{\circ}\text{C} \pm 1^{\circ}\text{C}$ ($-25^{\circ}\text{F} \pm 2^{\circ}\text{F}$) for a one hour conditioning period and then flex in the test chamber at $-31.67^{\circ}\text{C} \pm 1^{\circ}\text{C}$ ($-25^{\circ}\text{F} \pm 2^{\circ}\text{F}$). After flexing, test for water permeability as in test procedure #3 except that the orifice of the tester

shall be modified to accommodate the smaller specimen size

5. One 35.56 cm (14") by full width specimen shall be selected from each sample unit. The specimens shall be agitated using the 'normal' cycle in an automatic home laundering as specified in AATCC 135-2012 except that the machine shall be capable of continuous agitation. The water level shall be maintained at $72.74\ell \pm 4.55\ell$ (16 ± 1 gallons), and the water temperature shall be $32^{\circ}\text{C} \pm 9^{\circ}\text{C}$. The load shall be $.91\text{ kg} \pm .09\text{ kg}$ ($2\text{ lbs} \pm 0.2\text{ lbs}$). The specimen shall be removed from the washer after 100 hours of continuous agitation. The specimen shall be air dried and then tested for water permeability at three sites across the width of the specimen according to test procedure #3.
6. The water pressure shall be applied to the knit side of the laminated cloth from below the test specimen. The maximum pressure of 172.25 kPa (25 psi) shall be attained in 2 minutes ± 20 seconds and shall be applied for 5 minutes. Leakage is defined as the appearance of water any place within the test area.
7. Place a 15.24 cm x 15.24 cm (6" x 6") piece of blotting paper on a flat surface and cover with a 25.4 cm x 25.4 cm (10" x 10") test specimen with the face side up. Weigh out $2.0\text{ gm} \pm 0.1\text{ gm}$ ($.07\text{ oz} \pm .004\text{ oz}$) of solid contaminant or pipette 2.0 ml ($.07\text{ f. oz}$) of a liquid contaminant. Place the contaminant on the center of the specimen and cover with a 15.24 cm x 15.24 cm (6" x 6") piece of glassine paper. Place a 1.81 kg (4 lbs) weight on the glassine paper directly over the contaminated area. Allow the weight to remain on the specimen for 30 minutes. Remove the weight and glassine paper and allow the specimen to sit undisturbed for an additional 30 minutes. Wipe off any excess contaminant using a fresh piece of blotting paper and test for water permeability as per procedure #6 except that the water pressure shall be applied for 3 minutes.
8. One specimen per sample unit shall be tested for water permeability after exposure to synthetic perspiration. The specimen shall be not less than 15.24 cm (6") in diameter. The test cups shall accommodate this size specimen and shall have a depth of at least 2.5 cm (1"). The cups shall be sealed to prevent leakage. The solution shall contact the knit side of the laminate.

Synthetic perspiration shall be prepared by stirring the following ingredients into 500 ml of distilled water:

3 grams sodium chloride
1 gram predigested protein
1 gram n-propyl propionate
0.5 gram lecithin (phosphatidyl choline)

The predigested protein shall contain the following amino acids:

<u>Ingredient</u>	<u>Milligrams (mg)</u>
Lysine	82.5
Histidine	27.5
Arginine	40.0
Aspartic acid	72.5

Threonine	42.5
Serine	50.0
Glutamic acid	197.5
Proline	92.5
Glycine	22.5
Alanine	28.7
Cystine	4.7
Valine	66.2
Methionine	30.0
Isolencine	53.8
Leucine	87.5
Tyrosine	51.3
Phenylalanine	48.8
Tryptophan	18.8

The solution shall be stirred continuously and heated to $50 \pm 1^{\circ}\text{C}$, then covered and cooled to approximately 35°C .

The solution shall be stirred such that any solid particles are suspended in solution and poured into the test cup. The cup shall be inverted to allow the synthetic perspiration to evaporate through the specimen.

After the solution has evaporated through the specimen, such that no more than .32 cm (0.125") of solution remains, the specimen shall be removed from the cup, rinsed in warm water, dried and tested for water permeability as specified in test procedure #6 except that the water pressure shall be applied for 3 minutes.

9. Method ASTM D3886-99 (2013) Procedure: Use No. 0 Emery Polishing Paper. Side abraded shall be the knit side, with a multidirectional abrasion motion. Change abradant after each 300 cycles or specimen failure. The air pressure under the diaphragm should be 4 psi, and the load on the abradant plate should be 1 lb. Failure is determined by breaking of the electrical contact.
10. A minimum of 3 straight seams and 2 cross-over seams shall be tested prior to laundry cycle testing and remain waterproof (no leakage) when tested at 13.78 kPa (2 psi) for 3 minutes with the seam tape side facing up, away from the water challenge. Leakage is defined as the appearance of water any place within the 11.43 cm (4.5") diameter test area since the seam tape process can damage the fabric adjacent to the tape. Test for water permeability as in procedure #3 except the face fabric shall face the water challenge.
11. A minimum of 3 straight seams and 2 cross-over seams shall be tested after ten (10) home laundry cycles and remain waterproof (no leakage) when tested at 13.78 kPa (2 psi) for 3 minutes with the seam tape side facing up, away from the water challenge. Leakage is defined as the appearance of water any place within the 11.43 cm (4.5") diameter test area since the seam tape process can damage the fabric adjacent to the tape. Test for water permeability as in procedure #3 except the face fabric shall face the water challenge. Laundry testing should be performed in accordance with procedure specified in Machine

Cycle 1, Wash Temperature 111, and Drying Procedure Ai of ANSI/AATCC 135-2012.

12. A minimum of 3 straight seams and 2 cross-over seams shall be tested after ten(10) dry clean cycles and remain waterproof (no leakage) when tested a 13.78 kPa (2 psi) for 3 minutes with the seam tape side facing up, away from the water challenge. Leakage is defined as the appearance of water any place within the 11.43 cm (4.5") diameter test area since the seam tape process can damage the fabric adjacent to the tape. Test for water permeability as in procedure #3 except the face fabric shall face the water challenge.

TABLE II
Properties of Laminated Shell Material I (Dark Navy Blue)

REQUIREMENTS			TEST METHODS
1	Mass (Laminated)	205 g/m ² (maximum.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 5.1-M90 (2013) ASTM D3776/D3776M-09a (2013)
2	Colour fastness to Light	Equal to AATCC Standard L5 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 18.3 ISO 105-B02:2014
3	Colour Fastness - To Crocking	Wet: Grey Scale 4 or better Dry: Grey Scale 4 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 22 AATCC 8-2013
4	Colour Fastness - To Laundering	Colour change: Grey Scale 4.5 or better Staining: Grey Scale 3 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 19.1 Test 2A AATCC 61-2013
5	Dimensional Change to Laundering	After 5 cycles: Not exceed $\pm 3\%$ length Not exceed $\pm 3\%$ width	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 58-2004, 3, E AATCC Method 135-2012 (1) (III) (Ai)
6	Breaking Strength - Grab Method	Warp 800 Newton (min.) Weft 800 Newton (min.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 9.2 ASTM D5034-09 (2013)
7	Tearing Strength	Warp 20 Newton (min.) Weft 20 Newton (min.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 12.3 ISO 13937-1:2000 ASTM D1424-09 (2013)
8	Abrasion Resistance - Martindale Method Part 2 (Determination of Specimen Breakdown)	No breakdown after 10,000 at 9 kPa	<ul style="list-style-type: none"> ASTM D4966-12
9	DWR (durable water repellent)	- 100 spray rating. Initial - 90 spray rating. After 5 launderings - 80 spray rating. After 10 launderings	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 26.2 Perma Press washing cycles (Washing Temp. 40°C \pm 3°C) Tumble Dry - Perma Press for 30 minutes as per (AATCC Method 135-2012)
10	Oil Repellent	- 6 Initial - 5 After 5 launderings - 4 After 10 launderings	<ul style="list-style-type: none"> AATCC 118-2013 Perma Press washing cycles (Washing Temp. 40°C \pm 3°C) Tumble Dry - Perma Press for 30 minutes as per (AATCC Method 135-2012)

TABLE III
Mesh, Pocketing

REQUIREMENT			TEST METHODS
1	Colour	Black or Navy To match colour swatch provided by Uniform and Equipment Program	
2	Fiber Content	100% Polyester	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 14-2005
3	Knit Construction	Warp Knit	
4	Yarns per cm	Wales: 13 ± 3 Courses: 11 ± 3	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 7- M88 (2001) ISO 7211-2
5	Mass	$115 \text{ g/m}^2 \pm 6 \text{ g/m}^2$ ($109 \text{ g/m}^2 - 121 \text{ g/m}^2$)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 5.1-M90 (2013) ASTM D3776/D3776M-09a (2013)
6	Dimensional Change to Domestic Washing <i>After 5 cycles</i>	Warp 4% (max.) Weft 3% (max.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 58-2004,3,E
7	Colour fastness to Crocking Wet & Dry	Dry - Grey Scale 4 or better Wet - Grey Scale 4 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 22-2004
8	Colour fastness to Washing	Colour change Grey Scale 4 or better Staining cotton - Grey Scale 4 or better Staining polyester – Grey Scale 4 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 19.1-2004 Test #2 AATCC 61-2013
9	Mullen Burst (psi)	100 (minimum)	<ul style="list-style-type: none"> ASTM D3786/D3786M-13
10	Abrasion Resistance - Martindale Method Part 2 (Determination of Specimen Breakdown)	No breakdown after 25,000 at 9 kPa	<ul style="list-style-type: none"> ASTM D4966-12
11	Pilling	No less than 4 after 120 minutes	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 51.2-M87

APPENDIX A

Sealed Pattern Identifier

Pattern #: G.S. 1045-298

Title: Jacket, Patrol, Unisex

Paper Patterns - Paper patterns are available from the RCMP, Uniform and Equipment Program, Ottawa Ontario, under Pattern # G.S. 1045-298. 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. Contractors may make changes required to suit their production process, however, the design and grade shall not be affected or changed. **Punch holes are not an acceptable method of placement for this garment with the exception of the placement of the shoulder badge and the holes must be completely covered by the shoulder badge. 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.**

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

Pattern Pieces - This design has 42 pattern components.

<u>Legend:</u>	
Shell Material I	= Para. 4.1.2
Shell Material I (Tricot RSU)	= Para. 4.1.2 (inside face) Right Side Up
Lining Material	= Para. 4.1.4
Mesh Pocketing	= Para. 4.1.5
Cut 1 Single	= Cut 1
Cut 1 Paired	= Cut 2
Cut 2 Paired	= Cut 4
(RSU)	= Right Side Up

Pattern Components	Nomenclature	Quantity to be cut	Material
# 1 of 42	Back	1 Single	Shell Material I
# 2 of 42	Chest Pocket Zip Stay	1 Paired	Shell Material I
# 3 of 42	Middle Side Front	1 Paired	Shell Material I
# 4 of 42	Middle Front	1 Paired	Shell Material I
# 5 of 42	Lower Front	1 Paired	Shell Material I

Pattern Components	Nomenclature	Quantity to be cut	Material
# 6 of 42	Under Fly Front	1 Paired	Shell Material I
# 7 of 42	Storm Flap - Left	1 Single	Shell Material I (RSU)
# 8 of 42	Storm Flap - Right	1 Single	Shell Material I (RSU)
# 9 of 42	Shoulder Strap	2 Paired	Shell Material I
#10 of 42	Front Facing "A"	1 Paired	Shell Material I
# 11 of 42	Front Facing "B"	1 Paired	Shell Material
# 12 of 42	Sleeve	1 Paired	Shell Material I
# 13 of 42	Sleeve - Upper Back	1 Paired	Shell Material I
# 14 of 42	Sleeve - Lower Back	1 Paired	Shell Material I
# 15 of 42	Cuff	1 Paired	Shell Material I
# 16 of 42	Elasticized Cuff	1 Paired	Shell Material I
# 17 of 42	Cuff Adjustment Strap	1 Paired	Shell Material I
# 18 of 42	Top Collar	1 Single	Shell Material I
# 19 of 42	Under Collar	1 Single	Shell Material I
# 20 of 42	Hood Side	1 Paired	Shell Material I
# 21 of 42	Hood Center	1 Single	Shell Material I
# 22 of 42	Hood Back	1 Single	Shell Material I
# 23 of 42	Hem Facing - Front	1 Paired	Shell Material I
# 24 of 42	Hem Facing - Back	1 Single	Shell Material I
# 25 of 42	Top Collar Stand	1 Single	Shell Material I (Tricot RSU)
# 26 of 42	Hood Facing - Inside Front	1 Paired	Shell Material I (Tricot RSU)
# 27 of 42	Hood Facing - Inside Back	1 Single	Shell Material (Tricot RSU)
# 28 of 42	Yoke Facing - Front	1 Paired	Shell Material I
# 29 of 42	Yoke Front - Right	1 Single	Shell Material I
# 30 of 42	Yoke Front - Left	1 Single	Shell Material I

Pattern Components	Nomenclature	Quantity to be cut	Material
# 31 of 42	Yoke Back	1 Single	Shell Material I
# 32 of 42	Hideaway Police Patch - Back	1 Single	Shell Material I (RSU)
# 33 of 42	Hideaway Police Patch - Front	1 Single	Shell Material I (RSU)
# 34 of 42	Pen Loop	1 Single	Shell Material I
# 35 of 42	Pocket - Upper Sleeve	1 Paired	Shell Material I
# 36 of 42	Pocket Bag- Lower Pocket 'A'	1 Paired	Mesh Pocketing
# 37 of 42	Pocket Bag- Lower Pocket 'B'	1 Paired	Mesh Pocketing
# 38 of 42	Pocket Bag - Inside Chest	1 Paired	Mesh Pocketing
# 39 of 42	Pocket Bag - Chest 'A'	1 Paired	Mesh Pocketing
# 40 of 42	Pocket Bag - Chest 'B'	1 Paired	Mesh Pocketing
# 41 of 42	Pocket Bag - Attachment	1 Paired	Mesh Pocketing
# 42 of 42	Yoke - Inside Back	1 Single	Lining

APPENDIX B

CARE INSTRUCTIONS

Applicable To:

Jacket Patrol Unisex

Jacket High Visibility

Parka Inclement & Hood Cold Weather (without the fur trim)

Trouser Inclement

These garments are designed to be both waterproof and water repellent. The best way to maintain its performance is to **keep them clean by washing it regularly**. When the water no longer beads up and rolls off, use a water based, solvent free, nonflammable DWR product to restore the water repellency. The following care instructions should ensure a normal life cycle for your garments. These garments should be washed after 10-12 days of continuous use or every 20-30 days with occasional use.

The water repellency, waterproofness and breathability of your garment are affected by the following;

1. Dirt buildup and other contaminants including oils, sunscreen and sweat reduce the effectiveness of the water repellency.
2. Fabric softeners have a detrimental effect on the colour and the waterproofness and water repellency of the fabric. They will make the colour fade more quickly and affect the overall performance of the fabric. These include liquid fabric softeners, detergents that contain softeners and dryer sheets. Therefore it is very important that these softeners not be used when laundering your garment.

Machine Wash:

- DO NOT COMMERCIAL LAUNDER
- DO NOT WASH FUR

Close all zippers, fasteners and velcro before washing.

Wash in warm water separately, without detergent. DO NOT USE FABRIC SOFTENERS OR POWDERED DETERGENTS OR ANY LIQUID DETERGENTS THAT CONTAIN FABRIC SOFTENERS. DO NOT USE BLEACH.

If heavily soiled, a small amount of detergent or specialty wash products (**i.e. Grangers® Performance Wash, Fibertec Pro Wash or ReviveX® Synthetic fabric cleaner**) for waterproof garments may be used.

At the end of the final rinse cycle, re-adjust the garment in the washer, and put it through an additional rinse cycle. This will assure complete rinsing of detergent that may have been trapped during washing, therefore preserving water repellency.

Drying:

Close all zippers, fasteners and velcro before drying.

If re-application of DWR is necessary, hang wet garment on hanger and follow application instructions of DWR product. (**i.e. Grangers® XT Waterproof spray, Fibertec Blue Guard Spray-on, Revivex® Spray-On or Nikwax Tx-Direct™**)

The garment **must** be tumble dried separately on a warm setting for 50 minutes to reactivate the durable water repellency (DWR.). DO NOT USE DRYER SHEETS.

If necessary, touch up with steam iron at low temperature.

Dry Cleaning:

If dry cleaned, request clear distilled solvent rinse and DWR spray repellent.

INSTRUCTIONS D'ENTRETIEN

Applicable à :

Blouson de patrouille unisexe

Veste haute visibilité

Parka pour intempéries et capuchon pour temps froid (sans la bordure de fourrure)

Pantalon pour intempéries

Ces vêtements sont conçus pour être imperméables et déperlants. La meilleure façon de préserver leurs propriétés est de les **garder propres en les lavant régulièrement**. Lorsque l'eau ne perle plus, utiliser un produit déperlant durable à base d'eau, sans solvant et ininflammable pour restaurer la déperlance. Les instructions d'entretien ci-dessous permettront d'assurer le rendement optimal des vêtements. Ces vêtements devraient être lavés après 10 à 12 jours d'utilisation continue ou à tous les 20 à 30 jours d'utilisation occasionnelle.

Les conditions suivantes peuvent influencer sur l'imperméabilité, la déperlance et la respirabilité des vêtements :

1. L'accumulation de saletés et d'autres contaminants comme de l'huile, de la crème solaire ou de la sueur peut réduire l'imperméabilité.
2. Les agents assouplissants influent sur la couleur, la déperlance et l'imperméabilité. Ils décolorent les tissus plus rapidement et nuisent à leur rendement général. Il est très important de n'utiliser **aucun** type d'assouplissant (agent assouplissant liquide, détergent avec assouplissant et assouplissant en feuilles).

Lavage à la machine :

- NE PAS LAVER DANS UNE BUANDERIE COMMERCIALE
- NE PAS LAVER LA FOURRURE

Fermer toutes les fermetures à glissière, les attaches et les attaches à ruban autoagrippant avant de laver.

Laver séparément à l'eau tiède, sans détergent. **NE PAS UTILISER D'AGENT ASSOUPLISSANT NI DE DÉTERGENT EN POUDRE OU LIQUIDE AVEC ASSOUPLISSANT. NE PAS UTILISER D'AGENT DE BLANCHIMENT.**

Si le vêtement est très sale, une petite quantité de détergent ou de produit spécifiquement conçu pour l'entretien des vêtements imperméables (**p. ex. nettoyant haute performance de Granger's^{MD}, produit Pro Wash de Fibertec ou nettoyant pour tissus synthétiques ReviveX^{MD}**) peut être utilisée.

À la fin du dernier cycle de rinçage, replacer le vêtement dans la machine et entreprendre un autre cycle de rinçage, afin d'éliminer complètement le détergent qui peut être resté durant le lavage et de préserver la déperlance.

Séchage:

Fermer toutes les fermetures à glissière, les attaches et les attaches à ruban autoagrippant avant de sécher.

Si un nouveau traitement déperlant est requis, suspendre le vêtement mouillé sur un cintre et suivre les instructions du fabricant du produit (**p. ex. imperméabilisant à vaporiser XT de Granger's^{MD}, Blue Guard de Fibertec, Revivex^{MD} ou Tx-Direct^{MC} de Nikwax**).

Le vêtement **doit** être séché séparément par culbutage à basse température pendant 50 minutes, afin de réactiver les propriétés déperlantes. **NE PAS UTILISER D'ASSOUPLISSANT EN FEUILLES.**

Au besoin, repasser légèrement à basse température.

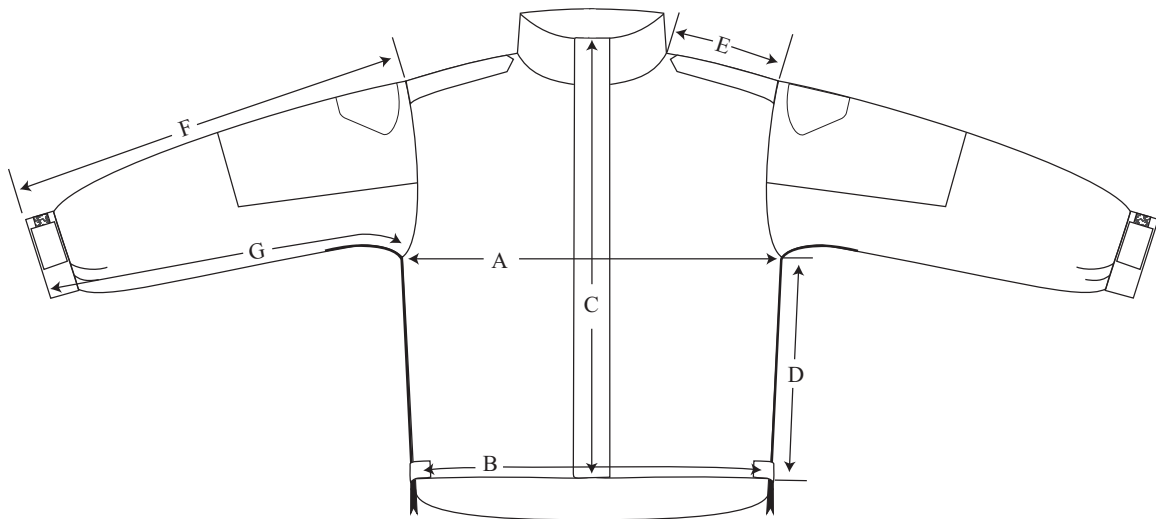
Nettoyage à sec :

Si le vêtement est nettoyé à sec, demander un rinçage avec un solvant distillé clair et un traitement à l'aide d'un produit déperlant à vaporiser.

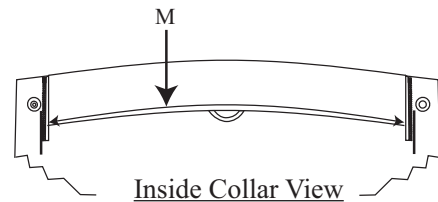
Jacket, Patrol, Unisex
Measurement Location Chart

G.S.1045-298

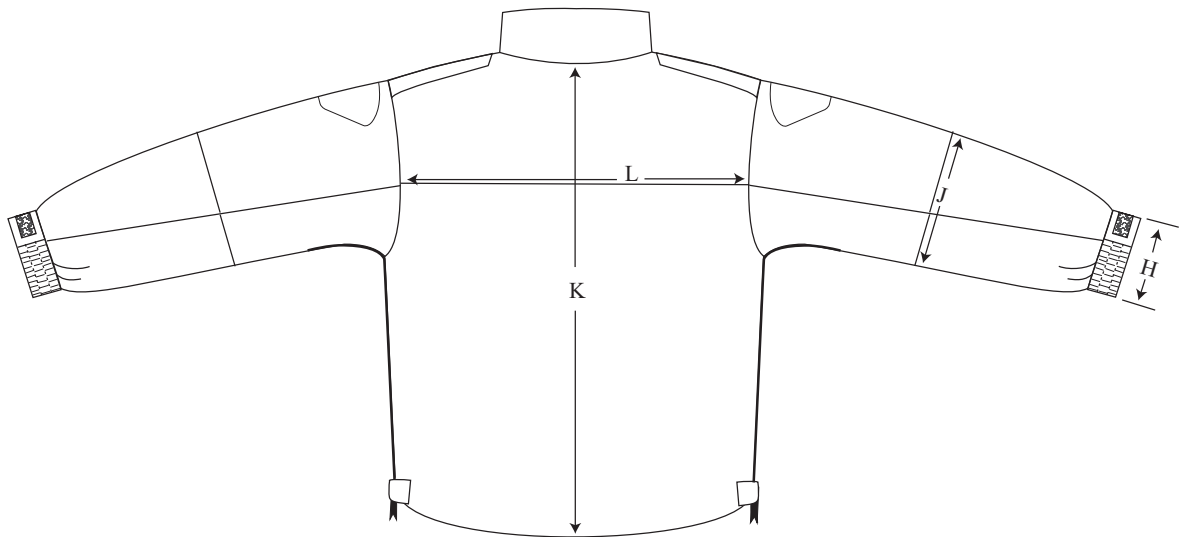
Dwg. 1



Front View



Inside Collar View



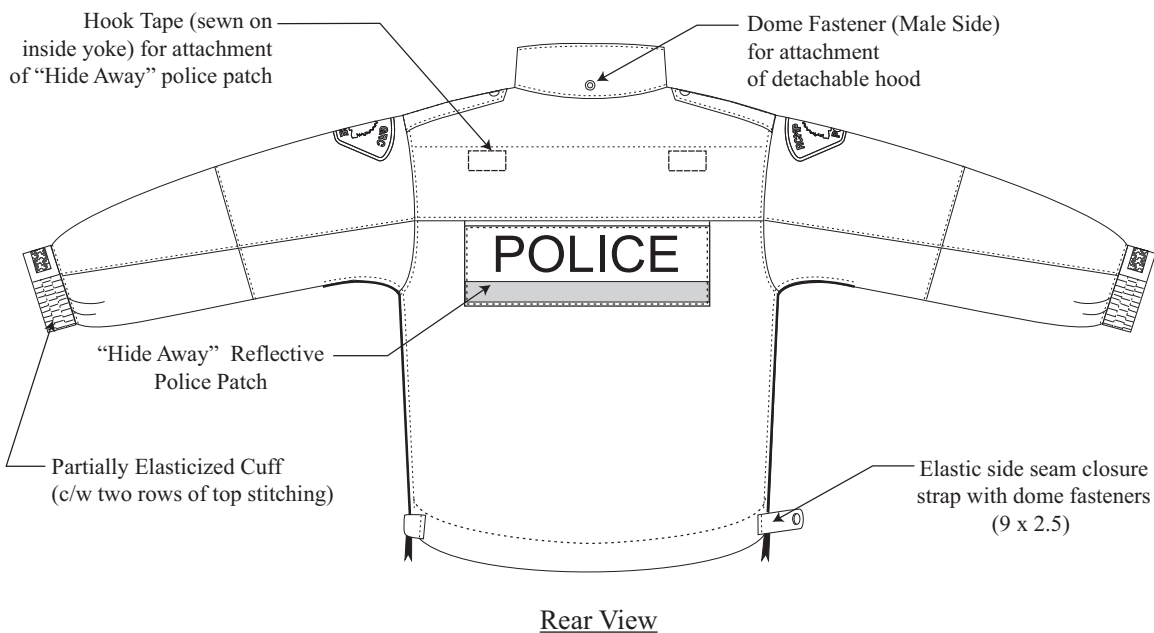
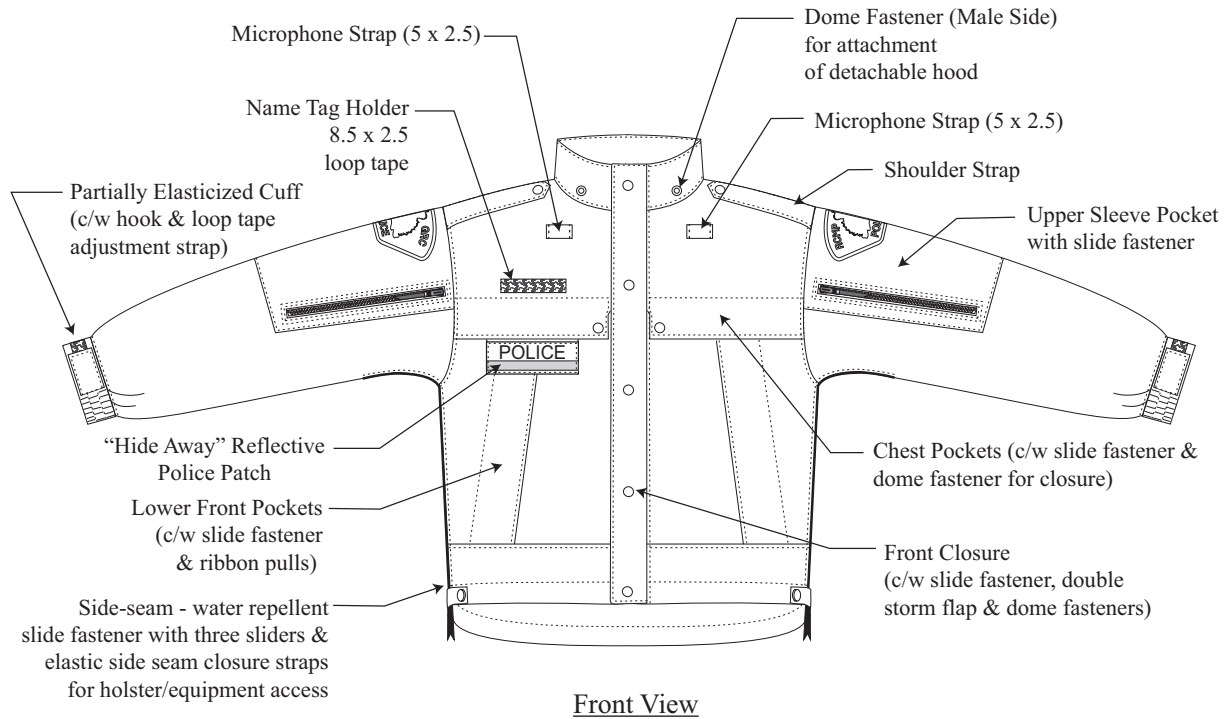
Rear View

NOT TO SCALE

Jacket, Patrol, Unisex

G.S.1045-298

Dwg. 2



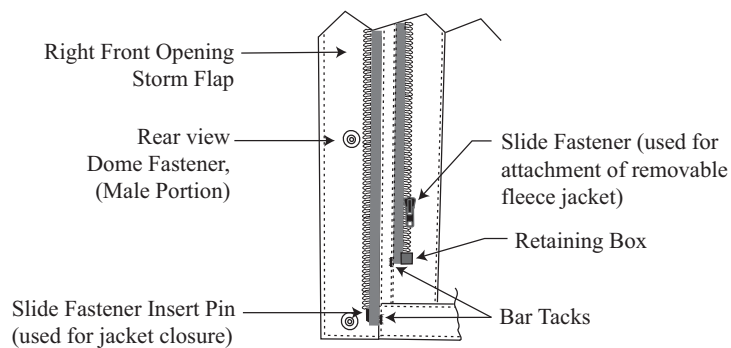
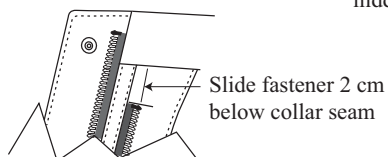
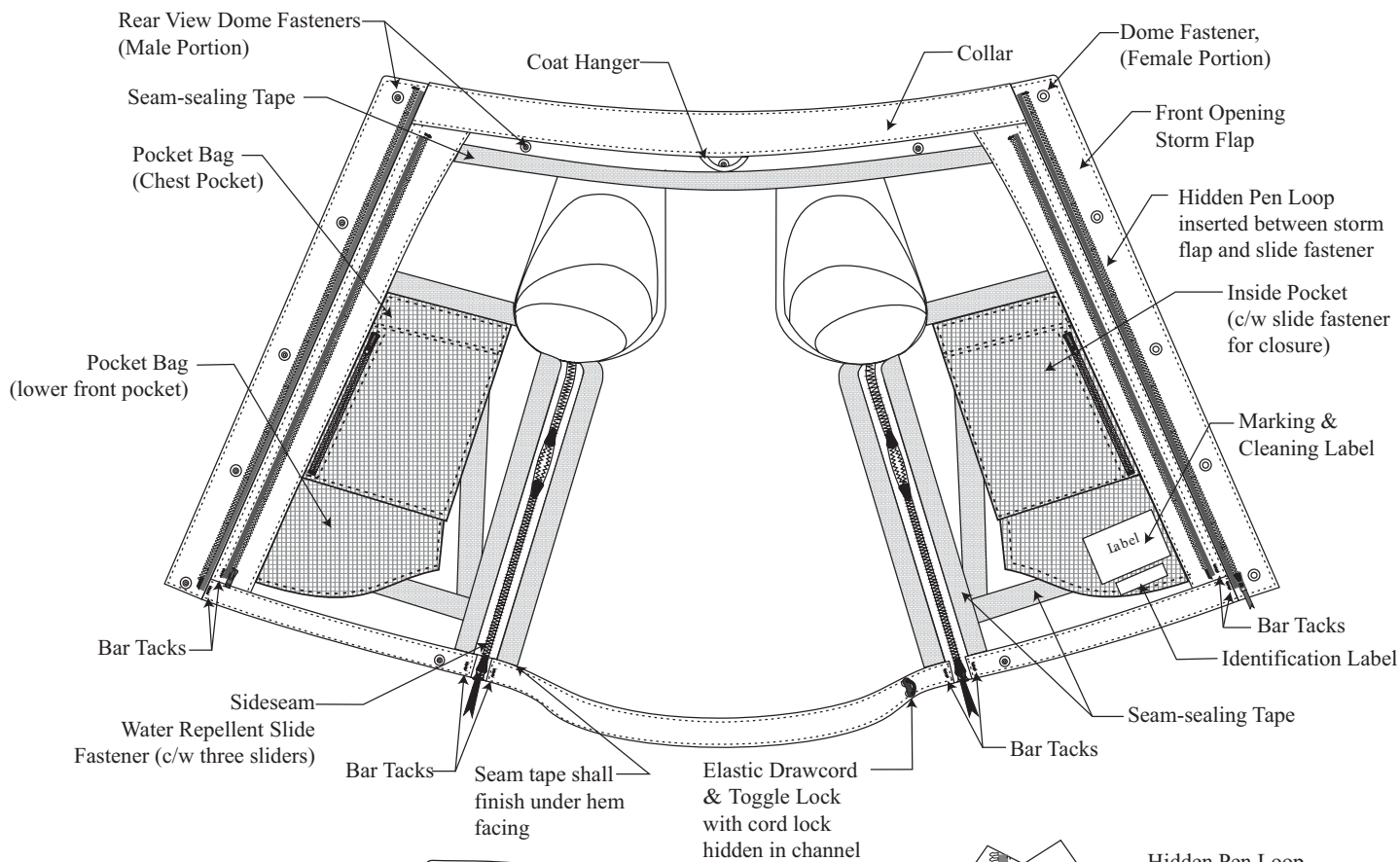
NOT TO SCALE

All measurements are shown in centimeters.

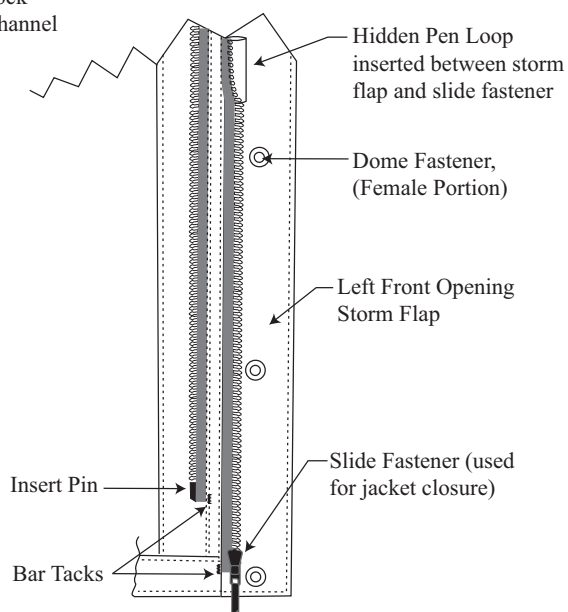
± 0.5 cm tolerance acceptable unless otherwise indicated.

Inside Jacket & Slide Fastener Detail

Dwg. 3



Slide Fastener Detail
Right Front (Inside View)



Slide Fastener Detail
Left Front (Inside View)

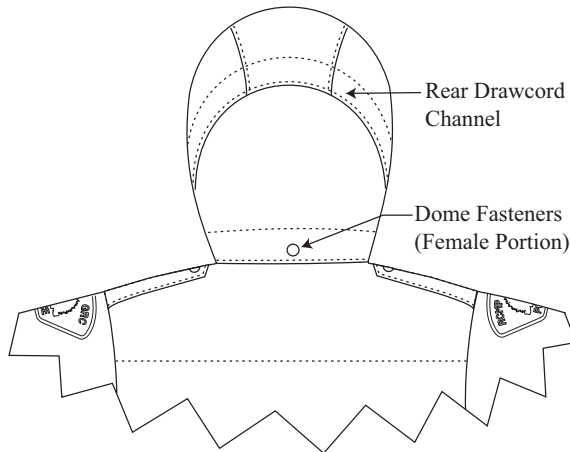
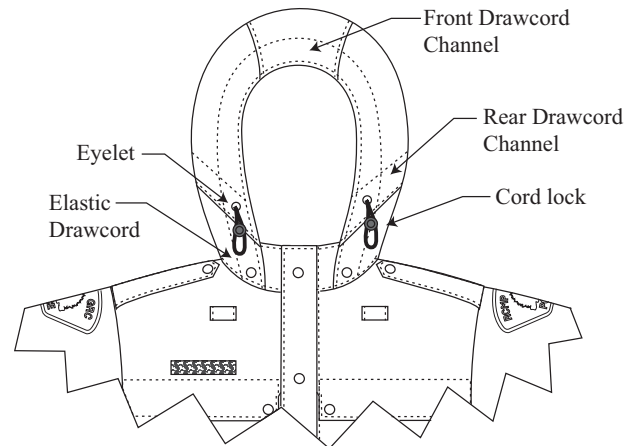
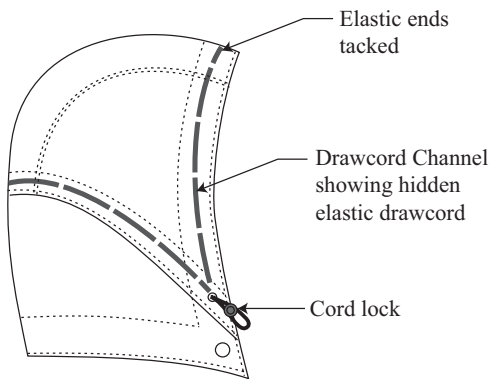
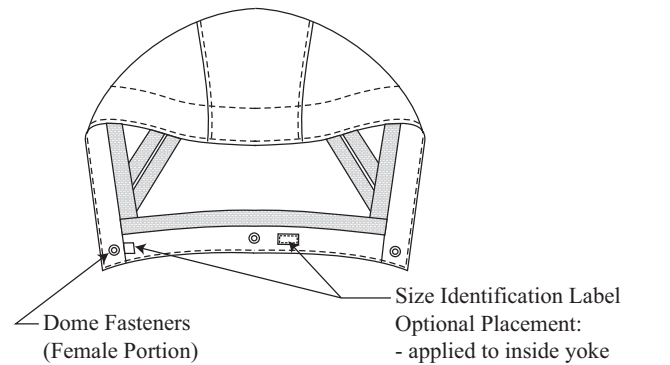
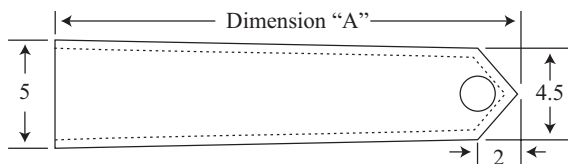
NOT TO SCALE

All measurements are shown in centimeters.

± 0.5 cm tolerance acceptable unless otherwise indicated.

Detachable Hood & Adjustment Strap Detail

Dwg. 4

Rear ViewFront ViewSide ViewInside Front ViewShoulder Strap Detail

Jacket Size (All Heights)	Dimension "A"
X-Small	14.25
Small	15.25
Medium	16.25
Large	17.25
X-Large	18.25
2X-Large	19.25
3X-Large	20.25
4X-Large	21.25
5X-Large	22.25

TABLE I
Shoulder Strap Length
(Finished)

NOT TO SCALE

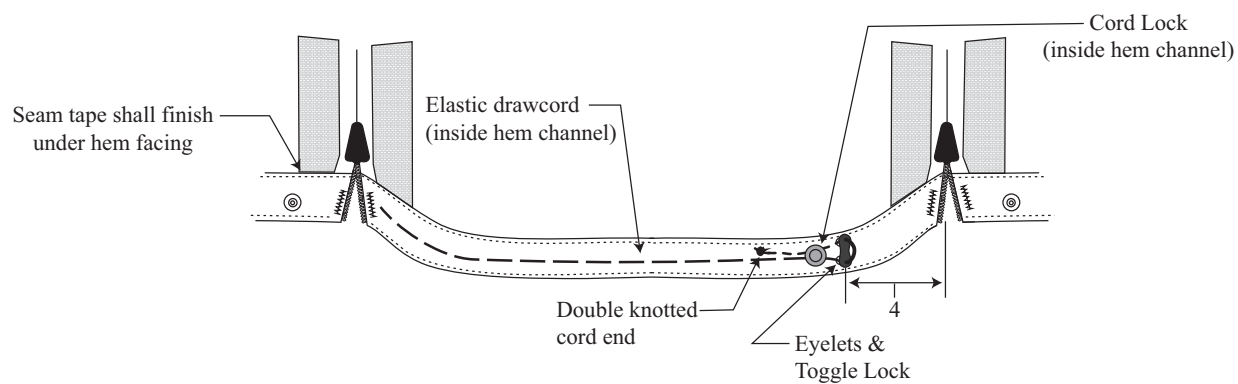
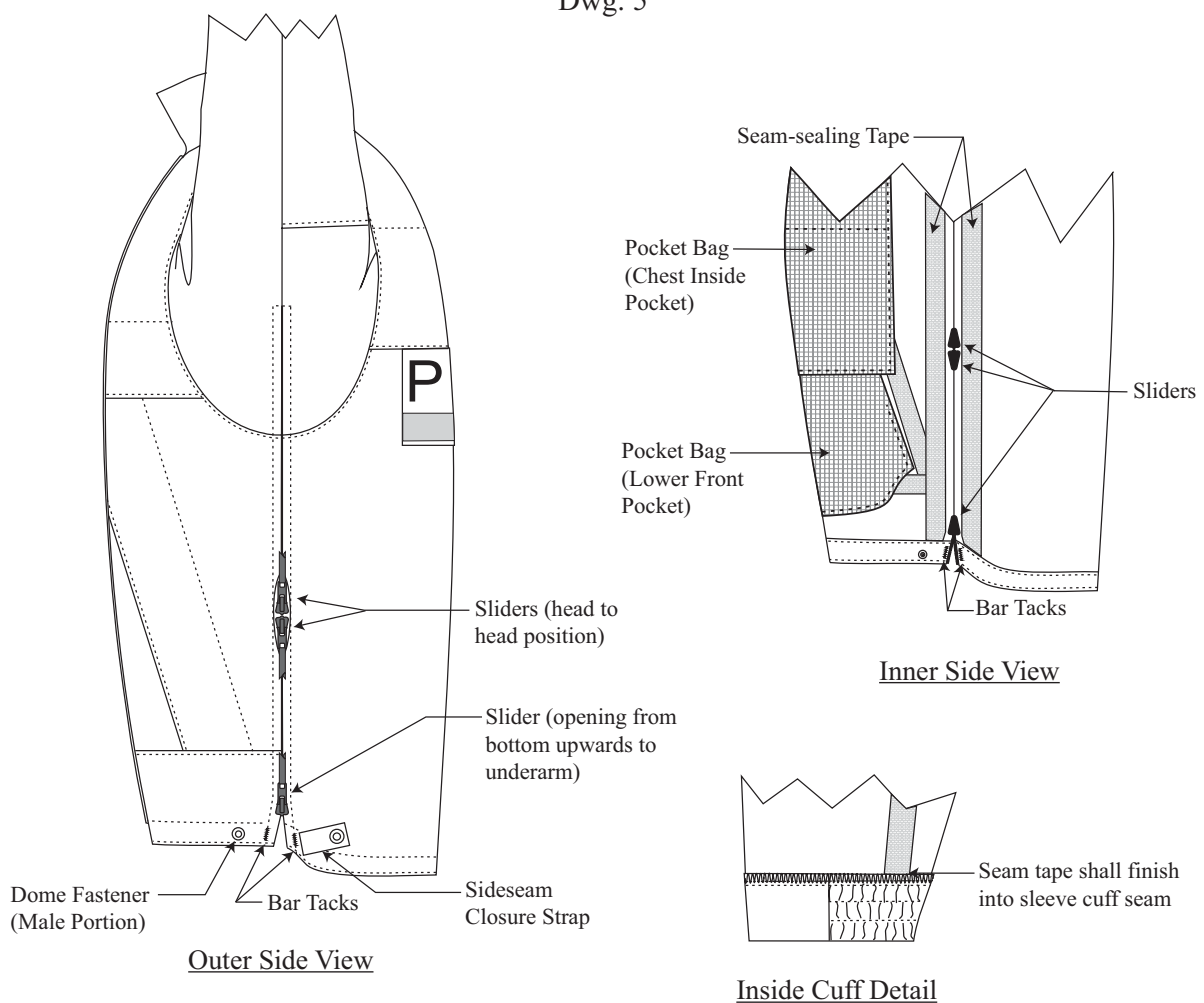
All measurements are shown in centimeters.

