

SPECIFICATION

SOLICITATION #: 13-22026

BUILDING:

U - 61

UPLANDS CAMPUS

OTTAWA, ONTARIO

PROJECT:

Airside Area Tarmac Resurfacing

PROJECT #:

U61/3808

Date:

MAY 2013



National Research Council
Canada

Conseil national de recherches
Canada

Administrative Services
& Property management
Branch (ASPM)

Conseil national de recherches
Canada

Direction des services
administratif et gestion
de l'immobilier (SAGI)

Construction Tender Form

Project Identifi	ication U-61 Resurfacing Flight Side Concrete
Tender No.:	13-22026
Business Name	and Address of Tenderer
Name	
Address	
:	
Contact Person	(Print Name)
Telephone (Fax: ()

1.3 Offer

I/We the Tenderer, hereby offer to Her Majesty the Queen in Right of Canada (hereinafter referred to as "Her Majesty") represented by the National Research Council Canada to perform and complete the work for the above named project in accordance with the Plans and Specifications and other Tender Documents, at the place and in the manner set out therein for the Total Tender Amount (to be expressed in numbers only) of: \$________ in lawful money of Canada (excluding GST/HST)

The above amount is inclusive of all applicable (*) Federal, Provincial and Municipal taxes except that in the event of a change in any tax imposed under the Excise Act, the Excise Tax Act, the Old Age Security Act, the Customs Act, the Customs Tariff or any provincial sales tax legislation imposing a retail sales tax on the purchase of tangible personal property incorporated into Real Property, that occurs

- .1 after the date this tender was mailed or delivered, or
- .2 if this tender is revised, after the date of the last revision

the amount of this offer shall be decreased or decreased in the manner provided for in GC22 of the General Conditions of the Contract Documents.

National Research Council Canada	Conseil national de recherches Canada	
Administrative Services & Property management Branch (ASPM)	Direction des services administratif et gestion de l'immobilier (SAGI)	

1.3.1 Offer (continued)

(*) For the purpose of this tender, the Goods and Services Tax (GST) is not to be considered as an applicable tax.

In the province of Quebec, the Quebec Sales Tax is not to be included in the tender amount because the Federal Government is exempt from this tax. Tenderers shall make arrangements directly with the provincial Revenue Department to recover any tax they may pay on good and servives acquired in the performance of this contract. However, tenderers should include in their tender amount Quebec Sales Tax for which an Input Tax Refund is not available.

1.4 Acceptance and Entry into Contract

I/We undertake, within fourteen (14) days of notification of acceptance of my/our offer, to sign a contract for the performance of the work provided I/we are notified, by the Department, of the acceptance of my/our offer within 30 days of the tender closing date.

1.5 <u>Construction Time</u>

I/We Agree to complete the work within the time stipulated in the specification from the date of notification of acceptance of my/our offer.

1.6 Bid Security

I/We herewith enclose tender security in accordance with Article 5 of the General Instruction to Tenderers.

I/We understand that if a security deposit is furnished as tender security and if I/we refuse to enter into a contract when called upon to do so, my/our security deposit shall be forfeited but the Minister may, if it is in the public interest, waive the right of Her Majesty to forfeit the security deposit.

I/We understand that if the security furnished is not in the approved from as described in Article 5 of the General Instructions to Tenderers, my/our tender is subject to disqualification.

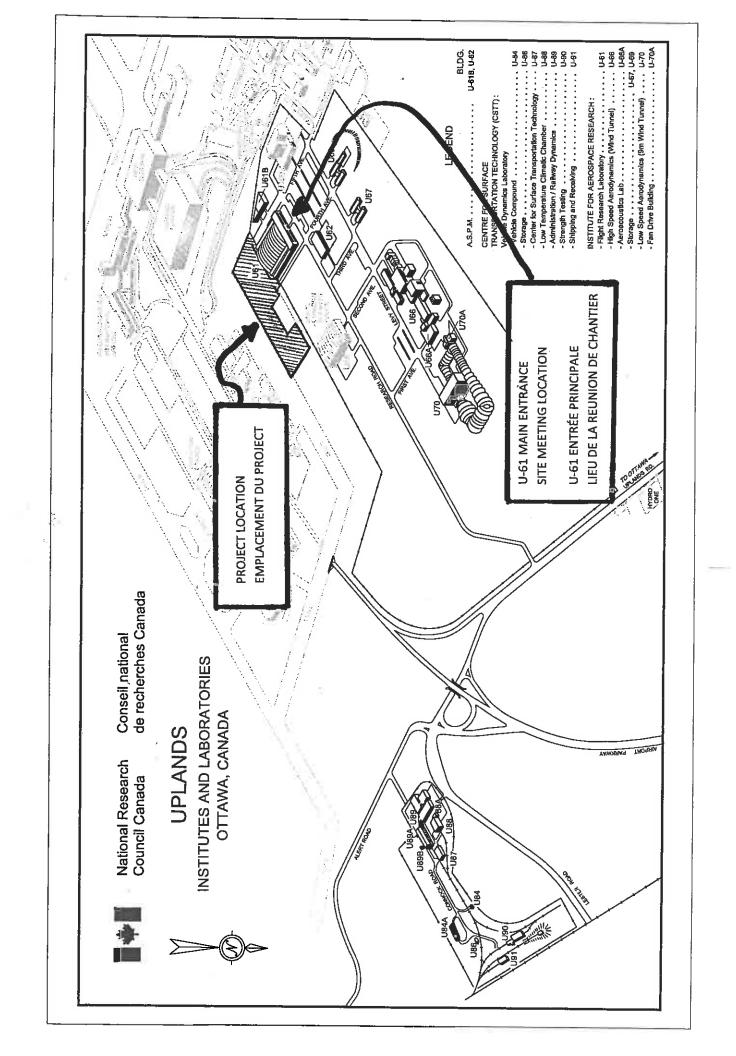
National Research Council Canada Administrative Services & Property management Branch (ASPM)		Conseil national de recherches Canada
		Direction des services administratif et gestion de l'immobilier (SAGI)
1.7	Contract Securit	<u>Y</u>
		(4) days after receipt of written notification of the acceptance of my/our rnish contract security in accordance with the Contract Conditions "F" ocuments.
	I/We understand to bill of exchange, v	hat the contract security referred to herein, if provided in the form of a will be deposited into the Consolidated Revenue Fund of Canada.
1.8	Appendices	
	This Tender Form includes Appendix NoN/A	
1.9	<u>Addenda</u>	
	The Total Tender	Amount provides for the Work described in the following Addenda:

NUMBER	DATE	NUMBER	DATE

(Tenderers shall enter numbers and dates of addenda)

Nationa Canada	al Research Council	Conseil national de recherches Canada	
Administrative Services & Property management Branch (ASPM)		Direction des services administratif et gestion de l'immobilier (SAGI)	
1.10	Execution of Ten	<u>der</u>	
	The Tenderer shal	l refer to Article 2 of the General Instructions to Tenderers.	
	SIGNED, ATTES	STED TO AND DELIVERED on theon behalf of	day of
	(Type or print the	business name of the Tenderer)	
	AUTHORIZED S	IGNATORY (IES)	
	(Signature	of Signatory)	
	(Print nam	e & Title of Signatory)	
	(Signature	of Signatory)	
	(Print nam	e & Title of Signatory)	

SEAL



IMPORTANT INSTRUCTIONS

NOTICE TO ALL PARTIES INVOLVED IN TENDERING ON THE FOLLOWING PROJECT:

- All General Contractors tendering must view the site with the Engineer and only with the Engineer. Site visit dates and times are as noted on the MERX notice. Site Visits at other times will not be arranged for contractors who missed the site meetings and their tenders will not be opened. Contractor's need to attend only one site showing.
- 2. The contract documents to be signed by the successful Contractor shall be in the same official language (English or French) as the language of the tender documents submitted.
- 3. <u>PROJECT SUPERVISION:</u> From the onset of the project until the issuance of a certificate of substantial completion, a fully qualified, experienced multi-trades, project superintendent is to be maintained on site full time that is acceptable to the Project Engineer and shall not be substituted without written consent from him. He shall coordinate the work of all disciplines involved in the project. Clause GC19 of the General Conditions will be strictly enforced.
- 4. Prior to any payments, an updated project schedule must be submitted to the Engineer as outlined in part "B" (Terms of Payment) of the Specification, Section 4.5, and 4.5.1 to 4.5.3 inclusive.
- 5. Questions regarding any part of the project are to be answered only by the Engineer (or a delegated assistant). Any information received other than from the Engineer will be disregarded when awarding the contract and during construction.

The Engineer for this project is: Chris Day

Telephone: 613-993-3118

* * * * * * *

NOTICE TO BIDDERS:

1. GENERAL:

Attendance at one (1) site visit during the tender period is mandatory at the pre-arranged date, time and location specified in the MERX notice.

Questions regarding any aspect of the project are to be addressed to and answered only by the Departmental Representative (or his designate) or the Contracting Authority.

Any information received other than from the Departmental Representative (or his designate) or the Contracting Authority will be disregarded when awarding the contract and during construction.

Firms intending to submit tenders on this project should obtain tender documents through the MERX services provider. Addenda, when issued, will be available from the MERX service provider. Firms that elect to base their bids on tender documents obtained from other sources do so at their own risk and will be solely responsible to inform the tender calling authority of their intention to bid. Tender packages are not available for distribution on the actual day of tender closing.

2. TENDER CLOSING DATE:

Tender closing date is indicated on the Buyandsell.gc.ca TMA notice.

3. TENDER RESULTS

Following the Tender closing, the tender results will be sent by facsimile to all Contractors who submitted a tender.

The Departmental Representative or his designate for this project is: Chris Day

Telephone: 613 993-3118

Contracting Authority for this project is: Marc Bedard

Telephone: 613 993-2274

SPECIFICATION

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National Research Council Canada

Special Instructions to Tenderers

1. TENDER DOCUMENTS

- 1.1 The following documents are incorporated by reference into, and form part of, the tender and contract documents:
 - .1 List of Bonding Companies
 - .2 Articles of Agreement
 - .3 Terms of Payment "B"
 - .4 General Conditions "C"
 - .5 Labour Conditions "D"
 - .6 Insurance Conditions "E"
 - .7 Contract Security Conditions "F"
 - .8 Security Requirement Check List "G"

Submission of a tender constitutes acknowledgement that the Tenderer has read and agrees to be bound by these documents and the other documents listed in 1.1 of the General Instructions to Tenderers.

1.2 Documents listed in 1.1 are issued by the National Research Council Canada and may be obtained in print copy from the National Research Council Canada, Procurement Services, Building M-22, Montreal Road, Ottawa, Ontario K1A 0R6.

2. TENDER RESULTS

2.1 Following the Tender closing, the tender results will be sent by facsimile to all Contractors who submitted a tender.

3. SECURITY REQUIREMENT FOR CANADIAN CONTRACTORS

3.1 MANDATORY SECURITY REQUIREMENT:

This procurement contains a mandatory security requirement as follows:

.1 The Contractor must, at all times during the performance of the Contract, hold a valid Designated Organization Screening (DOS), issued by the Canadian Industrial Security Director (CISD), Public Works Government Services Canada.

- .2 The Contractor personnel requiring access to sensitive work site(s) must EACH hold a valid RELIABILITY STATUS, granted or approved by CISD/PWGSC.
- .3 The Contractor must comply with the provisions of the:
 - a. Security Requirements Checklist attached at Appendix "G"
 - b. Industrial Security Manual (Latest Edition) available at: http://ssi-iss.tpsgc-pwgsc.gc.ca/msi-ism/msi-ism-eng.html

3.2 VERIFICATION OF SECURITY CLEARANCE AT BID CLOSING

- .1 The Bidder must hold a valid Designated Organization Screening (DOS) issued by the Canadian Industrial Security Directorate (CISD), Public Works and Government Services Canada (PWGSC), TO BE INCLUDED WITH THEIR TENDER OR PROVIDED WITHIN 48 HOURS FROM DATE AND TIME OF TENDER CLOSING. Verifications will be made through CISD to confirm the security clearance status of the Bidder. Failure to comply with this requirement will render the bid non-compliant and no further consideration will be given to the bid.
- .2 Within 72 hours of tender closing, the General Contractor must name all of his sub-contractors, each of whom must hold a valid RELIABILITY STATUS, granted or approved by CISD/PWGSC, or any other Federal Department or Agency along with the names and birthdates or security clearance certificate numbers of all personnel who will be assigned to the project.
- .3 It is to be noted that any subcontractor required to perform any part of the work during the performance of the subsequent contract must also adhere to the mandatory security requirement of the contract. As well, no personnel without the required level of security will be allowed on site. It will be the responsibility of the successful bidder to ensure that the security requirement is met throughout the performance of the contract. The Crown will not be held liable or accountable for any delays or additional costs associated with the contractor's non-compliance to the mandatory security requirement. Failure to comply with the mandatory security requirement will be grounds for being declared in default of contract.
- .4 For any enquiries concerning the project security requirement during the bidding period, the Bidder/Tenderer must contact the Security Officer @ 613-993-8956.



Non-Resident Contractors

RST Guide 804

Published: August 2006

Content last reviewed: August 2010

ISBN: 1-4249-2007-8 (Print), 1-4249-2009-4 (PDF), 1-4249-2008-6 (HTML)

Publication Archived

Notice to the reader: For Retail Sales Tax (RST) – On July 1, 2010 the 13 per cent Harmonized Sales Tax (HST) took effect in Ontario replacing the existing provincial Retail Sales Tax (RST) and combining it with the federal Goods and Services Tax (GST). As a result, RST provisions described on this page and in other publications ended on June 30, 2010.

Effective July 1, 2010 this publication was archived for RST purposes **only**. Use caution when you refer to it, since it reflects the law in force for RST at the time it was released and may no longer apply.

 The information in this Guide explains the Retail Sales Tax (RST) responsibilities of a non-resident contractor who is awarded a construction contract to perform work in Ontario and their Ontario customers. Please note that this Guide replaces the previous version dated March 2001.

Non-Resident Contractor Defined

A non-resident contractor is a contractor located outside Ontario who has been awarded a construction contract to perform work in Ontario, and who has not maintained a permanent place of business in Ontario continuously for twelve months immediately prior to signing the contract, or which is not a company incorporated under the laws of Ontario. A construction contract is a contract for the erection, remodelling or repair of a building or other structure on land.

A contractor is a person who is in the business of constructing, altering, repairing or improving real property and includes, but is not limited to,

- 1. a general contractor and subcontractor,
- a carpenter, bricklayer, stonemason, electrician, plasterer, plumber, painter, decorator, paver, and bridge builder,

3. a sheet metal, tile and terrazzo, heating, air conditioning, insulation, ventilating, papering, road, roofing and cement contractor,

who installs or incorporates items into real property. (See RST <u>Guide 206 - Real Property</u> <u>and Fixtures</u>).

Registration and Guarantee Deposit

Non-resident contractors who are awarded a construction contract in Ontario are required to register with the Ministry of Finance (ministry), Centralized Programs Unit and post a guarantee equal to 4 per cent of the total of each Ontario contract. The guarantee can be paid in cash, by certified cheque (payable to the Minister of Finance), letter of credit or by a guarantee bond.

To register with the ministry and to obtain further information on posting a guarantee, contractors should contact the ministry's Centralized Programs Unit, 33 King Street West, PO Box 623, Oshawa, Ontario, L1H 8H7, toll-free 1 866 ONT-TAXS (1 866 668-8297) or fax to 905 435-3617.

Non-resident contractors who sell taxable goods on a supply only basis to Ontario customers, or provide taxable services in Ontario, may obtain a regular Vendor Permit to collect and remit RST on their sales. Non-resident contractors who have been issued a regular Vendor Permit must still register separately with the ministry and post a guarantee if they are awarded a construction contract in Ontario.

Letter of Compliance

After receiving the guarantee, the ministry mails out two copies of a "letter of compliance" to the contractor certifying the Retail Sales Tax (RST) requirements have been met. Contractors must give a copy of the letter to their customers.

If a copy of the compliance letter is not provided, the customer must withhold 4 per cent of all amounts payable to the non resident contractor and pay the withheld amounts to the Minister of Finance (minister). Details relating to the contract should be sent along with the payments to the Centralized Programs Unit. Customers may give the minister a guarantee bond equal to 4 per cent of the total contract price instead of making the 4 per cent payments.

Note: Customers who do not follow these requirements may be held liable for 4 per cent of all amounts payable to the non resident contractor or any other amount that the Ministry deems to be the RST payable resulting from the performance of the contract.

Calculation of RST

Fair Value

RST is payable on the "fair value" of materials, purchased or brought into Ontario, to be used for work performed in Ontario. "Fair value" includes:

- the purchase price in Canadian funds;
- all charges by the supplier for handling and delivery, and
- any federal customs duties and excise taxes paid (but not the federal Goods and Services Tax (GST)).

Contractors are also required to pay RST to Ontario suppliers on the purchase, rental or lease of taxable services, materials, machinery, or equipment.

Machinery and Equipment - Leased

If machinery or equipment is leased from a supplier outside Ontario and brought into the province, RST is payable on the lease payments for the period the machinery or equipment is in Ontario.

Machinery and Equipment - Owned by Contractor

If machinery or equipment is owned by the contractor, RST may be calculated in one of the following ways:

a. If a contractor brings machinery and equipment into Ontario for less than 12 months' use, RST is to be calculated using the following formula:

 $1/36 \times$ net book value at date of import \times number of months in Ontario \times tax rate

For the purpose of this formula, RST is payable for each month or part of a month that the goods are in Ontario. A month is considered 31 consecutive days and a part month is considered more than 12 days. The RST payable is based on the number of days the machinery and equipment are located in Ontario and not the number of days the items are actually used.

Example: Equipment is brought into Ontario on March 28 and taken out on May 8. The items were in the province for 41 days. RST is payable on the first 31 days' temporary stay in Ontario vs. use of the equipment. Since the remainder (10 days) is not considered part of a month, no RST is payable on this portion.

b. If, at the time the goods are brought into Ontario, it is expected that the machinery or equipment will be in Ontario for more than twelve months, contractors must pay Retail Sales Tax (RST) on the following basis:

net book value at date of import × tax rate

If, at the time of import, the length of time is not known, vendors may use the formula under (a). If they later find it necessary to keep the machinery and equipment in Ontario for more than 12 months, the RST paid under (a) may be deducted from the RST payable under (b).

Using formula (a) or (b) above, contractors will calculate and remit the RST payable on the return that is filed when the contract is finished.

(See Completion of Contract section)

Manufacturing for Own Use

Contractors may need to manufacture items, such as doors and windows, for their construction contracts. Manufacturing is work done in a factory away from a construction site, or in a mobile unit or workshop that is on or near the construction site. Manufacturing occurs when raw materials are changed into manufactured goods for use in real property contracts.

Contractors are considered to be manufacturing contractors if they produce goods:

- 1. for their own use in real property contracts, and
- 2. the manufactured cost of the goods is more than \$50,000 a year.

(See RST <u>Guide 401 - Manufacturing Contractors</u>)

Contracts with the Federal Government

Where a non-resident contractor enters into a construction contract with the federal government, for the construction of a building and/or the installation of equipment, the nature of the equipment will determine whether the contract should be let on a tax-included or tax excluded basis.

Contracts for the construction of a building and the installation of equipment that directly services that building (i.e., elevators, escalators, light fixtures, central heating and air conditioning, etc.) should be tendered on a tax -included basis. Contractors are the consumers of the materials used in fulfilling these contracts and must pay or account for RST on the materials used to complete the contracts. There is NO exemption just because the contract is with the federal government.

Contracts for the installation of equipment that becomes a fixture and does not directly service a building (i.e., material handling equipment, production machinery, communication equipment, training equipment) may be tendered on a tax-excluded basis. Contractors engaged in contracts of this nature are permitted to make tax exempt purchases of such equipment by issuing a valid Purchase Exemption Certificate (PEC) to their supplier. Only non-resident contractors who have registered with the ministry and posted a guarantee may issue a PEC.

Exemptions

Contractors may supply and install equipment or materials for certain customers that may be entitled to an exemption from RST (e.g., manufacturers, Indian band councils, farmers and diplomatic organizations). The equipment or materials, when installed, becomes real property if it is permanently attached to land, or a fixture if it is permanently attached to

a building or real property structure. Since contractors are liable for RST, they should contact the ministry to find out if the customer qualifies for exemption before tendering the contract on a tax-excluded basis.

Status Indians, Indian Bands and Band Councils

Non-resident contractors may purchase building materials exempt from Retail Sales Tax (RST) for certain buildings and structures situated on reserves. The cost of such projects must be paid by the band council, and the buildings must provide a community service for the reserve. Contracts for the construction of an exempt community building project should be made on an RST-excluded basis. Non-resident contractors may purchase the materials exempt from RST by providing suppliers with a valid Purchase Exemption Certificate (PEC). As noted previously, only non-resident contractors who have registered with the ministry and posted a guarantee may issue a PEC. (See RST Guide 204 - Purchase Exemption Certificates).

Non-resident contractors must pay RST on items purchased for incorporation into a building or structure built for individual status Indians on a reserve. (See RST <u>Guide 808 - Status Indians</u>, <u>Indian Bands and Band Councils</u>).

Completion of Contract

When a contract is completed, non-resident contractors who were required to post a guarantee must complete a <u>Non-Resident Contractor Retail Sales Tax Return [PDF - 92 KB]</u> that is provided by the ministry.

If a contractor's guarantee was given in cash or by certified cheque, the amount of the deposit can be deducted from the RST liability owed by the contractor. If the liability is greater than the deposit, the amount remaining must be paid by the contractor. If the deposit is more than the liability, the contractor will receive a refund.

If a guarantee bond was posted instead of cash, the bond will be discharged once the RST liability is paid in full.

All returns are subject to audit.

Legislative References

- Retail Sales Tax Act, Subsections 19(2) and 39(3)(4) and (5)
- Regulation 1012 under the Act, Subsections 15.3(1)(2)(5)(6) and (7)
- Regulation 1013 under the Act, Sections 1 and 3

For More Information

The information contained in this publication is only a guideline. For more information, please contact the Ontario Ministry of Finance at 1 866 ONT-TAXS (1 866 668-8297) or visit our website at ontario.ca/finance.

To obtain the most current version of this document, visit ontario.ca/finance and enter 717 in the find page field at the bottom of the webpage or contact the ministry at 1 866 668-8297 (1 800 263-7776 for teletypewriter).

INSTRUCTIONS TO TENDERERS APPROVED BONDING COMPANIES ARTICLES OF AGREEMENT

FIXED PRICE CONSTRUCTION CONTRACT

Rev. 03/08/2012

INSTRUCTIONS TO TENDERERS

<u>Article 1</u> – Receipt of Tender

- Tenders must be received not later than the specified tender closing time.

 Tenders received after this time are invalid and shall not be considered, regardless of any reason for their late arrival.
- 1b) A letter of printed telecommunication from a bidder quoting a price shall not be considered as a valid tender unless a formal tender has been received on the prescribed Tender Form.
- 1c) Bidders may amend their tenders by letter or printed telecommunication provided that such amendments are received not later than the specified tender closing time.
- 1d) Any amendments to the tender which are transmitted by telefax must be signed and must clearly identify the tenderer.

All such amendments are to be addressed to:

National Research Council of Canada Marc Bedard, Senior Contracting Officer Building M-22 Montreal Road, Ottawa, Ontario K1A 0R6

Fax: (613) 991-3297

Article 2 – Tender Form & Qualifications

- 1) All tenders must be submitted on the Construction Tender Form and the tender must be signed in compliance with the following requirements:
 - a) Limited Company: The full names of the Company and the name(s) and status of the authorized signing officer(s) must be printed in the space provided for that purpose. The signature(s) of the authorized officer(s) and the corporate seal must be affixed.
 - b) Partnership: The firm name and the name(s) of the person(s) signing must be printed in the space provided. One or more of the partners must sign in the presence of a witness who must also sign. An adhesive coloured seal must be affixed beside each signature.

- c) Sole Proprietorship: The business name and the name of the sole proprietor must be printed in the space provided. The sole proprietor must sign in the presence of a witness who must also sign. An adhesive coloured seal must be affixed beside each signature.
- Any alterations in the printed part of the Construction Tender Form or failure to provide the information requested therein, may render the tender invalid.
- All space in the Construction Tender Form must be completed and any handwritten or typewritten corrections to the parts so completed must be initialed immediately to the side of the corrections by the person or persons executing the tender on behalf of the the tenderer.
- 4) Tenders must be based on the plans, specifications and tender documents provided.