± 0.5 cm tolerance acceptable unless otherwise indicated.

Jacket, Patrol, Unisex
Underarm, Inside Cuff
& Back Hem Channel Detail

G.S.1045-298

Dwg. 5



Back Hem Channel - Inside View

NOT TO SCALE

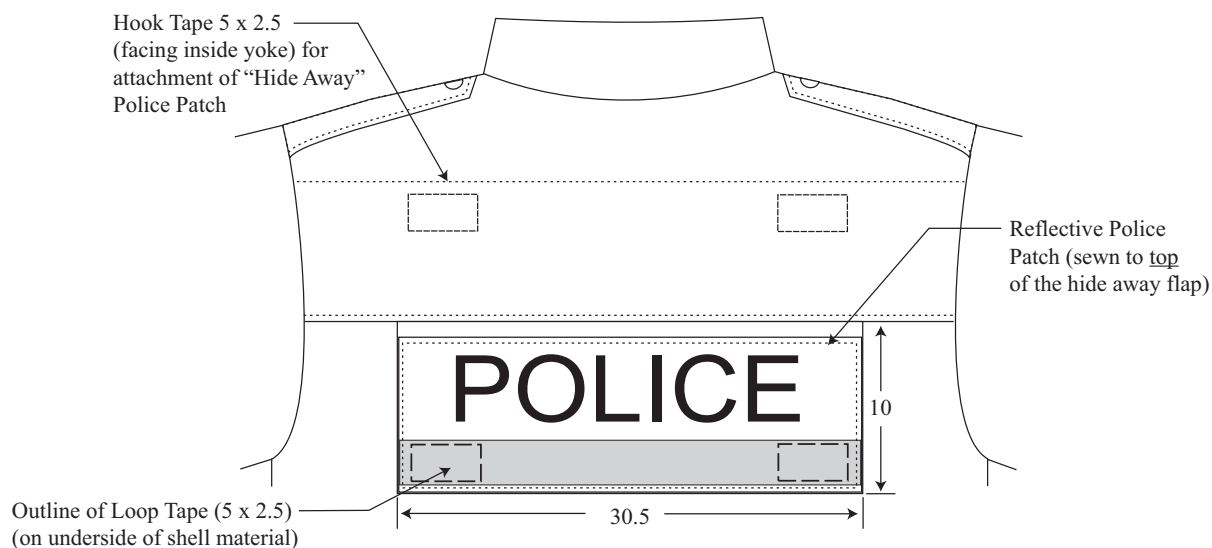
All measurements are shown in centimeters.

± 0.5 cm tolerance acceptable unless otherwise indicated.

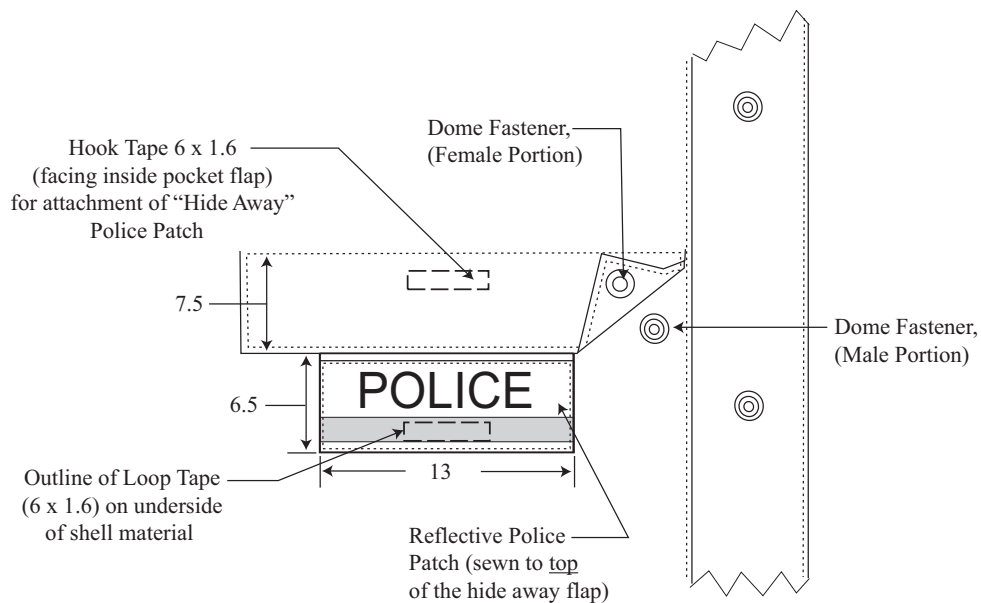
Jacket, Patrol, Unisex
 “Hide Away” Reflective Police Patch
 & Chest Pocket Detail

G.S.1045-298

Dwg. 6



Large Back Police Patch



Chest Pocket Detail
shown with corner folded up

NOT TO SCALE

All measurements are shown in centimeters.

± 0.5 cm tolerance acceptable unless otherwise indicated.

ANNEX C

SPECIFICATION - G.S. 1045-301

TROUSERS, INCLEMENT AND STRIPES

dated 2015-07-09



Royal Canadian Mounted Police
Gendarmerie royale du Canada

Doc. no: G.S. 1045-301

Date: 2015-07-09

Specification

Trousers, Inclement and Stripes

This document has 36 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

RCMP VIEWING SAMPLE

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

This will be used for the guidance of the 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

TROUSERS, INCLEMENT AND STRIPES

1. Definition

- 1.1 This specification shall govern the manufacture and inspection of Trousers, Inclement and Stripes. The specific items covered under this specification with stock numbers are as follows:
- i. 5260 Trousers, Inclement/ Pantalon pour intempéries
 - ii. 5261-100 Trousers, Inclement, Special / Pantalon pour intempéries, tailles spéciales
 - iii. 5265 Stripe, Trousers Inclement Yellow / Bande jaune, pantalon pour intempéries
 - iv. 5266-000 Trousers Inclement Yellow, Special / Bande jaune, pantalon pour intempéries, tailles spéciales
 - v. 5270 Stripe, Trousers Inclement Blue / Bande bleue, pantalon pour intempéries
 - vi. 5271-000 Stripe, Trousers Inclement Blue Special / Bande bleue, pantalon pour intempéries, tailles spéciales
 - vii. 5275 Stripe, Trousers Inclement Fluorescent / Bande fluorescente, pantalon pour intempéries
 - viii. 5276-000 Stripe, Trousers Inclement Fluorescent Special / Bande fluorescente, pantalon pour intempéries, tailles spéciales
- 1.2 This specification, pattern, drawings, 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 R.C.M.P. Trousers, Inclement and Stripes.
- 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.
- 2.3 CAN/CGSB 4.131-93, Thread, Polyester, Polyester or Cotton Covered.
- 2.4 FED-STD-191A, Federal Standard, Textile Test Methods.
- 2.5 ASTM, American Society for Testing and Materials, Method D3776/D3776M-09a (2013), D2097-03 (2010), D413-98, D3886-99 (2013), D4966-12, D1424-09 (2013), D5034-09 (2013), D5169-98 (2015), D5170-98 (2015), E808-01 (2009), E809-08 (2013), E1164-12 and F392/F392M-11.
- 2.6 AATCC-8-2013, 15-2013, 16.3-2014, 61-2013, 118-2013 and 135-2012, American Association of Textile Chemists and Colorists - Technical Manual.
- 2.7 ISO 105-B02:2014, ISO 13937-1:2000, and ISO 6330:2012 International Standards Organization.
- 2.8 BS 3424-26: 1990, Method 29A, British Standards Institution.
- 2.9 MIL-C-21852F-Type III Class I, Cloth, Taffeta, Nylon
- 2.10 CAN/CSA Standard, Z96-09 High-Visibility Safety Apparel.
- 2.11 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 imperfections or blemishes such as 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 Trousers, Inclement shall be a loose fitting over-pant designed to be worn in conjunction with a removable liner and over a uniform trouser. It shall be constructed from a 3-layer material with a WMVP (waterproof moisture vapour permeable) membrane. It shall be waterproof with all seams permanently seam sealed unless otherwise stated. The design shall encompass removable side stripes and high visibility pull downs.

4. **Detail Requirements**

4.1 **Components**

- 4.1.1 **Shell Material I** - The shell material I shall be plain weave 100% nylon, Type 6.6. The color shall be dark navy blue, meeting the approved color swatch, with a durable water repellent finish. An appropriate heat-set process shall be applied to the shell material in order to be prepared for the lamination of the waterproof moisture vapour permeable membrane specified in Para. 4.1.4.1.
- 4.1.2 **Shell Material II** - The shell material II shall be plain weave 100 % polyester. The color shall be fluorescent yellow-green, meeting CAN/CSA Z96-09, with a durable water repellent (DWR) finish. The laminated portion of the contrast shall have an appropriate heat-set process applied to it, in order for it to be prepared for the lamination of the waterproof moisture vapour permeable membrane as specified in Para. 4.1.4.2
- 4.1.3 **Shell Material III** - The shell material III shall be plain weave 100% polyester. The color shall be yellow in colour, meeting the approved color swatch, with a durable water repellent (DWR) finish. The laminated portion of the contrast shall have an appropriate heat-set process applied to it, in order for it to be prepared for the lamination of the waterproof moisture vapour permeable membrane as specified in Para. 4.1.4.3.
- 4.1.4 **Shell Material, Laminated** - The laminated shell materials shall not show any visible signs of delamination or loss of film during the garments useful life (approximately 5 years). The fabric shall be capable of having its sewn seams, seam-sealed with an appropriate tape, in a waterproof, durable fashion. Materials not meeting these requirements will be cause for rejection. Delamination is defined as any irreparable separation of the bonded layers of the Laminated Shell Material(s).
- 4.1.4.1 **Shell Material I, Laminated** – The shell material I shall be laminated in a 3-layer format with a membrane, which after lamination provides a high level of water resistance/waterproofness and breathability. The outer layer shall consist of primary shell material as specified in Para. 4.1.1, with the membrane as the middle layer, and a black, 100% nylon or polyester warp tricot knit fabric with a maximum weight of 55 g/m², as the inner layer. The layers shall be joined together by a suitable lamination process. The membrane when laminated to the

shell material shall meet the test requirements outlined in Table I and Table II forming part of this specification.

- 4.1.4.2 **Shell Material II, Laminated** The shell material II shall be laminated in a 3-layer format with a membrane, which after lamination provides a high level of water resistance/waterproofness and breathability. The outer layer shall consist of contrast fluorescent yellow-green shell material as specified in Para. 4.1.2, with the membrane as the middle layer, and a white, 100% nylon or polyester warp tricot knit fabric with a maximum weight of 55 g/m², as the inner layer. The layers shall be joined together by a suitable lamination process. The membrane when laminated to the shell material shall meet the test requirements outlined in Table I and Table IV forming part of this specification.
- 4.1.4.3 **Shell Material III, Laminated** –The shell material III shall be laminated in a 3-layer format with a membrane, which after lamination provides a high level of water resistance/waterproofness and breathability. The outer layer shall consist of contrast yellow shell material as specified in Para. 4.1.3, with the membrane as the middle layer, and a black, 100% nylon or polyester warp tricot knit fabric with a maximum weight of 55 g/m², as the inner layer. The layers shall be joined together by a suitable lamination process. The membrane when laminated to the shell material shall meet the test requirements outlined in Table I and Table III forming part of this specification.
- 4.1.5 **Seam Sealing Tape** – The 3-layer composite fabric shall be seamed using a compatible nylon or polyester seam-sealing tape with the 3-layer shell fabric and sealed-seams meeting the requirements outlined in Table I forming part of this specification. The tape on the sealed seams shall not peel off and/or wear during the projected life span of the garment.
- 4.1.6 **Thread** - The thread shall be polyester wrap, polyester core, Tex 50, Class B of matching colour, meeting CAN/CGSB 4.131-93.
- 4.1.7 **Dome Fastener** - The dome fastener shall be a standard type 24 ligne fastener. All metal parts to be brass with a 15 mm matte black, powder coated cap. (Universal SW61 is known to meet these requirements).
- 4.1.8 **Elastic** - The waist strap shall be heavy duty nylon or polyester elastic, black in colour, with maximum elongation of 130% and full recovery. It shall be 3.8cm (1 ½") in width.

- 4.1.9 **Hook and Loop Tape** - The hook and loop tape shall be woven nylon, black or white in colour as specified, with a high life cycle. The combined hook and loop shall have no less than 8 P.S.I length-wise shear strength with initial peel strength of not less than 1 P.I.W. when tested to ASTM D5169-98 (2015), standard test method for shear strength [dynamic method] of hook and loop touch fasteners and ASTM D5170-98 (2015), standard test method for peel strength ["T" method] of hook and loop touch fasteners."

Location	Loop Tape		Hook Tape	
	Dimension	Location	Dimension	Location
Side Seam / Waistband Closure	7.5 cm x 4 cm	outside waistband at side seam front	7.5 cm x 4 cm	inside back, waistband tab
Trouser Side Seam (Front)	1.27 cm ($\frac{1}{2}$ ") wide, sized to fit full length of side seam	front trouser leg at side seam		
Trouser Side Seam (Back)	1.27 cm ($\frac{1}{2}$ ") wide, sized to fit length of side seam	back trouser leg at side seam starting 2 cm below waistband		
Stripes			1.27 cm ($\frac{1}{2}$ ") wide, sized to fit full length	top of stripe to bottom hem
			9 cm x 1.27 cm ($\frac{1}{2}$ ") (4 pieces per stripe)	evenly spaced see drawing #3
5 Belt Loops	5.5 cm x 2.5 cm	top portion	4.5 cm x 2.5 cm	lower portion
Hide Away Flap			4 cm x 1.27 cm ($\frac{1}{2}$ ")	see drawing #2 & #4 and pattern for placement
Hide Away Curtain	4 cm x 2 cm	see pattern for placement		
Hide Away Flap attachment to trouser leg	3 cm x 1.27 cm ($\frac{1}{2}$ ") (3 pieces each leg)	lower trouser leg front and back as per pattern		
Adjustment Strap	23 cm x 2.5 cm	trouser hem at back	7.5 cm x 2.5 cm	inside of closure strap
Tolerance for all ± 5 mm				

4.1.10 **Slide Fasteners - Lengths - Measurements in Inches**

Height Group	Sizes	Side Seam	Front Fly	Height Group	Sizes	Side Seam	Front Fly
X Short	XX Small	33"	6½"	Tall	XX Small	42½"	8"
	X Small	33½"	6½"		X Small	43"	8"
	Small	34"	6½"		Small	43"	8"
	Medium	34"	6½"		Medium	43½"	8"
	Large	34½"	6½"		Large	44"	8"
	X Large	35"	6½"		X Large	44"	8"
	2X Large	35"	6½"		2X Large	44½"	8"
	3X Large	35½"	6½"		3X Large	45"	8"
	4X Large	36"	6½"		4X Large	45"	8"
	5X Large	36"	6½"		5X Large	45½"	8"
Short	XX Small	36½"	7"	X Tall	XX Small	46"	8"
	X Small	37"	7"		X Small	46"	8"
	Small	37"	7"		Small	46½"	8"
	Medium	37½"	7"		Medium	47"	8"
	Large	38"	7"		Large	47"	8"
	X Large	38"	7"		X Large	47½"	8"
	2X Large	38½"	"		2X Large	48"	8"
	3X Large	39"	7"		3X Large	48"	8"
	4X Large	39"	7"		4X Large	48½"	8"
	5X Large	39½"	7"		5X Large	49"	8"
Regular	XX Small	40"	7½"	XX Tall	XX Small	49"	8"
	X Small	40"	7½"		X Small	49"	8"
	Small	40½"	7½"		Small	49½"	8"
	Medium	40½"	7½"		Medium	50"	8"
	Large	41"	7½"		Large	50"	8"
	X Large	41½"	7½"		X Large	50½"	8"
	2X Large	41½"	7½"		2X Large	51"	8"
	3X Large	42"	7½"		3X Large	51"	8"
	4X Large	42"	7½"		4X Large	51½"	8"
	5X Large	42½"	7½"		5X Large	52"	8"

4.1.10.1 **Slide Fastener - Fly Front** - Shall be a closed-ended coil type slide fastener, black in colour. The slide fastener shall be water repellent, with the tape treated with a strong water repellent finish with a coated front of polyurethane. YKK #37003 CIT4C 56 DAB E 5/8 *REV* (only).

4.1.10.2 **Slide Fastener - Side Seam** - Shall be a medium weight, water repellent slide fastener with monofilament coil teeth. It shall be black in colour, with the tape coated with a PU film. The fastener shall be two-way separable with non-locking

powder coated sliders. YKK product # 37370 CIT4MC 51/51 DFBL EPC 5/8 *BT-0*B-B*REV* (only).

- 4.1.11 **Retroreflective Stripes** - The retroreflective markings shall be exposed, wide angle, retroreflective lenses, silver material in the form of a heat transfer film, 5 cm wide. It shall meet all the retroreflective performance requirements outlined in Section 6, meeting Table 5 in the CAN/CSA Z96-09 High-Visibility Safety Apparel standard. All retroreflective shall meet a minimum coefficient of retroreflection, R_A , that are determined in accordance with the procedures defined in ASTM E808-01 (2009) and E809-08 (2013). Note: 3M Scotchlite™ 8725N silver material in the form of a heat transfer film is known to meet these requirements.
- 4.1.12 **Grosgrain Ribbon** - Shall be nylon grosgrain ribbon, black in colour and come in 1 cm width.
- 4.2 **Size and Dimensions** - Trousers, Inclement to this specification shall be supplied in the sizes specified by the R.C.M.P. and to the dimensions given in the scale of measurements and drawings forming part of this specification. The garment components shall be shaped, dimensioned and positioned in accordance with the pattern components and pattern requirements as outlined in Appendix “A” forming part of this specification.
- 4.3 **Construction**
- 4.3.1 **Stitching and Seam Sealing** - All stitching shall be lockstitch. There shall be not less than three or more than four stitches per centimetre. The beginning and ending of all stitching shall be securely backstitch, tacked, unless secured by other stitching. All seams and points where stitching penetrates the shell materials shall be permanently sealed on the inside with the appropriate seam-sealing tape. Care shall be taken to ensure that the tape cross-over points where seams join are doubly covered and bonded securely so as to ensure water-resistance. Any sealed seams showing any form of delamination or any non-bonded or peeling seams shall be a cause for rejection.
- 4.3.2 **Waistband** - The waistband constructed from shell material I as specified in Para. 4.1.4.1, shall be 4.5 cm wide when finished. It shall be fully elasticized with openings at the fly front and side seams. The front fly shall be secured with a dome fastener as per 4.1.7 centred on the waistband opening as shown in drawing #3. Both side seams at the waistband shall be secured by means of tabs complete

with hook and loop tape as specified in Para. 4.1.9 for closure. Five (5) adjustable hook and loop tape secured belt loops shall be sewn to the waistband. Two (2) loops on the front of the waistband and three (3) on the back as shown in the drawings. The waistband shall be constructed and dimensioned as per the patterns and drawings.

- 4.3.3 **Fly Front Opening** - The fly front, fly front curtain and the inner fly facing shall be constructed from the shell material specified in Para. 4.1.4.1. There shall be a water repellent slide fastener in accordance with Para. 4.1.10.1. A ribbon pull as specified in Para. 4.3.7 shall be applied to the slide fastener. The fly front opening at the waistband shall be equipped with a dome fastener as per Para. 4.1.7 and the drawings. The front fly shall be constructed and dimensioned as per the patterns and drawings.
- 4.3.4 **Side Seams** - Both side seams from waistband to hem shall be equipped with a full length, water repellent slide fastener as specified in Para. 4.1.10.2. There shall be 2 sliders, applied in a back to back position. The bottom slide fastener shall open up towards the waist area and the top slider shall open towards the hem as per drawing #3. A ribbon pull as specified in Para. 4.3.7 shall be applied to the top slider. A 1.27 cm (½”) wide continuous length of loop tape as specified in Para. 4.1.9 shall be applied to the front of the trouser leg starting directly below the waistband seam to hem with a continuous piece of loop tape applied to the back starting 2 cm below the waistband as shown in the drawings and pattern for the attachment of the stripe. The bottom of the side seam at the hem shall have a dome fastener (male portion) as specified in Para. 4.1.7 positioned as per the drawings and pattern. The completed side-seam shall conform in all respects to the patterns and drawings. Care shall be taken to ensure that the correct application of loop is applied to the front and back of the trouser side seam.
- 4.3.5 **Legs** - The leg hem shall be 3 cm finished with the raw edge folded under 1.5 cm and stitched down on the folded edge using a 3 mm gauge. The back portion of the trouser hem shall have a 23 cm x 2.5 cm piece of loop tape sewn level with finished hem to secure the adjustment strap of the stripe as per Para. 5.2.3.
- 4.3.6 **Hide Away Flap** - The front to back of each trouser leg at the calf level shall have a “hide away” flap cover, dimensioned as per the pattern and drawings. Top stitching shall be applied as per drawings and viewing sample. The hide-away flap shall be constructed of single layer of fluorescent yellow-green material as specified in Para. 4.1.4.2. A 5 cm wide piece of retroreflective material as specified in Para. 4.1.11 shall be applied to the face side of the hide away flap 2.5

cm from the finished edge. The flap, when in a concealed position, shall be held in place by three (3) pieces of hook and loop tape as specified in Para. 4.1.9 on the hide away curtain as per pattern, and as shown in drawing #4. When finished and opened, the extension on the front of the hide away flap shall wrap around to the back to form one piece with a dome fastener as specified in Para. 4.1.7 for closure. When the “hide away” flap is opened, the hook tape on the flap will be attached to 3 pieces of corresponding loop tape applied to the trouser leg as per the patterns and drawings. Care shall be taken to ensure that the covering flap of the trouser leg and the hide away flap is in alignment and presents a neat and even appearance.

- 4.3.7 **Slide Fastener Ribbon Pulls** – All ribbon pulls shall be constructed with grosgrain ribbon as specified in Para. 4.1.12. The ribbon shall applied to the hole of the slide fastener pull in a way that allows the ribbon pulls to be removed easily without damage and reapplied. The ribbon pull should be 5 cm ± 0.5 cm in length when finished and attached to the slide fastener.
- 4.3.8 **Marking & Cleaning Instructions Label** - The “Trousers, Inclement” shall have a durable label inserted into the back of the waistband. The label information shall be as outlined below in a text no less than a size 8 font. The text shall be of permanent inks of a contrasting colour and shall withstand at least 50 washes showing no apparent change in appearance. The label shall be completed in accordance with 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. 5260 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. Your manufacturer identification (Company name or number).
 7. Print information as shown below.
 8. Print information as shown below.
 9. Print information as shown below.
 10. Print information as shown below.
 11. Print information as shown below.
 12. Print information as shown below.

1		
2		
3		
4		
5		
6		
7	Machine wash - warm (40°C)	Laver à la machine – à l’eau tiède (40°C)
8	Do Not use fabric softener or chlorine bleach	Ne pas utiliser d’agent adoucissant ni d’agent de blanchiment
9	Tumble dry- medium (Do Not use dryer sheets)	Séchage par culbutage – à température moyenne (Ne pas utiliser d’assouplissant en feuilles)
10	Steam iron - low	Repassage à vapeur - à température basse
11	Dry clean - If professionally dry cleaned request clear distilled solvent rinse; request spray repellent.	Nettoyer à sec – demander un rinçage avec un solvant distillé clair et un traitement à l’aide d’un produit hydrofuge en aérosol.
12	Further care instructions: See Ordering Guide.	Instructions d’entretien supplémentaires: Voir le guide de commande.

Note: The manufacturer’s identification shall not appear anywhere on the garment except on the garment label as indicated.

4.3.9 **Identification Label** - Each trouser shall have a durable blank label 7.5 cm x 2.5 cm applied separately beside the marking and cleaning label into the back of the waistband used for the inscription of the wearer’s name.

4.3.10 **Instruction Sheet** - Each completed trousers when folded and prepared for shipping shall have an instruction sheet placed freely into the inside seat area, with the information included in Appendix “B” English and French, forming a part of this specification.

5. **Stripes**

5.1 **Size and Dimensions** – Stripes to this specification shall be supplied in the sizes specified by the R.C.M.P. and to the dimensions given in the scale of measurements and drawings forming part of this specification. The stripes shall be shaped, dimensioned in accordance with the pattern components and pattern requirements as outlined in Appendix “A” forming part of this specification.

5.2 **Construction**

5.2.1 **Stitching** - All stitching shall be lockstitch. There shall be not less than three or more than four stitches per centimetre. The beginning and ending of all stitching shall be securely backstitch, tacked, unless secured by other stitching.

5.2.2 **Stripes (Side Seams)** - All stripes are to be made from the appropriate laminated shell material listed below and must meet the requirements outlined in Table I, Table II, Table III and Table IV forming part of this specification.

Design Options	Colour	Material	Hook Tape Colour
Design Option #1 Standard Stripe	Yellow	Shell Material III (Para.4.1.4.3)	Black
Design Option #2 Special Duty Stripe	Dark Navy Blue	Shell Material I (Para.4.1.4.1)	Black
Design Option #3 High Visibility Stripe	Fluorescent Yellow-Green	Shell Material II (Para.4.1.4.2)	White

5.2.3 **Stripe** - The stripes, constructed from shell material I, II or III as specified in Para. 5.2.2, shall be sewn, turned and edge stitched on all sides using a 3 mm gauge. The finished width of all stripes shall be 5.3 cm \pm 0.3 cm and the lengths shall be as per the scale of measurements. The lower front portion of the stripe shall be equipped with a dome fastener (female portion) as specified in Para 4.1.7 and the lower rear shall be equipped with a 9 cm long adjustment strap attached as shown in drawing #3 with a 7.5 cm x 2.5 cm piece of hook tape for adjustability. A 1.27 cm ($\frac{1}{2}$ ") wide continuous piece of hook tape as specified in Para. 4.1.9 shall be sewn securely to the front inside portion of the stripe matching the corresponding piece of loop tape which is applied to the front portion of the trouser. Four (4) pieces of hook tape, length as specified in Para 4.1.9 shall be spaced equally for the attachment of the stripe. As per the chart in Para. 5.2.2, the Design Option 1 and Design Option 2 stripes shall have black hook tape. The Design Option 3 stripes shall have white hook tape. The inside top of each stripe shall be equipped with a size identification label as referenced in Para. 5.2.4 and shown in the drawing #3. The completed side-seam including stripes shall conform in all respects to the patterns and drawings and sized according to the scale of measurements.

5.2.4 **Stripe Label** - Each stripe shall have a durable label positioned and sewn to the inside top of each stripe as shown in drawing #3. The label information shall in a text no less than a size 8 font with information as stated below.

1. RCMP stock number - reference contract documents. (Ex. 5260 000).
2. Size and height group of the article, combining the size designation referenced in the English and French contract documents. (Ex. L-XXL/R – G-2TG/R).

6. **Quality Assurance Provisions**

- 6.1 **Responsibility for Inspection** - Unless otherwise stipulated in the contract, it is the prime contractor's responsibility to satisfy the R.C.M.P., Uniform & Equipment Program that the material and services being supplied conform to this specification. This may be accomplished by performing the tests specified in this specification or by demonstrating to the satisfaction of the R.C.M.P., Uniform & Equipment Program that conformity to this specification of manufacturing processes is assured. The contractor must use an independent, North American, ISO 9001 certified and ISO 17025 “Textile” certified testing facilities. Note: CTT Group Inc., Quebec, is known to meet this requirement.
- 6.2 The R.C.M.P., Uniform & Equipment Program reserves the right to perform any inspection considered necessary to ensure the material and services conform to the specified requirements. For the purpose of inspection, a portion of each delivery not exceeding two percent or two out of any number delivered under 100 may be put to tests that could destroy the articles. If found to be inferior or not in accordance with this specification, all articles so destroyed shall be replaced by others of proper quality and pattern at the expense of the contractor. The entire delivery may also be rejected if it is found that articles previously rejected due to non-repairable defects are redelivered for inspection.
- 6.3 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.

7. **Scale of Measurement Definitions and Location References**

(Refer to the Scale of Measurements and Drawing No. 1)

- 7.1 **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. (A).
- 7.2 **Seat Circumference (total circumference)** - When placed flat, the seat shall be measured at the bottom of the fly and measured across the width. The result shall be doubled to measure total circumference. (B).
- 7.3 **Hem Circumference** - When placed flat, the bottom shall be measured across the width at the bottom of leg. The result shall be doubled to measure total circumference. (C).
- 7.4 **Outseam Length** - The length shall be the distance measured from the bottom of the waistband to the hem. (D).
- 7.5 **Inseam Length** - The length shall be the distance measured from the crotch to the hem following along the inseam. (E).
- 7.6 **Stripe Length** - The length shall be the distance measured from the top to the bottom of the stripe. (F).

Scale of Measurements - Trousers Inclement										
SIZE DESIGNATION		BODY MEASUREMENTS				GARMENT MEASUREMENTS				
Trouser Inseam	Size	Waist		Seat		Waist Relaxed	Seat Width	Hem Width	Out Seam	Inseam
X Short 26" -28" 66 -71 cm	XX Small	23" - 25"	58 - 63.5	28" - 30"	71-76	54.00	103.00	53.50	87.75	69.25
	X Small	26" - 28"	66 -71	31" - 33"	78.5 - 84	61.5	109.50	54.00	88.50	69.50
	Small	29" - 31"	73.5 - 78.5	34" - 36"	86 - 91	69.00	116.00	54.50	89.25	69.75
	Medium	32" - 34"	81 - 86	37" - 39"	94 - 99	76.50	122.50	55.00	90.00	70.00
	Large	35" - 37"	89 - 94	40" - 42"	101.5-106.5	84.00	129.00	55.50	90.75	70.25
	X Large	38" - 40"	96.5 - 101.5	43" - 45"	109-114	91.50	135.50	56.00	91.50	70.50
	2X Large	41" - 43"	104 - 109	46" - 48"	116.5-122	99.00	142.00	56.50	92.25	70.75
	3X Large	44" - 46"	111.5- 16.5	49" - 51"	124.5-129.5	106.50	148.50	57.00	93.00	71.00
	4X Large	47"- 49"	119 - 124.5	52"- 54"	132-137	114.00	155.00	57.50	93.75	71.25
	5X Large	50" - 52"	127 - 132	55" - 57"	139.5-144.5	121.50	161.50	58.00	94.50	71.50
Short 28" - 31" 71 -78.5 cm	XX Small	23" - 25"	58 - 63.5	28" - 30"	71-76	54.00	103.00	53.50	95.75	74.00
	X Small	26" - 28"	66 -71	31" - 33"	78.5 - 84	61.5	109.50	54.00	96.50	74.25
	Small	29" - 31"	73.5 - 78.5	34" - 36"	86 - 91	69.00	116.00	54.50	97.25	74.50
	Medium	32" - 34"	81 - 86	37" - 39"	94 - 99	76.50	122.50	55.00	98.00	74.75
	Large	35" - 37"	89 - 94	40" - 42"	101.5-106.5	84.00	129.00	55.50	98.75	75.00
	X Large	38" - 40"	96.5 - 101.5	43" - 45"	109-114	91.50	135.50	56.00	99.50	75.25
	2X Large	41" - 43"	104 - 109	46" - 48"	116.5-122	99.00	142.00	56.50	100.25	75.50
	3X Large	44" - 46"	111.5- 16.5	49" - 51"	124.5-129.5	106.50	148.50	57.00	101.00	75.75
	4X Large	47"- 49"	119 - 124.5	52"- 54"	132-137	114.00	155.00	57.50	101.75	76.00
	5X Large	50" - 52"	127 - 132	55" - 57"	139.5-144.5	121.50	161.50	58.00	102.50	76.25
TOLERANCES ±						3	3	1	1.5	1.5
MEASUREMENT LOCATION						A	B	C	D	E

Note: All dimensions are in centimeters unless otherwise indicated.

Scale of Measurements - Trousers Inclement									
SIZE DESIGNATION		BODY MEASUREMENTS				GARMENT MEASUREMENTS			
Trouser Inseam	Size	Waist		Seat		Waist Relaxed	Seat Width	Hem Width	Inseam
		Inches	cm	Inches	cm				
Regular 31" - 33" 78.5 - 84 cm	XX Small	23" - 25"	58 - 63.5	28" - 30"	71-76	54.00	103.00	53.50	78.75
	X Small	26" - 28"	66 - 71	31" - 33"	78.5 - 84	61.5	109.50	54.00	79.00
	Small	29" - 31"	73.5 - 78.5	34" - 36"	86 - 91	69.00	116.00	54.50	79.25
	Medium	32" - 34"	81 - 86	37" - 39"	94 - 99	76.50	122.50	55.00	79.50
	Large	35" - 37"	89 - 94	40" - 42"	101.5-106.5	84.00	129.00	55.50	79.75
	X Large	38" - 40"	96.5 - 101.5	43" - 45"	109-114	91.50	135.50	56.00	80.00
	2X Large	41" - 43"	104 - 109	46" - 48"	116.5-122	99.00	142.00	56.50	80.25
	3X Large	44" - 46"	111.5- 116.5	49" - 51"	124.5-129.5	106.50	148.50	57.00	80.50
	4X Large	47"- 49"	119 - 124.5	52"- 54"	132-137	114.00	155.00	57.50	80.75
	5X Large	50" - 52"	127 - 132	55" - 57"	139.5-144.5	121.50	161.50	58.00	81.00
Tall 33" - 35" 84 - 89 cm	XX Small	23" - 25"	58 - 63.5	28" - 30"	71-76	54.00	103.00	53.50	83.50
	X Small	26" - 28"	66 - 71	31" - 33"	78.5 - 84	61.5	109.50	54.00	83.75
	Small	29" - 31"	73.5 - 78.5	34" - 36"	86 - 91	69.00	116.00	54.50	84.00
	Medium	32" - 34"	81 - 86	37" - 39"	94 - 99	76.50	122.50	55.00	84.25
	Large	35" - 37"	89 - 94	40" - 42"	101.5-106.5	84.00	129.00	55.50	84.50
	X Large	38" - 40"	96.5 - 101.5	43" - 45"	109-114	91.50	135.50	56.00	84.75
	2X Large	41" - 43"	104 - 109	46" - 48"	116.5-122	99.00	142.00	56.50	85.00
	3X Large	44" - 46"	111.5- 116.5	49" - 51"	124.5-129.5	106.50	148.50	57.00	85.25
	4X Large	47"- 49"	119 - 124.5	52"- 54"	132-137	114.00	155.00	57.50	85.50
	5X Large	50" - 52"	127 - 132	55" - 57"	139.5-144.5	121.50	161.50	58.00	85.75
TOLERANCES ±						3	3	1	1.5
MEASUREMENT LOCATION						A	B	C	E

Note: All dimensions are in centimeters unless otherwise indicated.

Scale of Measurements -Trousers Inclement										
SIZE DESIGNATION			BODY MEASUREMENTS				GARMENT MEASUREMENTS			
Trouser Inseam	Size	Waist		Inches	Seat	Waist		Seat Width	Hem Width	Inseam
		Inches	cm		Inches	Relaxed	cm			
X Tall 35" - 37" 89 – 94 cm	XX Small	23" - 25"	58 - 63.5	28" - 30"	71-76	54.00	103.00	103.00	53.50	88.25
	X Small	26" - 28"	66 - 71	31" - 33"	78.5 - 84	61.5	109.50	109.50	54.00	88.50
	Small	29" - 31"	73.5 - 78.5	34" - 36"	86 - 91	69.00	116.00	116.00	54.50	88.75
	Medium	32" - 34"	81 - 86	37" - 39"	94 - 99	76.50	122.50	122.50	55.00	89.00
	Large	35" - 37"	89 - 94	40" - 42"	101.5-106.5	84.00	129.00	129.00	55.50	89.25
	X Large	38" - 40"	96.5 - 101.5	43" - 45"	109-114	91.50	135.50	135.50	56.00	89.50
	2X Large	41" - 43"	104 - 109	46" - 48"	116.5-122	99.00	142.00	142.00	56.50	89.75
	3X Large	44" - 46"	111.5- 116.5	49" - 51"	124.5-129.5	106.50	148.50	148.50	57.00	90.00
	4X Large	47"- 49"	119 - 124.5	52"- 54"	132-137	114.00	155.00	155.00	57.50	90.25
	5X Large	50" - 52"	127 - 132	55" - 57"	139.5-144.5	121.50	161.50	161.50	58.00	90.50
XX Tall 37" - 39" 94 – 99 cm	XX Small	23" - 25"	58 - 63.5	28" - 30"	71-76	54.00	103.00	103.00	53.50	93.00
	X Small	26" - 28"	66 - 71	31" - 33"	78.5 - 84	61.5	109.50	109.50	54.00	93.25
	Small	29" - 31"	73.5 - 78.5	34" - 36"	86 - 91	69.00	116.00	116.00	54.50	93.50
	Medium	32" - 34"	81 - 86	37" - 39"	94 - 99	76.50	122.50	122.50	55.00	93.75
	Large	35" - 37"	89 - 94	40" - 42"	101.5 -106.5	84.00	129.00	129.00	55.50	94.00
	X Large	38" - 40"	96.5 - 101.5	43" - 45"	109-114	91.50	135.50	135.50	56.00	94.25
	2X Large	41" - 43"	104 - 109	46" - 48"	116.5-122	99.00	142.00	142.00	56.50	94.50
	3X Large	44" - 46"	111.5- 116.5	49" - 51"	124.5-129.5	106.50	148.50	148.50	57.00	94.75
	4X Large	47"- 49"	119 - 124.5	52"- 54"	132-137	114.00	155.00	155.00	57.50	95.00
	5X Large	50" - 52"	127 - 132	55" - 57"	139.5-144.5	121.50	161.50	161.50	58.00	95.25
TOLERANCES ±		3 3 3 1 1.5								
MEASUREMENT LOCATION		A B C D E								

Note: All dimensions are in centimeters unless otherwise indicated.

Scale of Measurements -Trousers Inclement Stripes

SIZE DESIGNATION			Stripe (Length)
Trouser Inseam	Size	Label Information	
Short 28" - 31" 71 -78.5 cm	X Small Small Medium	XS – M/S TP – M/C	95
	Large X Large 2X Large	L – XXL/S G – TTG/C	97
Regular 31" - 33" 78.5 – 84 cm	X Small Small Medium	XS – M/R TP – M/R	103
	Large X Large 2X Large	L – XXL/R G – TTG/R	104.5
Tall 33" - 35" 84 – 89 cm	X Small Small Medium	XS – M/T TP – M/L	110.5
	Large X Large 2X Large	L – XXL/T G – TTG/L	112.5
MEASUREMENT LOCATION			F
TOLERANCES ±			2 cm

Note: All dimensions are in centimeters unless otherwise indicated.

TABLE I
Properties of Laminated Shell Material (with WMVP membrane & tricot backing)

	Test	Test Method	Duration	Min. Value Shell Material I	Min. Value Shell Material II & III
1	Resistance of Materials to Water Vapour Diffusion	CAN CGSB 4.2 Method 49-M99, Option 1 *See test procedure #1	- Initial - After 5 launderings - After ageing (70°C & 95% RH for 168 hrs)	13 mm max.	13 mm max.
2	Hydrostatic Resistance	CAN CGSB 4.2 Method 26.5 *See test procedure #2	- Initial - After 5 launderings	1240.2 kPa	689 kPa
3	Low Pressure Water Permeability	CAN CGSB 4.2 Method 26.3 * See test procedure #3	- Initial	No Leakage	No Leakage
		ASTM D2097-03 (2010) * See test procedure #4	- After Cold Flex Warp Fill	No Leakage	No Leakage
		AATCC 135-2012/Test procedure 6 * See test procedure #5	- After 100 hours of Continuous Wet Flex (Agitation)	No Leakage	No Leakage
4	High Pressure Water Permeability	BS 3424: Part 26: 1990 Method 29A * See test procedure #6	- Initial	No Leakage	No Leakage
		BS 3424: Part 26: 1990 Method 29A * See test procedure #7	- After Unleaded Gasoline	No Leakage	No Leakage
		BS 3424: Part 26: 1990 Method 29A * See test procedure #7	- After DEET Insect Repellent	No Leakage	No Leakage
		BS 3424: Part 26: 1990 Method 29A * See test procedure #8	- After Synthetic Perspiration	No Leakage	No Leakage
5	Abrasion Resistance	ASTM D3886-99 (2013) Procedure: use No. 0 Emery Polishing Paper * See test procedure #9	- 3200 Cycles	No failure	No failure

TABLE I
Properties of Laminated Shell Material (with WMVP membrane & tricot backing)

	Test	Test Method	Duration	Min. Value Shell Material I	Min. Value Shell Material II & III
SEAMS					
6	Seam Tape Durability	CAN CGSB 4.2 Method 26.3 * See test procedure #10	- Initial	No Leakage	No Leakage
		CAN CGSB 4.2 Method 26.3 ANSI/AATCC 135 * See test procedure #11	- After 10 laundry cycles	No Leakage	No Leakage
		CAN CGSB 4.2 Method 26.3 * See test procedure #12	- After 10 dry-clean cycles	No Leakage	No Leakage
7	Delamination	Visual	- During and after the above procedures in this table	No Delamination	No Delamination
8	Peel Strength N/23 mm	ASTM D413-98		8 N/23mm minimum	8 N/23mm minimum

TEST PROCEDURES FOR TABLE I

1. The knit side of the laminated cloth shall face the water. The tests shall be completed as outlined in CAN/CGSB 4.2 Method 49-99, Option #1. The samples shall be conditioned at $21^{\circ}\text{C} \pm 1^{\circ}\text{C}$ ($69.8^{\circ}\text{F} \pm 2^{\circ}\text{F}$) and relative humidity shall be $65 \pm 2\%$. The test specimen shall be placed approximately equidistant between the dry airflow and the water cell. Four specimens shall be tested per condition. The tests shall be completed initial, after 5 launderings according to ISO 6330-2012 Method 2B-E and after ageing according to ASTM F392/F392M-11.
2. The water pressure shall be applied to the knit side of the laminated cloth. A taffeta fabric restraint conforming to MIL-C-21852F-TYPE III-CLASS1 PART#WJAAGNA should be placed on top of the sample against the face side of the laminated cloth.
3. The knit side of the laminated cloth shall contact the water. The hydrostatic head shall be 13.78 kPa (2.0 psi) and shall be held for 3 minutes. Leakage is defined as the appearance of water any place within the 11.43 cm (4.5") diameter test area. The test may be performed using any device which tests the same specimen area at the equivalent pressure. In case of dispute, the apparatus described in FED-STD-191A Method 5516 shall be used.
4. Ten warp and ten fill specimens 8.26 cm x 11.43 cm (3.25" x 4.5") shall be selected from

each sample unit. The 8.26 cm (3.25") dimension is the test direction. Specimens shall be flexed for 20,000 cycles as specified in ASTM D2097-03 (2010) and as follows: Mark the knit side of each specimen with two lines 4.32 cm (1.7") apart and perpendicular to the test direction. The area between the lines is the test area and shall be centered on the knit side of the specimen. Wrap the specimens around fully extended pistons with the knit side out. The test area lines shall meet evenly and shall line up with the edges of the pistons. Clamp in place making sure the clamps are not in the test area. Check specimen for smoothness and tautness (wrinkles cause improper flexing). The distance between the pistons shall be 4.32 cm (1.7") in the open position and 1.27 cm (0.5") in the closed position as measured from the bottom of the upper piston and top of the lower piston. Place the test apparatus with mounted specimens in a test chamber at $-31.67^{\circ}\text{C} \pm 1^{\circ}\text{C}$ ($-25^{\circ}\text{F} \pm 2^{\circ}\text{F}$) for a one hour conditioning period and then flex in the test chamber at $-31.67^{\circ}\text{C} \pm 1^{\circ}\text{C}$ ($-25^{\circ}\text{F} \pm 2^{\circ}\text{F}$). After flexing, test for water permeability as in test procedure #3 except that the orifice of the tester shall be modified to accommodate the smaller specimen size

5. One 35.56 cm (14") by full width specimen shall be selected from each sample unit. The specimens shall be agitated using the 'normal' cycle in an automatic home laundering as specified in AATCC 135-2012 except that the machine shall be capable of continuous agitation. The water level shall be maintained at $72.74\ell \pm 4.55\ell$ (16 ± 1 gallons), and the water temperature shall be $32^{\circ}\text{C} \pm 9^{\circ}\text{C}$. The load shall be $.91\text{ kg} \pm .09\text{ kg}$ ($2\text{ lbs} \pm 0.2\text{ lbs}$). The specimen shall be removed from the washer after 100 hours of continuous agitation. The specimen shall be air dried and then tested for water permeability at three sites across the width of the specimen according to test procedure #3.
6. The water pressure shall be applied to the knit side of the laminated cloth from below the test specimen. The maximum pressure of 172.25 kPa (25 psi) shall be attained in 2 minutes \pm 20 seconds and shall be applied for 5 minutes. Leakage is defined as the appearance of water any place within the test area.
7. Place a 15.24 cm x 15.24 cm (6" x 6") piece of blotting paper on a flat surface and cover with a 25.4 cm x 25.4 cm (10" x 10") test specimen with the face side up. Weigh out $2.0\text{ gm} \pm 0.1\text{ gm}$ ($.07\text{ oz} \pm .004\text{ oz}$) of solid contaminant or pipette 2.0 ml ($.07\text{ f. oz}$) of a liquid contaminant. Place the contaminant on the center of the specimen and cover with a 15.24 cm x 15.24 cm (6" x 6") piece of glassine paper. Place a 1.81 kg (4 lbs) weight on the glassine paper directly over the contaminated area. Allow the weight to remain on the specimen for 30 minutes. Remove the weight and glassine paper and allow the specimen to sit undisturbed for an additional 30 minutes. Wipe off any excess contaminant using a fresh piece of blotting paper and test for water permeability as per procedure #6 except that the water pressure shall be applied for 3 minutes.
8. One specimen per sample unit shall be tested for water permeability after exposure to synthetic perspiration. The specimen shall be not less than 15.24 cm (6") in diameter. The test cups shall accommodate this size specimen and shall have a depth of at least 2.5 cm (1"). The cups shall be sealed to prevent leakage. The solution shall contact the knit side of the laminate.

Synthetic perspiration shall be prepared by stirring the following ingredients into 500 ml of distilled water:

3 grams sodium chloride
 1 gram predigested protein
 1 gram n-propyl propionate
 0.5 gram lecithin (phosphatidyl choline)

The predigested protein shall contain the following amino acids:

<u>Ingredient</u>	<u>Milligrams (mg)</u>
Lysine	82.5
Histidine	27.5
Arginine	40.0
Aspartic acid	72.5
Threonine	42.5
Serine	50.0
Glutamic acid	197.5
Proline	92.5
Glycine	22.5
Alanine	28.7
Cystine	4.7
Valine	66.2
Methionine	30.0
Isoleucine	53.8
Leucine	87.5
Tyrosine	51.3
Phenylalanine	48.8
Tryptophan	18.8

The solution shall be stirred continuously and heated to $50 \pm 1^{\circ}\text{C}$, then covered and cooled to approximately 35°C .

The solution shall be stirred such that any solid particles are suspended in solution and poured into the test cup. The cup shall be inverted to allow the synthetic perspiration to evaporate through the specimen.

After the solution has evaporated through the specimen, such that no more than .32 cm (0.125") of solution remains, the specimen shall be removed from the cup, rinsed in warm water, dried and tested for water permeability as specified in test procedure #6 except that the water pressure shall be applied for 3 minutes.

- Method ASTM D3886-99 (2013) Procedure: Use No. 0 Emery Polishing Paper. Side abraded shall be the knit side, with a multidirectional abrasion motion. Change abradant after each 300 cycles or specimen failure. The air pressure under the diaphragm should

be 4 psi, and the load on the abradant plate should be 1 lb. Failure is determined by breaking of the electrical contact.

10. A minimum of 3 straight seams and 2 cross-over seams shall be tested prior to laundry cycle testing and remain waterproof (no leakage) when tested at 13.78 kPa (2 psi) for 3 minutes with the seam tape side facing up, away from the water challenge. Leakage is defined as the appearance of water any place within the 11.43 cm (4.5") diameter test area since the seam tape process can damage the fabric adjacent to the tape. Test for water permeability as in procedure #3 except the face fabric shall face the water challenge.
11. A minimum of 3 straight seams and 2 cross-over seams shall be tested after ten (10) home laundry cycles and remain waterproof (no leakage) when tested at 13.78 kPa (2 psi) for 3 minutes with the seam tape side facing up, away from the water challenge. Leakage is defined as the appearance of water any place within the 11.43 cm (4.5") diameter test area since the seam tape process can damage the fabric adjacent to the tape. Test for water permeability as in procedure #3 except the face fabric shall face the water challenge. Laundry testing should be performed in accordance with procedure specified in Machine Cycle 1, Wash Temperature 111, and Drying Procedure Ai of ANSI/AATCC 135-2012.
12. A minimum of 3 straight seams and 2 cross-over seams shall be tested after ten(10) dry clean cycles and remain waterproof (no leakage) when tested a 13.78 kPa (2 psi) for 3 minutes with the seam tape side facing up, away from the water challenge. Leakage is defined as the appearance of water any place within the 11.43 cm (4.5") diameter test area since the seam tape process can damage the fabric adjacent to the tape. Test for water permeability as in procedure #3 except the face fabric shall face the water challenge.

TABLE II
Properties of Laminated Shell Material I (Dark Navy Blue)

REQUIREMENTS			TEST METHODS
1	Mass (Laminated)	205 g/m ² (maximum.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 5.1-M90 (2013) ASTM D3776/D3776M-09a (2013)
2	Colour fastness to Light	Equal to AATCC Standard L5 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 18.3 ISO 105-B02:2014
3	Colour Fastness - To Crocking	Wet: Grey Scale 4 or better Dry: Grey Scale 4 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 22 AATCC 8-2013
4	Colour Fastness - To Laundering	Colour change: Grey Scale 4.5 or better Staining: Grey Scale 3 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 19.1 Test 2A AATCC 61-2013
5	Dimensional Change to Laundering	After 5 cycles: Not exceed $\pm 3\%$ length Not exceed $\pm 3\%$ width	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 58-2004, 3, E AATCC Method 135-2012 (I) (III) (Ai)
6	Breaking Strength - Grab Method	Warp 800 Newton (min.) Weft 800 Newton (min.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 9.2 ASTM D5034-09 (2013)
7	Tearing Strength	Warp 20 Newton (min.) Weft 20 Newton (min.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 12.3 ISO 13937-1:2000 ASTM D1424-09 (2013)
8	Abrasion Resistance - Martindale Method Part 2 (Determination of Specimen Breakdown)	No breakdown after 10,000 at 9 kPa	<ul style="list-style-type: none"> ASTM D4966-12
9	DWR (durable water repellent)	- 100 spray rating. Initial - 90 spray rating. After 5 launderings - 80 spray rating. After 10 launderings	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 26.2 Perma Press washing cycles (Washing Temp. 40°C \pm 3°C) Tumble Dry - Perma Press for 30 minutes as per (AATCC Method 135-2012)
10	Oil Repellent	- 6 Initial - 5 After 5 launderings - 4 After 10 launderings	<ul style="list-style-type: none"> AATCC 118-2013 Perma Press washing cycles (Washing Temp. 40°C \pm 3°C) Tumble Dry - Perma Press for 30 minutes as per (AATCC Method 135-2012)

TABLE III
Properties of Laminated Shell Material III (Yellow)

		REQUIREMENTS	TEST METHODS
1	Mass (Laminated)	205 g/m ² (maximum.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 5.1-M90 (2013) ASTM D3776/D3776M-09a (2013)
2	Colour fastness to Light	Equal to AATCC Standard L5 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 18.3 ISO 105-B02:2014
3	Colour Fastness - To Crocking	Wet: Grey Scale 4 or better Dry: Grey Scale 4 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 22 AATCC 8-2013
4	Colour Fastness - To Laundering	Colour change: Grey Scale 4.5 or better Staining: Grey Scale 3 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 19.1 Test 2A AATCC 61-2013
5	Dimensional Change to Laundering	After 5 cycles: Not exceed $\pm 3\%$ length Not exceed $\pm 3\%$ width	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 58-2004, 3, E AATCC Method 135-2012 (1) (III) (Ai)
6	Breaking Strength - Grab Method	Warp: 550N (min.) Weft: 450N (min.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 9.2 ASTM D5034-09 (2013)
7	Tearing Strength	Warp 15 Newtons (min.) Weft 14 Newtons (min.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 12.3 ISO 13937-1:2000 ASTM D1424-09 (2013)
8	Abrasion Resistance - Martindale Method Part 2 (Determination of Specimen Breakdown)	No breakdown after 10,000 at 9 kPa	<ul style="list-style-type: none"> ASTM D4966-12
9	DWR (durable water repellent)	- 100 spray rating. Initial - 90 spray rating. After 5 launderings - 80 spray rating. After 10 launderings	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 26.2 -Perma Press washing cycles (Washing Temp. 40°C \pm 3°C) - Tumble Dry - Perma Press for 30 minutes as per (AATCC Method 135-2012)
10	Oil Repellent	- 6 Initial - 5 After 5 launderings - 4 After 10 launderings	<ul style="list-style-type: none"> AATCC 118-2013 -Perma Press washing cycles (Washing Temp. 40°C \pm 3°C) - Tumble Dry - Perma Press for 30 minutes as per (AATCC Method 135-2012)

TABLE IV
Properties of Laminated Shell Material II (Fluorescent Yellow-Green)
CAN/CSA Z96-09 High Visibility Apparel Requirements (Meeting or Exceeding)

REQUIREMENTS			TEST METHODS
1	Mass (Laminated)	205 g/m ² (maximum.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 5.1-M90 (2013) ASTM D3776/D3776M-09a (2013)
2	Background - Material Colour	<p>Initial: CSA-Z96-09, Table 2A - Fluorescent yellow-green</p> <p>After colourfastness to light (AATCC 16 Test Option E, 40 AATCC Fading Units): CSA-Z96-09, Table 2A - Fluorescent yellow-green</p>	<ul style="list-style-type: none"> ASTM E1164-12
3	Colour Fastness - To Light (Xenon)	Light fastness shall be equal or better than Grade 4 by Grey Scale for Colour change after 40 AATCC Fading Units.	<ul style="list-style-type: none"> AATCC 16.3-2014 Test Option E ISO 105-B02:2014
4	Colour Fastness - To Crocking	Wet: Grey Scale 4 or better Dry: Grey Scale 4 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 22 AATCC 8-2013
5	Colour Fastness - To Perspiration	Colour change: Grey Scale 4 or better Staining: Grey Scale 4 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 23-M90 AATCC 15-2013
6	Colour Fastness - To Laundering	Colour change: Grey Scale 4.5 or better Staining: Grey Scale 3 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 19.1 Test 2A AATCC 61-2013
7	Dimensional Change to Laundering	After 5 cycles: Not exceed $\pm 3\%$ length Not exceed $\pm 3\%$ width	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 58-2004, 3, E AATCC Method 135-2012 (1) (III) (Ai)
8	Breaking Strength	Warp: 550N (min.) Weft: 450N (min.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 9.2 ASTM D5034-09 (2013)
9	Tearing Strength	Warp 15 Newtons (min.) Weft 14 Newtons (min.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 12.3 ISO 13937-1:2000 ASTM D1424-09 (2013)
10	Abrasion Resistance - Martindale Method Part 2 (Determination of Specimen Breakdown)	No breakdown after 10,000 at 9 kPa	<ul style="list-style-type: none"> ASTM D4966-12
11	DWR (durable water repellent)	- 100 spray rating. Initial - 90 spray rating. After 5 launderings - 80 spray rating. After 10 launderings	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 26.2 Perma Press washing cycles (Washing Temp. 40°C \pm 3°C) Tumble Dry - Perma Press for 30 minutes as per (AATCC Method 135-2012)
12	Oil Repellent	- 6 Initial - 5 After 5 launderings - 4 After 10 launderings	<ul style="list-style-type: none"> AATCC 118-2013 Perma Press washing cycles (Washing Temp. 40°C \pm 3°C) Tumble Dry - Perma Press for 30 minutes as per (AATCC Method 135-2012)

APPENDIX A

Sealed Pattern Identifier

Pattern #: G.S. 1045-301

Title: Trousers, Inclement and Stripes

Paper Patterns - Paper patterns are available from the RCMP, Uniform & Equipment Program, Ottawa Ontario, under Pattern # G.S. 1045-301. 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. Contractors may make changes required to suit their production process, however, the design and grade shall not be affected or changed. **Punch holes are not an acceptable method of placement. 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.**

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

Pattern Pieces - This design has 16 pattern components.

<u>Legend:</u>	
Shell Material I	= Para. 4.1.4.1 Dark Navy Blue
Shell Material II	= Para. 4.1.4.2 Fluorescent Yellow-Green
Shell Material III	= Para. 4.1.4.3 Yellow
Cut 1 Single	= Cut 1
Cut 1 Paired	= Cut 2
(RSU)	= Right Side Up
(RSD)	= Right Side Down

Pattern Components	Nomenclature	Quantity to be cut	Material
# 1 of 16	Upper Back	1 paired	Shell Material I
# 2 of 16	Lower Back	1 paired	Shell Material I
# 3 of 16	Upper Front	1 paired	Shell Material I
# 4 of 16	Middle Front	1 paired	Shell Material I
# 5 of 16	Lower Front	1 paired	Shell Material I
# 6 of 16	Waistband Back	1 single	Shell Material I
# 7 of 16	Waistband Front	1 paired	Shell Material I
# 8 of 16	Fly Front	1 single	Shell Material I
# 9 of 16	Fly Front Curtain	1 single	Shell Material I
# 10 of 16	Inner Fly Facing	1 single (RSD)	Shell Material I
# 11 of 16	Waistband Tabs	1 paired	Shell Material I
# 12 of 16	Adjustment Strap	1 paired	Shell Material I
# 13 of 16	Belt Loops	5 single	Shell Material I
# 14 of 16	Stripe “A”(Contract Sizes)	1 paired	Shell Material I Shell Material II Shell Material III
# 14 of 16	Stripe “B” (Special Sizes)	1 paired	Shell Material I Shell Material II Shell Material III
# 15 of 16	Hide Away Flap	1 paired	Shell Material III
# 16 of 16	Hide Away Curtain	1 paired	Shell Material I

Note:

Pattern Component: #14 Stripe “A” to be used for all contract sizes.

Pattern Component: #14 Stripe “B” to be used for special order sizes only.

APPENDIX B

CARE INSTRUCTIONS

Applicable To:

Jacket Patrol Unisex
Jacket High Visibility
Parka Inclement & Hood Cold Weather (without the fur trim)
Trousers Inclement

These garments are designed to be both waterproof and water repellent. The best way to maintain its performance is to **keep them clean by washing it regularly**. When the water no longer beads up and rolls off, use a water based, solvent free, nonflammable DWR product to restore the water repellency. The following care instructions should ensure a normal life cycle for your garments. These garments should be washed after 10-12 days of continuous use or every 20-30 days with occasional use.

The water repellency, waterproofness and breathability of your garment are affected by the following:

1. Dirt buildup and other contaminants including oils, sunscreen and sweat reduce the effectiveness of the water repellency.
2. Fabric softeners have a detrimental effect on the colour and the waterproofness and water repellency of the fabric. They will make the colour fade more quickly and affect the overall performance of the fabric. These include liquid fabric softeners, detergents that contain softeners and dryer sheets. Therefore it is very important that these softeners not be used when laundering your garment.

Machine Wash:

- DO NOT COMMERCIAL LAUNDRY
- DO NOT WASH FUR

Close all zippers, fasteners and velcro before washing.

Wash in warm water separately, without detergent. DO NOT USE FABRIC SOFTENERS OR POWDERED DETERGENTS OR ANY LIQUID DETERGENTS THAT CONTAIN FABRIC SOFTENERS. DO NOT USE BLEACH.

If heavily soiled, a small amount of detergent or specialty wash products (i.e. **Grangers® Performance Wash, Fibertec Pro Wash or ReviveX® Synthetic fabric cleaner**) for waterproof garments may be used.

At the end of the final rinse cycle, re-adjust the garment in the washer, and put it through an additional rinse cycle. This will assure complete rinsing of detergent that may have been trapped during washing, therefore preserving water repellency.

Drying:

Close all zippers, fasteners and velcro before drying.

If re-application of DWR is necessary, hang wet garment on hanger and follow application instructions of DWR product. (i.e. **Grangers® XT Waterproof spray, Fibertec Blue Guard Spray-on, Revivex® Spray-On or Nikwax Tx-Direct™**)

The garment **must** be tumble dried separately on a warm setting for 50 minutes to reactivate the durable water repellency (DWR.). DO NOT USE DRYER SHEETS.

If necessary, touch up with steam iron at low temperature.

Dry Cleaning:

If dry cleaned, request clear distilled solvent rinse and DWR spray repellent.

INSTRUCTIONS D'ENTRETIEN

Applicable à :

Blouson de patrouille unisexe

Veste haute visibilité

Parka pour intempéries et capuchon pour temps froid

Pantalon pour intempéries

Ces vêtements sont conçus pour être imperméables et déperlants. La meilleure façon de préserver leurs propriétés est de les **garder propres en les lavant régulièrement**. Lorsque l'eau ne perle plus, utiliser un produit déperlant durable à base d'eau, sans solvant et ininflammable pour restaurer la déperlance. Les instructions d'entretien ci-dessous permettront d'assurer le rendement optimal des vêtements. Ces vêtements devraient être lavés après 10 à 12 jours d'utilisation continue ou à tous les 20 à 30 jours d'utilisation occasionnelle.

Les conditions suivantes peuvent influencer sur l'imperméabilité, la déperlance et la respirabilité des vêtements :

1. L'accumulation de saletés et d'autres contaminants comme de l'huile, de la crème solaire ou de la sueur peut réduire l'imperméabilité.
2. Les agents assouplissants influent sur la couleur, la déperlance et l'imperméabilité. Ils décolorent les tissus plus rapidement et nuisent à leur rendement général. Il est très important de n'utiliser **aucun** type d'assouplissant (agent assouplissant liquide, détergent avec assouplissant et assouplissant en feuilles).

Lavage à la machine :

- NE PAS LAVER DANS UNE BUANDERIE COMMERCIALE
- NE PAS LAVER LA FOURRURE

Fermer toutes les fermetures à glissière, les attaches et les attaches à ruban autoagrippant avant de laver.

Laver séparément à l'eau tiède, sans détergent. NE PAS UTILISER D'AGENT ASSOUPLISSANT NI DE DÉTERGENT EN POUDRE OU LIQUIDE AVEC ASSOUPLISSANT. NE PAS UTILISER D'AGENT DE BLANCHIMENT.

Si le vêtement est très sale, une petite quantité de détergent ou de produit spécifiquement conçu pour l'entretien des vêtements imperméables (**p. ex. nettoyeur haute performance de Granger's^{MD}, produit Pro Wash de Fibertec ou nettoyeur pour tissus synthétiques ReviveX^{MD}**) peut être utilisée.

À la fin du dernier cycle de rinçage, replacer le vêtement dans la machine et entreprendre un autre cycle de rinçage, afin d'éliminer complètement le détergent qui peut être resté durant le lavage et de préserver la déperlance.

Séchage:

Fermer toutes les fermetures à glissière, les attaches et les attaches à ruban autoagrippant avant de sécher.

Si un nouveau traitement déperlant est requis, suspendre le vêtement mouillé sur un cintre et suivre les instructions du fabricant du produit (**p. ex. imperméabilisant à vaporiser XT de Granger's^{MD}, Blue Guard de Fibertec, Revivex^{MD} ou Tx-Direct^{MC} de Nikwax**).

Le vêtement **doit** être séché séparément par culbutage à basse température pendant 50 minutes, afin de réactiver les propriétés déperlantes. NE PAS UTILISER D'ASSOUPLISSANT EN FEUILLES.

Au besoin, repasser légèrement à basse température.

Nettoyage à sec :

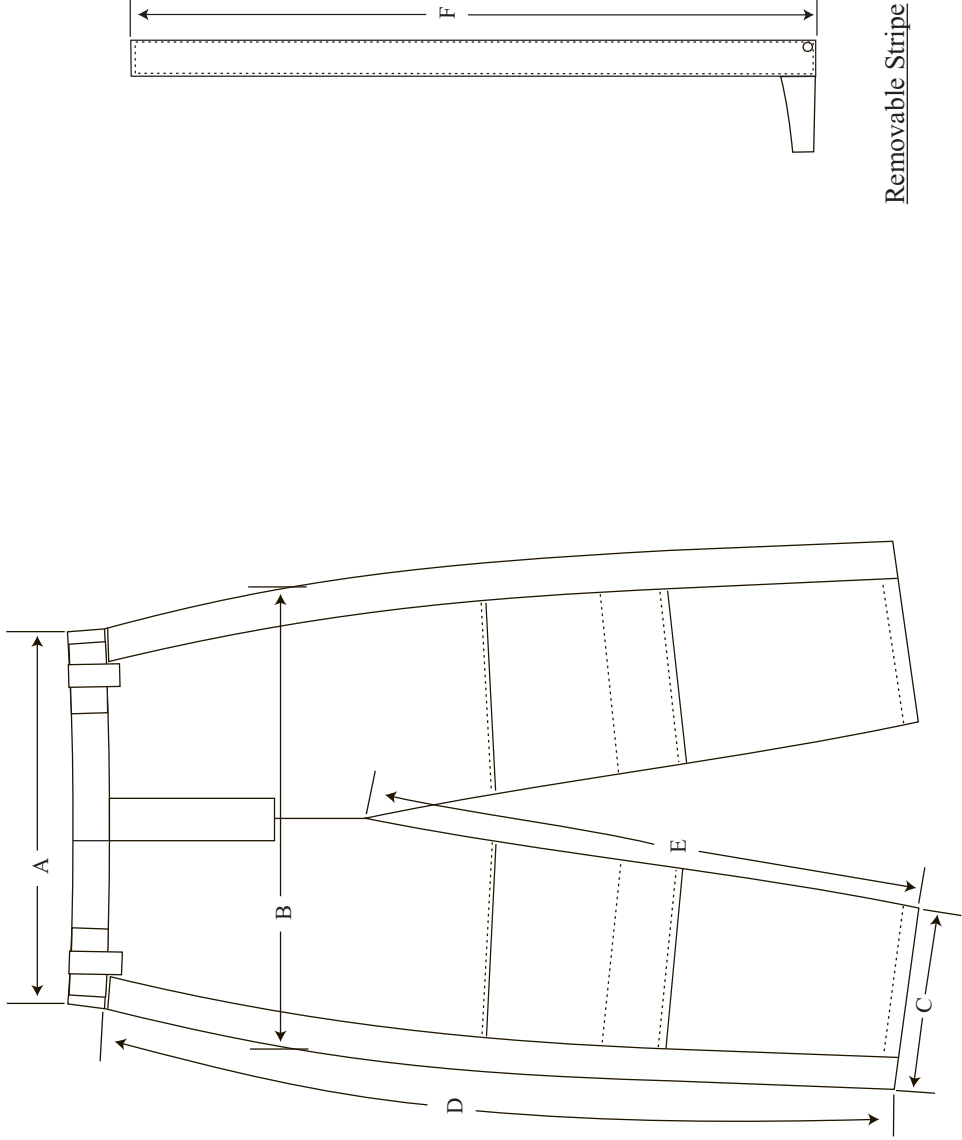
Si le vêtement est nettoyé à sec, demander un rinçage avec un solvant distillé clair et un traitement à l'aide d'un produit déperlant à vaporiser.

TROUSERS, INCLEMENT AND STRIPES

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Dwg. 1

Measurement Location Chart



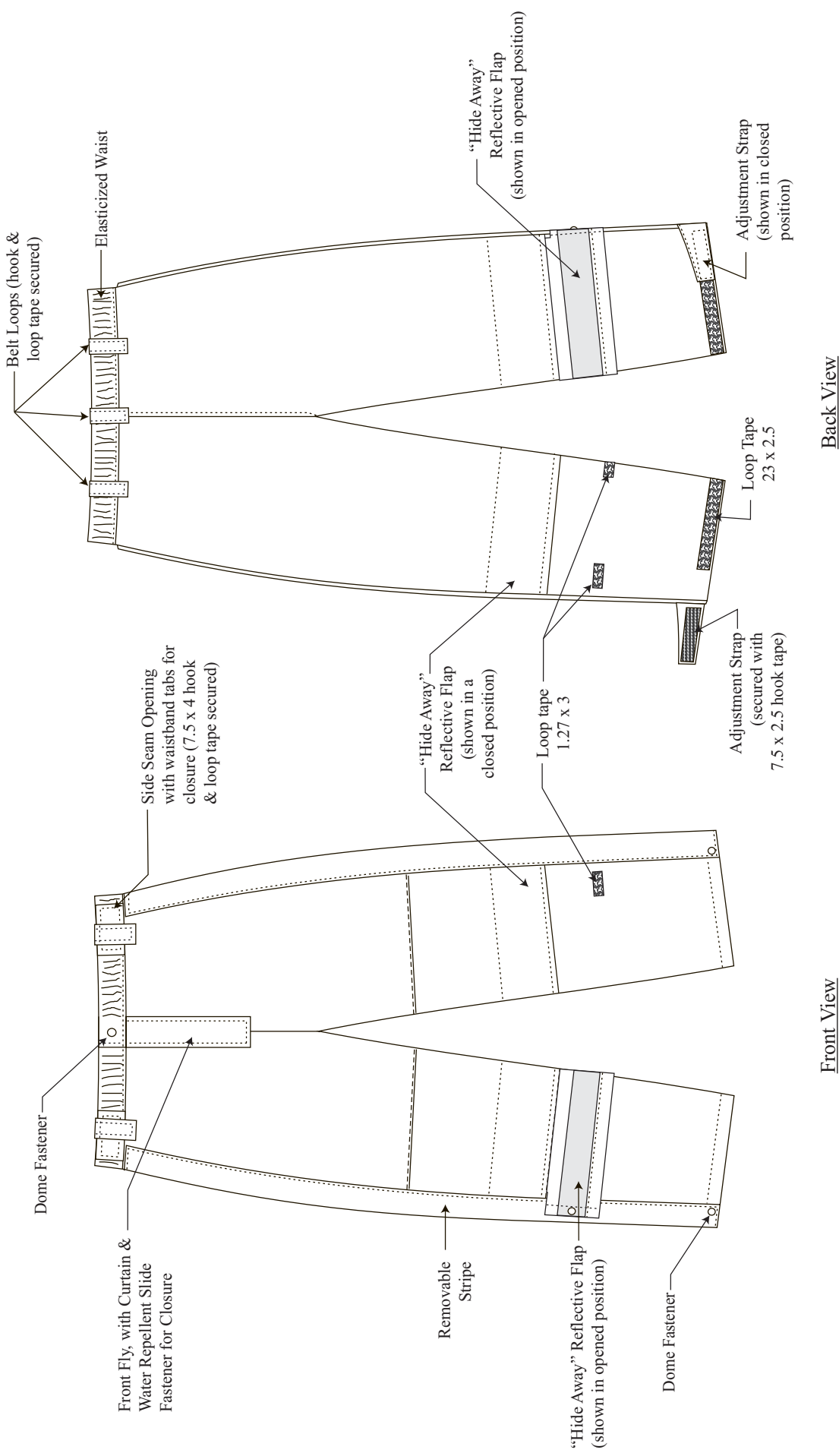
Front View

NOT TO SCALE

TROUSERS, INCLEMENT AND STRIPES

G.S.1045-301

Dwg. 2

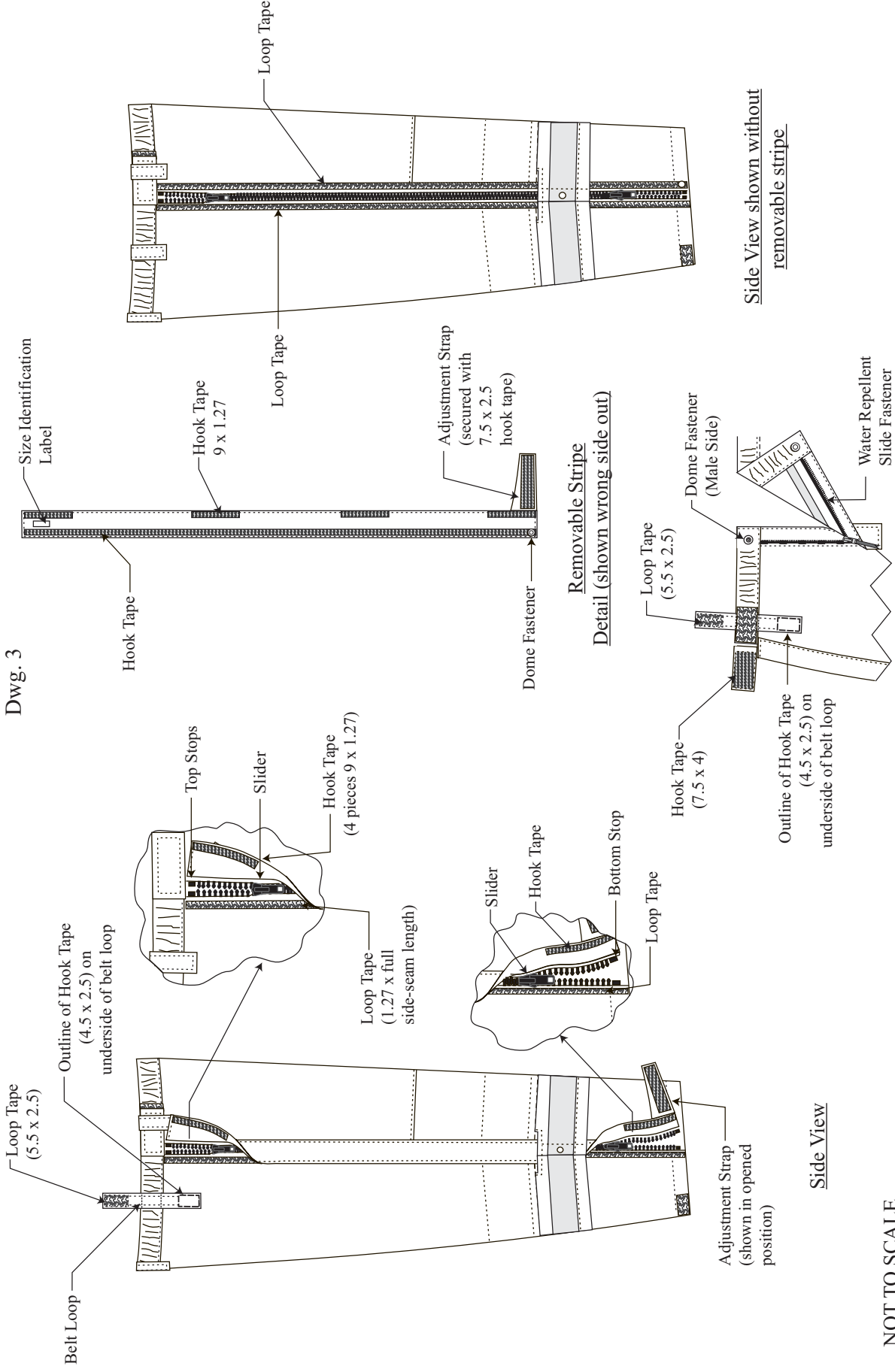


NOT TO SCALE
All measurements are shown in centimeters.
± 0.5cm tolerance acceptable unless otherwise indicated.

TROUSERS, INCREMENT AND STRIPES

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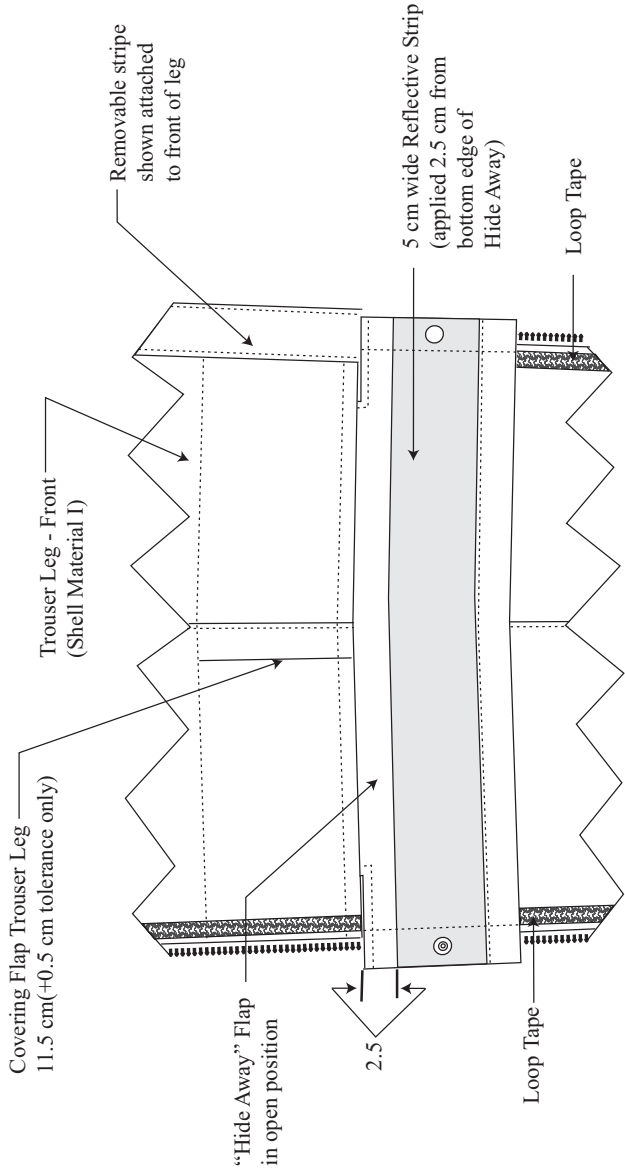
Dwg. 3



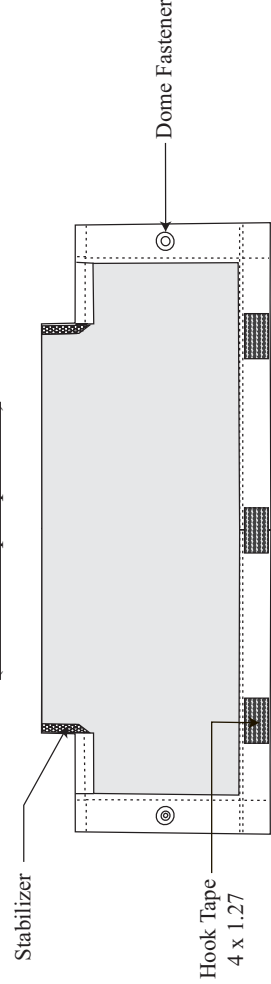
NOT TO SCALE
All measurements are shown in centimeters.
± 0.5cm tolerance acceptable unless otherwise indicated.

Fly & Belt Loop Detail

Dwg. 4

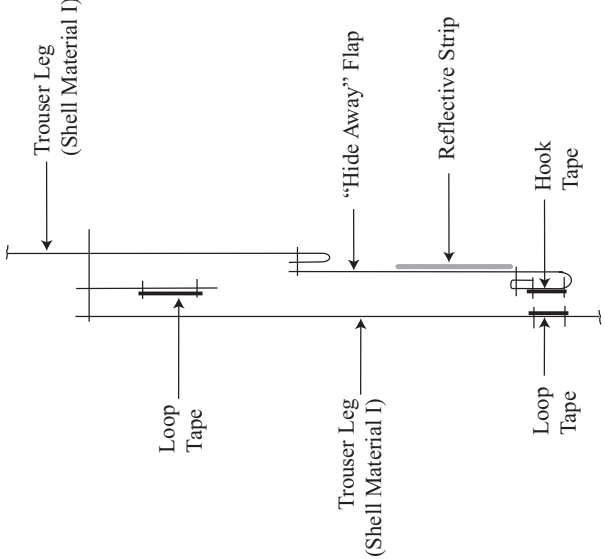


Partial View of Left Leg Covering Flap and "Hide Away" Flap (shown in open position)

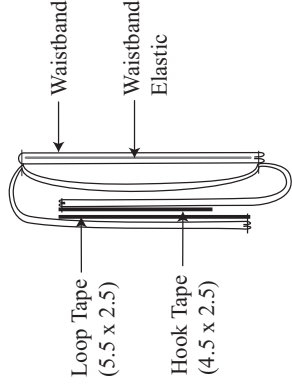


View of "Hide Away" Flap (shown wrong side out)

NOT TO SCALE
All measurements are shown in centimeters.
± 0.5cm tolerance acceptable unless otherwise indicated.



"Hide Away" Flap Detail



Belt Loop

ANNEX D

SPECIFICATION - G.S. 1045-307

PARKA, INCLEMENT AND COLD
WEATHER HOOD

dated 2015-07-09



Royal Canadian Mounted Police
Gendarmerie royale du Canada

Doc. no: G.S. 1045-307

Date: 2015-07-09

Specification

Parka, Inclement and Cold Weather Hood

This document has 49 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.



RCMP VIEWING SAMPLE

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

This will be used for the guidance of the 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 and 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

PARKA, INCLEMENT AND COLD WEATHER HOOD

1. Definition

- 1.1 This specification shall govern the manufacture and inspection of Parka, Inclement and Cold Weather Hood. The specific items covered under this specification with stock numbers are as follows:
- i. 5030 Parka, Inclement / Parka pour intempéries;
 - ii. 5031-000 Parka, Inclement Special / Parka pour intempéries, tailles spéciales;
 - iii. 3900 Parka, Inclement, Hood, Cold Weather / Parka pour intempéries, capuchon pour temps froid;
 - iv. 3901-000 Parka, Inclement, Hood, Cold Weather, Special / Parka pour intempéries, capuchon pour temps froid, tailles spéciales.
- 1.2 The specification, pattern, drawing, 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 Parka, Inclement and Cold Weather Hood.
- 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.
- 2.3 CAN/CGSB 4.131-93, Thread, Polyester, Polyester or Cotton Covered.
- 2.4 FED-STD-191A, Federal Standard, Textile Test Methods.

- 2.5 ASTM, American Society for Testing and Materials, Method D3776/D3776M-09a (2013), D2097-03 (2010), D413-98, D3886-99 (2013), D4966-12, D1424-09 (2013), D4770, D4970, D5034-09 (2013), D5169-98 (2015), D5170-98 (2015) and F392/F392M-11.
- 2.6 AATCC-8-2013, 16.3-2014, 61-2013, 100-2012, 118-2013 and 135-2012, American Association of Textile Chemists and Colorists - Technical Manual.
- 2.7 ISO 105-B02:2014, ISO 13937-1:2000, ISO 11092:2014, ISO 7211-2:1984 and ISO 6330:2012 International Standards Organization.
- 2.8 BS 3424-26: 1990, Method 29A, British Standards Institution.
- 2.9 MIL-C-21852F-Type III Class I, Cloth, Taffeta, Nylon
- 2.10 CAN/CGSB 86.1-2003 Care Labelling of Textiles
- 2.11 RCMP Specification, G.S.1045-266, Badges Woven Item - Badge, Shoulder, Cloth, Police.
- 2.12 RCMP Purchase Description, PD-PE-93, Police Patch, Reflective, Large & Small.
- 2.13 RCMP Purchase Description, PD-AP-02, Coyote Strips.

3. **General Requirements**

- 3.1 The article or material covered by this specification shall be free from imperfections or blemishes such as 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 Parka, Inclement shall be loose fitting, 3/4 length parka designed to be worn in conjunction with two removable RCMP liners, "Liner, Parka Inclement" or "Liner, Patrol, Unisex". It comes complete with one standard non-insulated hood and an optional cold weather hood with folding snorkel and fur trim. The front and back waist incorporates an elastic draw cord with cord locks which are divided into 3 separate compartments for adjustability. The shell is constructed from a 3-layer material with a WMVP (waterproof moisture vapour

permeable) membrane. The 3-layer fabric construction does not require a lining when made up into a garment. This parka shall be waterproof with all seams permanently seam sealed unless otherwise stated.