Article 3 - Contract

1) The Contractor will be required to sign a contract similar to the Standard Contract Form for Fixed Price Construction Contracts, a blank specimen of which is enclosed in the package for reference purposes.

Article 4 - Tender Destination

1a) Tenders are to be submitted in sealed envelopes to:

National Research Council Canada Administrative Services and Property Management Branch 1200 Montreal Road Building M-22 Ottawa, ON K1A 0R6

Endorsed "Tender for (insert title of work as it appears in the drawings and specifications)" and must bear the name and address of the tenderer.

1b) Unless otherwise specified, the only documents required to be submitted with the tender are the Tender form and the Bid Security.

Article 5 - Security

- 1a) Bid Security is required and must be submitted in one of the following forms:
 - i) a certified cheque payable to the Receiver General for Canada and

drawn on a member of the Canadian Payments Association or a local cooperative credit society that is a member of a central cooperative credit society having membership in the Canadian Payments Association; **OR**

- ii) bonds of the Government of Canada, or bonds unconditionally guaranteed as to principal and interest by the Government of Canada; OR
- iii) a bid bond.
- 1b) Regardless of the Bid Security submitted, it should never be more than \$250,000 maximum, calculated at 10% of the first \$250,000 of the tendered price, plus 5% of any amount in excess of \$250,000.
- 2a) Bid Security shall accompany each tender or, if forwarded separately from the tender, shall be provided not later than the specified tender closing time. Bid Security must be in the <u>ORIGINAL</u> form. Fax or photocopies and <u>NOT</u> acceptable. <u>FAILURE TO PROVIDE THE REQUIRED BID SECURITY SHALL INVALIDATE THE TENDER.</u>
- 2b) If the tender is not accepted, the Bid Security submitted pursuant to Article 8 shall be returned to the tenderer.
- 3a) The successful tenderer is required to provide security within 14 days of receiving notice of tender acceptance. The tenderer must furnish <u>EITHER</u>:
 - i) a Security Deposit as described in 1(b) above together with a Labour and Material Payment Bond in the amount of at least 50% of the amout payable under the contract, <u>OR</u>
 - ii) a Performance Bond and a Labour and Material Payment Bond each in the amount of 50% of the amount payable under the contract.
- 3b) Should it not be possible to obtain a Labour Material Payment Bond as required under 3(a) above, on making application thereof to at least two acceptable Bonding Companies, an additional Security Deposit of a straight 10% of the amount payable under the contract must be furnished.
- 3c) Where a tender has been accompanied by a Security Deposit, as described in 1(b) above, the amount of the Security Deposit required under 3(a) above may be reduced by the amount of the Security Deposit which accompanied the tender.
- 3d) Bonds must be in an approved form and from the companies whose

bonds are acceptable to the Government of Canada. Samples of the approved form of Bid Bond, Performance Bond and Labour and Material Payment Bond and a list of acceptable Bonding Companies may be obtained from the Contracting Officer, National Research Council, Building M-22, Montreal Road, Ottawa, Ontario, K1A 0R6.

Article 6 - Interest On Security Deposits

Tenderers are notified that they must make their own arrangements with their bankers as to the interest, if any, on the amount of the certified cheque accompanying their tender. The Council will not pay interest on said cheque pending the awarding of the contract nor be responsible for the payments of interest under any arrangement made by the tenderers.

Article 7 - Sales Tax

- 1) The amount of the tender shall include all taxes as levied under the Excise Act, the Excise Tax Act, the Old Age Security Act, the Customs Act or the Customs Tariff, in force or applicable at the time.
- 2) In Quebec, the Provincial Sales Tax should not be included in the Tender Price as the Federal Government is exempt. Tenderers should contact the Provincial Revenue Minister to recover all taxes paid for goods and services rendered under this contract.

Tenderers must include in their Tender Price the amount of Provincial Sales Tax for which the exemption does not apply.

Article 8 - Examination of Site

All parties tendering shall examine the sites of the proposed work before sending in their tender and make themselves thoroughly acquainted with the same and obtain for themselves any and all information that may be necessary for the proper carrying out of the Contract. No after claim will be allowed or entertained for any work or material that may be requisite and necessary for the proper execution and completion of this Contract with the exception of that provided for under GC 35 in the General Conditions of the General Specification.

Article 9 - Discrepancies, Omissions, Etc.

1a) Bidders finding discrepancies in, or omissions from, drawings, specifications or other documents, or having any doubt as to the meaning or intent of any part thereof, should at once notify the Engineer who will

- send written instructions or explanation to all bidders.
- 1b) Neither the Engineer nor the Council will be responsible for oral instructions.
- 1c) Addenda or corrections issued during the time of the bidding shall be covered in the proposal. However, the contract supersedes all communications, negotiations and agreements, either written or oral, relating to the work and made prior to the date of the contract.

Article 10 - No additional Payments for Increased Costs

 The only other adjustments in the contract price allowed are those specified in the General Conditions of the General Specification. The contract price will not be amended for change in freight rates, exchange rates, wage rates or cost of materials, plant or services.

Article 11 – Awards

- The Council reserves the power and right to reject tenders received from parties who cannot show a reasonable acquaintance with and preparation for the proper performance of the class of work herein specified and shown on plans. Evidence of such competence must be furnished by the tenderers if required to do so.
- 1b) A tenderer may be required to furnish to the Contracting Office, National Research Council of Canada, Building M-22, 1200 Montreal Road, Ottawa, Ontario, K1A 0R6, Canada, unsigned copies of the insurance requirements as covered by the Insurance Conditions of the General Specification.
- 1c) The Council does not bind itself to accept the lowest or any tender.

Article 12 – Harmonized Sales Tax

The Harmonized Sales Tax (HST) which in now in effect shall be considered an applicable tax for the purpose of this tender. However, the bidder shall NOT include any amount in the bid price for said HST. The successful contractor will indicate on each application for payment as a separate amount the appropriate HST the Owner is legally obliged to pay. This amount will be paid to the Contractor in addition to the amount certified for payment under the Contract in addition to the amount certified for payment under the Contract and will therefore not affect the Contract Price. The Contractor agrees to remit any HST collected or due to Revenue Canada.



Acceptable Bonding Companies

Published September 2010

The following is a list of insurance companies whose bonds may be accepted as security by the government.

1. Canadian Companies

ACE INA Insurance

Allstate Insurance Company of Canada

Ascentus Insurance Ltd. (Surety only)

Aviva Insurance Company of Canada

AXA Insurance (Canada)

AXA Pacific Insurance Company

Canadian Northern Shield Insurance Company

Certas Direct Insurance Company (Surety only)

Chartis Insurance Company of Canada (formerly AIG Commercial Insurance Company of Canada)

Chubb Insurance Company of Canada

Commonwealth Insurance Company

Co-operators General Insurance Company

CUMIS General Insurance Company

The Dominion of Canada General Insurance Company

Echelon General Insurance Company (Surety only)

Economical Mutual Insurance Company

Elite Insurance Company

Everest Insurance Company of Canada

Federated Insurance Company of Canada

Federation Insurance Company of Canada

Gore Mutual Insurance Company

Grain Insurance and Guarantee Company

The Guarantee Company of North America

Industrial Alliance Pacific General Insurance Corporation

Intact Insurance Company

Jevco Insurance Company (Surety only)

Lombard General Insurance Company of Canada

Lombard Insurance Company

Markel Insurance Company of Canada

The Missisquoi Insurance Company

The Nordic Insurance Company of Canada

The North Waterloo Farmers Mutual Insurance Company (Fidelity only)

Novex Insurance Company (Fidelity only)

The Personal Insurance Company

Pilot Insurance Company

Quebec Assurance Company

Royal & Sun Alliance Insurance Company of Canada

Saskatchewan Mutual Insurance Company

Scottish & York Insurance Co. Limited

The Sovereign General Insurance Company

TD General Insurance Company

Temple Insurance Company

Traders General Insurance Company

Travelers Guarantee Company of Canada

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National Research Council Canada Construction Contract

Trisura Guarantee Insurance Company
The Wawanesa Mutual Insurance Company
Waterloo Insurance Company
Western Assurance Company
Western Surety Company

2. Provincial Companies

 Surety bonds issued by the following companies may be accepted provided that the contract of suretyship was executed in a province in which the company is licensed to do business as indicated in brackets.

- AXA Boreal Insurance Company (P.E.I., N.B., Que., Ont., Man., B.C.)

AXA Boreal Insurance Company (P.E.I., N.B., Que., Ont., Man., B.C.)

ALPHA, Compagnie d'Assurances Inc. (Que.)

Canada West Insurance Company (Ont., Man., Sask, Alta., B.C., N.W.T.) (Surety only)

The Canadian Union Assurance Company (Que.)

La Capitale General Insurance Inc. (Nfld. & Lab., N.S., P.E.I., Que.(Surety only), Man., Sask., Alta., B.C., Nun., N.W.T., Yuk.)

Coachman Insurance Company (Ont.)

Continental Casualty Company (Nfld. & Lab., N.S., P.E.I., N.B., Que., Ont., Man., Sask., Alta., B.C., Nun., N.W.T., Yuk.)

GCAN Insurance Company (Nfld. & Lab., N.S., P.E.I., N.B., Que., Ont., Man., Sask., Alta., B.C., Nun., N.W.T., Yuk.)

The Insurance Company of Prince Edward Island (N.S., P.E.I., N.B.)

Kingsway General Insurance Company (N.S., N.B., Que., Ont., Man., Sask., Alta., and B.C.)

Liberty Mutual Insurance Company (Nfld. & Lab., N.S., P.E.I., N.B., Que., Ont., Man., Sask., Alta., B.C., Nun., N.W.T., Yuk.)

D.C., INUIL, IN. VV. I., TUK.)

Manitoba Public Insurance Corporation (Man.)

Norgroupe Assurance Générales Inc.

Orleans General Insurance Company (N.B., Que., Ont.)

Saskatchewan Government Insurance Office (Sask.)

SGI CANADA Insurance Services Ltd. (Ont., Man., Sask., Alta.)

L'Unique General Insurance Inc. (Nfld. & Lab., N.S., P.E.I., N.B., Que.(Surety only), Ont.(Surety only), Man., Sask., Alta., B.C.(Surety only), Nun., N.W.T., Yuk.)

3. Foreign Companies

Aspen Insurance UK Limited

Compagnie Française d'Assurance pour le Commerce Extérieur (Fidelity only)

Eagle Star Insurance Company Limited

Ecclesiastical Insurance Office Public Limited Company (Fidelity only)

Lloyd's Underwriters

Mitsui Sumitomo Insurance Company, Limited

NIPPONKOA Insurance Company, Limited

Sompo Japan Insurance Inc.

Tokio Marine & Nichido Fire Insurance Co., Ltd.

XL Insurance Company Limited (Surety only)

Zurich Insurance Company Ltd

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Articles of Agreement

Standard Construction Contract – Articles of Agreement (23/01/2002)

Unit Price Table

A5

A 1	Contract Documents
A2	Date of Completion of Work and Description of Work
A3	Contract Amount
A4	Contractor's Address

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Articles of Agreement

These Articles of Agreement made in duplicate this day of

Between

Her Majesty the Queen, in right of Canada (referred to in the contract documents as "Her Majesty") represented by the National Research Council Canada (referred to in the contract documents as the "Council")

and

(referred to in the contract documents as the "Contractor")

Witness that in consideration for the mutual promises and obligations contained in the contract, Her Majesty and the Contractor covenant and agree as follows:

A1 Contract Documents (23/01/2002)

- 1.1 Subject to A1.4 and A1.5, the documents forming the contract between Her Majesty and the Contractor, referred to herein as the contract documents, are
 - 1.1.1 these Articles of Agreement,
 - 1.1.2 the document attached hereto, marked "A" and entitled "Plans and Specifications", referred to herein as the Plans and Specifications,
 - 1.1.3 the document attached hereto, marked "B" and entitled "Terms of Payment", referred to herein as the Terms of Payment,
 - 1.1.4 the document attached hereto, marked "C" and entitled "General Conditions", referred to herein as the General Conditions,
 - 1.1.5 the document attached hereto, marked "D" and entitled "Labour Conditions", referred to herein as the Labour Conditions,
 - 1.1.6 the document attached hereto, marked "E" and entitled "Insurance Conditions", referred to herein as the Insurance Conditions,
 - 1.1.7 the document attached hereto, marked "F" and entitled "Contract Security Conditions", referred to herein as the Contract Security Conditions, and
 - 1.1.8 any amendment or variation of the contract documents that is made in accordance with the General Conditions.
 - 1.1.9 the document entitled Fair Wage Schedules for Federal Construction Contracts referred to herein as Fair Wage Schedules

CONTRACT NUMBER:

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Articles of Agreement

The Council hereby designates of of the Government of Canada as the Engineer for the purposes of the contract, and for all purposes of or incidental to the contract, the Engineer's address shall be deemed to be:

1.2 In the contract

- 1.3.1 "Fixed Price Arrangement" means that part of the contract that prescribes a lump sum as payment for performance of the work to which it relates; and
- 1.3.2 "Unit Price Arrangement" means that part of the contract that prescribes the product of a price multiplied by a number of units of measurement of a class as payment for performance of the work to which it relates.
- 1.3 Any of the provisions of the contract that are expressly stipulated to be applicable only to a Unit Price Arrangement are not applicable to any part of the work to which a Fixed Price Arrangement is applicable.
- 1.4 Any of the provisions of the contract that are expressly stipulated to be applicable only to a Fixed Price Arrangement are not applicable to any part of the work to which a Unit Price Arrangement is applicable.

A2 Date of Completion of Work and Description of Work (23/01/2002)

2.1 The contractor shall, between the date of these Articles of Agreement and the , in the careful and workmanlike manner, diligently perform and complete the following work:

which work is more particularly described in the Plans and Specifications.

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Articles of Agreement

A3 Contract Amount (23/01/2002)

- 3.1 Subject to any increase, decrease, deduction, reduction or set-off that may be made under the Contract, Her Majesty shall pay the Contractor at the times and in the manner that is set out or referred to in the Terms of Payment
 - 3.1.1 the sum of (GST/HST extra), in consideration for the performance of the work or the part thereof that is subject to Fixed Price Arrangement, and
 - a sum that is equal to the aggregate of the products of the number of units of Measurement of each class of labour, plant and material that is set out in a Final Certificate of Measurement referred to in GC44.8 multiplied in each case by the appropriate unit price that is set out in the Unit Price Table in consideration for the performance of the work or the part thereof that is subject to a Unit Price Arrangement.
- 3.2 For the information and guidance of the Contractor and the persons administering the contract on behalf of Her Majesty, but not so as to constitute a warranty, representation or undertaking of any nature by either party, it is estimated that the total amount payable by Her Majesty to the Contractor for the part of the work to which a Unit Price Arrangement is applicable will be approximately \$N/A
- 3.3 A3.1.1 is applicable only to a Fixed Price Arrangement.
- 3.4 A3.1.2 and A3.2 applicable only to a Unit Price Arrangement.

A4 Contractor's Address (23/01/2002)

4.1 For all purposes of or incidental to the contract, the Contractor's address shall be deemed to be:

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Articles of Agreement

A5 Unit Price Table (23/01/2002)

Her Majesty and the Contractor agree that the following table is the Unit Price Table for the purposes of the contract.

Column 1 Item	Column 2 Class of Labour Plant Or Material	Column 3 Unit of Measurement	Column 4 Estimated Total Quantity	Column 5 Price per Unit	Column 6 Estimated Total Price
					7
		N/A			

- 5.2 The Unit Price Table that is set out in A5.1 designates the part of the work to which a Unit Price Arrangement is applicable.
- 5.3 The part of the work that is not designated in the Unit Price Table referred to in A5.2 is the part of the work to which a Fixed Price Arrangement is applicable.

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Articles of Agreement

Signed on behalf of Her Majesty by	
as Senior Contracting Officer	
and	
as	
of the National Research Council Canada	
on the	
day of	
Signed, sealed and delivered by)
asand Position	
by	
asPosition	Seal
of	Jean
on the	
day of	

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1. SCOPE OF WORK

.1 Work under this contract covers the tarmac resurfacing on the airside of the Council's Building U-61 of the National Research Council.

2. WORK & MATERIALS SUPPLIED BY OWNER

- .1 Work and materials not included in this contract are described on drawings and in this specification.
- .2 Deliver to a storage place, as directed by the Departmental Representative, all materials returned to the Owner.
- .3 Unless otherwise specified, accept owner-supplied materials at their storage location and provide all transportation as required.
- .4 Contractor's duties:
 - .1 Unload at site.
 - .2 Promptly inspect products and report damaged or defective items.
 - .3 Give written notification to the Departmental Representative for items accepted in good order.
 - .4 Handle at site, including uncrating and storage.
 - .5 Repair or replace items damaged on site.
 - .6 Install, connect finished products as specified.

3. LABOUR CONDITIONS AND FAIR WAGE SCHEDULE

.1 Comply with all labour conditions as specified by the Human Resources Development Canada, Labour Program, including those outlined in Appendix "D", Labour Conditions and Fair Wage Schedule.

4. WORKPLACE HAZARDOUS MATERIAL INFORMATION SYSTEM (WHMIS)

- .1 The contractor shall comply with Federal and Provincial legislation regarding the WHMIS. The contractor's responsibilities include, but are not limited to the following:
 - .1 To ensure that any controlled product brought on site by the contractor or subcontractor is labeled;
 - .2 To make available to the workers and the Departmental Representative, Material Safety Data Sheets (MSDS) for these controlled products;
 - .3 To train own workers about WHMIS, and about the controlled products that they use on site;
 - .4 To inform other contractors, sub-contractors the Departmental Representative, authorized visitors and outside inspection agency personnel about the presence and use of such products on the site; and

		
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.5 The site foreman or superintendent must be able to demonstrate, to the satisfaction of the Departmental Representative, that he/she has had WHMIS training and is knowledgeable in its requirements. The Departmental Representative can require replacement of this person if this condition or implementation of WHMIS is not satisfactory.

5. EXAMINATION REQUIREMENTS OF BILL 208, SECTION 18(a)

.1 Under the requirements of Bill 208 of the Ministry of Labour Occupational Health & Safety Act, the following designated substances may be encountered while performing the work described in these contract documents:

.1 Silica.

- .1 It is the responsibility of the general contractor to ensure that each prospective subcontractor for this project has received a copy of the above list.
- .2 In addition to the above designated substances, the following may also be present:
- .3 The contractor is advised to take the following precautions when dealing with the above substances:

6. GENERAL

.1 The word "provide" indicated in this Specification means to supply and install. Site Examination

7. COMPLETION

.1 All work is to be completed within 6 weeks upon receipt of notification of acceptance of tender. The first 3 weeks to cover shop drawings, project start-up meeting, freeing up equipment and placement of sub contracts if required. Actual site work duration should take no more than 3 weeks.

8. COST BREAKDOWN

- .1 Submit, for approval by the Departmental Representative, a breakdown of tender before submitting the first request for progress payment.
- .2 Use the approved cost breakdown as the basis for submitting all claims.
- .3 Request Departmental Representative's verbal approval to amount of claim prior to preparing and submitting the claim in its final form.

9. MATERIALS AND WORKMANSHIP

- .1 Install only new materials on this project unless specifically noted otherwise.
- Only first class workmanship will be accepted, not only with regard to safety, efficiency, durability, but also with regard to neatness of detail and performance. Security Deposit.

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10.	00	SUB-TRADES
	.1	Submit no later than 72 hours after tender closing, a complete list of sub trades for the Departmental Representative's review.
11.		SITE VISITS
	.1	For tendering purposes, the site visit(s) must be attended in the presence of the Departmental Representative.
12.		MINIMUM STANDARDS
	.1	Conform to or exceed minimum acceptable standards of the various applicable federal, provincial and municipal codes such as The National Building Code, The National Fire Code, Canadian Plumbing Code, Canadian Electrical Code, Canadian Code for Construction Safety and the Provincial Construction Safety Act.
	.2	Work to conform to referenced standards and codes as reaffirmed or revised to date of specification.
13.		FIRE AND GENERAL SAFETY
	.1	Comply with the requirements of Fire Commissioner of Canada Standards No. 301 and 302.
	.2	Comply with the requirements of the National Research Council, Fire Prevention Officer including those outlined in Section 01545.
	.3	Comply with safety related instructions from the Departmental Representative or the National Research Council, Fire Prevention Officer.
	4	Comply with the National Building Code (Part 8, Construction Safety Measures) and the Provincial Construction Safety Act.
14.		PROTECTION AND WARNING NOTICES
	.1	Provide all materials required to protect existing equipment.
	.2	Erect dust barriers to prevent dust and debris from spreading through the building.
	.3	Place dust protection in the form of cover sheets over equipment and furniture and tape these sheets to floors, to ensure no dust infiltration.
	.4	Repair or replace any and all damage to Owner's property caused during construction, at no cost to the Owner and to the satisfaction of the Departmental Representative.
	.5	Protect the buildings, roads, lawns, services, etc. from damage which might occur as a

Plan and co-ordinate the work to protect the buildings from the leakage of water, dust, etc.

result of this work.

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Project No. <u>J61/3808</u>	Section 00 10 00 GENERAL INSTRUCTIONS Revised on Aug 4, 2010 Page 4 of 13
.7	Ensure that all doors, windows, etc., that could allow transfer of dust, noise, fumes, etc., to other areas of the building are kept closed.
.8	Secure working area at the end of each day's work and be responsible for the same.
.9	Provide and maintain adequate safety barricades around the work sites to protect NRC personnel and the public from injury during the carrying out of work.
.10	Post warnings in all instances where possible injury could occur such as Work Overhead, Hard Hat Areas, etc. or as required by the Departmental Representative.
.11	Provide temporary protective enclosures over building entrances and exits to protect pedestrians. All enclosures to be structurally sound against weather and falling debris.
15.	FASTENING DEVICES
.1	Do not use explosive actuated tools, unless permitted expressly by the Departmental Representative.
.2	Comply with the requirements of CSA A-166 (Safety Code for Explosive Actuated Tools).
.3	Do not use any kind of impact or percussion tool without first obtaining permission from the Departmental Representative.
.6.	BILINGUALISM
.1	Ensure that all signs, notices, etc. are posted in both official languages.
.2	Ensure that all identification of services called for by this contract are bilingual.
7.	TEMPORARY HEATING AND VENTILATING
.1	Bear the costs of temporary heat and ventilation during construction including costs of installation, fuel, operation, maintenance, and removal of equipment.
.2	Use of direct-fired heaters discharging waste products into the work areas will not be permitted unless prior approval is given by the Departmental Representative.
.3	Furnish and install temporary heat and ventilation in enclosed areas as required to:
	.1 Facilitate progress of work.
	.2 Protect work and products against dampness and cold.
	.3 Reduce moisture condensation on surfaces to an acceptable level.
	.4 Provide ambient temperature and humidity levels for storage, installation and curing of materials.
	.5 Provide adequate ventilation to meet health regulations for a safe working environment.

Maintain minimum temperature of 10 °C (50 °F) or higher where specified as soon as finishing work is commenced and maintain until acceptance of the structure by the

.4

NRC Project No. U61/3808	Section 00 10 00 GENERAL INSTRUCTIONS Revised on Aug 4, 2010 Page 5 of 13
001/2000	Departmental Representative. Maintain ambient temperature and humidity levels as
	required for comfort of NRC personnel.
.5	Prevent hazardous or unhealthy accumulations of dust, fumes, mists, vapours or gases in areas occupied during construction including also, storage areas and sanitary facilities.
	.1 Dispose of exhaust materials in a manner that will not result in a harmful or unhealthy exposure to persons.
.6	Maintain strict supervision of operation of temporary heating and ventilating equipment.
	.1 Enforce conformance with applicable codes and standards.
	.2 Comply with instructions of NRC Fire Prevention Officer including provision of full-time watchmen services when directed.
	.3 Enforce safe practices.
	.4 Vent direct-fired combustion units to outside.
.7	Submit tenders assuming existing or new equipment and systems will not be used for temporary heating and ventilating.
.8	After award of contract, Departmental Representative may permit use of the permanent system providing agreement can be reached on:
	.1 Conditions of use, special equipment, protection and maintenance, replacement of filters.
	.2 Methods of ensuring that heating medium will not be wasted and in the case of steam, agreement on what is to be done with the condensate.
	.3 Saving on contract price.
	.4 Provisions relating to guarantees on equipment.
18.	DISCREPANCIES & INTERFERENCES
.1	Before tender closing, examine drawings and specifications. Report at once to the Departmental Representative, any defects, discrepancies, omissions or interferences affecting the work.
.2	Provide items mentioned in either the drawings or the specification.
.3	Contractor to immediately inform the Departmental Representative in writing, of any discrepancies between the plans and the physical conditions so the Departmental Representative may promptly verify same.