4. **Detail Requirements**

4.1 **Components**

- 4.1.1 **Shell Material I** - The shell material shall be plain weave 100% nylon, Type 6.6. The colour shall be dark navy blue, meeting the approved colour swatch, with a durable water repellent finish. An appropriate heat-set process shall be applied to the shell material in order to be prepared for the lamination of the waterproof moisture vapour permeable membrane as specified in Para. 4.1.2.
- 4.1.2 **Shell Material I, Laminated** – The shell material shall be laminated in a 3-layer format with a membrane, which after lamination provides a high level of water resistance/waterproofness and breathability. The outer layer shall consist of shell material as specified in Para. 4.1.1, with the membrane as the middle layer, and a black, 100% nylon or polyester warp tricot knit fabric with a maximum weight of 55 g/m², as the inner layer. The layers shall be joined together by a suitable lamination process. The membrane when laminated to the shell material shall meet the test requirements outlined in Table I and Table II forming part of this specification. The laminated shell materials shall not show any visible signs of delamination or loss of film during the garments useful life (approximately 5 years). The fabric shall be capable of having its sewn seams, seam-sealed with an appropriate tape, in a waterproof, durable fashion. Materials not meeting these requirements will be cause for rejection. Delamination is defined as any irreparable separation of the bonded layers of the Laminated Shell Material(s).
- 4.1.3 **Seam Sealing Tape** – The 3-layer composite fabric shall be seamed using a compatible nylon or polyester seam-sealing tape with the 3-layer shell fabric and sealed-seams meeting the requirements outlined in Table I forming part of this specification. The tape on the sealed seams shall not peel off and/or wear during the projected life span of the garment.
- 4.1.4 **Fleece Lining** – 100% polyester, Micro-Fleece with a non-pill velour face. It shall be black in colour, meeting the requirements outlined in Table V forming part of this specification. Polartec LLC “Alaska Fleece #7366” is known to meet the requirement.

- 4.1.5 **Back Yoke Lining Material** - The back yoke lining material shall be 70 denier 100% nylon, weighing between 60-70 g/m², black in colour or to match the shell material.
- 4.1.6 **Mesh Pocketing** - The pocketing shall be a polyester, warp knit mesh, black in colour or to match the shell material, meeting the requirements outlined in Table III. Tek-Knit “XPTAR004” is known to meet the requirement.
- 4.1.7 **Insulation Cold Weather Hood** - Shall be 100% polyester insulation with 1 layer of polyester scrim. An anti-microbial agent in the form of Silver Nano Particle with binder shall be applied to the insulation as a preventive agent to Odor, Fungi, Bacteria and Viruses. The insulation when tested as a single layer shall meet the requirements outlined in Table IV forming part of this specification. There shall be two layers of insulation used.
- 4.1.8 **Reflective Police Patches** - The RCMP stock item number 8653-100, Police Patch, Reflective, Large and RCMP stock item number 8654-100, Police Patch, Reflective, Small shall be purchased from the RCMP.
- 4.1.9 **Shoulder Badges** - The RCMP stock item number 2135-108, Badge, Shoulder, Police shall be purchased from the RCMP.
- 4.1.10 **Fur Trim - Cold Weather Hood** - The RCMP stock item number 8750-100, Coyote Strips shall be purchased from the RCMP.
- 4.1.11 **Elastic Drawcord** - The drawcord shall be round braided polyester elastic, black in colour, 2.4 mm, with maximum elongation of 135% and full recovery. Cansew style #EBR C-38 is known to meet the requirement.
- 4.1.12 **Cord Locks**
- 4.1.12.1 **Cord Locks** - The cord locks shall be low profile cord lock cylinder, spring loaded in acetyl composition, black in colour. It shall come in two sizes. The cord lock for the hem channel shall be shaped with a maximum diameter of 13 mm and a maximum depth of 11.2 mm. Texfast style #S217B is known to meet the requirement. The cord lock for the hood shall be shaped with a maximum diameter of 15.5 mm and a maximum depth of 12.5 mm. Texfast style #S217A is known to meet the requirement.

- 4.1.12.2 **Cord Locks – Cold Weather Hood** - The cord locks shall be commercially available, spring loaded, nylon composition, black in colour, equal in respect to the viewing sample.
- 4.1.12.3 **Toggle Lock** - The lock shall be oval shaped with a maximum length of 30 mm and a maximum width of 9 mm, with two 4 mm holes, acetyl composition, and black in colour. It may be of sew on or clamp-on version.
- 4.1.13 **Elastic** - The elastic shall be heavy duty nylon or polyester, black in colour, with maximum elongation of 130% and full recovery. It shall come in two widths, 2.5 cm and 4 cm. The elastic measuring 2.5 cm shall be used in a double layer for the side seam closure strap. The elastic measuring 4 cm shall be used for the sleeve cuff.

4.1.14 Slide Fasteners - Lengths - Measurements in Inches

Height Group	Sizes	Front	Inside Front	Side Seam	Sleeve Pocket	Chest Pocket	Lower Front Pocket	Inside Pocket
X Short	XX Small	23"	13½"	23½"	7"	5½"	6½"	7"
	X Small	23½"	14½"	22"	7"	5½"	7"	7"
	Small	24"	15"	22"	7"	6"	8"	7"
	Medium	25"	15½"	23½"	7"	6½"	8"	7"
	Large	25½"	16½"	23½"	7"	6½"	9"	7"
	X Large	26"	17½"	24"	7"	6½"	9"	7"
	2X Large	27"	18"	24"	7"	7"	9"	7"
	3X Large	27"	19"	24"	7"	7"	10"	7"
	4X Large	28"	20"	25½"	7"	7"	10"	7"
	5X Large	28½"	20½"	25½"	7"	7"	10"	7"
Short	XX Small	24"	15½"	24"	7"	5½"	6½"	7"
	X Small	24"	16"	24"	7"	5½"	7"	7"
	Small	25"	17"	24"	7"	6"	8"	7"
	Medium	25½"	18"	25½"	7"	6½"	8"	7"
	Large	26"	18½"	25½"	7"	6½"	9"	7"
	X Large	27"	19½"	26"	7"	6½"	9"	7"
	2X Large	27½"	20"	26"	7"	7"	9"	7"
	3X Large	28"	21"	26"	7"	7"	10"	7"
	4X Large	29"	22"	27½"	7"	7"	10"	7"
	5X Large	29"	22½"	27½"	7"	7"	10"	7"
Regular	XX Small	24½"	17½"	26"	8"	5½"	6½"	7"
	X Small	25"	18"	26"	8"	5½"	7"	7"
	Small	26"	19"	26"	8"	6"	8"	7"
	Medium	26"	20"	27½"	8"	6½"	8"	7"
	Large	27"	20½"	27½"	8"	6½"	9"	7"
	X Large	27½"	21½"	28"	8"	6½"	9"	7"
	2X Large	28"	22"	28"	8"	7"	9"	7"
	3X Large	29"	23"	28"	8"	7"	10"	7"
	4X Large	29½"	24"	29½"	8"	7"	10"	7"
	5X Large	30"	24½"	29½"	8"	7"	10"	7"
Tall	XX Small	25"	19½"	28"	8"	5½"	6½"	7"
	X Small	26"	20"	28"	8"	5½"	7"	7"
	Small	26½"	21"	28"	8"	6"	8"	7"
	Medium	27"	22"	29½"	8"	6½"	8"	7"
	Large	28"	22½"	29½"	8"	6½"	9"	7"
	X Large	28½"	23½"	30"	8"	6½"	9"	7"
	2X Large	29"	24"	30"	8"	7"	9"	7"
	3X Large	30"	25"	30"	8"	7"	10"	7"
	4X Large	30"	25½"	31½"	8"	7"	10"	7"
	5X Large	31"	26"	31½"	8"	7"	10"	7"
X Tall	XX Small	26"	21½"	30"	8"	5½"	6½"	7"
	X Small	27"	22"	30"	8"	5½"	7"	7"
	Small	27"	23"	30"	8"	6"	8"	7"
	Medium	28"	24"	31½"	8"	6½"	8"	7"
	Large	28½"	24½"	31½"	8"	6½"	9"	7"
	X Large	29"	25½"	32"	8"	6½"	9"	7"
	2X Large	30"	26"	32"	8"	7"	9"	7"
	3X Large	30½"	27"	32"	8"	7"	10"	7"
	4X Large	31"	27½"	33½"	8"	7"	10"	7"
	5X Large	31"	28½"	33½"	8"	7"	10"	7"
XX Tall	XX Small	27"	23½"	32"	8"	5½"	6½"	7"
	X Small	27½"	24"	32"	8"	5½"	7"	7"
	Small	28"	25"	32"	8"	6"	8"	7"
	Medium	29"	25½"	33½"	8"	6½"	8"	7"
	Large	29"	26½"	33½"	8"	6½"	9"	7"
	X Large	30"	27"	34"	8"	6½"	9"	7"
	2X Large	30½"	28"	34"	8"	7"	9"	7"
	3X Large	31"	29"	34"	8"	7"	10"	7"
	4X Large	32"	29½"	35½"	8"	7"	10"	7"
	5X Large	32"	30½"	35½"	8"	7"	10"	7"

- 4.1.14.1 **Slide Fastener - Front** - Shall be a two way separable, movable open-end separator, black in colour, injection molded, with two automatic sliders, Slider 1: DA and slider 2: DAG. Vislon® YKK 28000 VSMO 56 9/16 (only).
- 4.1.14.2 **Slide Fastener - Right Inside Front** - (To be used for the attachment of a removable liners) - Shall consist of $\frac{1}{2}$ (half) of an open-end slide fastener with the retaining box and slider; it shall be injection molded, with a DA automatic slider, black in colour, Vislon® YKK 26590 VSO 56 9/16 (only).
- 4.1.14.3 **Slide Fastener - Left Inside Front** - (To be used for the attachment of a removable liners) Shall consist of $\frac{1}{2}$ (half) of an open-end slide fastener with the insert pin and shall be injection molded, black in colour, Vislon® YKK 26590 VSO 56 9/16 (Left Hand Pin Insertion) (only).
- 4.1.14.4 **Slide Fastener, Upper & Lower Front Pockets** - Shall be a closed end coil type slide fastener with a DF non-lock slider, black in colour, with long pull tabs, YKK 12430 CIFIC 51 DFL1 E 5/8 (only).
- 4.1.14.5 **Slide Fastener - Upper Sleeve Pocket** - Shall be a closed end coil type slide fastener with a DF non-lock slider, black in colour, YKK 12824 CIFIC 51 DFW1 E 5/8 (only).
- 4.1.14.6 **Slide Fastener - Side Seam** - Shall be water repellent, black in colour, with the tape treated with a strong water repellent finish and a coated back of polyurethane. It shall be closed-ended with double sliders arranged in a head-to-head relation, Aqua Guard YKK 37330 CIT4MC 56/6/6 DA8LH E/DA8LH E/DA8LH E 5/8*TS-BTM*B-B*H-H* (only).
- 4.1.14.7 **Slide Fastener - Inside Pockets** - The inside pocket slide fasteners shall be black in colour, woven-in style, DA automatic slider, YKK 20054 CFC 456 DA E 9/16 *E-BTM-2* (only).
- 4.1.14.8 **Slide Fastener - Cold Weather Hood (Snorkel)** - Shall be an open-end separable coil slide fastener, black in colour with a DA automatic lock slider. YKK 22000 CFOR 456 DA E 9/16 (only).
- 4.1.15 **Pull Tab** - Commercially available pull tab, plastisol, black in colour, equal in respect to the viewing sample.

- 4.1.16 **Hook and Loop Tape** - The hook and loop tape shall be woven nylon, black in colour, with a high life cycle. The combined hook and loop shall have no less than 8 P.S.I length-wise shear strength with initial peel strength of not less than 1 P.I.W. when tested to ASTM D5169-98 (2015), standard test method for shear strength [dynamic method] of hook and loop touch fasteners and ASTM D5170-98 (2015), standard test method for peel strength ["T" method] of hook and loop touch fasteners."

Location	Loop Tape		Hook Tape	
	Dimension	Location	Dimension	Location
Collar	3.5 cm x 2.5 cm (3 pieces)	outside of collar placed under dome fastener, see pattern for placement		
Name Tag Holder	8.5 cm x 2.5 cm	outer right front yoke contrast, see diagram and pattern for placement		
Back Yoke			5 cm x 2.5 cm (2 pieces)	sewn to inside back yoke facing inside, see pattern for placement
Back Police Patch	5 cm x 2.5 cm (2 pieces)	Applied facing inside of yoke see dwg. #6		
Front Police Patch	6 cm x 1.6 cm	centred on hideaway flap facing inside	6 cm x 1.6 cm	applied to inside of front yoke facing
Sleeve Cuffs	12 cm x 2.5 cm	cuff	4.5 cm x 2.5 cm	adjustment strap
Cold Weather Hood			3.5 cm x 2.5 cm (1 pieces) 6 cm x 2.5 cm (2 pieces)	Inside hood bottom facing placed under dome fasteners, see pattern for placement
	10 cm x 2 cm (3 pieces)	left front - 2 pieces applied to inside right front - 1 piece applied to outside spaced 65mm apart	10 cm x 2 cm (3 pieces)	left front - 1 piece applied to inside right side - 2 pieces applied to inside spaced 65mm apart
Standard Detachable Hood			3.5 cm x 2.5 cm (3 pieces)	Inside hood bottom facing placed under dome fasteners, see pattern for placement
	10 cm x 2 cm (3 pieces)	left front - 2 pieces applied to inside right front - 1 piece applied to outside	10 cm x 2 cm (3 piece)	left front - 1 piece applied to inside right side - 2 pieces applied to inside
Tolerance for all ± 5 mm				

- 4.1.17 **Grosgrain Ribbon** - Shall be nylon grosgrain ribbon, black in colour and come in three widths, 6 mm, 1 cm and 2.5 cm.

- 4.1.18 **Webbing, Microphone Strap** - The webbing shall be a durable nylon webbing, luggage quality, black in colour measuring 2.54 cm (1") wide and 0.04" \pm 0.01" thick. It shall have a minimum tensile strength of 1000 lbs. as per Federal Standard 191-5206 test method #4108 and be equal in appearance to the viewing sample. Tape Craft #N0015-1"-YD001-352 is known to meet the requirements.
- 4.1.19 **Thread** - The thread shall be polyester wrap, polyester core, Tex 50, Class B of matching colour, meeting CAN/CGSB 4.131-93.
- 4.1.20 **Dome Fastener** - The dome fastener shall be a standard type 24 ligne fastener. All metal parts to be brass with a 15 mm matte black, powder coated cap. Universal SW61 (only).
- 4.1.21 **Eyelets** - The eyelets shall be black in colour made of brass or aluminium. It shall come in two sizes, with a 5-6 mm diameter hole and with a 7-8 mm diameter hole.
- 4.2 **Size and Dimensions** - Parka, Inclement, to this specification shall be supplied in the sizes specified by the RCMP and to the dimensions given in the scale of measurements and drawings forming part of this specification. The garment components shall be shaped, dimensioned and positioned in accordance with the pattern components and pattern requirements as outlined in "Appendix A" forming part of this specification.
- 4.3 **Construction**
- 4.3.1 **Stitching and Seam Sealing** - All stitching shall be lockstitch. There shall be not less than three or more than four stitches per centimetre. The beginning and ending of all stitching shall be securely backstitch tacked, unless secured by other stitching. All seams and points where stitching penetrates the shell materials shall be permanently sealed on the inside with the appropriate seam-sealing tape as per Para. 4.1.3. Care shall be taken to ensure that the tape cross-over points where seams join are doubly covered and bonded securely so as to ensure water-resistance. Any sealed seams showing any form of delamination or any non-bonded or peeling seams shall be a cause for rejection.
- 4.3.2 **Body**
- 4.3.2.1 **Back & Back Yoke** - The body made from shell material as specified in Para. 4.1.2 shall have a two piece back with an interior drawcord channel and interior

cord locks at the waist. There shall be a large “hide away” police patch, constructed from shell material and a reflective police patch as per Para. 4.1.8. It shall be shaped and dimensioned as per the patterns and applied to the back yoke. The back yoke shall be faced with lining as specified in Para. 4.1.5 and stitched from side seam to side seam as shown in drawing # 6 and seam sealed appropriately to ensure waterproofness. The back and back yoke when finished shall be shaped and dimensioned as per the pattern and viewing sample.

4.3.2.2 **Abrasion Panel/Waist Drawcord Channel** - An abrasion panel, constructed from shell material as specified in Para. 4.1.2 shall be constructed with the centre portion face side out and the outer edges tricot side out as identified in the patterns and drawings. A 3-part, elastic secured, waist channel shall be sewn to the back body underneath the abrasion panel at waist level to create an adjustable drawcord channel as identified in the patterns and drawings. An elastic drawcord as specified in Para. 4.1.11 shall be securely attached into the side seam for the front waist channel and threaded through the cord channel. The elastic drawcord shall continue through the smaller cord lock as specified in Para. 4.1.12.1, and through the eyelet outside the cord channel at center front. It shall be threaded through the toggle lock as specified in Para. 4.1.12.3 and back through a second eyelet outside the abrasion panel. It shall continue back through the cord lock where the drawcord shall be knotted. An elastic drawcord as specified in Para. 4.1.11 shall be securely attached to the right side seam for the back waist channel and threaded through the hem channel. An eyelet with toggle lock shall be positioned on the back inside left side seam as indicated on the pattern through the abrasion panel and waist drawcord channel. When assembled completely, the cord locks shall be hidden in the channel with only the looped end of the elastic drawcord and the toggle lock showing as per drawings # 4.

4.3.2.3 **Front** - The parka shall be equipped with a centre front slide fastener, length as specified in Para 4.1.14 and the bottom ends of the slide fastener shall be bar tacked as per drawing # 4 and # 5. The front shall have two front storm flaps with dome fasteners for closure. Directly below the right front slide fastener shall be a pull tab as specified in Para. 4.1.15 and drawing # 4 and # 5. The fronts shall have four pockets two upper and two lower storm pockets all with slide fasteners and flaps. The outer front yoke extension shall be manufactured in a way to create a pocket flap with a dome fastener in order to close the zippered chest pockets. Under the outer right front yoke flap there shall be a small “hide away” reflective police patch and above the pocket flap shall be an 8.5 cm x 2.5 cm piece of loop tape for the name tag. Both outer left and right front yoke shall be equipped with webbing as specified in Para. 4.1.18, measuring 2.5 cm x 5 cm for the microphone

loop. All components of the front shall be constructed as per the patterns and drawings.

- 4.3.2.4 **Chest Pockets** - The parka shall have two upper front pockets with slide fasteners as specified in Para. 4.1.14.4 and lengths outlined in Para. 4.1.14. Ribbon pulls as specified in Para. 4.3.12 shall be applied to the sliders. Each chest pocket shall have flaps created from the front yoke extension pattern piece which shall be dimensioned in accordance with the patterns and drawing # 6. The slider shall be in a position closest to the centre front when closed. Applied to the top right front flap, shall be a small “hide away” reflective patch constructed from shell material and a reflective police patch as per Para. 4.1.8 and drawing # 6. The reflective police patch shall be sewn on top of the pull-down with the side edges folded under. The centre front of the front yoke piece when sewn to create a pocket flap shall be secured with a dome fastener. There shall be two inside pockets constructed out of mesh material as specified in Para. 4.1.6 secured with a slide fastener length as specified in Para. 4.1.14. There shall be two labels sewn through the mesh inner pocket bag with the Identification label and Marking and Cleaning Instruction as shown in drawing # 4. An external pen pocket measuring 2 cm after folding in half shall be constructed from a single layer of shell material. It shall be sewn to the left chest (only) directly under the storm flap between the front slide fastener and storm flap. The pen pocket shall be dimensioned and positioned as per the patterns and drawings.
- 4.3.2.5 **Lower Storm Pockets** - The parka shall have two lower front storm pockets with flaps shaped and dimensioned as per the patterns. Both lower pockets shall have slide fasteners as specified in Para. 4.1.14.4. Ribbon pulls as specified in Para. 4.3.12 shall be applied to the sliders. The slider shall be positioned towards the centre when the pocket is closed. The length of the slide fasteners for the lower storm pockets shall be as outlined in Para. 4.1.14. The inside pocket constructed as per the pattern shall be lined with fleece material as specified in Para. 4.1.4.
- 4.3.2.6 **Under Fly Front & Front Storm Flaps** - The under fly front shall be fitted with two injection molded, slide fasteners, length as specified in Para. 4.1.14. One is for the front closure and one is for the attachment of the removable liners. The parka front slide fastener as specified in Para. 4.1.14.1 shall be inserted in a way to have the double sliders with a rubber pull tab as specified in Para. 4.1.15 on the left front and the insert pin attached on the right front. Ribbon pulls as specified in Para. 4.3.12 shall be applied to the sliders. The left front storm flap shall have six dome fasteners (female portion) as specified in Para. 4.1.20, which align with the male portions attached to the right front storm flap as per drawing # 4. There

shall be $\frac{1}{2}$ (half) of a slide fastener attached to the right facing and $\frac{1}{2}$ (half) of a slide fastener attached to the left facing to be used for the attachment of a removable liners. The $\frac{1}{2}$ (half) attached to the right inside front facing shall consist of the retaining box and slider. The $\frac{1}{2}$ (half) attached to the left inside front shall consist of the insert pin, as shown in drawing # 5. An external pen pocket measuring 2 cm after folding in half shall be constructed from a single layer of shell material. It shall be sewn to the left chest only directly under the top storm flap between the front slide fastener and storm flap. The pen pocket shall be dimensioned and positioned as per the patterns and drawings.

- 4.3.3 **Side Seams** - Both side seams from sleeve underarm to hem shall be equipped with a water-resistant slide fastener as specified in Para. 4.1.14.6 lengths as outlined in Para. 4.1.14 and the bottom ends of the slide fasteners shall be bar tacked as per drawings # 3 & # 4. There shall be 3 sliders, the two closest to the underarm should be in a head to head position and the third shall be opening from the bottom upwards as shown in drawing # 3. Ribbon pulls as specified in Para. 4.3.12 shall be applied to the all the sliders. Six dome fasteners (female side) as specified in Para. 4.1.20 shall be applied to the parka and positioned as per the patterns for attachment to the parka liner as shown in drawing # 3. The side seam hem shall have an elastic closure strap as specified in Para. 4.3.13, measuring 2.5 cm wide constructed as per drawing # 3.
- 4.3.4 **Collar** - The collar made of shell material as specified in Para. 4.1.2, is to be designed as per the patterns. There shall be three dome fasteners (male portion) as specified in Para. 4.1.20 for the attachment of the detachable hoods. Centered underneath each dome fastener shall be a 3.5 cm x 2.5 cm piece of loop tape as specified in Para. 4.1.16.
- 4.3.5 **Standard Detachable Hood** - The standard hood as shown in drawing # 7 shall be constructed from shell material as specified in Para. 4.1.2 with all sewn seams, seam-sealed. It shall be secured to the collar with 3 (three) dome fasteners as specified in Para. 4.1.20 with the female portion applied to the hood and the corresponding male portion to the collar. Centred underneath each dome fastener shall be a 3.5 cm x 2.5 cm piece of hook tape as specified in Para. 4.1.16. The center front shall have a hook and loop closure as specified in Para. 4.1.16. The inside left front shall have two pieces of loop tape with one piece of hook tape in the centre. The outer right front shall have two pieces of hook tape with one piece of loop tape in the centre. Both right and left centre front closures shall have the hook and loop tape spaced .65 cm between each piece as per drawing # 7. An elastic drawcord as specified in Para. 4.1.11 shall be threaded through an inside

channel continuing through the eyelet with a 5-6 mm diameter hole as specified in Para. 4.1.21 and the larger cord lock as specified in Para. 4.1.12.1 and applied as per drawing # 7. After threading the drawcord through the cord lock it shall be knotted and the end tucked into the inside channel. There shall be no extra elastic given when the hood is completely relaxed and stretched out. A label identifying the corresponding hood size shall be sewn to the bottom hood facing either in mid back position, centred on the facing or in the front facing seam as shown in drawing # 7. The hood shall be shaped and dimensioned as per the patterns and viewing sample.

- 4.3.6 **Sleeve & Sleeve Cuffs** - The parka shall have a three piece sleeve with an upper sleeve pocket constructed from shell material as specified in Para. 4.1.2. All sleeve seams with exception of the underarm seam shall be top stitched using a 2 mm gauge. A dome fastener shall be applied to a piece of 2.5 cm wide gross grain ribbon as specified in Para. 4.1.17 which is doubled and sewn securely to the cuff/sleeve seam for the attachment of the liner as shown in drawing # 5. The sleeves shall have a 9 cm adjustment strap with a 4.5 cm x 2.5 cm piece of hook tape for adjustability. The cuff shall be 4 cm wide with a 12 cm x 2.5 cm piece loop tape to secure the adjustment strap. The cuff shall be partially elasticized using 4 cm wide elastic as specified in Para. 4.1.13. The elasticized area of the cuff shall have two rows of top stitching to anchor the elastic. The sleeves and cuffs shall be shaped and dimensioned as per the patterns and viewing sample.
- 4.3.7 **Shoulder Straps** - Shoulder straps shaped and dimensioned in accordance with the patterns and drawing # 5, shall be made from two layers of shell material as specified in Para. 4.1.2. They shall be sewn into the sleeve-head and positioned as per the pattern and viewing sample. The shoulder strap shall be secured to the parka shoulder with the dome fastener specified in Para. 4.1.20.
- 4.3.8 **Upper Sleeve Pocket** - Both sleeves shall have an upper sleeve pocket constructed from shell material with a slide fastener as specified in Para. 4.1.14.5. When in a closed position the slider shall be facing toward the shoulder as shown in drawing # 2. Ribbon pulls as specified in Para. 4.3.12 shall be applied to the sliders. There shall be two rows of topstitching around the slide fastener, using 2 mm gauge and 6 mm gauge. The sleeve pocket shall be sewn to the sleeve, top-stitched using a 2 mm gauge and seam sealed appropriately to ensure waterproofness. The upper sleeve pocket shall be constructed in accordance with the patterns and drawings of this specification.

- 4.3.9 **“Hide Away” Reflective Police Patches** - The front and back “hide away” patches shall be constructed of a single layer of shell material folded in half with raw ends turned inside and sewn. The finished length of the front “hide away” shall be 13 cm x 6.5 cm wide and the back “hide away” shall be 30.5 cm x 10 cm with a reflective police patch as specified in Para. 4.1.8. Both ends of the police patch shall be folded under and applied to the top of the hide away pull-down. Both “hide away” patches shall have loop tape as specified in Para. 4.1.16 attached to the back side for the patch to be concealed in a hide away position. All “hide away” patches shall be constructed as per drawing # 6.
- 4.3.10 **Shoulder Badges** - The RCMP shoulder badges specified in Para. 4.1.9 shall be sewn through the upper sleeve pocket only (not through the sleeve). The badge is to be centred on the sleeve-head 2.5 cm below the sleeve-head seam and attached with one row of stitching, as per the viewing sample.
- 4.3.11 **Coat Hanger** - A 6 cm long coat hanger, constructed from 6 mm wide grosgrain ribbon as specified in Para. 4.1.17 shall be centered at the neck in accordance with the viewing sample.
- 4.3.12 **Slide Fastener Ribbon Pulls** – All ribbon pulls shall be constructed with grosgrain ribbon 1 cm wide, as specified in Para. 4.1.17. The ribbon shall applied to the hole of the slide fastener pull in a way that allows the ribbon pulls to be removed easily without damage and reapplied. The ribbon pull should be 5 cm ± 0.5 cm in length when finished and attached to the slide fastener.
- 4.3.13 **Side Seam Closure Strap** - There shall be a side seam closure strap measuring 8 cm ±.5 cm when finished, at the side seam hem. It shall be constructed from 2.5 cm wide elastic as specified in Para. 4.1.13, doubled and shall be sewn to the lower back side seam flipping toward the front, equipped with a female dome fastener for closure. The corresponding male dome fastener shall be applied to the parka front at the hem.
- 4.3.14 **Identification Label** - Each parka shall have a durable blank label 7.5 cm x 2 cm applied separately below the marking and cleaning label used for the inscription of the wearers’ name.
- 4.3.15 **Marking & Cleaning Instructions Label** - Each parka shall have a durable label positioned and sewn to the bottom of the inside pocket bag as shown in drawing # 4. The label information shall be as outlined below in a text no less than a size 8 font. The text shall be of permanent inks of a contrasting colour and shall

withstand at least 50 washes showing no apparent change in appearance. The label shall be completed in accordance with 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. 5030 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. Your manufacturer identification (Company name or number).
7. Print information as shown below.
8. Print information as shown below.
9. Print information as shown below.
10. Print information as shown below.
11. Print information as shown below.
12. Print information as shown below.

1		
2		
3		
4		
5		
6		
7	Machine wash - warm (40°C)	Laver à la machine – à l’eau tiède (40°C)
8	Do Not use fabric softener or chlorine bleach	Ne pas utiliser d’agent adoucissant ni d’agent de blanchiment
9	Tumble dry- medium (Do Not use dryer sheets)	Séchage par culbutage – à température moyenne (Ne pas utiliser d’assouplissant en feuilles)
10	Steam iron - low	Repassage à vapeur - à température basse
11	Dry clean - If professionally dry cleaned request clear distilled solvent rinse; request spray repellent.	Nettoyer à sec – demander un rinçage avec un solvant distillé clair et un traitement à l’aide d’un produit hydrofuge à vaporiser
12	Further care instructions: See Ordering Guide.	Instructions d’entretien supplémentaires: Voir le guide de commande.

Note: The manufacturer’s identification shall not appear anywhere on the garment except on the garment label as indicated.

- 4.3.15.1 **Marking Label – Hood** - Each hood shall have a durable label positioned and sewn to the inside right hood facing as shown in drawing # 7. The label information shall in a text no less than a size 8 font with information as stated below.

1. Size of the article, combining the size designation referenced in the English and French contract documents. (Ex. L/XL - G/TG).
- 4.3.16 **Instruction Sheet** - Each completed parka shall have an instruction sheet folded and inserted into the inside chest pocket bag, with the information included in Appendix “B” English and French, forming a part of this specification.
5. **Cold Weather Hood**
- 5.1 **Construction**
- 5.1.1 **Stitching and Seam Sealing** - All stitching shall be lockstitch. There shall be not less than three or more than four stitches per centimetre. The beginning and ending of all stitching shall be securely backstitch tacked, unless secured by other stitching. All seams and points where stitching penetrates the shell materials shall be permanently sealed on the inside with the appropriate seam-sealing tape as per Para. 4.1.3. Care shall be taken to ensure that the tape cross-over points where seams join are doubly covered and bonded securely so as to ensure water-resistance. Any sealed seams showing any form of delamination or any non-bonded or peeling seams shall be a cause for rejection.
- 5.1.2 **Cold Weather Hood** - The Cold Weather Hood available in combined sizing shall be constructed as per the patterns and drawing # 8. It is designed to have a folding snorkel (extension) with removable fur trim and hook and loop centre front closure as specified in Para. 4.1.16. The inside left front shall have two pieces of loop tape with one piece of hook tape in the centre. The outer right front shall have two pieces of hook tape with one piece of loop tape in the centre. Both right and left centre front closures shall have the hook and loop tape spaced .65 cm between each piece as per drawing # 8. The outer shell portion shall be constructed out of material as specified in Para. 4.1.2 with all sewn seams, seam-sealed. There shall be 1 layer of insulation as specified in Para. 4.1.7 attached to the shell material as specified in Para. 4.1.2. The second layer of insulation shall be attached to the fleece lining as specified in Para. 4.1.4 with one layer of scrim between the fleece and the insulation. It shall be constructed in a way to have double adjustment for height and width, with an elastic drawcord as specified in Para. 4.1.11 and cord locks as specified in Para 4.1.12.2. Eyelets with a diameter of 5-6 mm as specified in per Para. 4.1.21 shall be applied to each side of the hood side fronts for the insertion of the elastic drawcord. A larger eyelet with a diameter of 7-8 mm as specified in Para. 4.1.21 shall be applied to the centre back of the hood as identified in the pattern under the centre back cover. The elastic drawcord shall be threaded through the channels and cord locks applied as per

drawing # 8. There shall be no extra elastic given when the hood is completely relaxed and stretched out. The front snorkel of the hood constructed as per the patterns shall incorporate a slide fastener as specified in Para. 4.1.14.8 for the attachment of the removable fur trim. The fur trim as specified in Para. 4.1.10, shall be faced with shell material as specified in Para. 4.1.2. The facing of the fur trim when constructed, shall be attached to the twill tape portion of the fur. There shall be ½ of a slide fastener attached to the front facing for the attachment of the fur trim with the other ½ attached to the inside hood snorkel. Five dome fasteners as specified in Para. 4.1.20 (male portion) shall be centred evenly spaced on the facing through the shell material only with the corresponding female portion attached to the hood snorkel. The hood shall be secured to the collar with dome fasteners (female portion) as specified in Para. 4.1.20 applied through all layers. The dome fastener (female portion) at centre back shall have a 3.5 cm x 2.5 cm piece of hook tape as specified in Para. 4.1.16 sewn underneath. At the sides, there shall be two dome fasteners (female portion) positioned as per pattern with a 6 cm x 2.5 cm piece of hook tape sewn underneath. A label as specified in Para. 5.1.3 identifying both the stock number and the corresponding hood size shall be sewn to the bottom hood facing either in mid back position, centred on the facing or in the front facing seam as shown in drawing # 8.

5.1.3 **Marking Label – Cold Weather Hood** - Each hood shall have a durable label positioned and sewn to the inside right hood facing as shown in drawing # 8. The label information shall in a text no less than a size 8 font with information as stated below.

1. RCMP stock number - reference contract documents. (Ex. 3900 000).
2. Size of the article, combining the size designation referenced in the English and French contract documents. (Ex. L/XL - G/TG).

6. **Quality Assurance Provisions**

6.1 **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 specified in this specification or by demonstrating to the satisfaction of the RCMP, Uniform and Equipment Program that conformity to this specification of manufacturing processes is assured. The contractor must use any independent, North American, ISO 9001 certified and ISO 17025 "Textile" certified testing facilities. Note: CTT Group Inc., Quebec, is known to meet this requirement.

- 6.2 The RCMP, Uniform and Equipment Program reserves the right to perform any inspection considered necessary to ensure the material and services conform to the specified requirements. For the purpose of inspection, a portion of each delivery not exceeding two percent or two out of any number delivered under 100 may be put to tests that could destroy the articles. If found to be inferior or not in accordance with this specification, all articles so destroyed shall be replaced by others of proper quality and pattern at the expense of the contractor. The entire delivery may also be rejected if it is found that articles previously rejected due to non-repairable defects are redelivered for inspection.
- 6.3 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.

7. **Scale of Measurement Definitions and Location References**

(Refer to the Scale of Measurements and Drawing No. 1)

- 7.1 **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).
- 7.2 **Bottom Circumference (total circumference)** - When placed flat, the bottom shall be measured across the jacket bottom. The result shall be doubled to measure total circumference. (B).
- 7.3 **Front Length** - The length shall be the distance measured from the top of the collar to the hem at front. (C).
- 7.4 **Side Length** - The length shall be the distance measured from the base of the armhole at the side to the hem. (D).
- 7.5 **Full Shoulder Width** - The distance measured at the shoulder seam from neckline to armhole. (E).
- 7.6 **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).
- 7.7 **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).
- 7.8 **Sleeve Cuff Circumference (Relaxed)** - The sleeve cuff shall be measured at the bottom edge of the sleeve. The result shall be doubled to measure total circumference. (H).
- 7.9 **Elbow Circumference** - The elbow shall be measured across the width of the sleeve in line with the seam of the sleeve patch. The result shall be doubled to measure total circumference. (J).
- 7.10 **Back Length** - The length shall be the distance measured from the bottom of the collar at the back to the hem. (K).
- 7.11 **Back Width** - When placed flat, the distance measured across the back from armhole to armhole at the yoke seam. (L).

- 7.12 **Collar Length** – The collar length shall be measured along the seam from slide fastener to slide fastener. (M).

SCALE OF MEASUREMENTS - Parka, Inclement

SIZE DESIGNATION		BODY MEASUREMENTS		GARMENT MEASUREMENTS											
Height Group	Size	Chest		Chest Circumference	Bottom Circumference	Front Length (top of collar to hem)	Side Seam Length (underarm to hem)	Full Shoulder Width (Shoulder seam from neckline to armhole)	Sleeve Length		Cuff Circumference	Elbow Circumference	Back Length (Bottom of collar at back to hem)	Back Width	Collar Length (zipper to zipper)
		Inches	cm						Overarm (Shoulder seam to cuff)	Underarm (Underarm seam to cuff)					
X Short	XXS	31" - 33"	79 - 84	109.5	111.5	74	44	14	53.25	49.5	24	44.5	73	39.5	47
	XS	34" - 36"	86 - 91	117	119	76	45	15	55	50.5	25	47	75	42.5	49
	S	37" - 39"	94 - 99	124.5	126.5	78	46	16	56.75	51.5	26	49.5	77	45.5	51
	M	40" - 42"	102 - 107	132	134	80	47	17	58.5	52.5	27	52	79	48.5	53
	L	43" - 45"	109 - 114	139.5	141.5	82	48	18	60.25	53.5	28	54.5	81	51.5	55
	XL	46" - 48"	117 - 122	147	149	84	49	19	62	54.5	29	57	83	54.5	57
	2XL	49" - 51"	124 - 129	154.5	156.5	86	50	20	63.75	55.5	30	59.5	85	57.5	59
	3XL	52" - 54"	132 - 137	162	164	88	51	21	65.5	56.5	31	62	87	60.5	61
	4XL	55" - 57"	140 - 145	169.5	171.5	90	52	22	67.25	57.5	32	64.5	89	63.5	63
	5XL	58" - 60"	147 - 152	177	179	92	53	23	69	58.5	33	67	91	66.5	65
Short	XXS	31" - 33"	79 - 84	109.5	111.5	79	49	14	57.25	53.5	24	44.5	78	39.5	47
	XS	34" - 36"	86 - 91	117	119	81	50	15	59	54.5	25	47	80	42.5	49
	S	37" - 39"	94 - 99	124.5	126.5	83	51	16	60.75	55.5	26	49.5	82	45.5	51
	M	40" - 42"	102 - 107	132	134	85	52	17	62.5	56.5	27	52	84	48.5	53
	L	43" - 45"	109 - 114	139.5	141.5	87	53	18	64.25	57.5	28	54.5	86	51.5	55
	XL	46" - 48"	117 - 122	147	149	89	54	19	66	58.5	29	57	88	54.5	57
	2XL	49" - 51"	124 - 129	154.5	156.5	91	55	20	67.75	59.5	30	59.5	90	57.5	59
	3XL	52" - 54"	132 - 137	162	164	93	56	21	69.5	60.5	31	62	92	60.5	61
	4XL	55" - 57"	140 - 145	169.5	171.5	95	57	22	71.25	61.5	32	64.5	94	63.5	63
	5XL	58" - 60"	147 - 152	177	179	97	58	23	73	62.5	33	67	96	66.5	65
TOLERANCES ±				3	3	2	1.5	1	1.5	1	2	2	1	1	1
MEASUREMENT LOCATION				A	B	C	D	E	F	G	H	J	K	L	M

NOTE: All dimensions are in centimetres unless otherwise indicated.

SCALE OF MEASUREMENTS - Parka, Inclement

GARMENT MEASUREMENTS																
SIZE DESIGNATION		BODY MEASUREMENTS														
Height Group	Size	Chest		Chest Circumference	Bottom Circumference	Front Length (top of collar to hem)	Side Seam Length (underarm to hem)	Full Shoulder Width (Shoulder seam from neckline to armhole)	Sleeve Length		Cuff Circumference	Elbow Circumference	Back Length (Bottom of collar at back to hem)	Back Width	Collar Length (zipper to zipper)	
		Inches	cm						Overarm (Shoulder seam to cuff)	Underarm (Underarm seam to cuff)						
Regular	XXS	31" - 33"	79 - 84	109.5	111.5	84	54	14	61.25	57.5	24	44.5	83	39.5	47	
	XS	34" - 36"	86 - 91	117	119	86	55	15	63	58.5	25	47	85	42.5	49	
	S	37" - 39"	94 - 99	124.5	126.5	88	56	16	64.75	59.5	26	49.5	87	45.5	51	
	M	40" - 42"	102 - 107	132	134	90	57	17	66.5	60.5	27	52	89	48.5	53	
	L	43" - 45"	109 - 114	139.5	141.5	92	58	18	68.25	61.5	28	54.5	91	51.5	55	
	XL	46" - 48"	117 - 122	147	149	94	59	19	70	62.5	29	57	93	54.5	57	
	2XL	49" - 51"	124 - 129	154.5	156.5	96	60	20	71.75	63.5	30	59.5	95	57.5	59	
	3XL	52" - 54"	132 - 137	162	164	98	61	21	73.5	64.5	31	62	97	60.5	61	
	4XL	55" - 57"	140 - 145	169.5	171.5	100	62	22	75.25	65.5	32	64.5	99	63.5	63	
	5XL	58" - 60"	147 - 152	177	179	102	63	23	77	66.5	33	67	101	66.5	65	
Tall	XXS	31" - 33"	79 - 84	109.5	111.5	89	59	14	65.25	61.5	24	44.5	88	39.5	47	
	XS	34" - 36"	86 - 91	117	119	91	60	15	67	62.5	25	47	90	42.5	49	
	S	37" - 39"	94 - 99	124.5	126.5	93	61	16	68.75	63.5	26	49.5	92	45.5	51	
	M	40" - 42"	102 - 107	132	134	95	62	17	70.5	64.5	27	52	94	48.5	53	
	L	43" - 45"	109 - 114	139.5	141.5	97	63	18	72.25	65.5	28	54.5	96	51.5	55	
	XL	46" - 48"	117 - 122	147	149	99	64	19	74	66.5	29	57	98	54.5	57	
	2XL	49" - 51"	124 - 129	154.5	156.5	101	65	20	75.75	67.5	30	59.5	100	57.5	59	
	3XL	52" - 54"	132 - 137	162	164	103	66	21	77.5	68.5	31	62	102	60.5	61	
	4XL	55" - 57"	140 - 145	169.5	171.5	105	67	22	79.25	69.5	32	64.5	104	63.5	63	
	5XL	58" - 60"	147 - 152	177	179	107	68	23	81	70.5	33	67	106	66.5	65	
TOLERANCES ±					3	3	2	1.5	1	1.5	1	2	2	1	1	
MEASUREMENT LOCATION					A	B	C	D	E	F	G	H	J	K	L	M

NOTE: All dimensions are in centimetres unless otherwise indicated.