- Representative may promptly verify same.
- .4 Any work done after such a discovery, until authorized, is at the contractor's risk.
- Where special interferences are encountered on the job and they have not been pointed out .5 on the original tender or on the plans and specifications, provide offsets, bends or reroute the services to suit job conditions at no extra cost.
- Arrange all work so as not to interfere in any way with other work being carried out. .6
- .7 Commencement of work will imply an acceptance of existing conditions.

NRC Project No.	Section 00 10 00 GENERAL INSTRUCTIONS
<u>U61/3808</u> 19.	Revised on Aug 4, 2010 Page 6 of 13 CO-OPERATION
.1	Co-operate with NRC staff in order to keep disruption of normal research work to an absolute minimum.
.2	Work out in advance, a schedule for all work which might disrupt normal work in the building.
.3	Have schedule approved by the Departmental Representative.
4	Notify the Departmental Representative in writing, 72 hours prior to any intended interruption of facilities, areas, corridors, mechanical or electrical services and obtain requisite permission.
20.	GENERAL REVIEW
.1	Periodic review of the contractor's work by the Departmental Representative, does not relieve the contractor of the responsibility of making the work in accordance with contract documents. Contractor shall carry out his own quality control to ensure that the construction work is in accordance with contract documents.
21.	INSPECTION OF BURIED OR CONCEALED SERVICES
.1	Prior to concealing any services that are installed, ensure that all inspection bodies concerned, including NRC, have inspected the work and have witnessed all tests. Failure to do so may result in exposing the services again at the contractor's expense.
22.	TESTING
.1	On completion, or as required by local authority inspectors and/or Departmental Representative during progress of work and before any services are covered up and flushing is complete, test all installations in the presence of the Departmental Representative.
.2	Obtain and hand to the Departmental Representative all acceptance certificates or test reports from authority having jurisdiction. The project will be considered incomplete without the same.

23. WORKING HOURS AND SECURITY

- .1 Normal working hours on the NRC property are from 8:00 a.m. until 4:30 p.m., Monday to Friday inclusive except statutory holidays.
- .2 At all other times, special written passes are required for access to the building site.
- .3 Obtain permission from the Departmental Representative to perform the specific tasks before scheduling any work outside normal working hours.
- An escort may be required whenever working outside normal hours. Contractor to bear the associated costs.

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5	All persons employed by the contractor, or by any subcont	tractor, and working on the site

.5 All persons employed by the contractor, or by any subcontractor, and working on the site must wear and keep visible identification badges issued by the Council.

24. SCHEDULE

.1 The contractor shall prepare a detailed schedule, fixing the date for commencement and completion of the various parts of the work and update the said schedule. Such schedule shall be made available to the Departmental Representative not later than two weeks after the award of the contract and prior to commencement of any work on site.

Notify Departmental Representative in writing of any changes in schedule.

.2 5 day(s) before the scheduled completion date arrange to do an interim inspection with the Departmental Representative.

25. SERVICE INTERRUPTIONS

- .1 Arrange for all service interruptions with the Departmental Representative. Do not operate any NRC equipment or plant.
- .2 Allow 72 hours notice prior to cutting into any existing service.
- .3 All service interruptions are to be of minimum duration.
- .4 Protect existing services as required and immediately make repairs if damage occurs.
- .5 Provide detours, bridges, alternate feeds, etc., as required to minimize disruptions.
- .6 Plan and perform work in advance in order to minimize disruption and service interruption.

26. SHOP DRAWINGS

- .1 Submit to Departmental Representative for review, shop drawings, product data and samples specified within 3 week(s) after contract award.
- .2 Submit to Departmental Representative for review a complete list of all shop drawings, product data and samples specified and written confirmation of corresponding delivery dates within one (1) week after shop drawings, product data and samples approval date. This list shall be updated on a 1 week basis and any changes to the list shall be immediately notified in writing to the Departmental Representative.
- .3 Review shop drawings, data sheets and samples prior to submission.
- 4 Submit 5 copies of all shop drawings and product data and samples for review, unless otherwise specified.

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.5	Review of shop drawings and product data by the Departmental Representative does not relieve the contractor of the responsibility for errors and omissions and for the conformity with contract documents.
27.	SAMPLES AND MOCK-UPS
.1	Submit samples in sizes and quantities specified.
.2	Where colour, pattern or texture is criterion, submit full range of samples.
.3	Construct field samples and mock-ups at locations acceptable to Departmental Representative.
.4	Reviewed samples or mock-ups will become standards of workmanship and material against which installed work will be checked on project.
28.	MANUFACTURER'S INSTRUCTIONS
.1	Unless otherwise specified, comply with manufacturer's latest printed instructions for materials and installation methods.
.2	Notify the Departmental Representative in writing of any conflict between these specifications and manufacturer's instruction. Departmental Representative will designate which document is to be followed.
29.	SPECIFICATIONS, "AS BUILTS"

- The contractor shall keep on the site, one (1) up-to-date copy of all specifications, .1 drawings and bulletins pertaining to the work, in good order, available to the Departmental Representative and to his representatives at all times.
- .2 At least one (1) copy of such specifications and drawings shall be marked by the contractor to show all work "As Built" and shall be handed over to the Departmental Representative with the Application for Payment and for the Final Certificate of Completion.

30. **ACCEPTANCE OF SITE**

- Inspect the site before commencing work, review any unexpected conditions with the .1 Departmental Representative.
- .2 Commencement of work will imply acceptance of existing conditions.

31. PARTIAL OCCUPANCY

.1 NRC may request partial occupancy of the facility if the contract extends beyond the expected completion date.

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32.	3000	USE OF SITE
	.1	Restrict operations on site to the areas approved by the Departmental Representative at the time of tendering.
	.2	Locate all temporary structures, equipment, storage, etc., to the designated areas.
	.3	Restrict parking to the designated areas.
	.4	Do not restrict access to the building, routes, and services.
	.5	Do not encumber the site with materials or equipment.
33.		SITE ACCESS
	.1	Make prior arrangements with the Departmental Representative before starting work or moving materials and equipment on site.
	.2	Obtain approval of Departmental Representative for regular means of access during the construction period.
	.3	Obtain approval of Departmental Representative before temporarily suspending operations on site; before returning to the site and before leaving the site at the end of the job.
	.4	Provide and maintain access to site.
	.5	Build and maintain temporary roads and provide snow removal during period of work.
	.6	Make good any damage and clean up dirt, debris, etc., resulting from contractor's use of existing roads.
34.		OVERLOADING
	.1	Ensure that no part of the building or work is subjected to a load which will endanger safety or cause permanent deformation or structural damage.
35.		TEMPORARY SERVICES
	.1	A source of temporary power will be made available in the area. Bear all costs to make connections to the power source and perform distribution on site.
	.2	Provide all load centres, breakers, conduit, wiring, disconnects, extension cords, transformers, as required from the source of power.
	.3	Power is to be used only for power tools, lighting, controls, motors, and not for space eating.

- $. 4 \qquad \quad A \ source \ of \ temporary \ water \ will \ be \ made \ available \ if \ required.$
- .5 Bear all costs associated with distributing the water to the required locations.

NRC Projec <u>U61/3</u>		Section 00 10 00 GENERAL INSTRUCTIONS Revised on Aug 4, 2010 Page 10 of 13
0 0 2/0	.6	Comply with NRC requirements when connecting to existing systems in accordance with the articles entitled "Co-operation" and "Service Interruptions" of this section.
36.		SITE OFFICE & TELEPHONE
	.1	Contractor to erect a temporary site office at his own expense.
	.2	Install and maintain a telephone, if necessary.
	.3	Use of NRC phones not permitted unless in the case of an emergency.
37.		SANITARY FACILITIES
	.1	Provide sanitary facility, and bear all associated costs.
38.		PROJECT MEETINGS
	.1	Hold regular project meetings at times and locations approved by the Departmental Representative.
	.2	Notify all parties concerned of meetings to ensure proper coordination of work.
	.3	Departmental Representative will set times for project meetings and assume responsibility for recording and distributing minutes.
39.		STORAGE
	.1	Provide storage as required to protect all tools, materials, etc., from damage or theft and be responsible for the same.
	.2	Do not store flammable or explosive materials on site without the authorization of the NRC Fire Prevention Officer.
40.		DRAINAGE
	.1	Provide temporary drainage and pumping as required to keep excavations and site free of water.
41.		ENCLOSURE OF STRUCTURES
71.	.1	Construct and maintain all temporary enclosures as required to protect foundations, subsoil, concrete, masonry, etc., from frost penetration or damage.
	.2	Maintain in place until all chances of damage are over and proper curing has taken place.

Provide temporary weathertight enclosures for exterior openings until permanent sash and glazing and exterior doors are installed.

Provide lockable enclosures as required to maintain the security of NRC facilities and be responsible for the same.

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NRC		Section 00 10 00
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0.01/3	.5	Revised on Aug 4, 2010 Page 11 of 13 Provide keys to NRC security personnel when required.
		J. F. Communication of the Com
42.		LAYOUT OF WORK
	.1	Lay out the work carefully and accurately.
	.2	Verify all dimensions and be responsible for them.
	.3	Locate and preserve general reference points.
	.4	Employ competent person to lay out work in accordance with control lines and grades provided by the Departmental Representative.
43.		CONCEALING
	.1	Conceal all services, piping, wiring, ductwork, etc., in floors, walls or ceilings except where indicated otherwise.
44.		SPACE CONFLICT
	.1	Maintain an awareness of responsibility to avoid space conflict with other trades.
	.2	Throughout the course of construction, keep continuously acquainted with field conditions, and the work being developed by all trades involved in the project.
45.		CUTTING AND PATCHING
	.1	Cut existing surfaces as required to accommodate new work.
	.2	Remove all items as shown or specified.
	.3	Patch and make good with identical materials, the surfaces that have been disturbed, cut or damaged, to the Departmental Representative's satisfaction.
	.4	Where new pipes pass through existing construction, core drill an opening. Size openings to leave 12mm (1/2") clearance around the pipes or pipe insulation. Do not drill or cut any surface without the approval of the Departmental Representative.
	.5	Obtain written approval of the Departmental Representative before cutting openings through existing or new structural members.
	.6	Seal all openings where cables, conduits or pipes pass through walls with an acoustic sealant conforming to CAN/CGSB-19.21-M87.

Where cables, conduits and pipes pass through fire rated walls and floors, pack space between with compressed glass fibres and seal with caulking in accordance with

CAN/CGSB-19.13-M87 AND NBC 3.1.7.

.7

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Project		GENERAL INSTRUCTIONS
<u>U61/38</u>	808	Revised on Aug 4, 2010 Page 12 of 13 CLEAN-UP DURING CONSTRUCTION
40.	.1	On a daily basis, maintain project site and adjacent area of campus including roofs, free from debris and waste materials.
	.2	Provide on-site dump containers for collection of waste materials and rubbish.
47.		FINAL CLEAN-UP
	.1	Upon completion do a final clean-up to the satisfaction of the Departmental Representative.
	.2	Clean all new surfaces, lights, existing surfaces affected by this work, replace filters, etc.
	.3	Clean all resilient flooring and prepare to receive protective finish. Protective finish applied by NRC
48.		DISPOSAL OF WASTES
	.1	Dispose of waste materials including volatiles, safely off NRC property. Refer to the article entitled "Fire & General Safety" of this section.
49.		WARRANTY
	.1	Refer to General Conditions "C", section GC32.
	.2	Ensure that all manufacturers' guarantees and warranties are issued in the name of the Contractor and the National Research Council.
50.		MAINTENANCE MANUALS
	.1	Provide three (3) bilingual copies of maintenance manuals or two English and two French maintenance manuals immediately upon completion of the work and prior to release of holdbacks.
	.2	Manuals to be neatly bound in hard cover loose leaf binders.
	.3	Manuals to include operating and maintenance instructions, all guarantees and warranties, shop drawings, technical data, etc., for the material and apparatus supplied under this contract.
51.		IDENTIFICATION BADGES
	.1	Use of Identification Badges is mandatory in NRC buildings.
	.2	Obtain all badges from the Security office.