SCALE OF MEASUREMENTS - Parka, Inclement

GARMENT MEASUREMENTS																	
SIZE DESIGNATION		BODY MEASUREMENTS															
Height Group	Size	Chest		Chest Circumference	Bottom Circumference	Front Length (top of collar to hem)	Side Seam Length (underarm to hem)	Full Shoulder Width (Shoulder seam from neckline to armhole)	Sleeve Length		Cuff Circumference	Elbow Circumference	Back Length (Bottom of collar at back to hem)	Back Width	Collar Length (zipper to zipper)		
		Inches	cm						Overarm (Shoulder seam to cuff)	Underarm (Underarm seam to cuff)							
X Tall	XXS	31" - 33"	79 - 84	109.5	111.5	94	64	14	69.25	65.5	24	44.5	93	39.5	47		
	XS	34" - 36"	86 - 91	117	119	96	65	15	71	66.5	25	47	95	42.5	49		
	S	37" - 39"	94 - 99	124.5	126.5	98	66	16	72.75	67.5	26	49.5	97	45.5	51		
	M	40" - 42"	102 - 107	132	134	100	67	17	74.5	68.5	27	52	99	48.5	53		
	L	43" - 45"	109 - 114	139.5	141.5	102	68	18	76.25	69.5	28	54.5	101	51.5	55		
	XL	46" - 48"	117 - 122	147	149	104	69	19	78	70.5	29	57	103	54.5	57		
	2XL	49" - 51"	124 - 129	154.5	156.5	106	70	20	79.75	71.5	30	59.5	105	57.5	59		
	3XL	52" - 54"	132 - 137	162	164	108	71	21	81.5	72.5	31	62	107	60.5	61		
	4XL	55" - 57"	140 - 145	169.5	171.5	110	72	22	83.25	73.5	32	64.5	109	63.5	63		
	5XL	58" - 60"	147 - 152	177	179	112	73	23	85	74.5	33	67	111	66.5	65		
XX Tall	XXS	31" - 33"	79 - 84	109.5	111.5	99	69	14	73.25	69.5	24	44.5	98	39.5	47		
	XS	34" - 36"	86 - 91	117	119	101	70	15	75	70.5	25	47	100	42.5	49		
	S	37" - 39"	94 - 99	124.5	126.5	103	71	16	76.75	71.5	26	49.5	102	45.5	51		
	M	40" - 42"	102 - 107	132	134	105	72	17	78.5	72.5	27	52	104	48.5	53		
	L	43" - 45"	109 - 114	139.5	141.5	107	73	18	80.25	73.5	28	54.5	106	51.5	55		
	XL	46" - 48"	117 - 122	147	149	109	74	19	82	74.5	29	57	108	54.5	57		
	2XL	49" - 51"	124 - 129	154.5	156.5	111	75	20	83.75	75.5	30	59.5	110	57.5	59		
	3XL	52" - 54"	132 - 137	162	164	113	76	21	85.5	76.5	31	62	112	60.5	61		
	4XL	55" - 57"	140 - 145	169.5	171.5	115	77	22	87.25	77.5	32	64.5	114	63.5	63		
	5XL	58" - 60"	147 - 152	177	179	117	78	23	89	78.5	33	67	116	66.5	65		
TOLERANCES ±				3	3	2	1.5	1	1.5	1	2	2	1	1			
MEASUREMENT LOCATION				A	B	C	D	E	F	G	H	J	K	L	M		

NOTE: All dimensions are in centimetres unless otherwise indicated.

TABLE I
Properties of Laminated Shell Material (with WMVP membrane & tricot backing)

	Test	Test Method	Duration	Min. Value Shell Material I
1	Resistance of Materials to Water Vapour Diffusion	CAN CGSB 4.2 Method 49-M99, Option 1 *See test procedure #1	- Initial - After 5 launderings - After ageing (70°C & 95% RH for 168 hrs)	13 mm max.
2	Hydrostatic Resistance	CAN CGSB 4.2 Method 26.5 *See test procedure #2	- Initial - After 5 launderings	1240.2 kPa
3	Low Pressure Water Permeability	CAN CGSB 4.2 Method 26.3 * See test procedure #3	- Initial	No Leakage
		ASTM D2097-03 (2010) * See test procedure #4	- After Cold Flex Warp Fill	No Leakage
		AATCC 135-2012/Test procedure 6 * See test procedure #5	- After 100 hours of Continuous Wet Flex (Agitation)	No Leakage
4	High Pressure Water Permeability	BS 3424: Part 26: 1990 Method 29A * See test procedure #6	- Initial	No Leakage
		BS 3424: Part 26: 1990 Method 29A * See test procedure #7	- After Unleaded Gasoline	No Leakage
		BS 3424: Part 26: 1990 Method 29A * See test procedure #7	- After DEET Insect Repellent	No Leakage
		BS 3424: Part 26: 1990 Method 29A * See test procedure #8	- After Synthetic Perspiration	No Leakage
5	Abrasion Resistance	ASTM D3886-99 (2013) Procedure: use No. 0 Emery Polishing Paper * See test procedure #9	- 3200 Cycles	No failure
SEAMS				
6	Seam Tape Durability	CAN CGSB 4.2 Method 26.3 * See test procedure #10	- Initial	No Leakage
		CAN CGSB 4.2 Method 26.3 ANSI/AATCC 135 * See test procedure #11	- After 10 laundry cycles	No Leakage

TABLE I
Properties of Laminated Shell Material (with WMVP membrane & tricot backing)

	Test	Test Method	Duration	Min. Value Shell Material I
		CAN CGSB 4.2 Method 26.3 * See test procedure #12	- After 10 dry-clean cycles	No Leakage
7	Delamination	Visual	- During and after the above procedures in this table	No Delamination
8	Peel Strength N/23 mm	ASTM D413-98		8 N/23mm minimum

TEST PROCEDURES FOR TABLE I

1. The knit side of the laminated cloth shall face the water. The tests shall be completed as outlined in CAN/CGSB 4.2 Method 49-99, Option #1. The samples shall be conditioned at $21^{\circ}\text{C} \pm 1^{\circ}\text{C}$ ($69.8^{\circ}\text{F} \pm 2^{\circ}\text{F}$) and relative humidity shall be $65 \pm 2\%$. The test specimen shall be placed approximately equidistant between the dry airflow and the water cell. Four specimens shall be tested per condition. The tests shall be completed initial, after 5 launderings according to ISO 6330-2012 Method 2B-E and after ageing according to ASTM F392/F392M-11.
2. The water pressure shall be applied to the knit side of the laminated cloth. A taffeta fabric restraint conforming to MIL-C-21852F-TYPE III-CLASS1 PART#WJAAGNA should be placed on top of the sample against the face side of the laminated cloth.
3. The knit side of the laminated cloth shall contact the water. The hydrostatic head shall be 13.78 kPa (2.0 psi) and shall be held for 3 minutes. Leakage is defined as the appearance of water any place within the 11.43 cm (4.5") diameter test area. The test may be performed using any device which tests the same specimen area at the equivalent pressure. In case of dispute, the apparatus described in FED-STD-191A Method 5516 shall be used.
4. Ten warp and ten fill specimens 8.26 cm x 11.43 cm (3.25" x 4.5") shall be selected from each sample unit. The 8.26 cm (3.25") dimension is the test direction. Specimens shall be flexed for 20,000 cycles as specified in ASTM D2097-03 (2010) and as follows: Mark the knit side of each specimen with two lines 4.32 cm (1.7") apart and perpendicular to the test direction. The area between the lines is the test area and shall be centered on the knit side of the specimen. Wrap the specimens around fully extended pistons with the knit side out. The test area lines shall meet evenly and shall line up with the edges of the pistons. Clamp in place making sure the clamps are not in the test area. Check specimen for smoothness and tautness (wrinkles cause improper flexing). The distance between the

pistons shall be 4.32 cm (1.7") in the open position and 1.27 cm (0.5") in the closed position as measured from the bottom of the upper piston and top of the lower piston. Place the test apparatus with mounted specimens in a test chamber at $-31.67^{\circ}\text{C} \pm 1^{\circ}\text{C}$ ($-25^{\circ}\text{F} \pm 2^{\circ}\text{F}$) for a one hour conditioning period and then flex in the test chamber at $-31.67^{\circ}\text{C} \pm 1^{\circ}\text{C}$ ($-25^{\circ}\text{F} \pm 2^{\circ}\text{F}$). After flexing, test for water permeability as in test procedure #3 except that the orifice of the tester shall be modified to accommodate the smaller specimen size

5. One 35.56 cm (14") by full width specimen shall be selected from each sample unit. The specimens shall be agitated using the 'normal' cycle in an automatic home laundering as specified in AATCC 135-2012 except that the machine shall be capable of continuous agitation. The water level shall be maintained at $72.74\ell \pm 4.55\ell$ (16 ± 1 gallons), and the water temperature shall be $32^{\circ}\text{C} \pm 9^{\circ}\text{C}$. The load shall be $.91\text{ kg} \pm .09\text{ kg}$ ($2\text{ lbs} \pm 0.2\text{ lbs}$). The specimen shall be removed from the washer after 100 hours of continuous agitation. The specimen shall be air dried and then tested for water permeability at three sites across the width of the specimen according to test procedure #3.
6. The water pressure shall be applied to the knit side of the laminated cloth from below the test specimen. The maximum pressure of 172.25 kPa (25 psi) shall be attained in 2 minutes \pm 20 seconds and shall be applied for 5 minutes. Leakage is defined as the appearance of water any place within the test area.
7. Place a 15.24 cm x 15.24 cm (6" x 6") piece of blotting paper on a flat surface and cover with a 25.4 cm x 25.4 cm (10" x 10") test specimen with the face side up. Weigh out $2.0\text{ gm} \pm 0.1\text{ gm}$ (.07 oz \pm .004 oz) of solid contaminant or pipette 2.0 ml (.07 f. oz) of a liquid contaminant. Place the contaminant on the center of the specimen and cover with a 15.24 cm x 15.24 cm (6" x 6") piece of glassine paper. Place a 1.81 kg (4 lbs) weight on the glassine paper directly over the contaminated area. Allow the weight to remain on the specimen for 30 minutes. Remove the weight and glassine paper and allow the specimen to sit undisturbed for an additional 30 minutes. Wipe off any excess contaminant using a fresh piece of blotting paper and test for water permeability as per procedure #6 except that the water pressure shall be applied for 3 minutes.
8. One specimen per sample unit shall be tested for water permeability after exposure to synthetic perspiration. The specimen shall be not less than 15.24 cm (6") in diameter. The test cups shall accommodate this size specimen and shall have a depth of at least 2.5 cm (1"). The cups shall be sealed to prevent leakage. The solution shall contact the knit side of the laminate.

Synthetic perspiration shall be prepared by stirring the following ingredients into 500 ml of distilled water:

3 grams sodium chloride
1 gram predigested protein
1 gram n-propyl propionate
0.5 gram lecithin (phosphatidyl choline)

The predigested protein shall contain the following amino acids:

<u>Ingredient</u>	<u>Milligrams (mg)</u>
Lysine	82.5
Histidine	27.5
Arginine	40.0
Aspartic acid	72.5
Threonine	42.5
Serine	50.0
Glutamic acid	197.5
Proline	92.5
Glycine	22.5
Alanine	28.7
Cystine	4.7
Valine	66.2
Methionine	30.0
Isoleucine	53.8
Leucine	87.5
Tyrosine	51.3
Phenylalanine	48.8
Tryptophan	18.8

The solution shall be stirred continuously and heated to $50 \pm 1^{\circ}\text{C}$, then covered and cooled to approximately 35°C .

The solution shall be stirred such that any solid particles are suspended in solution and poured into the test cup. The cup shall be inverted to allow the synthetic perspiration to evaporate through the specimen.

After the solution has evaporated through the specimen, such that no more than .32 cm (0.125") of solution remains, the specimen shall be removed from the cup, rinsed in warm water, dried and tested for water permeability as specified in test procedure #6 except that the water pressure shall be applied for 3 minutes.

9. Method ASTM D3886-99 (2013) Procedure: Use No. 0 Emery Polishing Paper. Side abraded shall be the knit side, with a multidirectional abrasion motion. Change abradant after each 300 cycles or specimen failure. The air pressure under the diaphragm should be 4 psi, and the load on the abradant plate should be 1 lb. Failure is determined by breaking of the electrical contact.
10. A minimum of 3 straight seams and 2 cross-over seams shall be tested prior to laundry cycle testing and remain waterproof (no leakage) when tested at 13.78 kPa (2 psi) for 3 minutes with the seam tape side facing up, away from the water challenge. Leakage is defined as the appearance of water any place within the 11.43 cm (4.5") diameter test area since the seam tape process can damage the fabric adjacent to the tape. Test for water permeability as in procedure #3 except the face fabric shall face the water

challenge.

11. A minimum of 3 straight seams and 2 cross-over seams shall be tested after ten (10) home laundry cycles and remain waterproof (no leakage) when tested at 13.78 kPa (2 psi) for 3 minutes with the seam tape side facing up, away from the water challenge. Leakage is defined as the appearance of water any place within the 11.43 cm (4.5") diameter test area since the seam tape process can damage the fabric adjacent to the tape. Test for water permeability as in procedure #3 except the face fabric shall face the water challenge. Laundry testing should be performed in accordance with procedure specified in Machine Cycle 1, Wash Temperature 111, and Drying Procedure Ai of ANSI/AATCC 135-2012.
12. A minimum of 3 straight seams and 2 cross-over seams shall be tested after ten(10) dry clean cycles and remain waterproof (no leakage) when tested a 13.78 kPa (2 psi) for 3 minutes with the seam tape side facing up, away from the water challenge. Leakage is defined as the appearance of water any place within the 11.43 cm (4.5") diameter test area since the seam tape process can damage the fabric adjacent to the tape. Test for water permeability as in procedure #3 except the face fabric shall face the water challenge.

TABLE II
Properties of Laminated Shell Material I (Dark Navy Blue)

REQUIREMENTS			TEST METHODS
1	Mass (Laminated)	205 g/m ² (maximum.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 5.1-M90 (2013) ASTM D3776/D3776M-09a (2013)
2	Colour fastness to Light	Equal to AATCC Standard L5 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 18.3 ISO 105-B02:2014
3	Colour Fastness - To Crocking	Wet: Grey Scale 4 or better Dry: Grey Scale 4 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 22 AATCC 8-2013
4	Colour Fastness - To Laundering	Colour change: Grey Scale 4.5 or better Staining: Grey Scale 3 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 19.1 Test 2A AATCC 61-2013
5	Dimensional Change to Laundering	After 5 cycles: Not exceed $\pm 3\%$ length Not exceed $\pm 3\%$ width	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 58-2004, 3, E AATCC Method 135-2012 (1) (III) (Ai)
6	Breaking Strength - Grab Method	Warp 800 Newton (min.) Weft 800 Newton (min.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 9.2 ASTM D5034-09 (2013)
7	Tearing Strength	Warp 20 Newton (min.) Weft 20 Newton (min.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 12.3 ISO 13937-1:2000 ASTM D1424-09 (2013)
8	Abrasion Resistance - Martindale Method Part 2 (Determination of Specimen Breakdown)	No breakdown after 10,000 at 9 kPa	<ul style="list-style-type: none"> ASTM D4966-12
9	DWR (durable water repellent)	- 100 spray rating. Initial - 90 spray rating. After 5 launderings - 80 spray rating. After 10 launderings	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 26.2 Perma Press washing cycles (Washing Temp. 40°C \pm 3°C) Tumble Dry - Perma Press for 30 minutes as per (AATCC Method 135-2012)
10	Oil Repellent	- 6 Initial - 5 After 5 launderings - 4 After 10 launderings	<ul style="list-style-type: none"> AATCC 118-2013 Perma Press washing cycles (Washing Temp. 40°C \pm 3°C) Tumble Dry - Perma Press for 30 minutes as per (AATCC Method 135-2012)

TABLE III
Mesh, Pocketing

REQUIREMENT			TEST METHODS
1	Colour	Black or Navy To match colour swatch provided by Uniform and Equipment Program	
2	Fiber Content	100% Polyester	• CAN/CGSB-4.2 Method 14-2005
3	Knit Construction	Warp Knit	
4	Yarns per cm	Wales: 13 ± 3 Courses: 11 ± 3	• CAN/CGSB-4.2 Method 7- M88 (2001) • ISO 7211-2:1984
5	Mass	$115 \text{ g/m}^2 \pm 6 \text{ g/m}^2$ ($109 \text{ g/m}^2 - 121 \text{ g/m}^2$)	• CAN/CGSB-4.2 Method 5.1-M90 (2013) • ASTM D3776/D3776M-09a (2013)
6	Dimensional Change to Domestic Washing <i>After 5 cycles</i>	Warp 4% (max.) Weft 3% (max.)	• CAN/CGSB-4.2 Method 58-2004,3,E
7	Colour fastness to Crocking Wet & Dry	Dry - Grey Scale 4 or better Wet - Grey Scale 4 or better	• CAN/CGSB-4.2 Method 22-2004
8	Colour fastness to Washing	Colour change Grey Scale 4 or better Staining cotton - Grey Scale 4 or better Staining polyester – Grey Scale 4 or better	• CAN/CGSB-4.2 Method 19.1-2004 Test #2 • AATCC 61-2013
9	Mullen Burst (psi)	100 (minimum)	• ASTM D3786/D3786M-13
10	Abrasion Resistance - Martindale Method Part 2 (Determination of Specimen Breakdown)	No breakdown after 25,000 at 9 kPa	• ASTM D4966-12
11	Pilling	No less than 4 after 120 minutes	• CAN/CGSB-4.2 Method 51.2-M87

TABLE IV
Insulation

	TEST	RCMP REQUIREMENTS	TEST METHOD
1	Fiber content	100% Micro Denier Polyester with Binder Fiber and Acrylic resin	
2	Mass – Batt only	150 g/m ² ± 10 g/m ²	<ul style="list-style-type: none"> • CAN/CGSB-4.2 No.5.1-M90 (2013)
3	Scrim only	17 g/m ² ± 1.5 g/m ²	
4	Fabric Thickness -Batt & Scrim	<i>Initial:</i> 35 mm (max.) <i>After 5 Washes:</i> Maximum loss 20% of initial value	<ul style="list-style-type: none"> • CAN/CGSB-4.2 No. 37-2002 <u>Washing</u> - • ISO 6330:2012 Procedure E (4B)
5	Stiffness (Drape) Cantilever Bending Method	Length 5 cm (max.) Width 5 cm (max.)	<ul style="list-style-type: none"> • FED-STD-191 5206
6	Resistance to Pilling	3 (min.)	<ul style="list-style-type: none"> • ASTM D4970 After 1000 cycles Tested with the face of batt against shell material layer.
7	Dimensional Change in Laundering - Batt & Scrim <i>After 5 Washes</i>	Warp: 5% (max.) Weft: 5% (max.) The difference in the dimensional change between the batt and scrim shall not exceed 5%.	<ul style="list-style-type: none"> • ISO 6330:2012 Procedure E (4B)
8	CLO - Batt Only <i>Initial</i> <i>After 5 Washes</i>	1.9 (min.) 1.6 (min.)	<ul style="list-style-type: none"> • ISO11092:2014 (dry) <u>Washing</u> - • ISO 6330:2012 Procedure E (4B)
9	Standard Evaluation of Filling/Batting	4 (min.)	<ul style="list-style-type: none"> • ASTM D4770 <u>Washing</u> - <ul style="list-style-type: none"> • ISO 6330:2012 Procedure E (4B)
10	Anti-Microbial Agent Silver Nano Particle Additive with Binder	99.9% killed within 24 hour	<ul style="list-style-type: none"> • AATCC 100-2012 Tested for s. aureus, e. coli, k. pneumonia
11	Compression Recovery	91% (min.)	<ul style="list-style-type: none"> • Procedure below

PROCEDURE FOR COMPRESSION RECOVERY

1. The compression recovery of the insulation shall be determined as stated below.
2. A cloth specimen shall be measured for thickness using a 64 cm² pressure foot at a pressure of 0.07kPa.
3. 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.
4. 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.
5. The compressional recovery shall be calculated as follows:
 Per cent compressional recovery =

$$\frac{\text{Thickness of specimen after compression}}{\text{Thickness of specimen before compression}} \times 100$$

TABLE V
Micro Fleece

REQUIREMENT			TEST METHOD
1	Colour	Black	
2	Knit	Fleece	
3	Fiber Content	100% Polyester $\pm 3\%$	<ul style="list-style-type: none"> • CAN/CGSB 4.2 Method 14-2005
4	Mass	$139\text{g/m}^2 \pm 10\text{ g/m}^2$ (129 - 149) $4.1\text{ oz/yd}^2 \pm 3\text{ oz/yd}^2$ (3.8 – 4.4)	<ul style="list-style-type: none"> • CAN/CGSB 4.2 Method 5.1-M90 (2013)
5	Colour Fastness to Light	Equal to AATCC Standard L3 or better	<ul style="list-style-type: none"> • CAN/CGSB 4.2 Method 18.3-97
6	Colourfastness - To Crocking	Dry: Grade 4 or better Wet: Grade 3 or better	<ul style="list-style-type: none"> • CAN/CGSB-4.2 Method 22 • AATCC 8-2013
7	Colour fastness to Washing	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"> • CAN/CGSB-4.2 Method 19.1 Test 2A • AATCC 61-2013
8	Dimensional Change to Domestic Washing <i>After 5 cycles</i>	Warp 5% (max.) Weft 5% (max.)	<ul style="list-style-type: none"> • CAN/CGSB 4.2 Method 58-2004,1,C

APPENDIX A

Sealed Pattern Identifier

Pattern #: G.S. 1045-307
 Title: Parka, Inclement and Hoods

Paper Patterns - Paper patterns are available from the RCMP, Uniform and Equipment Program, Ottawa Ontario, under Pattern # G.S. 1045-307. 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. Contractors may make changes required to suit their production process, however, the design and grade shall not be affected or changed. **Punch holes are not an acceptable method of placement for this garment with the exception of the placement of the shoulder badge and the holes must be completely covered by the shoulder badge.**

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.

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

Pattern Pieces:

Parka Inclement - 50 pattern components

Cold Weather Hood - 14 pattern components

Legend:

Shell Material I,	=	Para. 4.1.2
Shell Material I, (Tricot RSU)	=	Para. 4.1.2 (inside face) Right Side Up
Fleece Lining	=	Para. 4.1.4
Lining Material	=	Para. 4.1.5
Mesh Pocketing	=	Para. 4.1.6

Cut 1 Single	=	Cut 1
Cut 1 Paired	=	Cut 2
(RSU)	=	Right Side Up

Pattern Components	Nomenclature	Quantity to be cut	Material
# 1 of 50	Back	1 Single	Shell Material I
# 2 of 50	Chest Pocket Zip Stay	1 Paired	Shell Material I
# 3 of 50	Draw Cord Channel - Back	1 Single	Shell Material I (Tricot RSU)
# 4 of 50	Middle Front	1 Paired	Shell Material I
# 5 of 50	Draw Cord Channel - Front	1 Paired	Shell Material I (Tricot RSU)
# 6 of 50	Under Fly Front	1 Paired	Shell Material I
# 7 of 50	Storm Flap	1 Paired	Shell Material I
# 8 of 50	Shoulder Strap	2 Paired	Shell Material I
# 9 of 50	Front Facing "A"	1 Paired	Shell Material I
#10 of 50	Front Facing "B"	1 Paired	Shell Material I
#11 of 50	Sleeve	1 Paired	Shell Material I
#12 of 50	Sleeve - Upper Back	1 Paired	Shell Material I
#13 of 50	Sleeve - Lower Back	1 Paired	Shell Material I
#14 of 50	Cuff	1 Paired	Shell Material I
#15 of 50	Elasticized Cuff	1 Paired	Shell Material I
#16 of 50	Cuff Adjustment Strap	1 Paired	Shell Material I
#17 of 50	Top Collar	1 Single	Shell Material I
#18 of 50	Under Collar	1 Single	Shell Material I
#19 of 50	Top Collar Stand	1 Single	Shell Material I (Tricot RSU)
#20 of 50	Hem Facing - Front	1 Paired	Shell Material I
#21 of 50	Hem Facing - Back	1 Single	Shell Material I
#22 of 50	Yoke Facing - Front	1 Paired	Shell Material I
#23 of 50	Yoke Front - Right	1 Single	Shell Material I
#24 of 50	Yoke Front - Left	1 Single	Shell Material I
#25 of 50	Yoke - Back	1 Single	Shell Material I
#26 of 50	Hideaway Police Patch - Back	1 Single	Shell Material I (RSU)
#27 of 50	Hideaway Police Patch - Front	1 Single	Shell Material I (RSU)

Pattern Components	Nomenclature	Quantity to be cut	Material
#28 of 50	Pen Loop	1 Single	Shell Material I
#29 of 50	Pocket - Upper Sleeve	1 Paired	Shell Material I
#30 of 50	Pocket - Lower Front	1 Paired	Shell Material I
#31 of 50	Pocket - Lower Front Flap	1 Paired	Shell Material I
#32 of 50	Pocket Bag - Inside Chest	1 Paired	Mesh Pocketing
#33 of 50	Pocket Bag - Chest "A"	1 Paired	Mesh Pocketing
#34 of 50	Pocket Bag - Chest "B"	1 Paired	Mesh Pocketing
#35 of 50	Pocket Bag - Lower Front	1 Paired	Shell Material
#36 of 50	Yoke - Inside Back	1 Single	Lining Material
#37 of 50	Pocket - Lower Front Fleece	1 Paired	Fleece Material
#38 of 50	Hood Front (Hood # 1)	1 Paired	Shell Material I
#39 of 50	Hood Center (Hood #1)	1 Single	Shell Material I
#40 of 50	Hood Bottom Facing (Hood #1)	1 Paired	Shell Material I (Tricot RSU)
#41 of 50	Hood Facing - Front A (Hood #1)	1 Paired	Shell Material I (Tricot RSU)
#42 of 50	Hood Facing - Front B (Hood #1)	1 Paired	Shell Material I
#43 of 50	Hood Channel (Hood # 1)	1 Single	Shell Material I
#44 of 50	Abrasion Panel - Back "A"	1 Single	Shell Material I
#45 of 50	Abrasion Panel - Back "B"	1 Paired	Shell Material I (Tricot RSU)
#46 of 50	Abrasion Panel - Back "C"	1 Paired	Shell Material I (Tricot RSU)
#47 of 50	Abrasion Panel - Front "A"	1 Paired	Shell Material I
#48 of 50	Abrasion Panel - Center Front "B"	1 Paired	Shell Material (Tricot RSU)
#49 of 50	Abrasion Panel - Front "C"	1 Paired	Shell Material I (Tricot RSU)
#50 of 50	Abrasion Panel - Front "D"	2 Paired	Shell Material I (Tricot RSU)

Cold Weather (CW) Hood

Pattern Components	Nomenclature	Quantity to be cut	Material
# 1 of 14	CW Hood - Front (Hood # 2)	1 Paired	Shell Material I
# 2 of 14	CW Hood - Side (Hood # 2)	1 Paired	Shell Material I
# 3 of 14	CW Hood - Center (Hood # 2)	1 Single	Shell Material I
# 4 of 14	CW Hood Casing - Front (Hood # 2)	1 Paired	Shell Material I
# 5 of 14	CW Hood Casing - Side (Hood # 2)	1 Paired	Shell Material I
# 6 of 14	CW Hood Casing - Center Back (Hood #2)	1 Single	Shell Material I
# 7 of 14	CW Hood - Center Back Cover (Hood #2)	1 Single	Shell Material I
# 8 of 14	CW Facing - Hood Bottom (Hood # 2)	1 Single	Shell Material I
# 9 of 14	CW Hood - Front Extension (Hood # 2)	1 Single	Shell Material I
#10 of 14	CW Fur (Hood # 2)	1 Single	Fur
#11 of 14	CW Hood - Fur Facing (Hood # 2)	1 Single	Shell Material I
#12 of 14	CW Hood - Front Lining (Hood # 2)	1 Paired	Fleece Material
#13 of 14	CW Hood - Side Lining (Hood # 2)	1 Paired	Fleece Material
#14 of 14	CW Hood - Center Lining (Hood # 2)	1 Single	Fleece Material

APPENDIX B

CARE INSTRUCTIONS

Applicable To:

Jacket Patrol Unisex
Jacket High Visibility
Parka Inclement & Hood Cold Weather (without the fur trim)
Trousers Inclement

These garments are designed to be both waterproof and water repellent. The best way to maintain its performance is to **keep them clean by washing it regularly**. When the water no longer beads up and rolls off, use a water based, solvent free, nonflammable DWR product to restore the water repellency. The following care instructions should ensure a normal life cycle for your garments. These garments should be washed after 10-12 days of continuous use or every 20-30 days with occasional use.

The water repellency, waterproofness and breathability of your garment are affected by the following:

1. Dirt buildup and other contaminants including oils, sunscreen and sweat reduce the effectiveness of the water repellency.
2. Fabric softeners have a detrimental effect on the colour and the waterproofness and water repellency of the fabric. They will make the colour fade more quickly and affect the overall performance of the fabric. These include liquid fabric softeners, detergents that contain softeners and dryer sheets. Therefore it is very important that these softeners not be used when laundering your garment.

Machine Wash:

- DO NOT COMMERCIAL LAUNDRY
- DO NOT WASH FUR

Close all zippers, fasteners and velcro before washing.

Wash in warm water separately, without detergent. **DO NOT USE FABRIC SOFTENERS OR POWDERED DETERGENTS OR ANY LIQUID DETERGENTS THAT CONTAIN FABRIC SOFTENERS. DO NOT USE BLEACH.**

If heavily soiled, a small amount of detergent or specialty wash products (**i.e. Grangers® Performance Wash, Fibertec Pro Wash or ReviveX® Synthetic fabric cleaner**) for waterproof garments may be used.

At the end of the final rinse cycle, re-adjust the garment in the washer, and put it through an additional rinse cycle. This will assure complete rinsing of detergent that may have been trapped during washing, therefore preserving water repellency.

Drying:

Close all zippers, fasteners and velcro before drying.

If re-application of DWR is necessary, hang wet garment on hanger and follow application instructions of DWR product. (**i.e. Grangers® XT Waterproof spray, Fibertec Blue Guard Spray-on, Revivex® Spray-On or Nikwax Tx-Direct™**)

The garment **must** be tumble dried separately on a warm setting for 50 minutes to reactivate the durable water repellency (DWR.). **DO NOT USE DRYER SHEETS.**

If necessary, touch up with steam iron at low temperature.

Dry Cleaning:

If dry cleaned, request clear distilled solvent rinse and DWR spray repellent.

INSTRUCTIONS D'ENTRETIEN

Applicable à :

Blouson de patrouille unisexe

Veste haute visibilité

Parka pour intempéries et capuchon pour temps froid (sans la bordure de fourrure)

Pantalons pour intempéries

Ces vêtements sont conçus pour être imperméables et déperlants. La meilleure façon de préserver leurs propriétés est de les **garder propres en les lavant régulièrement**. Lorsque l'eau ne perle plus, utiliser un produit déperlant durable à base d'eau, sans solvant et ininflammable pour restaurer la déperlance. Les instructions d'entretien ci-dessous permettront d'assurer le rendement optimal des vêtements. Ces vêtements devraient être lavés après 10 à 12 jours d'utilisation continue ou à tous les 20 à 30 jours d'utilisation occasionnelle.

Les conditions suivantes peuvent influencer sur l'imperméabilité, la déperlance et la respirabilité des vêtements :

1. L'accumulation de saletés et d'autres contaminants comme de l'huile, de la crème solaire ou de la sueur peut réduire l'imperméabilité.
2. Les agents assouplissants influent sur la couleur, la déperlance et l'imperméabilité. Ils décolorent les tissus plus rapidement et nuisent à leur rendement général. Il est très important de n'utiliser **aucun** type d'assouplissant (agent assouplissant liquide, détergent avec assouplissant et assouplissant en feuilles).

Lavage à la machine :

- NE PAS LAVER DANS UNE BUANDERIE COMMERCIALE
- NE PAS LAVER LA FOURRURE

Fermer toutes les fermetures à glissière, les attaches et les attaches à ruban autoagrippant avant de laver.

Laver séparément à l'eau tiède, sans détergent. NE PAS UTILISER D'AGENT ASSOUPLISSANT NI DE DÉTERGENT EN POUDRE OU LIQUIDE AVEC ASSOUPLISSANT. NE PAS UTILISER D'AGENT DE BLANCHIMENT.

Si le vêtement est très sale, une petite quantité de détergent ou de produit spécifiquement conçu pour l'entretien des vêtements imperméables (**p. ex. nettoyeur haute performance de Granger's^{MD}, produit Pro Wash de Fibertec ou nettoyeur pour tissus synthétiques ReviveX^{MD}**) peut être utilisée.

À la fin du dernier cycle de rinçage, replacer le vêtement dans la machine et entreprendre un autre cycle de rinçage, afin d'éliminer complètement le détergent qui peut être resté durant le lavage et de préserver la déperlance.

Séchage:

Fermer toutes les fermetures à glissière, les attaches et les attaches à ruban autoagrippant avant de sécher.

Si un nouveau traitement déperlant est requis, suspendre le vêtement mouillé sur un cintre et suivre les instructions du fabricant du produit (**p. ex. imperméabilisant à vaporiser XT de Granger's^{MD}, Blue Guard de Fibertec, Revivex^{MD} ou Tx-Direct^{MC} de Nikwax**).

Le vêtement **doit** être séché séparément par culbutage à basse température pendant 50 minutes, afin de réactiver les propriétés déperlantes. NE PAS UTILISER D'ASSOUPLISSANT EN FEUILLES.

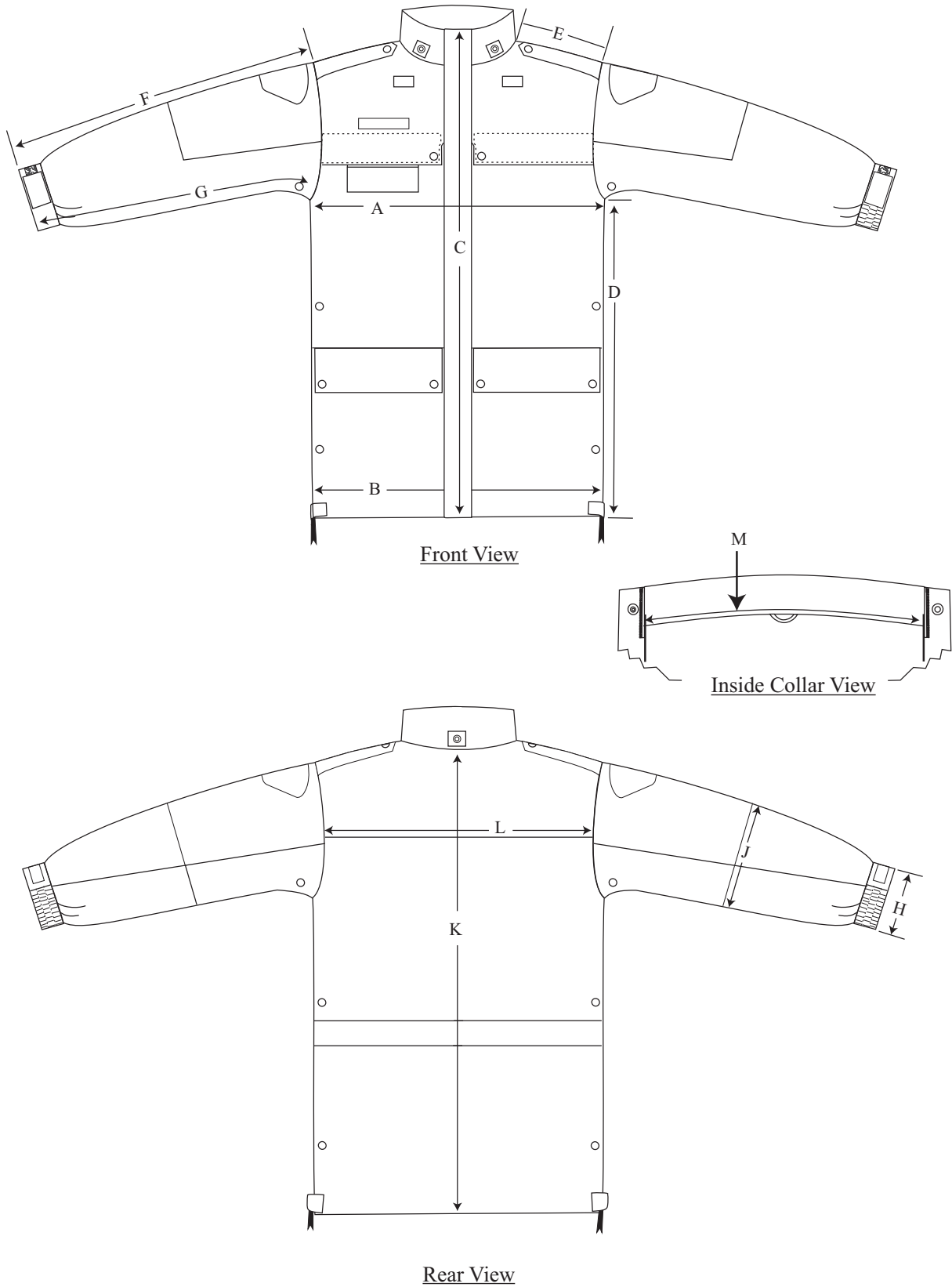
Au besoin, repasser légèrement à basse température.

Nettoyage à sec :

Si le vêtement est nettoyé à sec, demander un rinçage avec un solvant distillé clair et un traitement à l'aide d'un produit déperlant à vaporiser.

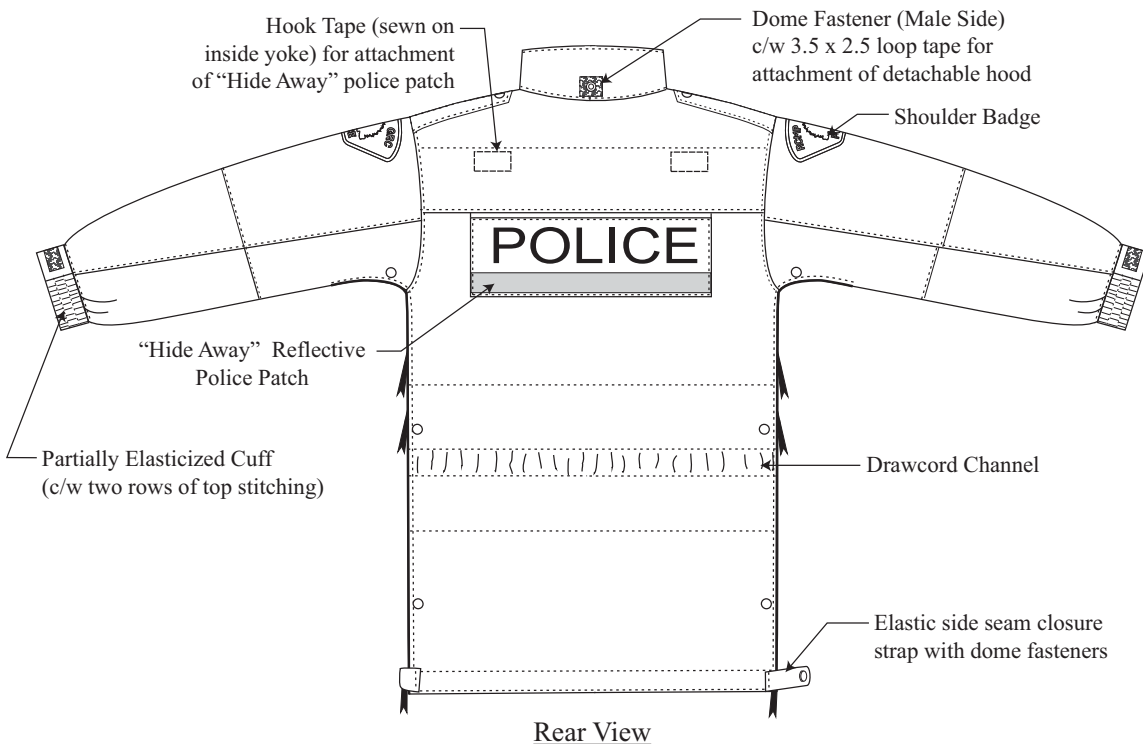
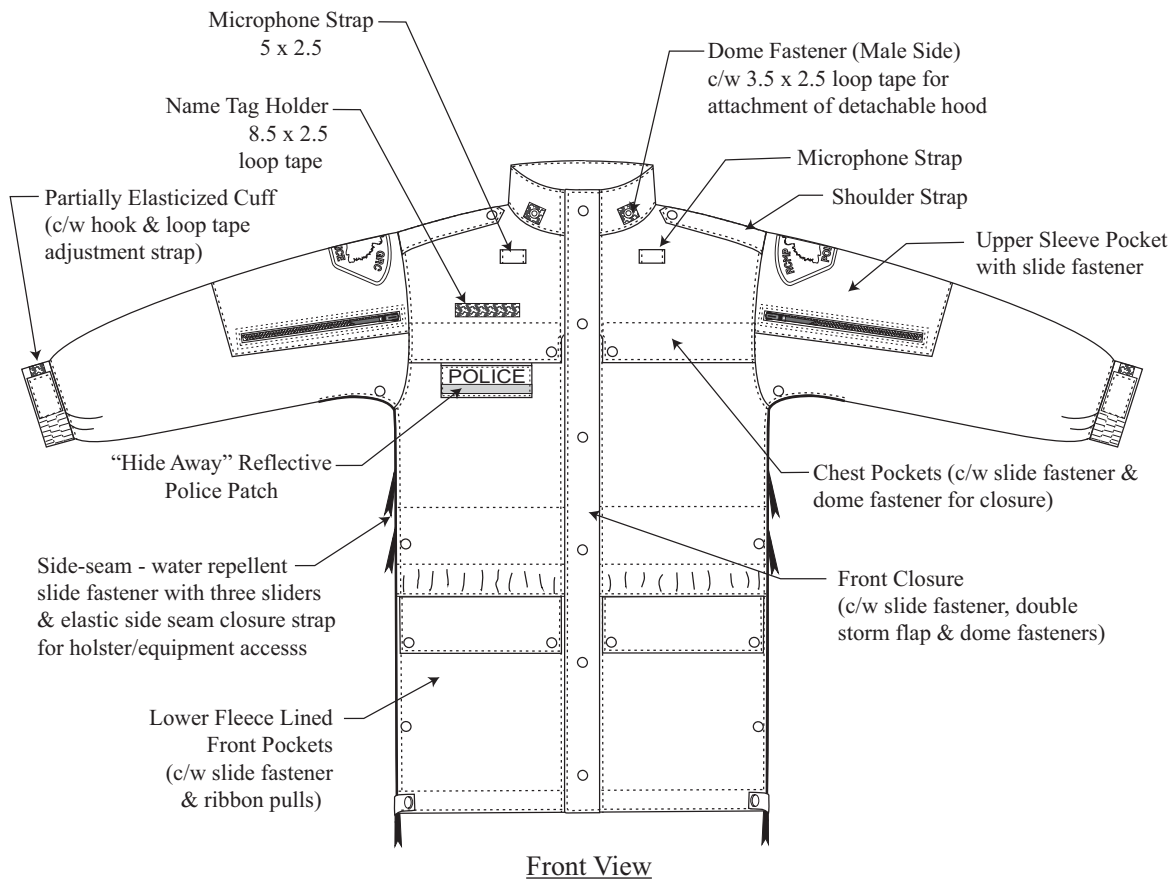
Measurement Location Chart

Dwg. 1



NOT TO SCALE

Dwg. 2



NOT TO SCALE

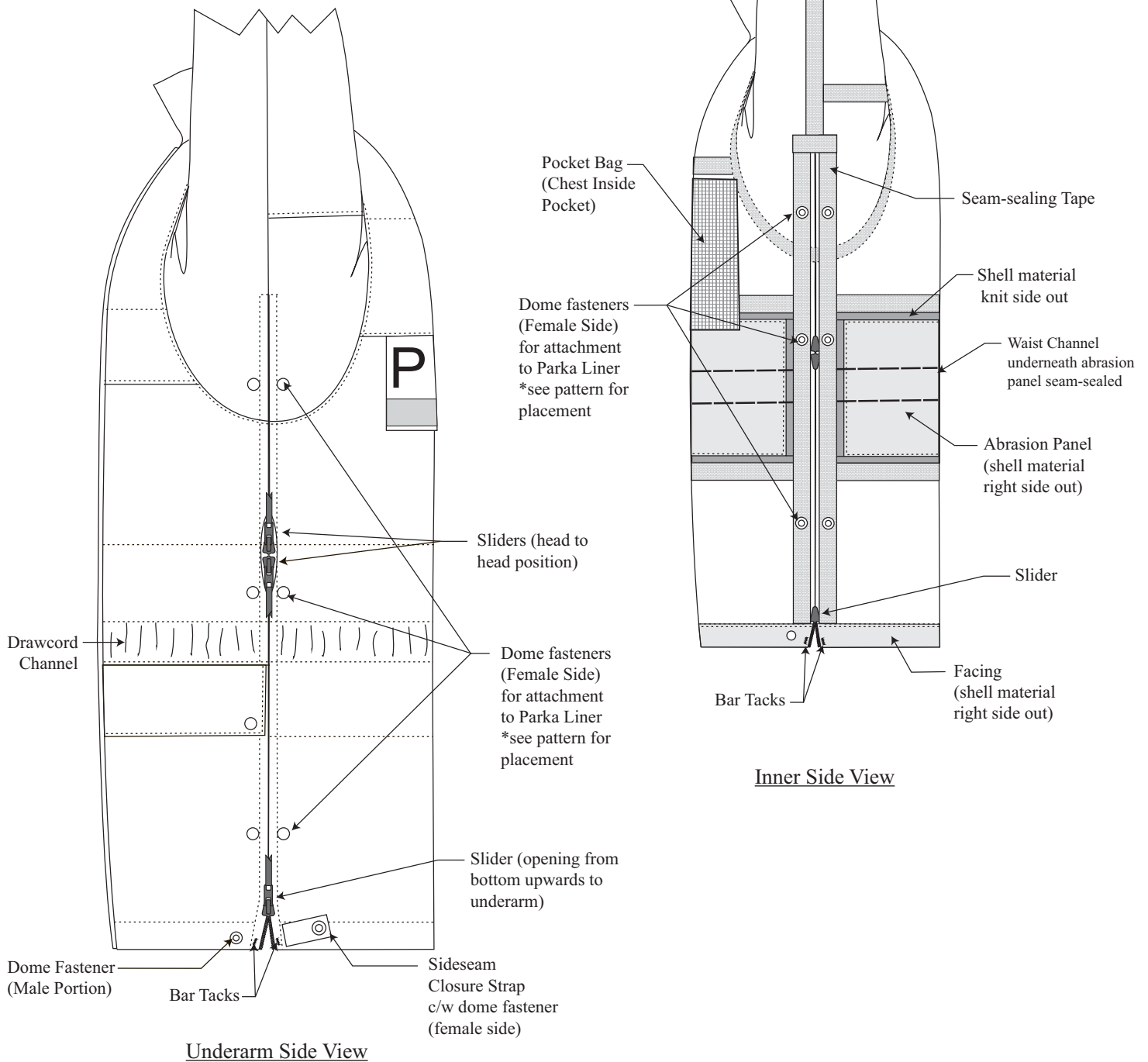
All measurements are shown in centimeters.

± 0.5cm tolerance acceptable unless otherwise indicated.

Parka, Inclement and Hoods
Underarm & Inner Side View Detail

G.S.1045-307

Dwg. 3



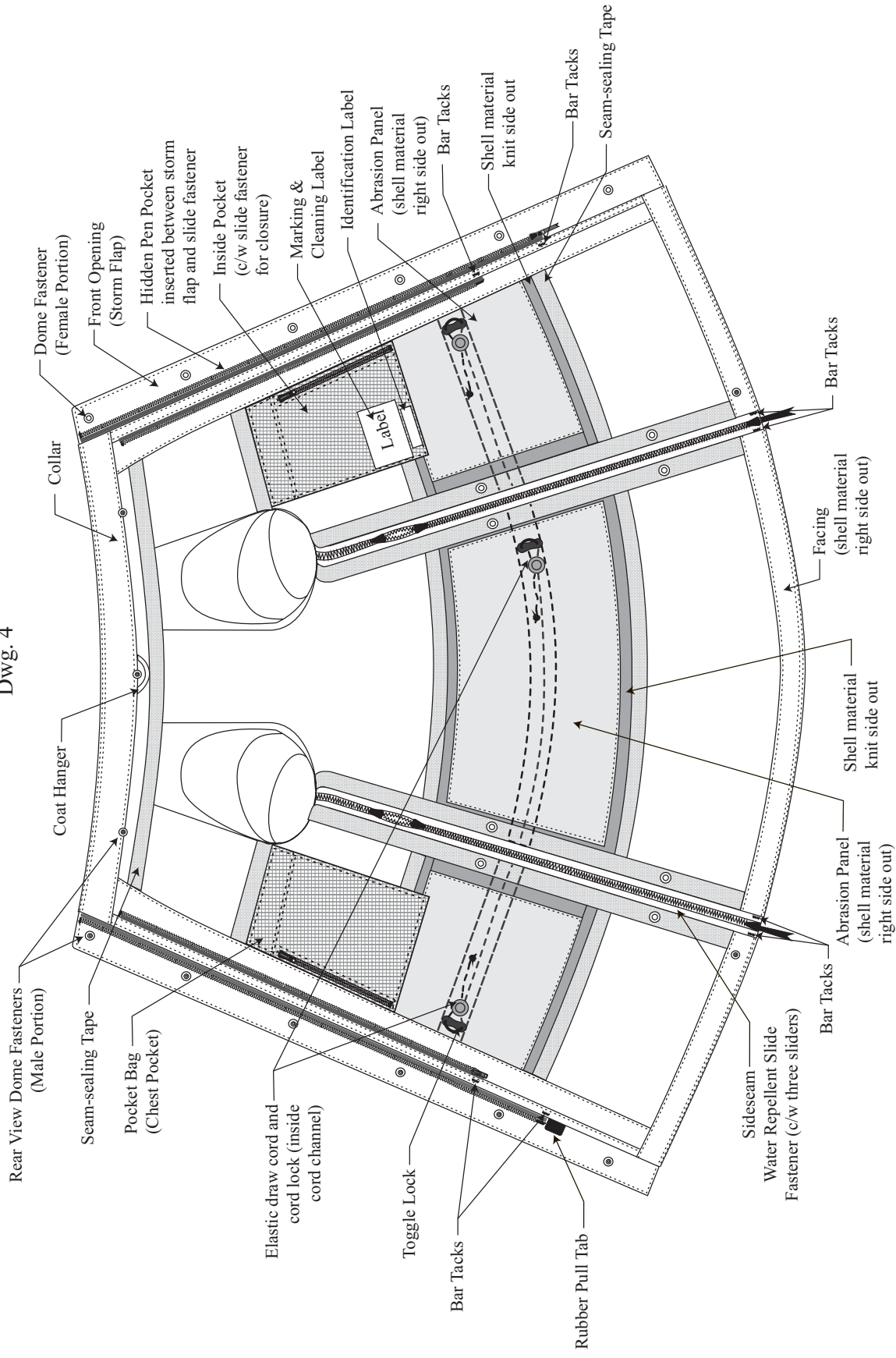
NOT TO SCALE

All measurements are shown in centimeters.

± 0.5cm tolerance acceptable unless otherwise indicated.

Inside Parka Detail

Dwg. 4



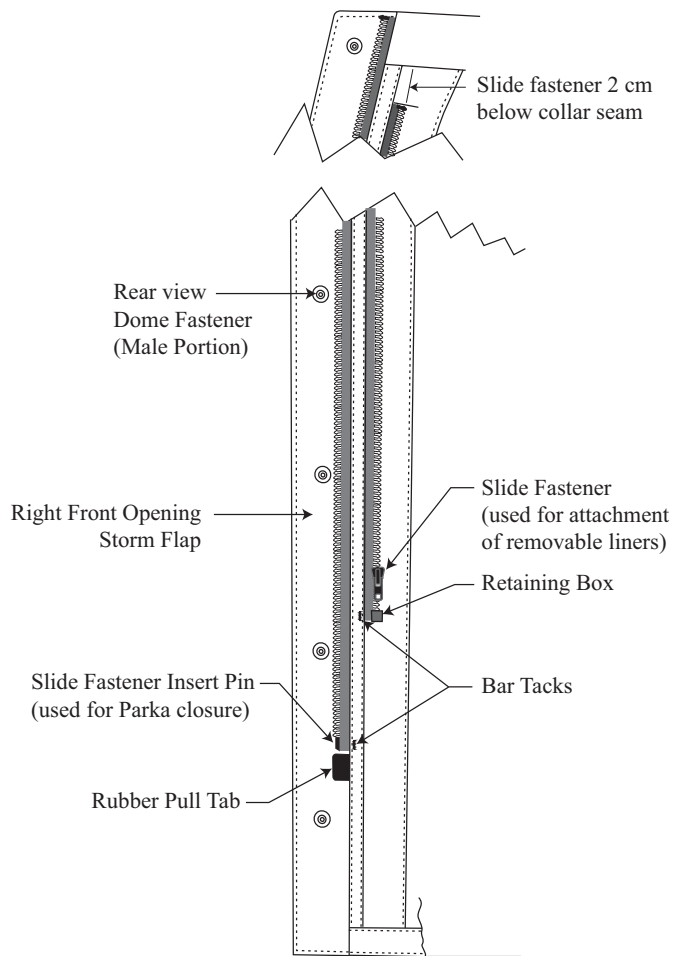
NOT TO SCALE

All measurements are shown in centimeters.

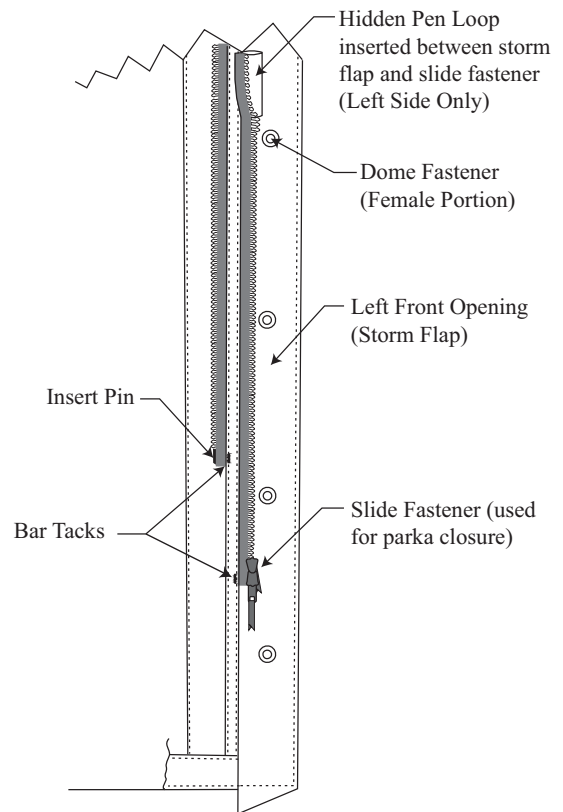
± 0.5cm tolerance acceptable unless otherwise indicated.

Slide Fastener, Shoulder Strap
& Inside Cuff Detail

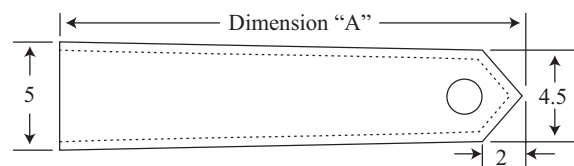
Dwg. 5



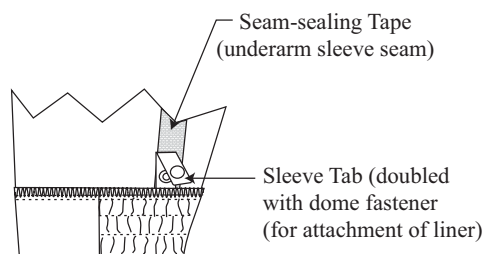
Slide Fastener Detail
Right Front (Inside View)



Slide Fastener Detail
Left Front (Inside View)



Shoulder Strap Detail



Inside Cuff Detail

Jacket Size (All Heights)	Dimension "A"
X-Small	14.25
Small	15.25
Medium	16.25
Large	17.25
X-Large	18.25
2X-Large	19.25
3X-Large	20.25
4X-Large	21.25
5X-Large	22.25

TABLE I
Shoulder Strap Length
(Finished)

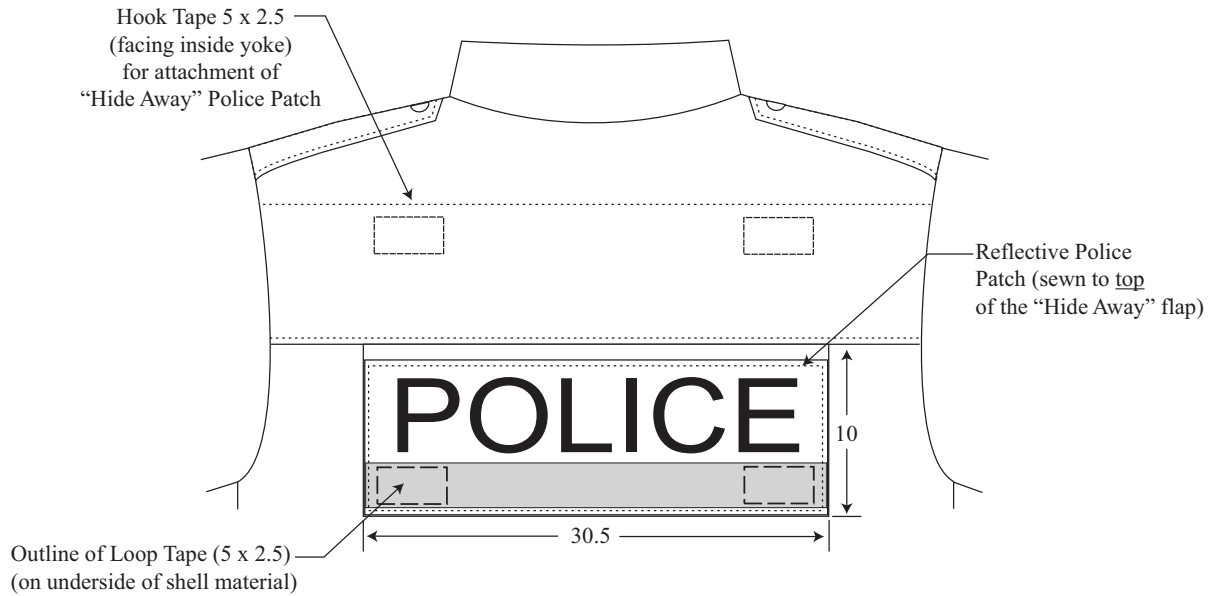
NOT TO SCALE

All measurements are shown in centimeters.

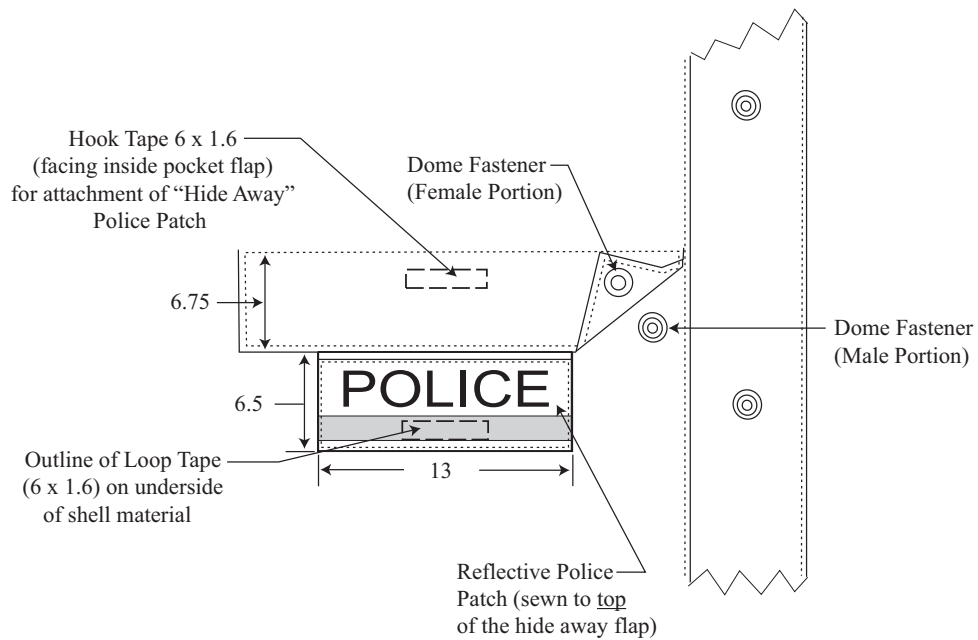
± 0.5cm tolerance acceptable unless otherwise indicated.

**“Hide Away” Reflective Police Patch
& Chest Pocket Detail**

Dwg. 6



Large Back Police Patch



Chest Pocket Detail

shown with corner folded up

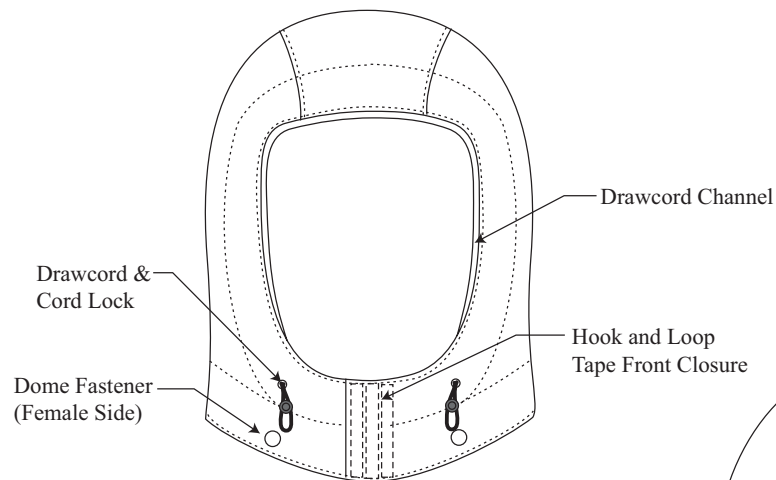
NOT TO SCALE

All measurements are shown in centimeters.

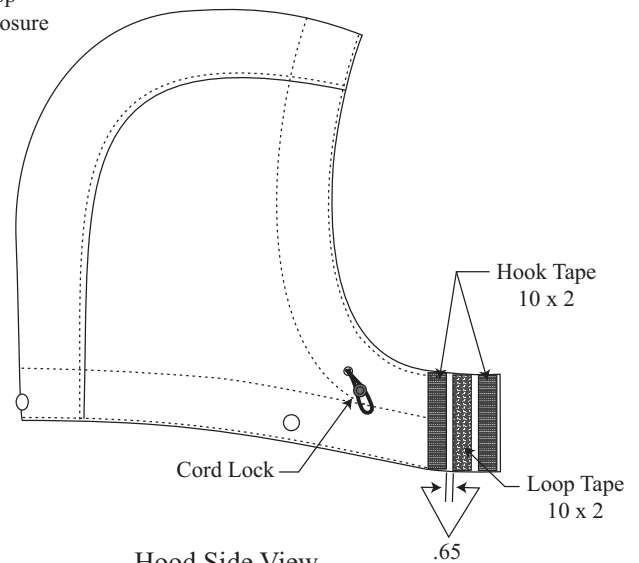
± 0.5cm tolerance acceptable unless otherwise indicated.

Parka, Inclement and Hoods
Standard Detachable Hood Detail
Dwg. 7

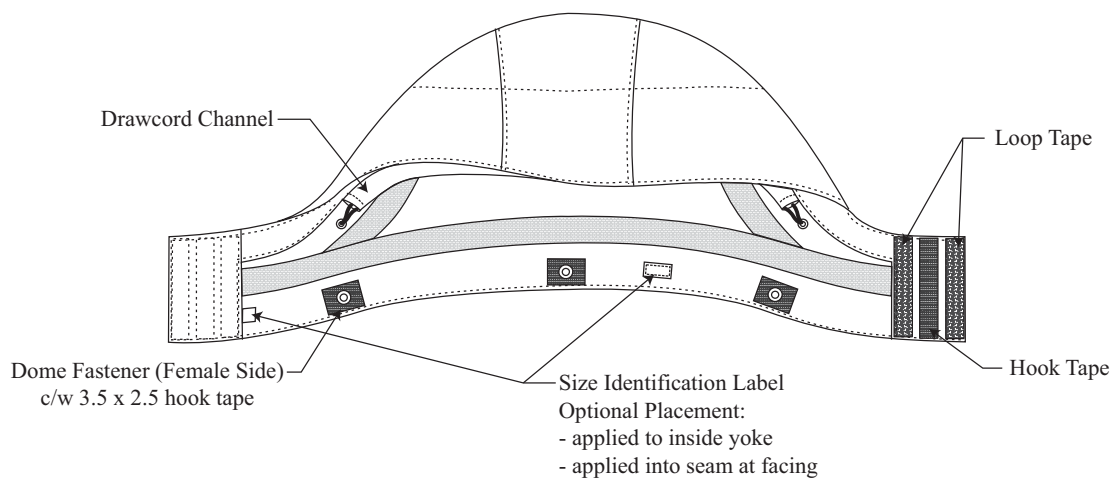
G.S.1045-307



Hood Front View



Hood Side View

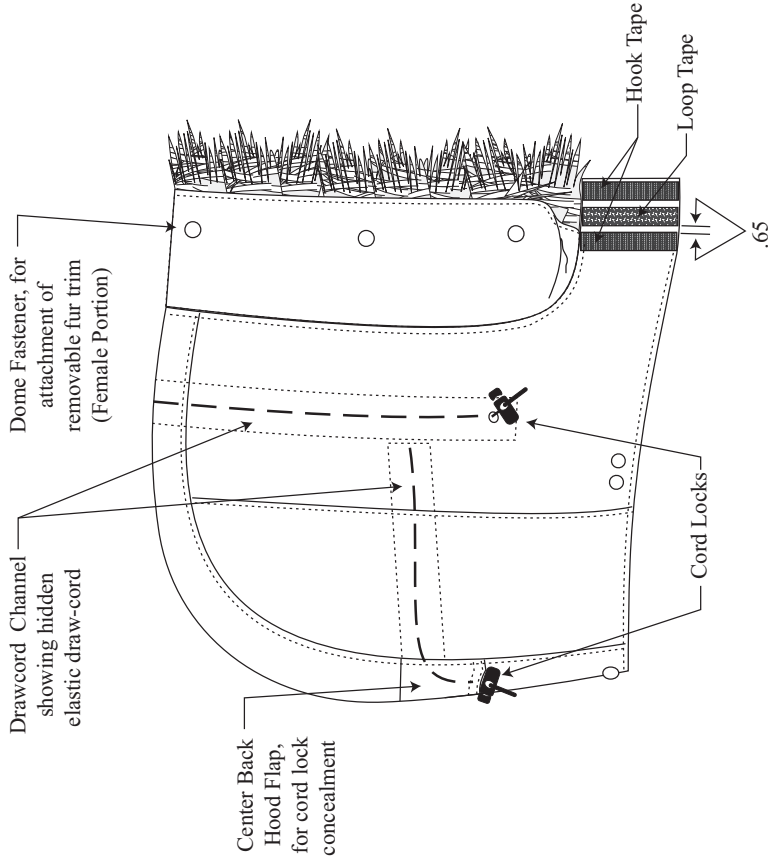


Inside Front View

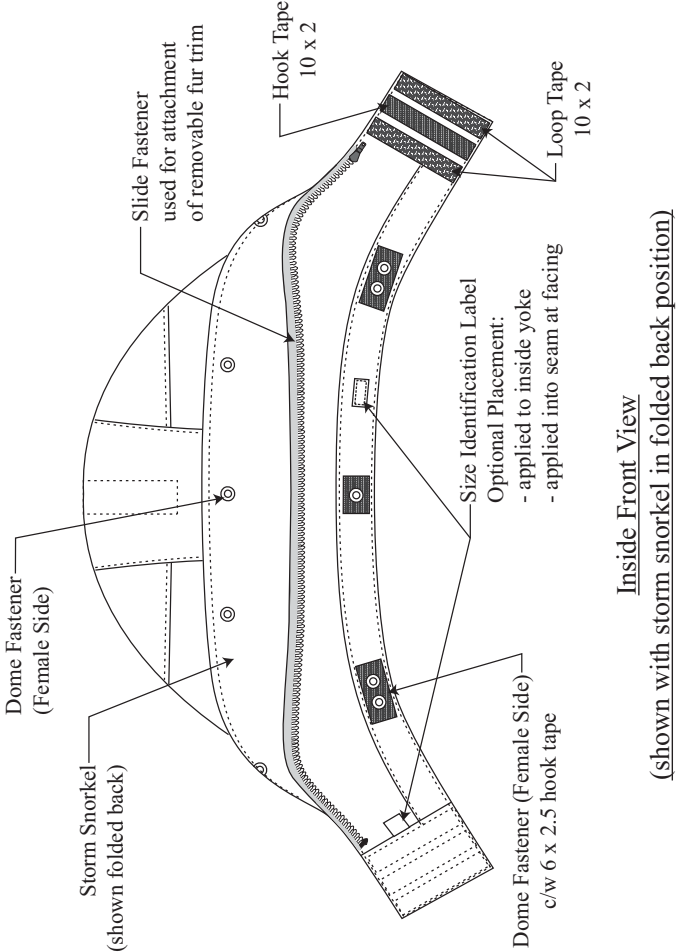
NOT TO SCALE

All measurements are shown in centimeters.
± 0.5cm tolerance acceptable unless otherwise indicated.

Dwg. 8

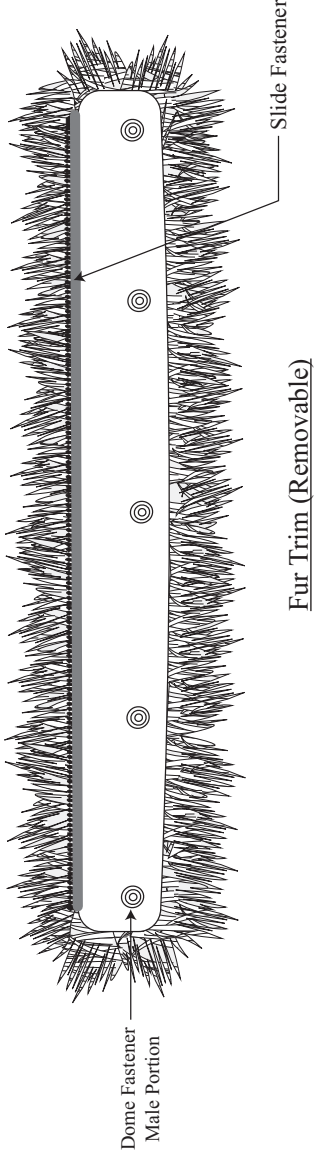


Hood Side View



Inside Front View
(shown with storm snorkel in folded back position)

Hood Sizes	Slide Fastener Lengths
XX Small/ X Small	23 inches
Small/ Medium	24 inches
Large/ XL	25 inches
2XL/ 3XL	26 inches
4XL/ 5XL	27 inches



NOT TO SCALE
All measurements are shown in centimeters.
± 0.5cm tolerance acceptable unless otherwise indicated.

ANNEX E

SPECIFICATION - G.S. 1045-310 **JACKET, HIGH VISIBILITY**

dated 2015-07-09



Royal Canadian Mounted Police
Gendarmerie royale du Canada

Doc. no: G.S. 1045-310

Date: 2015-07-09

Specification

Jacket, High Visibility

This document has 41 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.



RCMP VIEWING SAMPLE

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

This will be used for the guidance of the 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 and 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

JACKET, HIGH VISIBILITY

1. Definitions

- 1.1 This specification shall govern the manufacture and inspection of Jacket, High Visibility. The specific item covered under this specification with stock number is as follows:
 - i. 3985 Jacket, High Visibility / Veste haute visibilité
 - ii. 3986-000 Jacket, High Visibility, Special / Veste haute visibilité, tailles spéciales
- 1.2 The specification, pattern, drawing, 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 RCMP Jacket, High Visibility and/or purchase descriptions for RCMP Rain suit, High Visibility.
- 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.
- 2.3 CAN/CSA Z96-09 High-Visibility Safety Apparel.
- 2.4 CAN/CGSB 4.131-93, Thread, Polyester, Polyester or Cotton Covered.
- 2.5 CAN/CGSB 86.1-2003 Care Labeling of Textiles
- 2.6 FED-STD-191A, Federal Standard, Textile Test Methods.

- 2.7 ASTM, American Society for Testing and Materials, Method D3776/D3776M-09a (2013), D2097-03 (2010), D413-98, D3886-99 (2013), D4966-12, D1424-09 (2013), D5034-09 (2013), D5169-98 (2015), D5170-98 (2015), E808-01 (2009), E809-08 (2013), E1164-12 and F392/F392M-11.
- 2.8 ASTM, American Society for Testing and Materials, Method E308-01 Standard Practice for Computing the Colors of Objects by Using the CIE System.
- 2.9 AATCC-8-2013, 15-2013, 16.3-2014, 61-2013, 118-2013 and 135-2012, American Association of Textile Chemists and Colorists - Technical Manual.
- 2.10 ISO 105-B02:2014, ISO 13937-1:2000, International Standards Organization.
- 2.11 BS 3424-26: 1990, Method 29A, British Standards Institution.
- 2.12 RCMP Specification, G.S.1045-266, Badges Woven Item - Badge, Shoulder, Cloth, Police.

3. **General Requirements**

- 3.1 The article or material covered by this specification shall be free from imperfections or blemishes such as 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 Jacket, High Visibility shall be a loose fitting, waist length jacket designed to be worn in conjunction with a removable fleece jacket. The shell is constructed from a 3-layer material with a WMVP (waterproof moisture vapour permeable) membrane. The 3-layer fabric construction does not require a lining when made up into a garment. The jacket shall be waterproof with all seams permanently seam sealed unless otherwise stated. This jacket has been designed to meet CAN/CSA Z96-09 requirements for a Class 2, Level 2 garment. The lettering “RCMP”, “GRC”, and “Police” shall be retro reflective on the front and back of the garment.

4. **Detail Requirements**

4.1 **Components**

- 4.1.1 **Shell Material I** - The shell material I shall be plain weave 100% nylon, Type 6.6. The color shall be dark navy blue, meeting the approved color swatch, with a durable water repellent finish. An appropriate heat-set process shall be applied to the shell material in order to be prepared for the lamination of the waterproof moisture vapour permeable membrane specified in Para. 4.1.3.1.
- 4.1.2 **Shell Material II** - The shell material II shall be plain weave 100% polyester. The color shall be fluorescent yellow-green, meeting CAN/CSA Z96-09, with a durable water repellent (DWR) finish. The laminated portion of the contrast shall have an appropriate heat-set process applied to it, in order for it to be prepared for the lamination of the waterproof moisture vapour permeable membrane as specified in Para. 4.1.3.2.
- 4.1.3 **Shell Material, Laminated** - The laminated shell materials shall not show any visible signs of delamination or loss of film during the garments useful life (approximately 5 years). The fabric shall be capable of having its sewn seams, seam-sealed with an appropriate tape, in a waterproof, durable fashion. Materials not meeting these requirements will be cause for rejection. Delamination is defined as any irreparable separation of the bonded layers of the Laminated Shell Material(s).
- 4.1.3.1 **Shell Material I, Laminated** – The shell material I shall be laminated in a 3-layer format with a membrane, which after lamination provides a high level of water resistance/waterproofness and breathability. The outer layer shall consist of shell material I as specified in Para. 4.1.1, with the membrane as the middle layer, and a black, 100% nylon or polyester warp tricot knit fabric with a maximum weight of 55 g/m², as the inner layer. The layers shall be joined together by a suitable lamination process. The membrane when laminated to the shell material shall meet the test requirements outlined in Table I and Table II forming part of this specification.
- 4.1.3.2 **Shell Material II, Laminated** – The shell material II shall be laminated in a 3-layer format with a membrane, which after lamination provides a high level of water resistance/waterproofness and breathability. The outer layer shall consist of shell material II as specified in Para. 4.1.2, with the membrane as the middle layer, and a white, 100% nylon or polyester warp tricot knit fabric with a maximum weight of 55 g/m², as the inner layer. The layers shall be joined together by a suitable lamination process. The membrane when laminated to the shell material shall meet the test requirements outlined in Table I and Table IV forming part of this specification.

- 4.1.4 **Seam Sealing Tape** – The 3-layer composite fabric shall be seamed using a compatible nylon or polyester seam-sealing tape with the 3-layer shell fabric and sealed-seams meeting the requirements outlined in Table I forming part of this specification. The tape on the sealed seams shall not peel off and/or wear during the projected life span of the garment.
- 4.1.5 **Thread** - The thread shall be polyester wrap, polyester core, Tex 50, Class B of matching colour, meeting CAN/CGSB 4.131-93.
- 4.1.6 **Mesh Pocketing** - The pocketing shall be a polyester, warp knit mesh, black in colour or to match the shell material, meeting the requirements outlined in Table III. Tek-Knit “XPTAR004” is known to meet the requirement
- 4.1.7 **Retro reflective Markings and Lettering** - The retro reflective markings shall be exposed, wide angle, retroreflective lenses, silver material in the form of a heat transfer film, 5 cm wide. The lettering on the front and back will be Arial Black font dimensioned as per drawing #3. It shall meet all the retro reflective performance requirements outlined in Section 6, meeting Table 5 in the CAN/CSA Z96-09 High-Visibility Safety Apparel standard. All retro reflective markings and lettering shall meet a minimum coefficient of retro reflection, R_A , that are determined in accordance with the procedures defined in E808-01 (2009) and E809-08 (2013). 3M Scotchlite™ 8725N silver material in the form of a heat transfer film is known to meet these requirements.
- 4.1.8 **Shoulder Badges** - The RCMP stock item number 2135-108, Badge, Shoulder, Police shall be purchased from the RCMP.

4.1.9 Slide Fasteners - Lengths - Measurements in Inches

Height Group	Sizes	Front	Inside Front	Side Seam	Sleeve Pocket	Chest Pocket	Inside Pocket
X Short	XX Small	19½"	13½"	15"	7"	6½"	7"
	X Small	20½"	14½"	15"	7"	6½"	7"
	Small	21"	15"	15"	7"	6½"	7"
	Medium	22"	15½"	16"	7"	6½"	7"
	Large	23"	16½"	16"	7"	6½"	7"
	X Large	23½"	17½"	17"	7"	6½"	7"
	2X Large	24½"	18"	17"	7"	6½"	7"
	3X Large	25"	19"	17"	7"	6½"	7"
	4X Large	26"	20"	18"	7"	6½"	7"
	5X Large	27"	20½"	18"	7"	6½"	7"
Short	XX Small	21½"	15½"	17"	7"	7"	7"
	X Small	22½"	16"	17"	7"	7"	7"
	Small	23"	17"	17"	7"	7"	7"
	Medium	24"	18"	18"	7"	7"	7"
	Large	25"	18½"	18"	7"	7"	7"
	X Large	25½"	19½"	19"	7"	7"	7"
	2X Large	26½"	20"	19"	7"	7"	7"
	3X Large	27"	21"	19"	7"	7"	7"
	4X Large	28"	22"	20"	7"	7"	7"
	5X Large	29"	22½"	20"	7"	7"	7"
Regular	XX Small	23½"	17½"	19"	8"	7½"	7"
	X Small	24½"	18"	19"	8"	7½"	7"
	Small	25"	19"	19"	8"	7½"	7"
	Medium	26"	20"	20"	8"	7½"	7"
	Large	27"	20½"	20"	8"	7½"	7"
	X Large	27½"	21½"	21"	8"	7½"	7"
	2X Large	28½"	22"	21"	8"	7½"	7"
	3X Large	29"	23"	21"	8"	7½"	7"
	4X Large	30"	24"	22"	8"	7½"	7"
	5X Large	31"	24½"	22"	8"	7½"	7"
Tall	XX Small	25½"	19½"	21"	8"	8"	7"
	X Small	26½"	20"	21"	8"	8"	7"
	Small	27"	21"	21"	8"	8"	7"
	Medium	28"	22"	22"	8"	8"	7"
	Large	29"	22½"	22"	8"	8"	7"
	X Large	29½"	23½"	23"	8"	8"	7"
	2X Large	30½"	24"	23"	8"	8"	7"
	3X Large	31"	25"	23"	8"	8"	7"
	4X Large	32"	25½"	24"	8"	8"	7"
	5X Large	33"	26"	24"	8"	8"	7"
X Tall	XX Small	27½"	21½"	23"	8"	8"	7"
	X Small	28½"	22"	23"	8"	8"	7"
	Small	29"	23"	23"	8"	8"	7"
	Medium	30"	24"	24"	8"	8"	7"
	Large	31"	24½"	24"	8"	8"	7"
	X Large	31½"	25½"	25"	8"	8"	7"
	2X Large	32½"	26"	25"	8"	8"	7"
	3X Large	33"	27"	25"	8"	8"	7"
	4X Large	34"	27½"	26"	8"	8"	7"
	5X Large	34½"	28½"	26"	8"	8"	7"
XX Tall	XX Small	29½"	23½"	25"	8"	8"	7"
	X Small	30½"	24"	25"	8"	8"	7"
	Small	31"	25"	25"	8"	8"	7"
	Medium	32"	25½"	26"	8"	8"	7"
	Large	33"	26½"	26"	8"	8"	7"
	X Large	33½"	27"	27"	8"	8"	7"
	2X Large	34"	28"	27"	8"	8"	7"
	3X Large	35"	29"	27"	8"	8"	7"
	4X Large	36"	29½"	28"	8"	8"	7"
	5X Large	36½"	30½"	28"	8"	8"	7"

4.1.9.1 **Slide Fastener - Front** - Shall be an open-end separator, black in colour, injection molded, DA automatic slider, Vislon® YKK 26500 VSO 56 9/16 (only).

- 4.1.9.2 **Slide Fastener - Right Inside Front** - (To be used for the attachment of a removable fleece jacket) - Shall consist of ½ (half) of an open-end slide fastener with the retaining box and slider; it shall be injection molded, with a DA automatic slider, black in colour, Vislon® YKK 26590 VSO 56 9/16 (only).
- 4.1.9.3 **Slide Fastener - Left Inside Front** - (To be used for the attachment of a removable fleece jacket) Shall consist of ½ (half) of an open-end slide fastener with the insert pin and shall be injection molded, black in colour, Vislon® YKK 26590 VSO 56 9/16 (Left Hand Pin Insertion) (only).
- 4.1.9.4 **Slide Fastener - Upper Sleeve Pocket** - Shall be a closed end coil type slide fastener with a DF non-lock slider, black in colour, YKK 12824 CIFC 51 DFW1 E 5/8 (only).
- 4.1.9.5 **Slide Fastener - Chest Pockets** - Shall be a closed end coil type slide fastener with a DF non-lock slider, black in colour, with long pull tabs, YKK 12430 CIFC 51 DFL1 E 5/8 (only).
- 4.1.9.6 **Slide Fastener - Side Seam** - Shall be water repellent, black in colour, with the tape treated with a strong water repellent finish and a coated back of polyurethane. It shall be closed-ended with double sliders arranged in a head-to-head relation, Aqua Guard YKK 37330 CIT4MC 56/6/6 DA8LH E/DA8LH E/DA8LH E 5/8*TS-BTM*B-B*H-H* (only).
- 4.1.9.7 **Slide Fastener - Inside Pockets** - The inside pocket slide fasteners shall be black in colour, woven-in style, DA automatic slider, YKK 20054 CFC 456 DA E 9/16 *E-BTM-2* (only).
- 4.1.10 **Hook and Loop Tape** - The hook and loop tape shall be woven nylon, black in colour, with a high life cycle. The combined hook and loop shall have no less than 8 P.S.I length-wise shear strength with initial peel strength of not less than 1 P.I.W. when tested to ASTM D5169-98 (2015), standard test method for shear strength [dynamic method] of hook and loop touch fasteners and ASTM D5170-98 (2015), standard test method for peel strength ["T" method] of hook and loop touch fasteners."
- 4.1.11 **Elastic Drawcord** - The drawcord shall be round braided polyester elastic, black in colour, 2.4 mm, with maximum elongation of 135% and full recovery. Cansew style #EBR C-38 is known to meet the requirement.

4.1.12 **Cord Locks**

4.1.12.1 **Cord Locks** - The cord locks shall be low profile cord lock cylinder, spring loaded in acetyl composition, black in colour. It shall come in two sizes. The cord lock for the hem channel shall be shaped with a maximum diameter of 13 mm and a maximum depth of 11.2 mm. Texfast style #S217B is known to meet the requirement. The cord lock for the hood shall be shaped with a maximum diameter of 15.5 mm and a maximum depth of 12.5 mm. Texfast style #S217A is known to meet the requirement.

4.1.12.2 **Toggle Lock** - The lock shall be oval shaped with a maximum length of 30 mm and a maximum width of 9 mm, with two 4 mm holes, acetyl composition, and black in colour. It may be of sew on or clamp-on version.

4.1.13 **Eyelets** - The eyelets shall be black in colour with a 5-6 mm diameter hole, brass or aluminum.

4.1.14 **Dome Fastener** - The dome fastener shall be a standard type 24 ligne fastener. All metal parts to be brass with a 15 mm matte black, powder coated cap. Universal SW61 (only).

4.1.15 **Elastic** - The elastic shall be heavy duty nylon or polyester, black in colour, with maximum elongation of 130% and full recovery. It shall come in two widths, 2.5 cm and 4 cm. The elastic measuring 2.5 cm shall be used in a double layer for the side seam closure strap. The elastic measuring 4 cm shall be used for the sleeve cuff.

4.1.16 **Grosgrain Ribbon** - Shall be nylon grosgrain ribbon, black in colour and come in two widths, 6 mm and 1 cm.

4.1.17 **Webbing, Microphone Strap** - The webbing shall be a durable nylon webbing, luggage quality, black in colour measuring 2.54 cm (1") wide and 0.04" ± 0.01" thick. It shall have a minimum tensile strength of 1000 lbs. as per Federal Standard 191-5206 test method #4108 and be equal in appearance to the viewing sample. Tape Craft #N0015-1"-YD001-352 is known to meet the requirements.

4.2 **Size and Dimensions** - Jacket, High Visibility to this specification shall be supplied in the sizes specified by the RCMP and to the dimensions given in the scale of measurements and drawings forming part of this specification. The

garment components shall be shaped, dimensioned and positioned in accordance with the pattern components and pattern requirements as outlined in Appendix “A” forming part of this specification.

4.3 **Construction**

4.3.1 **Stitching and Seam Sealing** - All stitching shall be lockstitch. There shall be not less than three or more than four stitches per centimetre. The beginning and ending of all stitching shall be securely backstitch tacked, unless secured by other stitching. All seams and points where stitching penetrates the shell materials shall be permanently sealed on the inside with the appropriate seam-sealing tape as per Para. 4.1.3. Care shall be taken to ensure that the tape cross-over points where seams join are doubly covered and bonded securely so as to ensure water-resistance. Any sealed seams showing any form of delamination or any non-bonded or peeling seams shall be a cause for rejection.