52. SPECIFIED ACCEPTABLE & ALTERNATIVE EQUIPMENT & MATERIALS

.1 Materials and equipment scheduled and/or specified on the drawings or in the specifications have been selected to establish a performance and quality standard. In most cases, acceptable manufacturers are stated for any material or equipment specified by

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	manufacturer's name and model number. Contractors may base their tender price on	
	materials and equipment supplied by any of the manufacturers' names as acceptable for the particular material or equipment.	
.2	In addition to the manufacturers specified or named as acceptable, you may propose alternative manufacturers of materials or equipment to the Departmental Representative for acceptance. For a product to be considered as an alternative product substitute, make a written application to the Departmental Representative during the tender period, not later than seven (7) working days before tender closing.	
.3	Certify in writing that the alternative meets all requirements of the specified material or equipment. In addition, it shall be understood that all costs required by or as a result of acceptance or proposed alternatives, will be borne by the contractor.	
.4	Approval of alternatives will be signified by issue of an Addendum to the Tender Documents.	
.5	Any alternative manufacturers or materials submitted which are incomplete and cannot be evaluated, or are later than seven (7) working days before tender closing date or after the tender period, will not be considered.	

53. DRAWINGS

- .1 The following drawings illustrate the work and form part of this contract:
 - -D-3808-SC1

END OF SECTION

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D 1 (3)	~	
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Part 1 General

1.1 AUTHORITIES

- .1 The Fire Commissioner of Canada (F.C.) is the authority for fire safety at NRC.
- .2 For the purpose of this document, "Departmental Representative" will be deemed as the NRC person in charge of the project.
- .3 The Departmental Representative will consult with the Fire Prevention Officer (FPO) as and when required.
- .4 The Departmental Representative will enforce these Fire Safety Requirements.
- .5 Comply with the following standards as published by the Office of the Fire Commissioner of Canada:
 - .1 Standard No. 301 June 1982 "Standard for Construction Operations";
 - .2 Standard No. 302 June 1982 "Standard for Welding and Cutting"

1.2 Hot Work

- .1 Permit:
 - .1 Prior to commencement of any "Hot Work" involving welding, soldering, burning, heating, use of torches or salamanders or any open flame, obtain a Hot Work Permit from the Departmental Representative.
- .2 Site Review:
 - .1 Prior to commencement of "Hot Work", review the area of hot work with the Departmental Representative to determine the level of fire safety precautions to be taken.

1.3 REPORTING FIRES

- .1 Know the exact location of the nearest Fire Alarm Pull Station and telephone, including the emergency phone number.
- .2 REPORT immediately, all fire incidents as follows
 - .1 Activate nearest fire alarm pull station and;
 - .2 Telephone the following emergency phone number:

CELLULAR OR

NRC LOCATION	NON-NRC PHONES	NRC PHONES
Montreal Road Campus	613-993-2411	333
Uplands	613-993-2411	333
Carleton Place	613-993-2411 OR	993-2411
Greenbank	613-993-2411 OR	993-2411

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	Sussex Drive	613-993-2411	333
	.3 When rep	oorting a fire by phone, give the location to verify location.	on of fire, building number and be
	.4 The perso	on activating fire alarm pull station munformation and direction to the Fire De	st remain at the scene of fire to epartment personnel.
1.4	INTERIOR ANI	EXTERIOR FIRE PROTECTION	N & ALARM SYSTEMS
.1	DO NOT OBSTR ALARM SYSTE REPRESENTAT	UCT OR SHUT OFF FIRE PROTEC MS WITHOUT AUTHORIZATION F IVE.	TION EQUIPMENT OR FROM THE DEPARTMENTAL
.2	ALTERNATIVE	E PROTECTION EQUIPMENT IS T MEASURES AS PRESCRIBED BY IVE SHALL BE TAKEN TO ENSUR	THE DEPARTMENTAL
.3	END OF A WOR FROM THE DEP	FIRE PROTECTION OR ALARM S KING DAY WITHOUT NOTIFICAT ARTMENTAL REPRESENTATIVE VE WILL ADVISE THE (FPO) OF T	TON AND AUTHORISATION THE DEPARTMENTAL
.4	OTHER THAN F	RE HYDRANTS, STANDPIPES ANI IRE FIGHTING PURPOSES UNLES LL REPRESENTATIVE.	
1.5	FIRE EXTINGU	ISHERS	
.1	Provide a minimu operation.	m of 1-20 lb. ABC Dry Chemical Fire	Extinguisher for every hot work
.2	Provide fire exting	guishers for hot asphalt and roofing op	erations as follows:
		ot area - 1-20 lb. ABC Dry Chemical; oof - 2-20 lb. ABC Dry Chemical.	
.3	Provide fire exting	guishers equipped as below:	
	.1 P	inned and sealed;	
	.2 W	ith a pressure gauge;	
	.3 W	ith an extinguisher tag signed by a fire	e extinguisher servicing company.
.4	Carbon Dioxide (0	CO2) extinguishers will not be consider	red as substitutes for the above.
.6	ROOFING		
1	Kettles:		

1.

- .1 Kettles:
 - Arrange for the safe location of asphalt kettles and material storage with the Departmental Representative before moving them on site. Do not locate kettles on .1

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	any roof or structure and keep them at least 10m away from a building and at a safe distance from parked automobiles.
	.2 Equip kettles with thermometers or gauges that are in good working order.
	.3 Do not operate kettles at temperatures in excess of 232°C.
	.4 Maintain continuous supervision while kettles are in operation and provide metal covers for the kettles to smother any flames in case of fire. Provide fire extinguishers as required in article 12.
	.5 Advise the Departmental Representative of container capacities prior to start of work.
	.6 Keep compressed gas cylinders secured in an upright position and a minimum of 20 feet away from any kettle.
.2	Mops:
	.1 Use only glass fibre roofing mops.
	.2 Remove used mops from the roof site at the end of each working day.
.3	Torch Applied Systems:
	.1 Do not use torches next to walls.
	.2 Provide a fire watch as required by article 13 of this section.
.4	Materials Storage:
	.1 Store all combustible roofing materials at least 3m away from any structure and 6m from any kettle.
1.7	FIRE WATCH
.1	Provide a fire watch for a minimum of one hour after the termination of a hot work operation.
.2	Temporary heating, refer to General Instructions Section 01000.
.3	Equip fire watch personnel with fire extinguishers as required by article 5.

.3 Equip fire watch personnel with fire extinguishers as required by article 5.

1.8 OBSTRUCT OF ACCESS/EGRESS ROUTES-ROADWAYS, HALLS, DOORS OR ELEVATORS

- .1 Advise the Departmental Representative in advance of any work that would impede the response of the Fire Department personnel and their apparatus. This includes violation of minimum overhead clearance, erecting of barricades and the digging of trenches.
- .2 Building exit routes must not be obstructed in any way without special permission from the Departmental Representative, who will ensure that adequate alternative routes are maintained.
- .3 The Departmental Representative will advise the FPO of any obstruction that may warrant advanced planning and communication to ensure the safety of building occupants and the effectiveness of the Fire Department.

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1.9		SMOKING Tage 4 01 3	
	.1	Smoking is prohibited inside all NRC buildings.	
	.2	Obey all "NO SMOKING" signs.	
1.10		RUBBISH AND WASTE MATERIALS	
	.1	Keep rubbish and waste materials to a minimum and a minimum of 20 feet from any kettle or torches.	
	.2	Do not burn rubbish on site.	
	.3	Removal:	
		.1 Remove all rubbish from work site at the end of the work day or shift, or as directed.	
	4	Storage:	
		Exercise extreme care when storing combustible waste materials in work areas. Ensure maximum possible cleanliness, ventilation and that all safety standards are adhered to when storing any combustible materials.	
		.2 Deposit greasy or oily rags or materials subject to spontaneous combustion in CSA or ULC approved receptacles and remove as required in 10.3.1.	
	.5	Dumpsters:	
		.1 Consult the Departmental Representative to determine an acceptable safe location before bringing the dumpster on site.	
1.11		FLAMMABLE LIQUIDS	
	.1	The handling, storage and use of flammable liquids are governed by the current National Fire Code of Canada.	
	.2	Flammable Liquids such as gasoline, kerosene and naphtha may be kept for ready use in quantities not exceeding 45 litres, provided they are stored in approved safety cans bearing the ULC seal of approval. Storage of quantities of flammable liquids exceeding 45 litres for work purposes, require the permission of the Departmental Representative.	
	.3	Transfer of flammable liquids is prohibited within buildings.	
	.4	Do not transfer flammable liquids in the vicinity of open flames or any type of heat producing device.	
	.5	Do not use flammable liquids having a flash point below 38 °C such as naphtha or gasoline as solvents or cleaning agents.	

Store flammable waste liquids for disposal in approved container located in a safe, ventilated area. Waste flammable liquids are to be removed from the site on a regular

.6

basis.

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.7	Where flammable liquids, such as lacquers or urethane are used, assure proper ventilation and eliminate all sources of ignition. Inform the Departmental Representative prior to, and at the cessation of such work.
1.12	QUESTIONS AND/OR CLARIFICATION
.1	Direct any questions or clarification on Fire Safety, in addition to the above requirements, to the Departmental Representative.

END OF SECTION

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SCOPE

This project involves rehabilitation of the surface of the U-61 Hangar Apron Area by cold milling of approximately 14,987m² of Portland cement concrete (PCC) apron to a depth of 50 mm and repaving with 50 mm of hot mix asphalt (HMA) surface course mix generally meeting OPSS 1150 HL3 requirements and as modified in accordance with the attached specification. The joints between each existing panel are to be surveyed and saw-cut following the surface overlay. The saw cut joints are to be filled with a bituminous asphalt joint sealant. Re-instatement of the existing painted lines and any new markings is required at the conclusion of the paving process. The location of this work is summarized below.

The milling and paving is to be carried out on air side in fifteen (15) days in two phases to facilitate continuous access to the hangar. The construction will take place in the following areas:

- AREA A Apron in front of the hangar U-61, approximately center of the north half of the hangar door to taxiway 'G', eastward toward the RCMP Hangar, comprising an area of 11,886.7m² will be rehabilitated. The apron area is Mill concrete surface, survey existing construction joint locations. Place HMA overlay. Saw-cut all joint locations following paving and install bituminous joint sealant. Re-paint lines to existing.
- AREA B Adjacent to Area 'A', the apron in front of the hangar U-61, south half of the hangar door to taxiway 'G', westward towards Tracker Private road, comprising an area of 3,100.3m² in the same manner.

See attached plan for limits of each phase. A period of not less than three (3) days shall be allowed between paving of the above areas to permit adequate curing of the HMA and avoid tracking of bitumen into the hangar. No traffic will be permitted to travel on the existing concrete fuelling pad at any time during execution of the work.

The construction work for this pavement rehabilitation project shall be conducted in accordance with the specifications contained herein and the referenced Ontario Provincial Standards and Specifications (OPSS).

SECTION 1 – GENERAL CONSTRUCTION PROCEDURE FOR COLD MILL REMOVAL AND REPAVING OF CONCRETE APRON AT THE PLH AREA

The following repair program shall be conducted without deviation and the specifications herein shall be followed, without exception.

1.1 DESCRIPTION

This work consists of repairing the poor performing concrete apron with the direction provided by the National Research Council Canada (NRC), in conjunction with Stantec Consulting Ltd.