4.3.2 **Body**

4.3.2.1 **Back** - The upper body shall be made from shell material II as specified in Para. 4.1.3.2 and the lower body shall be made from shell material I as specified in Para. 4.1.3.1. The back shall have a retro reflective pattern and retro reflective lettering meeting CAN/CSA Z96-09 requirements as outlined in Para. 4.3.9 and 4.3.9.1. The back when finished shall conform in every respect to the patterns and drawings.

4.3.2.2 **Back Hem Channel** - The back hem facing shaped and dimensioned as per the pattern shall be sewn face side out, to the bottom of the jacket back to create a hem channel for the elastic drawcord. The hem channel shall have two eyelets as per Para. 4.1.13, measuring 4 cm from the left side seam as identified in drawing # 6. An elastic drawcord as specified in Para. 4.1.11 shall be securely attached into the right side seam and threaded through the hem channel. It shall continue through the smaller cord lock as specified in Para. 4.1.12.1, and through the eyelet outside the hem channel. It shall be threaded through the toggle lock as specified in Para. 4.1.12.2 and back through a 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 and the toggle lock showing as per drawings # 6 and 8.

4.3.2.3 **Front** - The jacket shall be equipped with a center front slide fastener as specified in Para. 4.1.9.1, lengths as specified in Para 4.1.9, and the bottom ends of the slide fasteners shall be bar tacked as per drawing # 6. The front shall have two front storm flaps with dome fasteners for closure. The front shall have two chest pockets with slide fasteners and flaps with dome fasteners. The front shall have a

retro reflective pattern and retro reflective lettering meeting CAN/CSA Z96-09 requirements as outlined in Para. 4.3.9 and 4.3.9.1. On the right-hand side, there shall be an 8.5 cm x 2.5 cm piece of loop tape as specified in Para. 4.1.10 for the name tag. The left and right fronts shall be equipped with webbing as specified in Para. 4.1.17, measuring 2.5 cm x 5 cm for the microphone loop. All components of the front shall be constructed as per the patterns and drawings.

4.3.2.4 **Chest Pockets** - The jacket shall have two vertical chest pockets with slide fasteners as specified in Para. 4.1.9.5 and lengths as specified in Para. 4.1.9. Ribbon pulls as specified in Para. 4.3.12 shall be applied to the sliders. The slider shall be in an upright position when the pocket is closed. Each chest pocket shall have flaps which shall be dimensioned in accordance with the patterns. The dome fastener as specified in Para. 4.1.14 shall be applied to the flap for closure. There shall be two inside pockets as shown in drawing # 6 constructed out of mesh material as specified in Para. 4.1.6 secured with a slide fastener as specified in Para. 4.1.9.7 and lengths as specified in Para. 4.1.9. There shall be two labels sewn through the mesh inner pocket bag with the Identification label and Marking and Cleaning Instructions as shown in drawing # 6.

4.3.2.5 **Under Fly Front & Front Storm Flaps** - The under fly front shall be fitted with two injection molded slide fasteners, length as specified in Para. 4.1.9. One is for the front closure and one is for the attachment of the removable fleece. The jacket front slide fastener, as specified in Para. 4.1.9.1, shall be inserted in a way to have the slider and retaining box on the left front and the insert pin attached on the right front. A ribbon pull as specified in Para. 4.3.12 shall be applied to the slider. The left front storm flap shall have five dome fasteners (female portion) as specified in Para. 4.1.14, which align with the male portions attached to the right front storm flap as per drawing # 6. There shall be ½ (half) of a slide fastener attached to the right facing and ½ (half) of a slide fastener attached to the left facing to be used for the attachment of a removable fleece jacket. The ½ (half) attached to the front right inside facing as specified in Para. 4.1.9.2 shall consist of the retaining box and slider which shall begin 2 cm below the collar seam for all sizes. The ½ (half) attached to the left inside front, as specified in Para. 4.1.9.3, shall consist of the insert pin and begin 2 cm below the collar seam for all sizes, as shown in drawing # 6. The bottom ends of all the slide fasteners shall be bar tacked as per drawing # 6. An external pen pocket measuring 2 cm after folding in half shall be constructed from a single layer of shell material II. It shall be sewn to the left chest only directly under the top storm flap between the front slide fastener and storm flap. The pen pocket shall be dimensioned and positioned as per the patterns and drawings.

- 4.3.3 **Side Seams** - Both side seams from sleeve underarm to hem shall be equipped with a water-resistant slide fastener as specified in Para. 4.1.9.6, and lengths as specified in Para. 4.1.9 and the bottom ends of the slide fasteners shall be bar tacked as per drawings # 6. The slide fastener, when applied, shall be covered by the shell material. There shall be 3 sliders, the two closest to the underarm should be in a head to head position and the third shall be opening from the bottom upwards as shown in drawing # 8. All sliders shall be equipped with ribbon pulls as specified in Para. 4.3.12. The seam tape, when applied, shall extend into the front and back hem facing so that no tape ends are visible as shown in drawing # 8. The side seam hem shall have an elastic closure strap as specified in Para. 4.3.13, measuring 2.5 cm wide constructed as per drawing # 8.
- 4.3.4 **Collar** - The collar, made of shell material II as specified in Para. 4.1.3.2, shall be designed as per the patterns. There shall be three dome fasteners (male portion) as specified in Para. 4.1.14 for the attachment of the detachable hood.
- 4.3.5 **Detachable Hood** - The hood shall be constructed from shell material II as specified in Para. 4.1.3.2 with all sewn seams, seam-sealed. It shall be constructed in a way to have double adjustment for height and width, with an elastic drawcord as specified in Para. 4.1.11 and large size cord locks as specified in Para. 4.1.12.2. The hood shall be secured to the collar with 3 (three) dome fasteners as specified in Para. 4.1.14 with the female portion applied to the hood and the corresponding male portion to the collar. Eyelets as per Para. 4.1.13 shall be applied to each side of the hood side fronts for the insertion of the elastic drawcord. The elastic drawcord shall be threaded through the inside channel continuing through the eyelet with cord locks applied as per drawing # 7. A label identifying the corresponding hood size shall be sewn to the bottom hood facing mid back position or centered on the facing as shown in drawing # 7.
- 4.3.6 **Sleeve & Sleeve Cuffs** - The jacket shall have a three piece sleeve with an upper sleeve pocket. The sleeve shall be made of shell material II as specified in Para. 4.1.3.2. All sleeve seams with exception of the underarm seam shall be top stitched using a 2 mm gauge. The cuff shall be made from shell material I as specified in Para. 4.1.3.1. The sleeves shall have a 9 cm adjustment strap with a 4.5 cm x 2.5 cm piece of hook tape as specified in Para. 4.1.10 for adjustability. The cuff shall be 4 cm wide with a 12 cm x 2.5 cm piece loop tape to secure the adjustment strap. The cuff shall be partially elasticized using 4 cm wide elastic as specified in Para. 4.1.15. The elasticized area of the cuff shall have two rows of

top stitching to anchor the elastic. The sleeves and cuffs shall be shaped and dimensioned as per the patterns and viewing sample.

- 4.3.7 **Shoulder Straps** - Shoulder straps, shaped and dimensioned in accordance with the patterns and drawing # 7, shall be made from two layers of shell material II as specified in Para. 4.1.3.2. They shall be sewn into the sleeve-head and positioned as per the pattern and viewing sample. The shoulder strap shall be secured to the jacket shoulder with the dome fastener specified in Para. 4.1.14.
- 4.3.8 **Upper Sleeve Pocket** - Both sleeves shall have an upper sleeve pocket constructed from shell material II with a slide fastener as specified in Para. 4.1.9.4. When in a closed position, the slider shall be facing toward the shoulder as shown in drawing # 2. Ribbon pulls as specified in Para. 4.3.12 shall be applied to the sliders. There shall be two rows of topstitching around the slide fastener, using 2 mm gauge and 6 mm gauge. The sleeve pocket shall be sewn to the sleeve, top-stitched using a 2 mm gauge and seam sealed appropriately to ensure waterproofness. The upper sleeve pocket shall be constructed in accordance with the patterns and drawings.
- 4.3.9 **Retro reflective Pattern** - The retro reflective material as specified in Para. 4.1.7 shall be heat transferred to the shell material II and positioned as per drawing # 2. The pattern template for the retro reflective markings shall be used but it does not show the break for the letter placement on the back. Refer to drawing # 5 for letter placement. The break shall be 10 cm high, measuring 5 cm vertically on both sides of center keeping the “X” symmetrical. The word “POLICE” shall be centered in the “X” and the words “RCMP” and “GRC” shall be above it as per drawing # 4. The horizontal band extending from side to side shall align to meet with the bottom of the “X”. The front body shall have retro reflective material from the shoulder seam extending down the body to meet the horizontal band that extends from side to side as per pattern. Each sleeve shall have a continuous retro reflective band circling the sleeve as per pattern. All retro reflective material shall be permanently attached to the shell material by means of heat sealing. No stitching shall be employed in attaching the retro reflective material, and the heat-sealing shall endure for the life of the garment. There shall be no loose or unbonded edges, or loss of film. Retro reflective material shall not cover other retro reflective material in order to provide the best bond between the retro reflective material and the shell material.
- 4.3.9.1 **Retro reflective Lettering** - The font shall be Arial Black in retro reflective material as specified in Para. 4.1.7. On the back, the word “POLICE” shall be

centered within the 10 cm high break in the “X” and the words “RCMP” and “GRC” shall be above “POLICE”, dimensioned and positioned as per drawing # 4 and # 5. The lettering “RCMP” shall be left justified in relation to “POLICE” and the “GRC” shall be right justified in relation to “POLICE”. On the front, 1 cm below the name tag shall be “RCMP”, “GRC” and “POLICE” lettering, dimensioned and positioned as per drawing # 4. The lettering “RCMP” shall be left justified in relation to “POLICE” and the lettering “GRC” shall be right justified in relation to “POLICE”. The front lettering shall be in line with the left side of the name tag.

- 4.3.10 **Shoulder Badges** - The RCMP shoulder badges specified in Para. 4.1.8 shall be sewn through the upper sleeve pocket only (not through the sleeve). The badge is to be centered on the sleeve-head 2.5 cm below the sleeve-head seam and attached with one row of stitching, as per the viewing sample.
- 4.3.11 **Coat Hanger** - A 6 cm long coat hanger, constructed from 6 mm wide grosgrain ribbon as specified in Para. 4.1.16 shall be centered at the neck in accordance with the viewing sample.
- 4.3.12 **Slide Fastener Ribbon Pulls** – All ribbon pulls shall be constructed with grosgrain ribbon 1 cm wide, as specified in Para. 4.1.16. The ribbon shall be applied to the hole of the slide fastener pull in a way that allows the ribbon pulls to be removed easily without damage and reapplied. The ribbon pull should be 5 cm ± 0.5 cm in length when finished and attached to the slide fastener.
- 4.3.13 **Side Seam Closure Strap** - There shall be a side seam closure strap measuring 9 cm ± 0.5 cm when finished, at the side seam hem. It shall be constructed from 2.5 cm wide elastic as specified in Para. 4.1.15 doubled and shall be sewn to the lower back side seam flipping toward the front, equipped with a female dome fastener for closure. The corresponding male dome fastener shall be applied to the jacket front at the hem.
- 4.3.14 **Identification Label** - Each jacket shall have a durable blank label 7.5 cm x 2 cm applied separately below the marking and cleaning label used for the inscription of the wearers’ name.
- 4.3.15 **Marking & Cleaning Instructions Label** - Each jacket shall have a durable label positioned and sewn to the bottom of the inside pocket bag as shown in drawing # 6. The label information shall be as outlined below in a text no less than a size 8 font. The text shall be of permanent inks of a contrasting colour and shall withstand at least 50 washes showing no apparent change in appearance. The

label shall be completed in accordance with 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. 3985 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. Your manufacturer identification (Company name or number).
7. Print information as shown below.
8. Print information as shown below.
9. Print information as shown below.
10. Print information as shown below.
11. Print information as shown below.
12. Print information as shown below.
13. Print information as shown below.

1		
2		
3		
4		
5		
6		
7	Machine wash - warm (40°C)	Laver à la machine – à l’eau tiède (40°C)
8	Do Not use fabric softener or chlorine bleach	Ne pas utiliser d’agent adoucissant ni d’agent de blanchiment
9	Tumble dry- medium (Do Not use dryer sheets)	Séchage par culbutage – à température moyenne (Ne pas utiliser d’assouplissant en feuilles)
10	Steam iron - low	Repassage à vapeur - à température basse
11	Dry clean - If professionally dry cleaned request clear distilled solvent rinse; request spray repellent.	Nettoyer à sec - demander un rinçage avec un solvant distillé clair et un traitement à l’aide d’un produit hydrofuge à vaporiser
12	Further care instructions: See Ordering Guide.	Instructions d’entretien supplémentaires: Voir le guide de commande.
13	CAN/CSA Z96-09 Class 2, Level 2 Fluorescent Yellow-Green	Norme Z96-09 de la CAN/CSA Classe 2, Niveau 2 Jaune-vert fluorescent

Note: The manufacturer’s identification shall not appear anywhere on the garment except on the garment label as indicated.

- 4.3.16 **Instruction Sheet** - Each completed jacket shall have an instruction sheet folded and inserted into the inside chest pocket bag, with the information included in Appendix “B” English and French, forming a part of this specification.

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 specified in this specification or by demonstrating to the satisfaction of the RCMP, Uniform and Equipment Program that conformity to this specification of manufacturing processes is assured. The contractor must use an independent, North American, ISO 9001 certified and ISO 17025 “Textile” certified testing facilities. Note: CTT Group Inc., Quebec, is known to meet this requirement.
- 5.2 The RCMP, Uniform and Equipment Program reserve the right to perform any inspection considered necessary to ensure the material and services conform to the specified requirements. For the purpose of inspection, a portion of each delivery not exceeding two percent or two out of any number delivered under 100 may be put to tests that could destroy the articles. If found to be inferior or not in accordance with this specification, all articles so destroyed shall be replaced by others of proper quality and pattern at the expense of the contractor. The entire delivery may also be rejected if it is found that 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 No. 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 jacket bottom. The result shall be doubled to measure total circumference. (B).
- 6.3 **Front Length** - The length shall be the distance measured from the top 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 at the side to the hem. (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)** - 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 **Elbow Circumference** - The elbow shall be measured across the width of the sleeve in line with the seam of the sleeve patch. The result shall be doubled to measure total circumference. (J).
- 6.10 **Back Length** - The length shall be the distance measured from the bottom of the collar at the back to the hem. (K).
- 6.11 **Back Width** - When placed flat, the distance measured across the back from shoulder point to shoulder point. (L).
- 6.12 **Collar Length** - The collar length shall be measured along the seam from slide fastener to slide fastener. (M).

SCALE OF MEASUREMENTS - Jacket, High Visibility															
SIZE DESIGNATION		BODY MEASUREMENTS		GARMENT MEASUREMENTS											
Height Group	Size	Chest		Chest Circumference	Bottom Circumference	Front Length (top of collar to hem)	Side Seam Length (underarm to hem)	Full Shoulder Width (Shoulder seam from neckline to armhole)	Sleeve Length		Cuff Circumference	Elbow Circumference	Back Length (Bottom of collar at back to hem)	Back Width	Collar Length (zipper to zipper)
		Inches	cm						Overarm (Shoulder seam to cuff)	Underarm (Underarm seam to cuff)					
X Short	XXS	31" - 33"	79 - 84	108	98	55	25	14	52.75	48.5	24	43	61	40.5	47
	XS	34" - 36"	86 - 91	115.5	105.5	57	26	15	54.5	49.75	25	46	63	43.25	49
	S	37" - 39"	94 - 99	123	113	59	27	16	56.25	51	26	49	65	46	51
	M	40" - 42"	102 - 107	130.5	120.5	61	28	17	58	52.25	27	52	67	48.75	53
	L	43" - 45"	109 - 114	138	128	63	29	18	59.75	53.5	28	55	69	51.5	55
	XL	46" - 48"	117 - 122	145.5	135.5	65	30	19	61.5	54.75	29	58	71	54.25	57
	2XL	49" - 51"	124 - 129	153	143	67	31	20	63.25	56	30	61	73	57	59
	3XL	52" - 54"	132 - 137	160.5	150.5	69	32	21	65	57.25	31	64	75	59.75	61
	4XL	55" - 57"	140 - 145	168	158	71	33	22	66.75	58.5	32	67	77	62.5	63
	5XL	58" - 60"	147 - 152	175.5	165.5	73	34	23	68.5	59.75	33	70	79	65.25	65
Short	XXS	31" - 33"	79 - 84	108	98	60	30	14	56.75	52.5	24	43	66	40.5	47
	XS	34" - 36"	86 - 91	115.5	105.5	62	31	15	58.5	53.75	25	46	68	43.25	49
	S	37" - 39"	94 - 99	123	113	64	32	16	60.25	55	26	49	70	46	51
	M	40" - 42"	102 - 107	130.5	120.5	66	33	17	62	56.25	27	52	72	48.75	53
	L	43" - 45"	109 - 114	138	128	68	34	18	63.75	57.5	28	55	74	51.5	55
	XL	46" - 48"	117 - 122	145.5	135.5	70	35	19	65.5	58.75	29	58	76	54.25	57
	2XL	49" - 51"	124 - 129	153	143	72	36	20	67.25	60	30	61	78	57	59
	3XL	52" - 54"	132 - 137	160.5	150.5	74	37	21	69	61.25	31	64	80	59.75	61
	4XL	55" - 57"	140 - 145	168	158	76	38	22	70.75	62.5	32	67	82	62.5	63
	5XL	58" - 60"	147 - 152	175.5	165.5	78	39	23	72.5	63.75	33	70	84	65.25	65
TOLERANCES±				3	3	2	1.5	1	1.5	1.5	1	2	2	1	1
MEASUREMENT LOCATION				A	B	C	D	E	F	G	H	J	K	L	M

NOTE: All dimensions are in centimeters unless otherwise indicated.

SCALE OF MEASUREMENTS - Jacket, High Visibility															
SIZE DESIGNATION		BODY MEASUREMENTS		GARMENT MEASUREMENTS											
Height Group	Size	Chest		Chest Circumference	Bottom Circumference	Front Length (top of collar to hem)	Side Seam Length (underarm to hem)	Full Shoulder Width (Shoulder seam from neckline to armhole)	Sleeve Length		Cuff Circumference	Elbow Circumference	Back Length (Bottom of collar at back to hem)	Back Width	Collar Length (zipper to zipper)
		Inches	cm						Overarm (Shoulder seam to cuff)	Underarm (Underarm seam to cuff)					
Regular	XXS	31" - 33"	79 - 84	108	98	65	35	14	60.75	56.5	24	43	71	40.5	47
	XS	34" - 36"	86 - 91	115.5	105.5	67	36	15	62.5	57.75	25	46	73	43.25	49
	S	37" - 39"	94 - 99	123	113	69	37	16	64.25	59	26	49	75	46	51
	M	40" - 42"	102 - 107	130.5	120.5	71	38	17	66	60.25	27	52	77	48.75	53
	L	43" - 45"	109 - 114	138	128	73	39	18	67.75	61.5	28	55	79	51.5	55
	XL	46" - 48"	117 - 122	145.5	135.5	75	40	19	69.5	62.75	29	58	81	54.25	57
	2XL	49" - 51"	124 - 129	153	143	77	41	20	71.25	64	30	61	83	57	59
	3XL	52" - 54"	132 - 137	160.5	150.5	79	42	21	73	65.25	31	64	85	59.75	61
	4XL	55" - 57"	140 - 145	168	158	81	43	22	74.75	66.5	32	67	87	62.5	63
	5XL	58" - 60"	147 - 152	175.5	165.5	83	44	23	76.5	67.75	33	70	89	65.25	65
Tall	XXS	31" - 33"	79 - 84	108	98	70	40	14	64.75	60.5	24	43	76	40.5	47
	XS	34" - 36"	86 - 91	115.5	105.5	72	41	15	66.5	61.75	25	46	78	43.25	49
	S	37" - 39"	94 - 99	123	113	74	42	16	68.25	63	26	49	80	46	51
	M	40" - 42"	102 - 107	130.5	120.5	76	43	17	70	64.25	27	52	82	48.75	53
	L	43" - 45"	109 - 114	138	128	78	44	18	71.75	65.5	28	55	84	51.5	55
	XL	46" - 48"	117 - 122	145.5	135.5	80	45	19	73.5	66.75	29	58	86	54.25	57
	2XL	49" - 51"	124 - 129	153	143	82	46	20	75.25	68	30	61	88	57	59
	3XL	52" - 54"	132 - 137	160.5	150.5	84	47	21	77	69.25	31	64	90	59.75	61
	4XL	55" - 57"	140 - 145	168	158	86	48	22	78.75	70.5	32	67	92	62.5	63
	5XL	58" - 60"	147 - 152	175.5	165.5	88	49	23	80.5	71.75	33	70	94	65.25	65
TOLERANCES±				3	3	2	1.5	1	1.5	1.5	1	2	2	1	1
MEASUREMENT LOCATION				A	B	C	D	E	F	G	H	J	K	L	M

NOTE: All dimensions are in centimeters unless otherwise indicated.

NOTE: All dimensions are in centimeters unless otherwise indicated.

SCALE OF MEASUREMENTS - Jacket, High Visibility															
SIZE DESIGNATION		BODY MEASUREMENTS		GARMENT MEASUREMENTS											
Height Group	Size	Chest		Chest Circumference	Bottom Circumference	Front Length (top of collar to hem)	Side Seam Length (underarm to hem)	Full Shoulder Width (Shoulder seam from neckline to armhole)	Sleeve Length		Cuff Circumference	Elbow Circumference	Back Length (Bottom of collar at back to hem)	Back Width	Collar Length (zipper to zipper)
		Inches	cm						Overarm (Shoulder seam to cuff)	Underarm (Underarm seam to cuff)					
X Tall	XXS	31" - 33"	79 - 84	108	98	75	45	14	68.75	64.5	24	43	81	40.5	47
	XS	34" - 36"	86 - 91	115.5	105.5	77	46	15	70.5	65.75	25	46	83	43.25	49
	S	37" - 39"	94 - 99	123	113	79	47	16	72.25	67	26	49	85	46	51
	M	40" - 42"	102 - 107	130.5	120.5	81	48	17	74	68.25	27	52	87	48.75	53
	L	43" - 45"	109 - 114	138	128	83	49	18	75.75	69.5	28	55	89	51.5	55
	XL	46" - 48"	117 - 122	145.5	135.5	85	50	19	77.5	70.75	29	58	91	54.25	57
	2XL	49" - 51"	124 - 129	153	143	87	51	20	79.25	72	30	61	93	57	59
	3XL	52" - 54"	132 - 137	160.5	150.5	89	52	21	81	73.25	31	64	95	59.75	61
	4XL	55" - 57"	140 - 145	168	158	91	53	22	82.75	74.5	32	67	97	62.5	63
	5XL	58" - 60"	147 - 152	175.5	165.5	93	54	23	84.5	75.75	33	70	99	65.25	65
XX Tall	XXS	31" - 33"	79 - 84	108	98	80	50	14	72.75	68.5	24	43	86	40.5	47
	XS	34" - 36"	86 - 91	115.5	105.5	82	51	15	74.5	69.75	25	46	88	43.25	49
	S	37" - 39"	94 - 99	123	113	84	52	16	76.25	71	26	49	90	46	51
	M	40" - 42"	102 - 107	130.5	120.5	86	53	17	78	72.25	27	52	92	48.75	53
	L	43" - 45"	109 - 114	138	128	88	54	18	79.75	73.5	28	55	94	51.5	55
	XL	46" - 48"	117 - 122	145.5	135.5	90	55	19	81.5	74.75	29	58	96	54.25	57
	2XL	49" - 51"	124 - 129	153	143	92	56	20	83.25	76	30	61	98	57	59
	3XL	52" - 54"	132 - 137	160.5	150.5	94	57	21	85	77.25	31	64	100	59.75	61
	4XL	55" - 57"	140 - 145	168	158	96	58	22	86.75	78.5	32	67	102	62.5	63
	5XL	58" - 60"	147 - 152	175.5	165.5	98	59	23	88.5	79.75	33	70	104	65.25	65
TOLERANCES±				3	3	2	1.5	1	1.5	1.5	1	2	2	1	1
MEASUREMENT LOCATION				A	B	C	D	E	F	G	H	J	K	L	M

NOTE: All dimensions are in centimeters unless otherwise indicated.

NOTE: All dimensions are in centimeters unless otherwise indicated.

TABLE I
Properties of Laminated Shell Material (with WMVP membrane & tricot backing)

	Test	Test Method	Duration	Min. Value Shell Material I	Min. Value Shell Material II
1	Resistance of Materials to Water Vapour Diffusion	CAN CGSB 4.2 Method 49-M99, Option 1 *See test procedure #1	- Initial - After 5 launderings - After ageing (70°C & 95% RH for 168 hrs)	13 mm max.	13 mm max.
2	Hydrostatic Resistance	CAN CGSB 4.2 Method 26.5 *See test procedure #2	- Initial - After 5 launderings	1240.2 kPa	689 kPa
3	Low Pressure Water Permeability	CAN CGSB 4.2 Method 26.3 * See test procedure #3	- Initial	No Leakage	No Leakage
		ASTM D2097-03 (2010) * See test procedure #4	- After Cold Flex Warp/ Fill	No Leakage	No Leakage
		AATCC 135-2012/Test procedure 6 * See test procedure #5	- After 100 hours of Continuous Wet Flex (Agitation)	No Leakage	No Leakage
4	High Pressure Water Permeability	BS 3424: Part 26: 1990 Method 29A * See test procedure #6	- Initial	No Leakage	No Leakage
		BS 3424: Part 26: 1990 Method 29A * See test procedure #7	- After Unleaded Gasoline	No Leakage	No Leakage
		BS 3424: Part 26: 1990 Method 29A * See test procedure #7	- After DEET Insect Repellent	No Leakage	No Leakage
		BS 3424: Part 26: 1990 Method 29A * See test procedure #8	- After Synthetic Perspiration	No Leakage	No Leakage
5	Abrasion Resistance	ASTM D3886-99 (2013) Procedure: use No. 0 Emery Polishing Paper * See test procedure #9	- 3200 Cycles	No failure	No failure
SEAMS					
6	Seam Tape Durability	CAN CGSB 4.2 Method 26.3 * See test procedure #10	- Initial	No Leakage	No Leakage
		CAN CGSB 4.2 Method 26.3 ANSI/AATCC 135 * See test procedure #11	- After 10 laundry cycles	No Leakage	No Leakage

TABLE I
Properties of Laminated Shell Material (with WMVP membrane & tricot backing)

	Test	Test Method	Duration	Min. Value Shell Material I	Min. Value Shell Material II
		CAN CGSB 4.2 Method 26.3 * See test procedure #12	- After 10 dry-clean cycles	No Leakage	No Leakage
7	Delamination	Visual	- During and after the above procedures in this table	No Delamination	No Delamination
8	Peel Strength N/23 mm	ASTM D413-98		8 N/23mm minimum	8 N/23mm minimum

TEST PROCEDURES FOR TABLE I

1. The knit side of the laminated cloth shall face the water. The tests shall be completed as outlined in CAN/CGSB 4.2 Method 49-99, Option #1. The samples shall be conditioned at $21^{\circ}\text{C} \pm 1^{\circ}\text{C}$ ($69.8^{\circ}\text{F} \pm 2^{\circ}\text{F}$) and relative humidity shall be $65 \pm 2\%$. The test specimen shall be placed approximately equidistant between the dry airflow and the water cell. Four specimens shall be tested per condition. The tests shall be completed initial, after 5 launderings according to ISO 6330-2012 Method 2B-E and after ageing according to ASTM F392/F392M-11.
2. The water pressure shall be applied to the knit side of the laminated cloth. A taffeta fabric restraint conforming to MIL-C-21852F-TYPE III-CLASS1 PART#WJAAGNA should be placed on top of the sample against the face side of the laminated cloth.
3. The knit side of the laminated cloth shall contact the water. The hydrostatic head shall be 13.78 kPa (2.0 psi) and shall be held for 3 minutes. Leakage is defined as the appearance of water any place within the 11.43 cm (4.5") diameter test area. The test may be performed using any device which tests the same specimen area at the equivalent pressure. In case of dispute, the apparatus described in FED-STD-191A Method 5516 shall be used.
4. Ten warp and ten fill specimens 8.26 cm x 11.43 cm (3.25" x 4.5") shall be selected from each sample unit. The 8.26 cm (3.25") dimension is the test direction. Specimens shall be flexed for 20,000 cycles as specified in ASTM D2097-03 (2010) and as follows: Mark the knit side of each specimen with two lines 4.32 cm (1.7") apart and perpendicular to the test direction. The area between the lines is the test area and shall be centered on the knit side of the specimen. Wrap the specimens around fully extended pistons with the knit side out. The test area lines shall meet evenly and shall line up with the edges of the pistons. Clamp in place making sure the clamps are not in the test area. Check specimen for smoothness and tautness (wrinkles cause improper flexing). The distance between the pistons shall be 4.32 cm (1.7")

in the open position and 1.27 cm (0.5") in the closed position as measured from the bottom of the upper piston and top of the lower piston. Place the test apparatus with mounted specimens in a test chamber at $-31.67^{\circ}\text{C} \pm 1^{\circ}\text{C}$ ($-25^{\circ}\text{F} \pm 2^{\circ}\text{F}$) for a one hour conditioning period and then flex in the test chamber at $-31.67^{\circ}\text{C} \pm 1^{\circ}\text{C}$ ($-25^{\circ}\text{F} \pm 2^{\circ}\text{F}$). After flexing, test for water permeability as in test procedure #3 except that the orifice of the tester shall be modified to accommodate the smaller specimen size

5. One 35.56 cm (14") by full width specimen shall be selected from each sample unit. The specimens shall be agitated using the 'normal' cycle in an automatic home laundering as specified in AATCC 135-2012 except that the machine shall be capable of continuous agitation. The water level shall be maintained at $72.74\ell \pm 4.55\ell$ (16 ± 1 gallons), and the water temperature shall be $32^{\circ}\text{C} \pm 9^{\circ}\text{C}$. The load shall be $.91\text{ kg} \pm .09\text{ kg}$ ($2\text{ lbs} \pm 0.2\text{ lbs}$). The specimen shall be removed from the washer after 100 hours of continuous agitation. The specimen shall be air dried and then tested for water permeability at three sites across the width of the specimen according to test procedure #3.
6. The water pressure shall be applied to the knit side of the laminated cloth from below the test specimen. The maximum pressure of 172.25 kPa (25 psi) shall be attained in 2 minutes \pm 20 seconds and shall be applied for 5 minutes. Leakage is defined as the appearance of water any place within the test area.
7. Place a 15.24 cm x 15.24 cm (6" x 6") piece of blotting paper on a flat surface and cover with a 25.4 cm x 25.4 cm (10" x 10") test specimen with the face side up. Weigh out $2.0\text{ gm} \pm 0.1\text{ gm}$ ($.07\text{ oz} \pm .004\text{ oz}$) of solid contaminant or pipette 2.0 ml ($.07\text{ f. oz}$) of a liquid contaminant. Place the contaminant on the center of the specimen and cover with a 15.24 cm x 15.24 cm (6" x 6") piece of glassine paper. Place a 1.81 kg (4 lbs) weight on the glassine paper directly over the contaminated area. Allow the weight to remain on the specimen for 30 minutes. Remove the weight and glassine paper and allow the specimen to sit undisturbed for an additional 30 minutes. Wipe off any excess contaminant using a fresh piece of blotting paper and test for water permeability as per procedure #6 except that the water pressure shall be applied for 3 minutes.
8. One specimen per sample unit shall be tested for water permeability after exposure to synthetic perspiration. The specimen shall be not less than 15.24 cm (6") in diameter. The test cups shall accommodate this size specimen and shall have a depth of at least 2.5 cm (1"). The cups shall be sealed to prevent leakage. The solution shall contact the knit side of the laminate.

Synthetic perspiration shall be prepared by stirring the following ingredients into 500 ml of distilled water:

- 3 grams sodium chloride
- 1 gram predigested protein
- 1 gram n-propyl propionate
- 0.5 gram lecithin (phosphatidyl choline)

The predigested protein shall contain the following amino acids:

<u>Ingredient</u>	<u>Milligrams (mg)</u>
Lysine	82.5
Histidine	27.5
Arginine	40.0
Aspartic acid	72.5
Threonine	42.5
Serine	50.0
Glutamic acid	197.5
Proline	92.5
Glycine	22.5
Alanine	28.7
Cystine	4.7
Valine	66.2
Methionine	30.0
Isoleucine	53.8
Leucine	87.5
Tyrosine	51.3
Phenylalanine	48.8
Tryptophan	18.8

The solution shall be stirred continuously and heated to $50 \pm 1^{\circ}\text{C}$, then covered and cooled to approximately 35°C .

The solution shall be stirred such that any solid particles are suspended in solution and poured into the test cup. The cup shall be inverted to allow the synthetic perspiration to evaporate through the specimen.

After the solution has evaporated through the specimen, such that no more than .32 cm (0.125") of solution remains, the specimen shall be removed from the cup, rinsed in warm water, dried and tested for water permeability as specified in test procedure #6 except that the water pressure shall be applied for 3 minutes.

9. Method ASTM D3886-99 (2013) Procedure: Use No. 0 Emery Polishing Paper. Side abraded shall be the knit side, with a multidirectional abrasion motion. Change abradant after each 300 cycles or specimen failure. The air pressure under the diaphragm should be 4 psi, and the load on the abradant plate should be 1 lb. Failure is determined by breaking of the electrical contact.
10. A minimum of 3 straight seams and 2 cross-over seams shall be tested prior to laundry cycle testing and remain waterproof (no leakage) when tested at 13.78 kPa (2 psi) for 3 minutes with the seam tape side facing up, away from the water challenge. Leakage is defined as the appearance of water any place within the 11.43 cm (4.5") diameter test area since the seam tape process can damage the fabric adjacent to the tape. Test for water permeability as in procedure #3 except the face fabric shall face the water challenge.
11. A minimum of 3 straight seams and 2 cross-over seams shall be tested after ten (10) home laundry cycles and remain waterproof (no leakage) when tested at 13.78 kPa (2 psi) for 3

minutes with the seam tape side facing up, away from the water challenge. Leakage is defined as the appearance of water any place within the 11.43 cm (4.5") diameter test area since the seam tape process can damage the fabric adjacent to the tape. Test for water permeability as in procedure #3 except the face fabric shall face the water challenge. Laundry testing should be performed in accordance with procedure specified in Machine Cycle 1, Wash Temperature 111, and Drying Procedure Ai of ANSI/AATCC 135-2012.

12. A minimum of 3 straight seams and 2 cross-over seams shall be tested after ten(10) dry clean cycles and remain waterproof (no leakage) when tested a 13.78 kPa (2 psi) for 3 minutes with the seam tape side facing up, away from the water challenge. Leakage is defined as the appearance of water any place within the 11.43 cm (4.5") diameter test area since the seam tape process can damage the fabric adjacent to the tape. Test for water permeability as in procedure #3 except the face fabric shall face the water challenge.

TABLE II
Properties of Laminated Shell Material I (Dark Navy Blue)

REQUIREMENTS			TEST METHODS
1	Mass (Laminated)	205 g/m ² (maximum.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 5.1-M90 (2013) ASTM D3776/D3776M-09a (2013)
2	Colour fastness to Light	Equal to AATCC Standard L5 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 18.3 ISO 105-B02:2014
3	Colour Fastness - To Crocking	Wet: Grey Scale 4 or better Dry: Grey Scale 4 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 22 AATCC 8-2013
4	Colour Fastness - To Laundering	Colour change: Grey Scale 4.5 or better Staining: Grey Scale 3 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 19.1 Test 2A AATCC 61-2013
5	Dimensional Change to Laundering	After 5 cycles: Not exceed $\pm 3\%$ length Not exceed $\pm 3\%$ width	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 58-2004, 3, E AATCC Method 135-2012 (1) (III) (Ai)
6	Breaking Strength - Grab Method	Warp 800 Newton (min.) Weft 800 Newton (min.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 9.2 ASTM D5034-09 (2013)
7	Tearing Strength	Warp 20 Newton (min.) Weft 20 Newton (min.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 12.3 ISO 13937-1:2000 ASTM D1424-09 (2013)
8	Abrasion Resistance - Martindale Method Part 2 (Determination of Specimen Breakdown)	No breakdown after 10,000 at 9 kPa	<ul style="list-style-type: none"> ASTM D4966-12
9	DWR (durable water repellent)	- 100 spray rating. Initial - 90 spray rating. After 5 launderings - 80 spray rating. After 10 launderings	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 26.2 Perma Press washing cycles (Washing Temp. 40°C \pm 3°C) Tumble Dry - Perma Press for 30 minutes as per (AATCC Method 135-2012)
10	Oil Repellent	- 6 Initial - 5 After 5 launderings - 4 After 10 launderings	<ul style="list-style-type: none"> AATCC 118-2013 Perma Press washing cycles (Washing Temp. 40°C \pm 3°C) Tumble Dry - Perma Press for 30 minutes as per (AATCC Method 135-2012)

TABLE III
Mesh, Pocketing

REQUIREMENT			TEST METHODS
1	Colour	Black or Navy To match colour swatch provided by Uniform and Equipment Program	
2	Fiber Content	100% Polyester	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 14-2005
3	Knit Construction	Warp Knit	
4	Yarns per cm	Wales: 13 ± 3 Courses: 11 ± 3	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 7- M88 (2001) ISO 7211-2
5	Mass	$115 \text{ g/m}^2 \pm 6 \text{ g/m}^2$ ($109 \text{ g/m}^2 - 121 \text{ g/m}^2$)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 5.1-M90 (2013) ASTM D3776/D3776M-09a (2013)
6	Dimensional Change to Domestic Washing <i>After 5 cycles</i>	Warp 4% (max.) Weft 3% (max.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 58-2004,3,E
7	Colour fastness to Crocking Wet & Dry	Dry - Grey Scale 4 or better Wet - Grey Scale 4 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 22-2004
8	Colour fastness to Washing	Colour change Grey Scale 4 or better Staining cotton - Grey Scale 4 or better Staining polyester – Grey Scale 4 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 19.1-2004 Test #2 AATCC 61-2013
9	Mullen Burst (psi)	100 (minimum)	<ul style="list-style-type: none"> ASTM D3786/D3786M-13
10	Abrasion Resistance - Martindale Method Part 2 (Determination of Specimen Breakdown)	No breakdown after 25,000 at 9 kPa	<ul style="list-style-type: none"> ASTM D4966-12
11	Pilling	No less than 4 after 120 minutes	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 51.2-M87

TABLE IV
Properties of Laminated Shell Material II (Fluorescent Yellow-Green)
CAN/CSA Z96-09 High Visibility Apparel Requirements (Meeting or Exceeding)

REQUIREMENTS			TEST METHODS
1	Mass (Laminated)	205 g/m ² (maximum.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 5.1-M90 (2013) ASTM D3776/D3776M-09a (2013)
2	Background - Material Colour	Initial: CSA-Z96-09, Table 2A - Fluorescent yellow-green	<ul style="list-style-type: none"> ASTM E1164-12
		After colourfastness to light (AATCC 16 Test Option E, 40 AATCC Fading Units): CSA-Z96-09, Table 2A - Fluorescent yellow-green	
3	Colour Fastness - To Light (Xenon)	Light fastness shall be equal or better than Grade 4 by Grey Scale for Colour change after 40 AATCC Fading Units.	<ul style="list-style-type: none"> AATCC 16.3-2014 Test Option E ISO 105-B02:2014
4	Colour Fastness - To Crocking	Wet: Grey Scale 4 or better Dry: Grey Scale 4 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 22 AATCC 8-2013
5	Colour Fastness - To Perspiration	Colour change: Grey Scale 4 or better Staining: Grey Scale 4 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 23-M90 AATCC 15-2013
6	Colour Fastness - To Laundering	Colour change: Grey Scale 4.5 or better Staining: Grey Scale 3 or better	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 19.1 Test 2A AATCC 61-2013
7	Dimensional Change to Laundering	After 5 cycles: Not exceed $\pm 3\%$ length Not exceed $\pm 3\%$ width	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 58-2004, 3, E AATCC Method 135-2012 (1) (III) (Ai)
8	Breaking Strength	Warp: 550N (min.) Weft: 450N (min.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 9.2 ASTM D5034-09 (2013)
9	Tearing Strength	Warp 15 Newtons (min.) Weft 14 Newtons (min.)	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 12.3 ISO 13937-1:2000 ASTM D1424-09 (2013)
10	Abrasion Resistance - Martindale Method Part 2 (Determination of Specimen Breakdown)	No breakdown after 10,000 at 9 kPa	<ul style="list-style-type: none"> ASTM D4966-12
11	DWR (durable water repellent)	- 100 spray rating. Initial - 90 spray rating. After 5 launderings - 80 spray rating. After 10 launderings	<ul style="list-style-type: none"> CAN/CGSB-4.2 Method 26.2 Perma Press washing cycles (Washing Temp. 40°C \pm 3°C) Tumble Dry - Perma Press for 30 minutes as per (AATCC Method 135-2012)
12	Oil Repellent	- 6 Initial - 5 After 5 launderings - 4 After 10 launderings	<ul style="list-style-type: none"> AATCC 118-2013 Perma Press washing cycles (Washing Temp. 40°C \pm 3°C) Tumble Dry - Perma Press for 30 minutes as per (AATCC Method 135-2012)

APPENDIX A

Sealed Pattern Identifier

Pattern #: G.S. 1045-310

Title: Jacket, High Visibility

Paper Patterns - Paper patterns are available from the RCMP, Uniform and Equipment Program, Ottawa Ontario, under Pattern # G.S. 1045-310. 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. Contractors may make changes required to suit their production process, however, the design and grade shall not be affected or changed. **Punch holes are not an acceptable method of placement for this garment with the exception of the placement of the shoulder badge and the holes must be completely covered by the shoulder badge. Placement markings used for the retroreflective pattern must be covered or removed and shall not be visible on the finished garment. 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.**

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

Pattern Pieces - This design has 36 pattern components.

Legend:

Shell Material I	= Para. 4.1.3.1 (Dark Navy Blue)
Shell Material II	= Para. 4.1.3.2 ((fluorescent yellow-green))
Shell Material I, (Tricot RSU)	= Para. 4.1.3.1 with Tricot (inside face) Right Side Up
Shell Material II, (Tricot RSU)	= Para. 4.1.3.2 ((fluorescent yellow-green)
Mesh Pocketing	= Para. 4.1.6

Cut 1 Single	= Cut 1
Cut 1 Paired	= Cut 2
Cut 2 Paired	= Cut 4
(RSU)	= Right Side Up

Pattern Components	Nomenclature	Quantity to be cut	Material
# 1 of 36	Upper Back	1 Single	Shell Material II
# 2 of 36	Lower Back	1 Single	Shell Material I
# 3 of 36	Front - Upper Right	1 Single	Shell Material II (RSU)
# 4 of 36	Front - Upper Left	1 Single	Shell Material II (RSU)
# 5 of 36	Lower Front	1 Paired	Shell Material I
# 6 of 36	Under Fly Front	1 Paired	Shell Material II
# 7 of 36	Storm Flap - Upper Left	1 Single	Shell Material II (RSU)

Pattern Components	Nomenclature	Quantity to be cut	Material
# 8 of 36	Storm Flap - Lower Left	1 Single	Shell Material II (RSU)
# 9 of 36	Storm Flap - Upper Right	1 Single	Shell Material II (RSU)
# 10 of 36	Storm Flap - Lower Right	1 Single	Shell Material I (RSU)
# 11 of 36	Shoulder Strap	2 Paired	Shell Material II
# 12 of 36	Front Facing “A”	1 Paired	Shell Material II
# 13 of 36	Front Facing “B”	1 Paired	Shell Material II
# 14 of 36	Sleeve	1 Paired	Shell Material II
# 15 of 36	Sleeve - Upper Back	1 Paired	Shell Material II
# 16 of 36	Sleeve - Lower Back	1 Paired	Shell Material II
# 17 of 36	Cuff	1 Paired	Shell Material I
# 18 of 36	Elasticized Cuff	1 Paired	Shell Material I
# 19 of 36	Cuff Adjustment Strap	1 Paired	Shell Material I
# 20 of 36	Top Collar	1 Single	Shell Material II
# 21 of 36	Under Collar	1 Single	Shell Material II
# 22 of 36	Hood Side	1 Paired	Shell Material II
# 23 of 36	Hood Center	1 Single	Shell Material II
# 24 of 36	Hood Back	1 Single	Shell Material II
# 25 of 36	Hem Facing - Front	1 Paired	Shell Material I (RSU)
# 26 of 36	Hem Facing - Back	1 Single	Shell Material I (Tricot RSU)
# 27 of 36	Top Collar Stand	1 Single	Shell Material II (Tricot RSU)
# 28 of 36	Hood Facing-Inside Front	1 Paired	Shell Material II (Tricot RSU)
# 29 of 36	Hood Facing-Inside Back	1 Single	Shell Material II (Tricot RSU)
# 30 of 36	Pocket Flap - Chest	2 Paired	Shell Material II
# 31 of 36	Pen Loop	1 Single	Shell Material II
# 32 of 36	Pocket - Upper Sleeve	1 Paired	Shell Material II
# 33 of 36	Pocket Bag - Chest “A”	1 Paired	Mesh Pocketing
# 34 of 36	Pocket Bag - Chest “B”	1 Paired	Mesh Pocketing
# 35 of 36	Pocket Bag - Inside Chest	1 Paired	Mesh Pocketing
# 36 of 36	Pocket Bag - Inside Chest Facing	1 Paired	Shell Material I

APPENDIX B

CARE INSTRUCTIONS

Applicable To:

Jacket Patrol Unisex
Jacket High Visibility
Parka Inclement & Hood Cold Weather (without the fur trim)
Trouser Inclement

These garments are designed to be both waterproof and water repellent. The best way to maintain its performance is to **keep them clean by washing it regularly**. When the water no longer beads up and rolls off, use a water based, solvent free, nonflammable DWR product to restore the water repellency. The following care instructions should ensure a normal life cycle for your garments. These garments should be washed after 10-12 days of continuous use or every 20-30 days with occasional use.

The water repellency, waterproofness and breathability of your garment are affected by the following;

1. Dirt buildup and other contaminants including oils, sunscreen and sweat reduce the effectiveness of the water repellency.
2. Fabric softeners have a detrimental effect on the colour and the waterproofness and water repellency of the fabric. They will make the colour fade more quickly and affect the overall performance of the fabric. These include liquid fabric softeners, detergents that contain softeners and dryer sheets. Therefore it is very important that these softeners not be used when laundering your garment.

Machine Wash:

- DO NOT COMMERCIAL LAUNDRY
- DO NOT WASH FUR

Close all zippers, fasteners and velcro before washing.

Wash in warm water separately, without detergent. **DO NOT USE FABRIC SOFTENERS OR POWDERED DETERGENTS OR ANY LIQUID DETERGENTS THAT CONTAIN FABRIC SOFTENERS. DO NOT USE BLEACH.**

If heavily soiled, a small amount of detergent or specialty wash products (**i.e. Grangers® Performance Wash, Fibertec Pro Wash or ReviveX® Synthetic fabric cleaner**) for waterproof garments may be used.

At the end of the final rinse cycle, re-adjust the garment in the washer, and put it through an additional rinse cycle. This will assure complete rinsing of detergent that may have been trapped during washing, therefore preserving water repellency.

Drying:

Close all zippers, fasteners and velcro before drying.

If re-application of DWR is necessary, hang wet garment on hanger and follow application instructions of DWR product. (**i.e. Grangers® XT Waterproof spray, Fibertec Blue Guard Spray-on, Revivex® Spray-On or Nikwax Tx-Direct™**)

The garment **must** be tumble dried separately on a warm setting for 50 minutes to reactivate the durable water repellency (DWR.). **DO NOT USE DRYER SHEETS.**

If necessary, touch up with steam iron at low temperature.

Dry Cleaning:

If dry cleaned, request clear distilled solvent rinse and DWR spray repellent.

INSTRUCTIONS D'ENTRETIEN

Applicable à :

Blouson de patrouille unisexe

Veste haute visibilité

Parka pour intempéries et capuchon pour temps froid (sans la bordure de fourrure)

Pantalon pour intempéries

Ces vêtements sont conçus pour être imperméables et déperlants. La meilleure façon de préserver leurs propriétés est de les **garder propres en les lavant régulièrement**. Lorsque l'eau ne perle plus, utiliser un produit déperlant durable à base d'eau, sans solvant et ininflammable pour restaurer la déperlance. Les instructions d'entretien ci-dessous permettront d'assurer le rendement optimal des vêtements. Ces vêtements devraient être lavés après 10 à 12 jours d'utilisation continue ou à tous les 20 à 30 jours d'utilisation occasionnelle.

Les conditions suivantes peuvent influencer sur l'imperméabilité, la déperlance et la respirabilité des vêtements :

1. L'accumulation de saletés et d'autres contaminants comme de l'huile, de la crème solaire ou de la sueur peut réduire l'imperméabilité.
2. Les agents assouplissants influent sur la couleur, la déperlance et l'imperméabilité. Ils décolorent les tissus plus rapidement et nuisent à leur rendement général. Il est très important de n'utiliser **aucun** type d'assouplissant (agent assouplissant liquide, détergent avec assouplissant et assouplissant en feuilles).

Lavage à la machine :

- NE PAS LAVER DANS UNE BUANDERIE COMMERCIALE
- NE PAS LAVER LA FOURRURE

Fermer toutes les fermetures à glissière, les attaches et les attaches à ruban autoagrippant avant de laver.

Laver séparément à l'eau tiède, sans détergent. NE PAS UTILISER D'AGENT ASSOUPLISSANT NI DE DÉTERGENT EN POUDRE OU LIQUIDE AVEC ASSOUPLISSANT. NE PAS UTILISER D'AGENT DE BLANCHIMENT.

Si le vêtement est très sale, une petite quantité de détergent ou de produit spécifiquement conçu pour l'entretien des vêtements imperméables (**p. ex. nettoyant haute performance de Granger's^{MD}, produit Pro Wash de Fibertec ou nettoyant pour tissus synthétiques ReviveX^{MD}**) peut être utilisée.

À la fin du dernier cycle de rinçage, replacer le vêtement dans la machine et entreprendre un autre cycle de rinçage, afin d'éliminer complètement le détergent qui peut être resté durant le lavage et de préserver la déperlance.

Séchage:

Fermer toutes les fermetures à glissière, les attaches et les attaches à ruban autoagrippant avant de sécher.

Si un nouveau traitement déperlant est requis, suspendre le vêtement mouillé sur un cintre et suivre les instructions du fabricant du produit (**p. ex. imperméabilisant à vaporiser XT de Granger's^{MD}, Blue Guard de Fibertec, Revivex^{MD} ou Tx-Direct^{MC} de Nikwax**).

Le vêtement **doit** être séché séparément par culbutage à basse température pendant 50 minutes, afin de réactiver les propriétés déperlantes. NE PAS UTILISER D'ASSOUPLISSANT EN FEUILLES.

Au besoin, repasser légèrement à basse température.

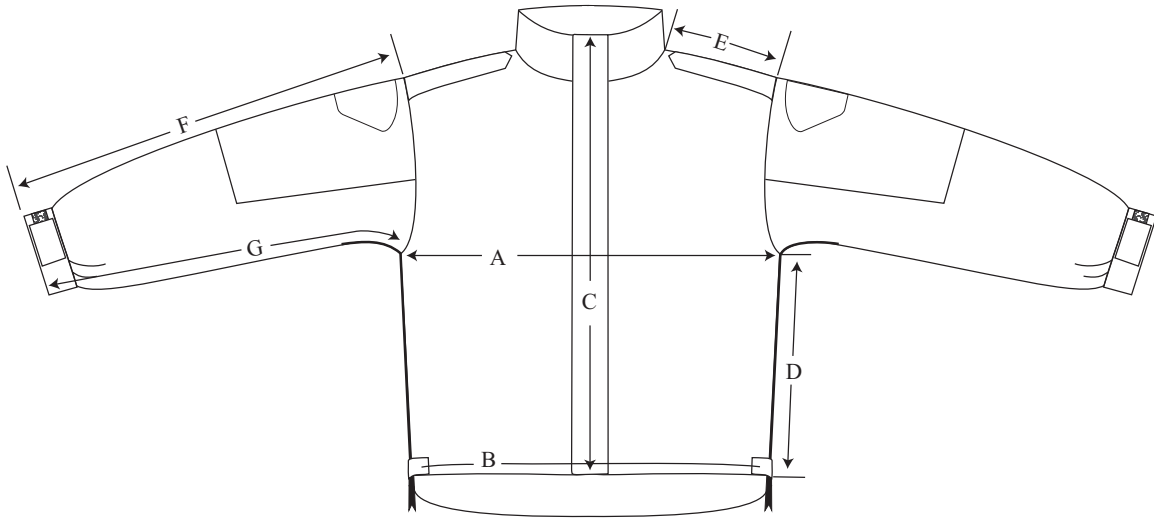
Nettoyage à sec :

Si le vêtement est nettoyé à sec, demander un rinçage avec un solvant distillé clair et un traitement à l'aide d'un produit déperlant à vaporiser.

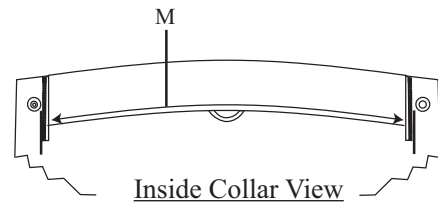
Jacket, High Visibility
Measurement Location Chart

G.S.1045-310

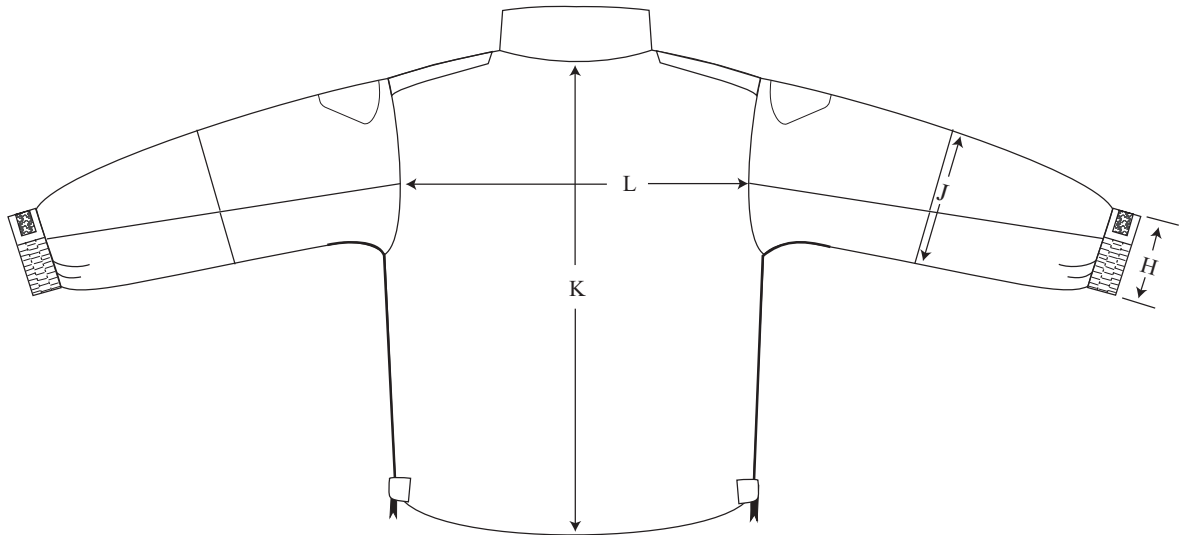
Dwg. 1



Front View



Inside Collar View



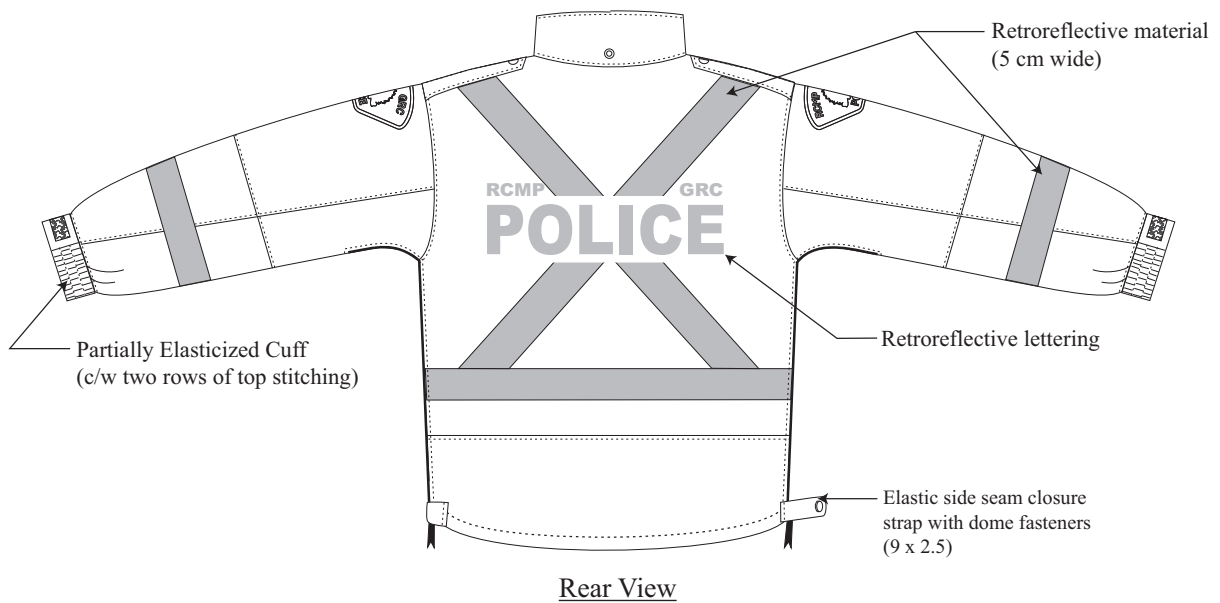
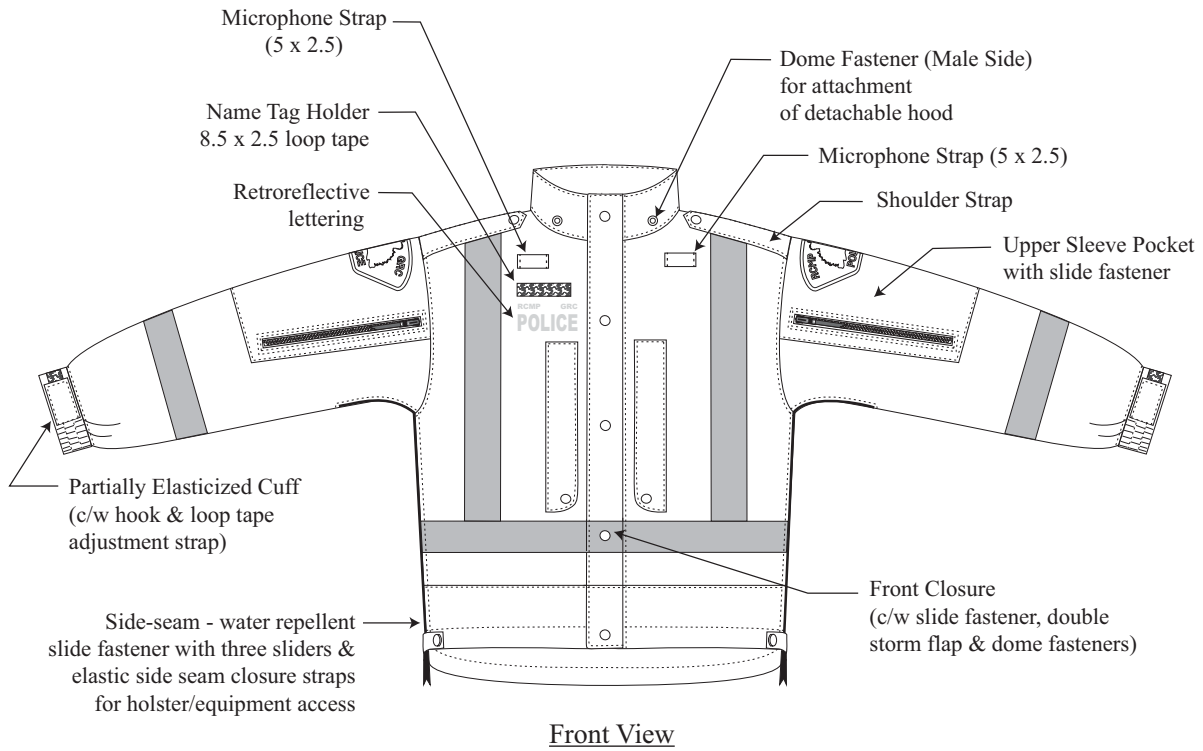
Rear View

NOT TO SCALE

Jacket, High Visibility

G.S.1045-310

Dwg. 2



NOT TO SCALE

All measurements are shown in centimeters.

± 0.5cm tolerance acceptable unless otherwise indicated.

G.S.1045-310

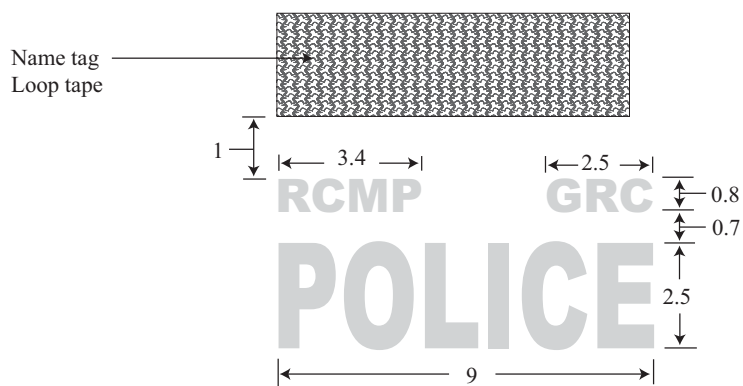
Dwg. 3



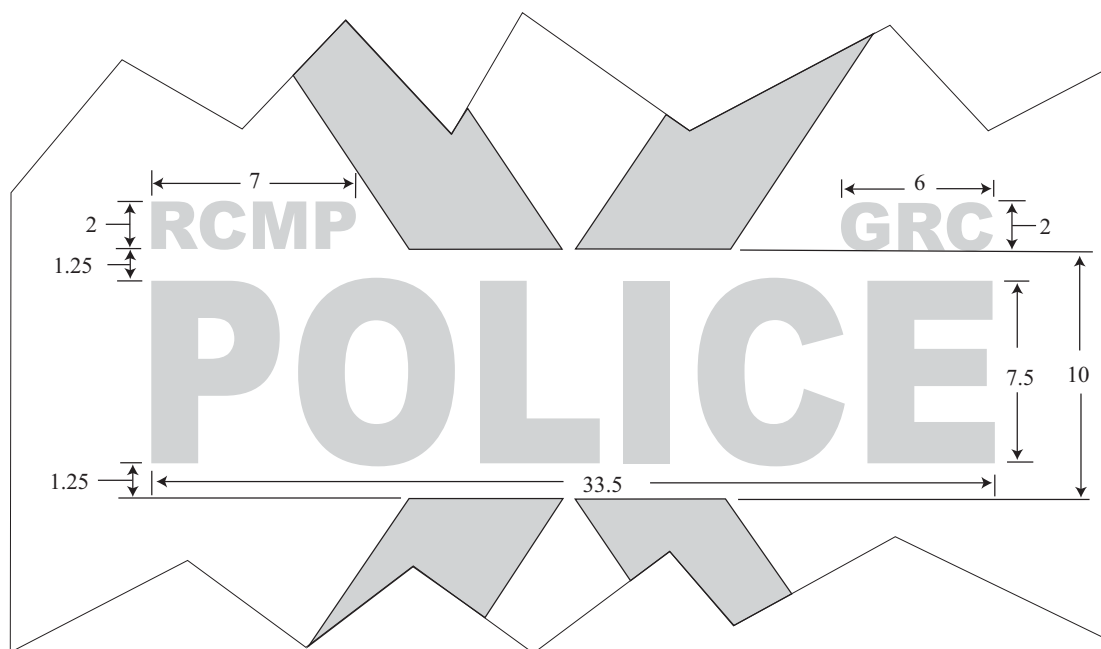
NOT TO SCALE

G.S.1045-310

Dwg. 4



Front Retroreflective Lettering



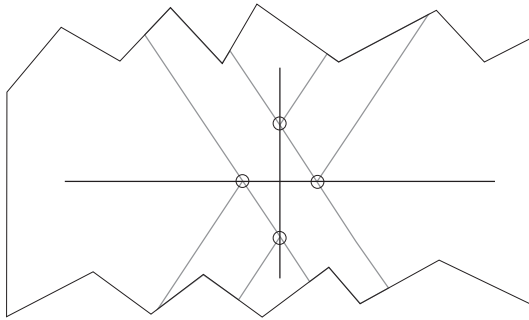
Back Retroreflective Lettering

All measurements are shown in centimeters.

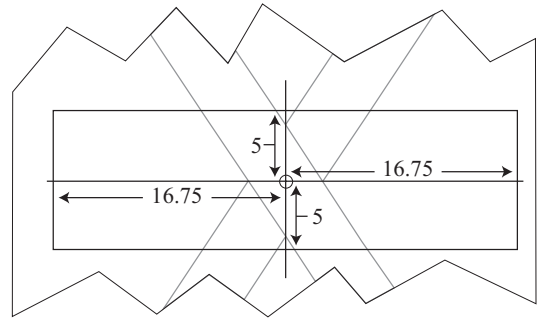
± 0.5cm tolerance acceptable unless otherwise indicated.

Jacket, High Visibility
Lettering placement for back
Dwg. 5

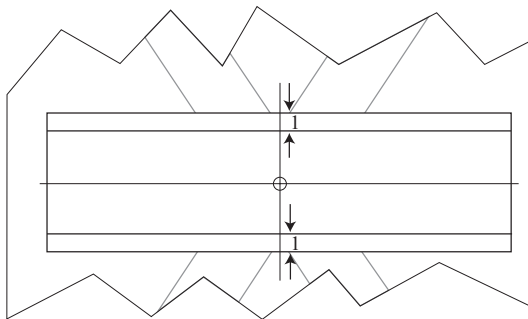
G.S.1045-310



Locate center with vertical and horizontal lines



Measure distances vertically and horizontally from center and mark.
This defines the retroreflective break.



Measure vertically towards center 1 cm and mark



This defines the placement for POLICE.



Extend the lines vertically at each end.
This defines the placement for the RCMP and GRC.



NOT TO SCALE

All measurements are shown in centimeters.

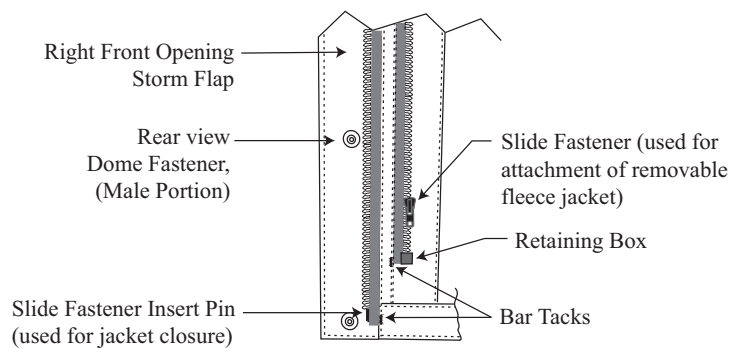
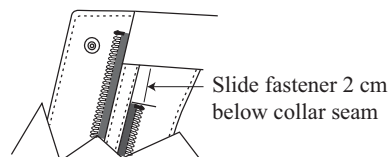
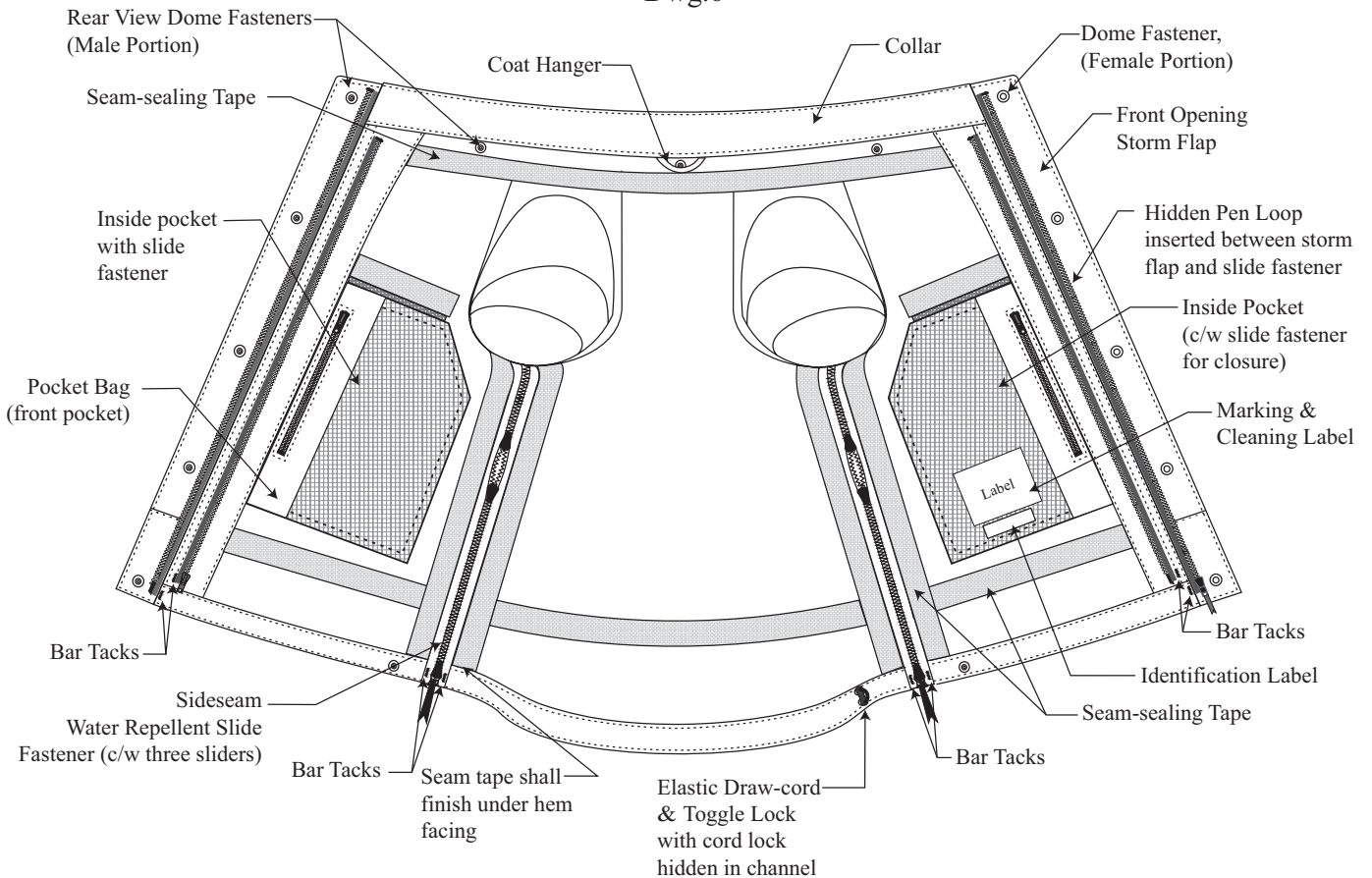
± 0.5cm tolerance acceptable unless otherwise indicated.

Jacket, High Visibility

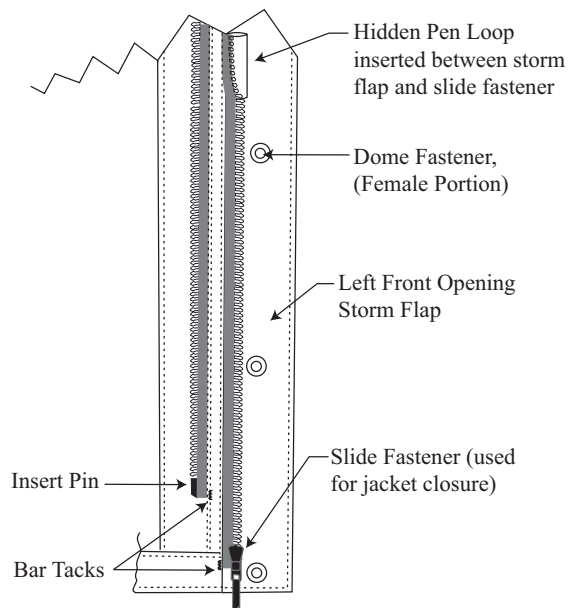
G.S.1045-310

Inside Jacket & Slide Fastener Detail

Dwg.6



Slide Fastener Detail
Right Front (Inside View)



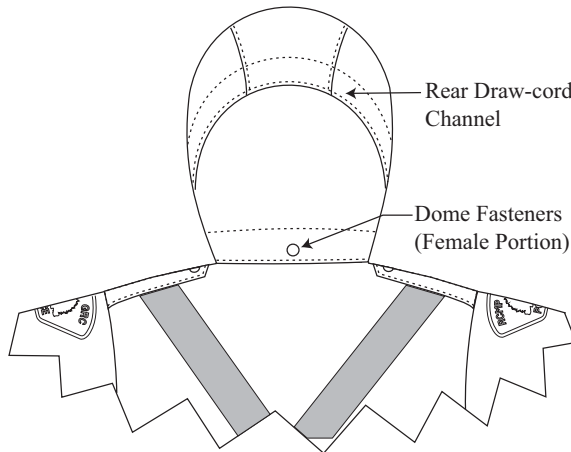
Slide Fastener Detail
Left Front (Inside View)

NOT TO SCALE

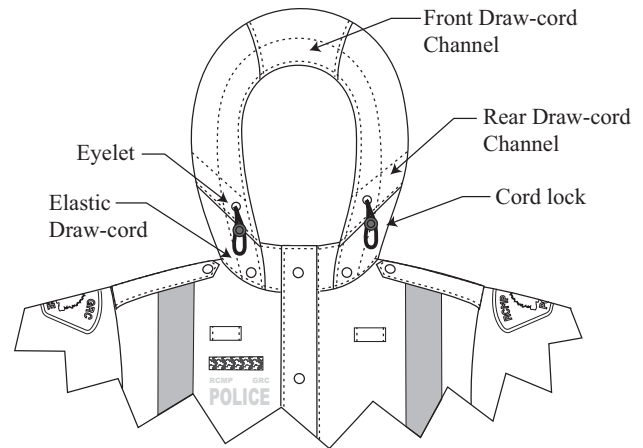
All measurements are shown in centimeters.
± 0.5cm tolerance acceptable unless otherwise indicated.

Jacket, High Visibility
Detachable Hood
& Adjustment Strap Detail
Dwg. 7

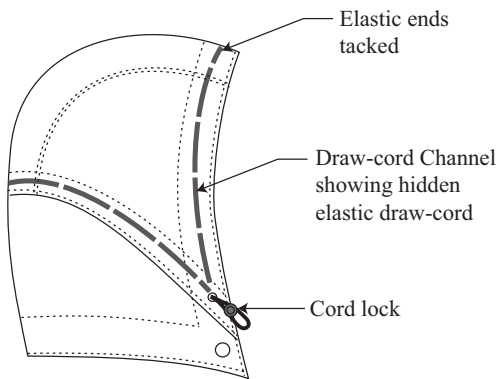
G.S.1045-310



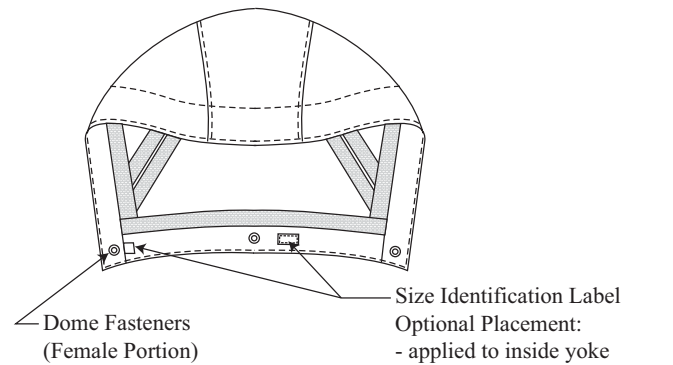
Rear View



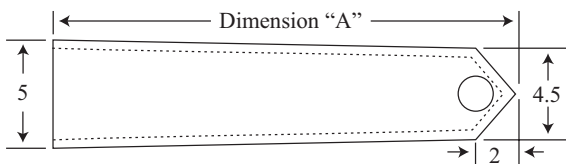
Front View



Side View



Inside Front View



Shoulder Strap Detail

Jacket Size (All Heights)	Dimension "A"
X-Small	14.25
Small	15.25
Medium	16.25
Large	17.25
X-Large	18.25
2X-Large	19.25
3X-Large	20.25
4X-Large	21.25
5X-Large	22.25

TABLE I
Shoulder Strap Length
(Finished)

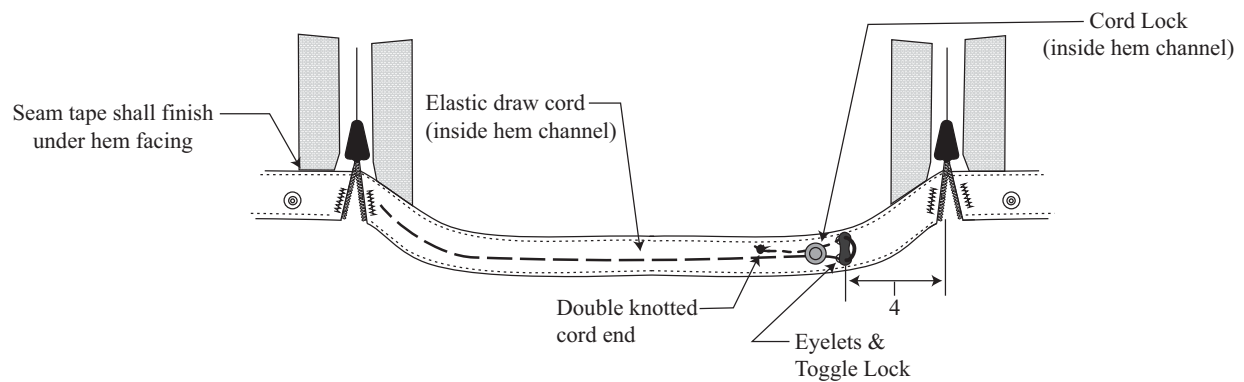
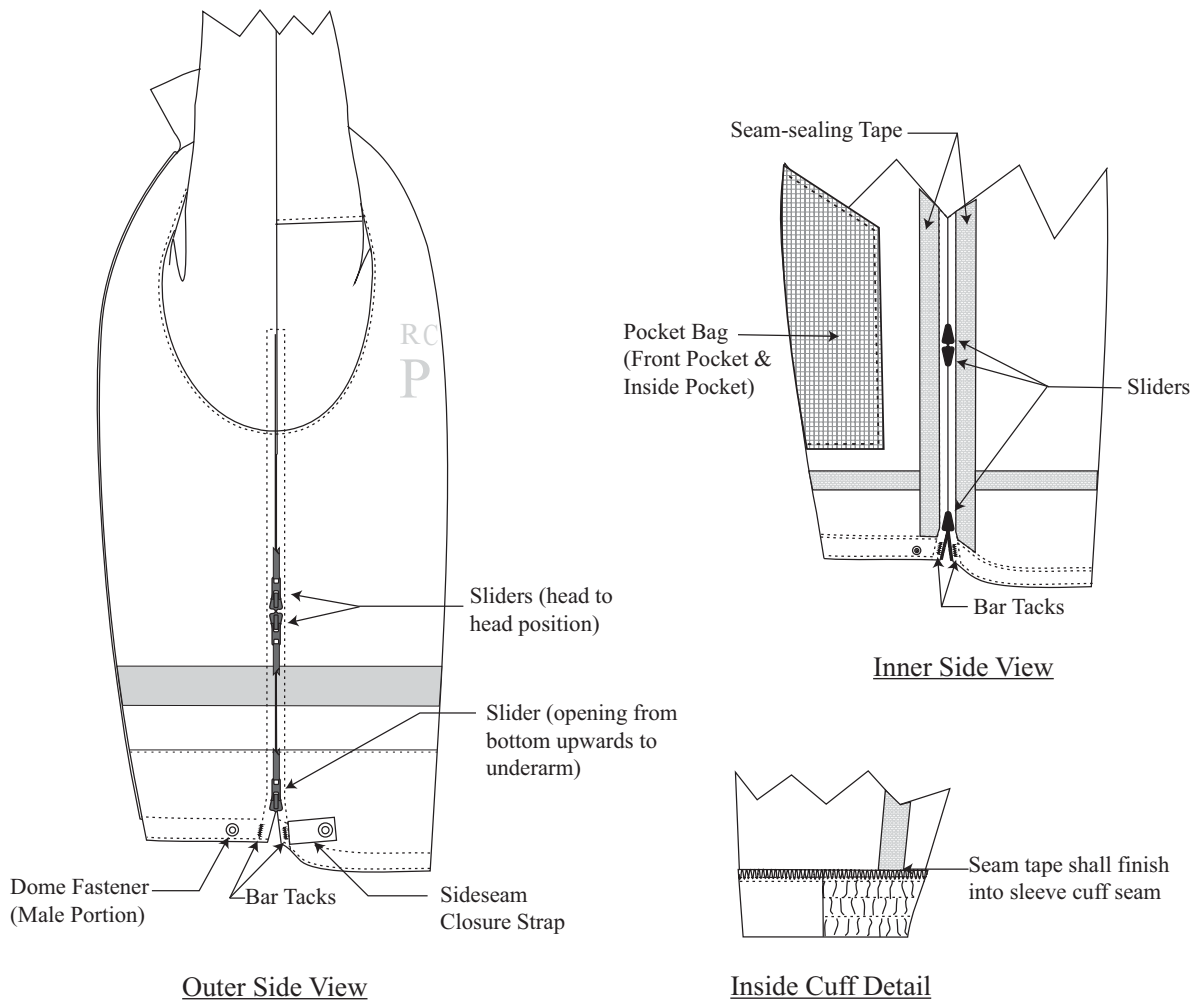
NOT TO SCALE

All measurements are shown in centimeters.

± 0.5cm tolerance acceptable unless otherwise indicated.

Underarm Detail & Back Hem Channel Detail

Dwg. 8

Back Hem Channel - Inside View

NOT TO SCALE

All measurements are shown in centimeters.

± 0.5cm tolerance acceptable unless otherwise indicated.

Solicitation No. - N° de l'invitation
M0077-151106/A
Client Ref. No. - N° de réf. du client
M0077-151106

Amd. No. - N° de la modif.
File No. - N° du dossier
pr760. M0077-151106

Buyer ID - Id de l'acheteur
pr760
CCC No./N° CCC - FMS No./N° VME

ANNEX F

SPECIAL MADE MEASUREMENT FORMS

ANNEX F
OUTERWEAR, JACKETS & PARKA
SPECIAL MADE MEASUREMENT FORM

Name:		Date:	Click here to enter a date.		
Reg #:		Gender:	Male <input type="checkbox"/> Female <input type="checkbox"/>		
Height:		Weight:		Inseam:	
Item:	Choose an item.				

	Measurements	Finished Garment Measurement Location	Body Measurements		Wearing Ease		Finished Garment Measurements		TI
			Inches	Cm	Inches	Cm	Inches	Cm	
1	Chest Circumference	A			Click	Click			
2	Waist/Girth Circumference*				-	-	N/A	N/A	
3	Seat Circumference	B			Click	Click			
4	Front Length	C			-	-			
5	Centre Back Length	K2 or K3			Click	Click			
6	Shoulder Width	E			-	-			
7	Sleeve Length (from center back)	F			Click	Click			
8	Bicep*				-	-	N/A	N/A	
9	Sleeve Cuff Circumference	H			Click	Click			
10	Collar Length	M			Click	Click			
11	Shoulder Point to Shoulder Point*				-	-			
12	Back Width Depth*				-	-	N/A	N/A	
13	Back Width	L			-	-			

*Measurement provided for information and cross reference only.

Measurements Verified By:	Choose an item.	Date:	Click here to enter a date.	Patterns sent:	Choose an item.
RCMP Use Only	Bill to: Click here to enter text.	Ship to: Click here to enter text.		Duty Code: Click here to enter text.	

Notes:

- Refer to Specifications G.S. 1045-298 Jacket, Patrol Unisex, dated 2015-07-09, paragraph 6, G.S. 1045-307 Parka, Inclement, dated 2015-07-09, paragraph 7 and G.S. 1045-310 Jacket, High Visibility, dated 2015-07-09, paragraph 6 for Measurement Location Chart Definitions and Drawing 1 in each specification for Measurement Location.
- Label requirements shall be as specified in the contract documents.

ANNEX F (continued)

TROUSERS, INCLEMENT SPECIAL MADE MEASUREMENT FORM

Name:				Date:	Click here to enter a date.		
Reg #:				Gender:	Male <input type="checkbox"/> Female <input type="checkbox"/>		
Height:		Weight:		Inseam:			
Item:	Choose an item.						

	Measurements	Finished Garment Measurement Location	Body Measurements		Wearing Ease		Finished Garment Measurements		TI
			Inches	Cm	Inches	Cm	Inches	Cm	
1	Waist Circumference	A			Click	Click			
2	Seat circumference	B			Click	Click			
3	Thigh Circumference**				Click	Click	N/A	N/A	
4	Bottom Circumference	C			-	-			
5	Outseam Length	D			-	-			
6	Inseam Length	E			-	-			
7	Front Rise				-	-			
8	Back Rise				-	-			

*Measurement provided for information and cross reference only.

**Finished garment shall be no smaller and may be larger than this measurement in order to respect the look of the garment.

Additional Comments:

Measurements Verified By:	Choose an item.	Date:	Click here to enter a date.	Pattern Sent:	Choose an item.
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RCMP Use Only	Bill to: Click here to enter text.	Ship to: Click here to enter text.	Duty Code: Click here to enter text.
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Notes:

- Refer to Specification G.S. 1045-301 dated 2015-07-09, paragraph 7 for Measurement Location Chart Definitions and Drawing 1 for Measurement Location.
- Label requirements shall be as specified in the contract documents.