- In the apron area, grind concrete pavement using Class III cold milling methods of grinding to a depth of 50mm. Pavement profile shall not deviate from finished plane by more than 5.0 mm.
- Control grinding dust with water and a vacuum truck recovery system to prevent debris that could result in foreign object debris (FOD).
- Survey the intersection of all concrete panel joints using Global Positioning System (GPS) or survey techniques resulting in an accuracy of +/- 5.0 mm.
- Identify locations of severe distress such as multiple cracks or loose pavement pieces, for possible full depth removal. Mill these areas to a depth of 100mm or as required, removing the distressed material. Conduct this work prior to the general milling operation.
- Pad and restore to grade the areas where milling beyond the 50mm was required to remove severe distress areas. Detail OPSD 509.010 shall apply. At the NRC Department Representative, and or Stantec Engineer option, excessively deep areas may be repaired with a rapid setting concrete that will achieve not less than 15MPa within 24 hours, prior to paving with the surface course. Deep areas may be repaired by padding with HMA based on approval from the NRC Department Representative, and or Stantec Engineer.
- Clean and vacuum surface debris and dispose of millings offsite.
- Apply an anionic emulsion tack coat meeting the requirements of an RS-1 or MS-1 based on the
 prevailing weather conditions and the time available prior to paving. Surface to be free of loose
 debris and dust. Washing of the surface is permitted and the tack coat may be applied to a damp
 but not wet surface.
- A light tack coat application; 0.23 to 0.45 litres/m², (0.05 to 0.10 gallons per square yard) is required
 or the full area.
- Traffic control is required to divert traffic around the work area where tack coat has been applied.
 Every reasonable effort should be made to keep "pick up" of the asphalt material, prior to paving, to a minimum. This may involve tacking in sections and allowing time for curing.
- Place and compact hot mix asphalt to match existing grades. Placing of the HMA will be by use of a material transfer vehicle (MTV) only. Discharge of the HMA directly from the delivery truck into the hopper of the paving machine is not permitted.
- HMA to meet specifications herein and to utilize PG AC 64-34.

1.2 MEASUREMENT AND PAYMENT

Milling of existing concrete surface and asphalt concrete paving for surface courses will be at a fixed cost. The rate will include preparation of preceding layer or surface, supply of; emulsified tack coat, asphalt cement, HMA placement, compaction, sawcutting/sealing of joints, and temporary, signage, paving, all ancillary works and site clean-up.

Asphalt concrete, saw-cutting or joint sealing associated with defective work will not be taken into consideration.

1.3 HEALTH AND SAFETY

Establish appropriate safety and health practices and determine applicability of regulatory limitations prior to use of asphalt cement, anti-stripping additives, sealants etc. Comply with applicable specified requirements of the NRC Safety Policies.

Submit a copy of Contractor Company Safety Policy on award of the contract. Provide a site specific Safety Plan prior to commencing work, for review.

1.3.1 Security Escort Allowance:

.1 The National Research Council Canada with be responsible for the direct hire of member(s) of the Ottawa Airport's designated security escort and surveillance agency .2 The work schedule is based on 15 days duration. If the schedule is exceeded, the contractor will assume all security costs beyond that period. In such case payment will be made directly to the security company by the NRC and a corresponding reduction in the contractor monthly financial draw will be made.

1.4 REFERENCE DOCUMENTS

- .1 CAN/CGSB-8.2-M88, Sieves Testing, Woven Wire, Metric.
- .2 CAN/CGSB-37.50-M89, Hot applied, Rubberized Asphalt for Roofing and Waterproofing.
- .3 AASHTO M 320-04, Performance-Graded Asphalt Binder.
- .4 AASHTO R 29-02, Grading or Verifying the Performance Grade of an Asphalt Binder.
- AASHTO PP6-94, Standard Practice for Grading or Verifying the Performance Grade of an Asphalt Binder.
- .6 AASHTO T245-97, Resistance to Plastic Flow of Bituminous Mixtures Using Marshall Apparatus.
- .7 AASHTO T283-02, Resistance of Compacted Bituminous Mixture to Moisture-Induced Damage for Superpave.
- .8 ASTM C88-05, Test Method for Soundness of Aggregates by Use of Sodium Sulphate or Magnesium Sulphate.
- .9 ASTM C117-04, Test Method for Materials Finer Than 0.075 mm (No. 200) Sieve in Mineral Aggregates by Washing.
- .10 ASTM C123-04, Test Method for Lightweight Pieces in Aggregate.
- .11 ASTM C127-04, Test Method for Density, Relative (Specific Gravity) and Absorption of Coarse Aggregate.
- .12 ASTM C131-06, Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.
- .13 ASTM C136-06, Test Method for Sieve Analysis of Fine and Coarse Aggregates.
- .14 ASTM C207-06 Specification for Hydrated Lime for Masonry Purposes.
- .15 ASTM D242-04, Standard Specification for Mineral Filler for Bituminous Paving Mixtures.
- .16 ASTM D995-95b(2002), Standard Specification for Mixing Plants for Hot-Mixed, Hot-Laid Bituminous Paving Mixtures.
- .17 ASTM D2419-02, Test Method for Sand Equivalent Value of Soils and Fine Aggregate.
- .18 ASTM D3203-05, Test Method for Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures.
- .19 ASTM D6690-06a, Standard Specification for Joint and Crack Sealant, Hot-Applied, for Concrete and Asphalt Pavements.
- .20 ASTM D4791-05, Test Method for Flat and Elongated Particles in Coarse Aggregate.
- .21 ASTM D5329-04, Standard Test Methods for Sealants and Fillers, Hot-Applied for Joints and Cracks in Asphaltic and Portland Cement Concrete Pavements.
- .22 ASTM D5361-06, Standard Practice for Sampling Compacted Bituminous Mixtures for Laboratory Testing.
- .23 ASTM D6373-99, Standard Specification for Performance Graded Asphalt Binder.
- .24 Ministry of Transportation, Ontario (MTO) Manual of Designated Sources for Materials (DSM).

- .25 Ministry of Transportation, Ontario (MTO) SP313S25 Lime for DFC Aggregates.
- .26 Ministry of Transportation, Ontario (MTO) Ontario Provincial Laboratory Testing Manual, LS-283, Method of Test for Resistance to Stripping of Asphalt Cement in Bituminous Mixtures by Immersion Marshall, 1995.
- .27 Asphalt Institute MS-2-1993, Mix Design Methods for Asphalt Concrete and Other Hot Mix Types (Reprinted 1997)

1.5 PRODUCT DATA

- 1.5.1 Submit viscosity-temperature chart for asphalt cement to be supplied showing either Saybolt Furol viscosity in Pascal seconds or Kinematic Viscosity in centistokes, temperature range 135°C to 175°C a minimum 2 weeks prior to commencing work.
- 1.5.2 At least 2 weeks prior to commencing work, submit Asphalt Cement manufacturer's test data and certification with details on appropriate use of Performance Graded Asphalt Cement (PGAC), such as; influence of any liquid antistripping additive, recommended mixing procedure, storage and compaction temperatures and any special requirements.
- 1.5.3 Submit antistripping additive technical data and specification, Material Safety Data Sheet (MSDS), manufacturer's test data and instructions for use.
- 1.5.4 Submit asphalt concrete mix design and trial mix test results to Engineer for review at least 2 weeks prior to commencing work.
- 1.5.5 Submit manufacturer's test data and certification that joint sealant materials meet requirements of this section to Engineer at least 2 weeks prior to commencing work.
- 1.5.6 Submit Ministry of Transportation, Ontario (MTO) Designated Source of Materials certificate (DSM) for the following materials:
 - .1 Performance Graded Asphalt Cement: MTO DSM 3.05.22.
 - .2 Anti-stripping Additive: MTO DSM 3.05.10.
 - .3 Crack Sealant, Rubberized Asphalt, Hot poured: MTO DSM 3.05.40.
- 1.5.7 Submit details of mixing batch plant such as manufacturer, model, capacity, dust control system, anti-stripping utilization, etc. to be utilized for the Work and its location.

SECTION 2 - PRODUCTS

2.1 MATERIALS

2.1.1 Water:

Clean and potable. Contractor is responsible to supply and deliver all water required to execute the work.

2.1.2 Asphalt Cement:

- .1 Surface Course: Performance Graded Asphalt Cement to AASHTO M320 and R29, Grade: **PGAC 64-34**.
- .2 Supplier of PGAC must be listed in Ontario Ministry of Transportation (MTO)'s Designated Sources for Materials Manual (DSM).

- .3 Test surface course performance Graded Asphalt Cement to measure effect of anti-stripping additive on overall performance and to ensure specified requirements are met, in accordance to MTO LS-283.
- 2.1.3 Aggregates: General and following requirements:
 - .1 Surface Course: Coarse and fine aggregate to be 100% crushed limestone consisting of hard, durable, angular particles, free from clay lumps, cementation, organic material, frozen material and other deleterious materials.
 - .2 Use of natural (non-manufactured) sand will only be permitted when required to obtain specified aggregate blend gradation or to improve workability of asphalt mix. When required for this purpose, natural sand is not to exceed 10% by mass of total aggregate.
 - .3 Gradation: within limits specified when tested to ASTM C136 and ASTM C117. Sieve sizes to CAN/CGSB-8.1. Mineral filler, if used, is to be part of the gradation below.

Surface Course

Sieve Designation	% Passing	
19.0 mm	100	
16.0 mm	95-100	
13.2 mm	90-98	
9.5 mm	75-90	
4.75 mm	45-65	
2.36 mm	35-55	
1.18 mm	25-45	
0.600 mm	15-35	
0.300 mm	7-20	
0.150 mm	1-8	
0.075 mm	1-5	

4 Acceptable sample gradation tolerances for approved mix design shall be:

5% for 4.75 mm sieve and larger.

4% for 2.36 mm sieve.

3.5% for 1.18 mm sieve.

3.5% for 0.600 mm sieve.

3% for 0.300 mm sieve.

2% for 0.150 mm sieve.

1.0% for 0.075 mm sieve.

Aggregate gradation for mix design falling outside these tolerances will be rejected.

- .5 When dryer drum plant or plant without hot screening is used, process fine aggregate through 4.75 mm sieve and stockpile separately from coarse aggregate.
- .6 Sand equivalent: to ASTM D2419. Min: 50.
- .7 Magnesium Sulphate soundness: to ASTM C88. Max:

- .1 Coarse aggregate surface course: 12 % loss by mass
- .2 Fine aggregate, surface course: 16 % loss by mass
- .8 Los Angeles degradation: to ASTM C131, Max:
 - .1 Coarse aggregate, surface course: 25 % loss by mass
- .9 Absorption: to ASTM C127, Max:
 - .1 Coarse aggregate, surface course: 1.75 % by mass
- .10 Loss by washing: to ASTM C117. Max % passing 0.075 mm sieve:
 - .1 Coarse aggregate, surface course:1.5
- .11 Lightweight particles: to ASTM C123. Max:
 - .1 Surface course: 1.5 % by mass less than 1.95 relative density
- .12 Flat and elongated particles: to ASTM D4791, (with length to thickness ratio greater than 5): Max % by mass:
 - .1 Coarse aggregate, surface course 10 % by mass
- .13 Crushed fragments: surface course 100% of particles by mass within each of following sieve designation ranges, to have at least 2 freshly fractured faces. Material to be divided into ranges, using methods of ASTM C136.

	Retained on	
to	13.2 mm	
to	9.5 mm	
to	4.75 mm	
	to	

.14 Regardless of compliance with specified requirements, fine aggregates may be accepted or rejected on the basis of past field performance and recommendation by a laboratory certified by CCIL Type A and D, AMRL or equivalent laboratory and as approved by NRC Department Representative, and or Stantec Engineer.

2.1.4 Mineral Filler:

- .1 Finely ground particles of limestone, hydrated lime, Portland cement or other approved nonplastic mineral matter, thoroughly dry and free from lumps. Comply with ASTM D242.
- .2 Add mineral filler when necessary to meet job mix aggregate gradation or as directed to improve mix properties.
- .3 Mineral filler to be dry and free flowing when added to aggregate.

2.1.5 Anti-stripping Agent:

.1 General: Hot mix asphalt shall incorporate an antistripping additive if testing in accordance with MTO LS-283 indicates that the mix does not meet minimum stability requirements, and as directed by NRC Department Representative, and or Stantec Engineer.

.2 Product:

Hydrated Lime: to ASTM C207 Type N or;

- .2 Chemical Additive: suitable for intended use with established record of performance under similar conditions of airfield paving and subject to NRC Department Representative, and or Stantec Engineer's approval, such as;
 - Rohm & Haas Pave Bond Lite:
 - Akzo Nobel Chemicals Ltd.
 - Redicote.
- .3 Additives with objectionable odour should not be used.

2.1.6 Sealant:

- .1 Hot poured joint sealant: to ASTM D3405 and capable of withstanding exposure to heavy traffic, fuel and oil spills and extreme weather conditions without deterioration or failure and subject to NRC Department Representative, and or Stantec Engineer's approval. Sealant is to be used for saw cut butt joints between new and existing asphalt concrete and routed cracks.
- .2 Physical properties: Sealant is to comply with following requirements:
 - .1 Pour point: as recommended by manufacturer and approved by NRC Department Representative, and or Stantec Engineer. .2 Penetration at 25°C: to ASTM D5329, 80mm maximum.
- .3 Flow at 60°C: to ASTM D5329, nil.
- .4 Cold bond extensibility at -29°C, 3 cycles, 50% extension: to ASTM D5329, pass.
- .5 Resiliency at 25°C to ASTM D5329, 65% minimum.
- .6 Asphalt compatibility: to ASTM D5329, no failure in adhesion
- .7 Viscosity: to CAN/CGSB-37.50-M89, 4s minimum.
- .8 Acceptable manufacturers: Hydrotech 6165, Meadows Hi-Spec, Bakelite 590-13A, Crafco RS221/231.
- 2.1.7 Recycled Asphalt Pavement (RAP):
 - .1 The use of recycled asphalt pavement will **NOT** be permitted.

2.2 MIX DESIGN

Hot Mix Asphaltic (HMA) paving, surface course, shall conform to OPSS 310, OPSS 1001 and OPSS 1150. Except where modified herein.

2.2.1 Job mix formula (JMF) to be provided by Contractor through a Laboratory Certified by a CCIL Type A and D, AMRL or equivalent laboratory for NRC Department Representative, and or Stantec Engineer's review. 2.2.2 Mix design to be developed, at no additional cost, by testing laboratory, certified by the Canadian Council of Independent Laboratories (CCIL) and approved by NRC Department Representative, and or Stantec Engineer.

- 2.2.3 Design of mix: by Marshall method to requirements below.
 - .1 Compaction blows on each face of test specimens: 50.
 - .2 Mix physical requirements:

Property Marshall Stability,60°C KN minimum Flow Value, mm Air Voids in Mixture, %	Surface Course 14.0 2-4 3-5
Voids in Mineral Aggregate (VMA),	Nominal Maximum Particle Size13.2 mm
% min Passing 4.75 mm size bypass %	VMA%
40	13.0
45	13.5
50	14.0
55	14.5
60	15.0
over 60	15.5
Marshall Retained Stability % minimum Asphalt Cement	75
(Based on Total Weight of Dry Aggregate) 4.8% - 5.2%

- .3 Preferred design mix should be based on 4% air voids and 5.0% asphalt cement content for surface course. Once the mix design is approved, any deviation falling outside the specified limits for the "mix physical requirements", will be rejected and the Contractor shall remove the defective areas, dispose of debris off Airport property and replace at their own cost.
- .4 Measure physical requirements as follows:
 - .1 Marshall load and flow value: to AASHTO T245, at 50 blows.
 - .2 Air voids: to ASTM D3203.
 - .3 Voids in mineral aggregates: to Asphalt Institute MS-2, chapter 4.
 - .4 Marshall Retained Stability: in accordance with MTO Test Method LS-283.
 - .5 Visual Stripping Rating: in accordance with MTO Laboratory Test Method LS- 283.

2.2.4 Anti-stripping Additive:

Verify suitability and effectiveness of antistripping additive and determine optimum quantity of additive through Contractors comparative laboratory testing to MTO LS-283. Subject to manufacturer's recommendation and as directed by NRC Department Representative, and or Stantec Engineer, typical quantities:

- .1 Hydrated lime: 0.5 to 1.0% by mass of dry aggregate.
- .2 Chemical Additive: 0.5 to 1.0% by mass of the asphalt content.

2.2.5 Mix Changes

Do not change job-mix without prior approval of the NRC Department Representative, and or Stantec Engineer. When change in material source is proposed, submit new mix design and give minimum of one (1) week advance notice to allow new job-mix formula to be reviewed by NRC Department Representative, and or Stantec Engineer.

2.2.6 Mix Quality Control

All testing and trial batches around the development of the job mix are to be carried out at Contractor's own cost. Costs for quality control during supply placing and execution of the work will be paid for by the Contractor and will be conducted by a third party independent CCIL certified laboratory or the Contractors own forces provided that their laboratory has successfully completed the most recent hot mix correlation program administered by the CCIL. The QC laboratory to be reviewed and approved by the NRC Department Representative, and or Stantec Engineer.

The NRC shall conduct quality assurance (QA) in accordance with section 4.2.1.

2.2.7 Tolerances

Tolerances for the approved mix physical requirements shall be within the specified limits stipulated in the design of mix in 2.2.3 herein. For any deviation from tolerances stated herein, the mix will be rejected.

SECTION 3 - EXECUTION

3.1 PLANT AND MIXING REQUIREMENTS

3.1.1 General:

Batch and continuous mix plants shall to comply with ASTM D995.

3.1.2 Addition of anti-stripping agent;

.1 Unless otherwise specified or directed, comply with MTO Manual MT 3.0.

.2 Addition of Lime;

- .1 When hydrated lime is used for antistripping, the aggregates shall be limed by the supplier prior to shipping.
- .2 Plant and equipment used for addition of lime to be equipped with covers to control loss of lime.
- .3 Plant to control rate of lime incorporation to within 1/4%.
- .4 Add water to aggregate prior to entering pugmill.
- .5 Add water to lime sufficiently in advance to permit time to slake prior to entering pugmill.

.3 Addition of Chemical Additive:

.1 Agent to be added to asphalt cement at supplier/ manufacturer plant and at rate commensurate with design mix requirements and will result in a mix that complies with specified requirements, subject to NRC Department Representative, and or Stantec Engineer's approval.

- .4 Temporary storage of hot mix:
 - .1 Provide mix storage of sufficient capacity to permit continuous operation and designed to prevent segregation.
 - .2 Do not store asphalt mix in storage bins in excess of 3 hours.
 - .3 While producing asphalt mix for this project, do not produce mix for other users unless separate storage and pumping facilities are provided for materials supplied to this project.

3.2 EQUIPMENT

3.2.1 Milling Machine:

The equipment for cold milling shall consist of a rotating drum equipped with teeth capable of removing material to a minimum depth of three inches (75 mm) in one pass, producing a uniform surface finish.

The cold milling machine shall establish a longitudinal profile grade within ±3 mm referenced from a traveling stringline or erected fixed string line and shall be controlled by an automatic system for controlling grade. The cold milling machine shall be equipped so that the depth and transverse slope of the drum is manually or automatically controlled using the traveling or fixed stringline on either or both sides of the milling machine. The fixed stringline shall remain taut after being tightened.

The traveling stringline shall have a minimum effective length of 8.5 meters. The traveling stringline shall be attached and positioned on the milling machine to reference the longitudinal profile. The traveling stringline shall utilize either mechanical skis or non-contacting grade averaging sensors. If mechanical skis are provided, the sensor of the control system shall rest midway between the traveling stringline.

Following milling of the first pass, adjacent passes shall be milled referencing the traveling stringline riding on the previously milled pass or a fixed stringline. A shoe attachment may be used to match an adjacent reference point when directed by the NRC Department Representative, and or Stantec Engineer.

The drum shall be capable of tilting to allow feathering of edges to zero cut.

3.2.2 Pavers:

Mechanical grade controlled self-powered, laser operated pavers capable of spreading mix within specified tolerances, true to line, grade and crown indicated.

3.2.3 Rollers:

Rollers of the vibratory steel wheel and pneumatic-tired type shall all be used. They shall be in good condition and capable of operating at slow speeds to avoid the displacement of the hot mix. The number, type and weight of the rollers shall be sufficient to compact the mix to the required density while it is still in a workable condition. Combination rollers that use both steel wheels and pneumatic tires for compaction are not permitted. For vibratory rollers, maximum amplitude of vibration (machine setting): 0.5 mm for lifts less than 40 mm thick.

3.2.4 Haul Trucks:

Haul trucks shall be provided in sufficient number and of adequate size, speed and condition to ensure orderly and continuous operation and as follows:

- .1 Boxes with tight metal bottoms.
- .2 Covers of sufficient size and weight to completely cover and protect asphalt mix when truck fully loaded.
- .3 In cool weather or for long hauls, insulate truck box.
- .4 Use only trucks which can be weighed in single operation on scales supplied.

3.2.5 Material Transfer Vehicle (Shuttle Buggy):

A self-powered material transfer vehicle between asphalt truck and paver that allows paver to run continuously, either in-line or adjacent lane and enhances smoothness and minimizes segregation of the surface course.

3.2.6 Hand Tools:

- .1 Lutes or rakes with covered teeth for spreading and finishing operations.
- .2 Tamping irons having mass not less than 15 kg and bearing area less than 310 cm² for compacting material in areas inaccessible to roller. Mechanical compaction equipment, when approved by NRC Department Representative, and or Stantec Engineer, may be used instead of tamping irons.
- .3 Straight edges, one 3m and one 5 m in length, to test finished surface.

3.2.7 Saws and Routers:

Small diameter diamond bladed pavement saws or mechanical rotary routers capable of producing joints with clean, vertical side walls and without tearing, chipping or spalling of joint edges. Open "V" grooves are not permitted.

3.2.8 Joint Sealant Applicator:

Applicator shall be direct connecting pressure type extruding device, to joint sealant manufacturer's written instruction, and capable of applying sealant by means of hose and wand fitted with size of tip suitable for the joints.

3.2.9 Hot Poured Sealant Heating Kettle:

Kettle shall be an indirect heating type, constructed as an insulated, double-shell, oil-jacketed boiler, including positive temperature controls (for oil and compound) and equipped with a mechanical agitator.

3.3 PREPARATION

3.3.1 Tack Coat

- .1 Anionic Emulsified Asphalt: to ASTM D977, RS-1.
- .2 Water for dilution: use only clean, uncontaminated water.

Where asphalt paving over existing asphalt is required, apply tack coat in accordance with the following:

3.3.2 Application

- .1 Apply asphalt tack coat only on clean and dry surfaces. Obtain NRC Department Representative, and or Stantec Engineer's approval of surface before applying asphalt tack coat. Unless otherwise directed, apply as follows:
 - .1 Apply anionic emulsified asphalt on asphalt concrete surfaces.
- .2 Dilute asphalt emlusion with clean water at 1:1 ratio for application. Mix thoroughly by pumping or other method approved by NRC Department Representative, and or Stantec engineer.
- .3 Apply asphalt tack coat evenly to clean, dry pavement surfaces at a rate of 0.2 to 0.3 L/m², unless otherwise directed by NRC Department Representative, and or Stantec engineer.
- .4 Apply asphalt tack coat between lifts of new asphalt paving uniformly, without streaking at a rate of 0.1 to 0.2 L/m2, unless otherwise directed by the NRC Department Representative, and or Stantec engineer.
- .5 Paint contact cold joints of surfaces of manholes and like structures and asphalt concrete pavements with a uniform coat of asphalt tack coat material.
- .6 Do not apply asphalt tack coat when air temperature is less than 5°C or when rain is forecast within 2 h of application.
- .7 Apply asphalt tack coat only to surfaces that are expected to be overlayed on same day.
- .8 Evenly distribute localized excessive deposits of tack coat by brooming as directed by NRC Department Representative, and or Stantec Engineer.
- .9 Where traffic is to be maintained, treat no more than one half of width of surface in one application.
- .10 Keep traffic off tacked areas until asphalt tack coat has set.
- .11 Re-tack contaminated or disturbed areas as directed by NRC Department Representative, and or Stantec Engineer.
- .12 Permit asphalt tack coat to set before placing asphalt pavement.
- 3.3.3 Cold Milling / Grinding Pavements:
 - .1 Mill existing asphalt surfaces as indicated below; Clean surfaces of loose material and remove and dispose of accumulated material on the Airport property. Milled material to be loaded, cleaned-up, transport, and disposed off-NRC and Airport property.
 - .2 Cold mill or grind using equipment and techniques which will not damage underlying asphalt and/or concrete pavement designated to remain. If overall pavement thickness is insufficient to permit milling/grinding without damage to portion to remain, immediately notify NRC Department Representative, and or Stantec Engineer and await direction.

- .3 The completed milled surface shall be free from transverse and longitudinal irregularities exceeding 6 mm (1/4 inch) when measured with a 3 m (10-foot) straightedge, or otherwise specified.
- .4 Prior to paving over milled areas, clean pavement surface by power broom and clean surfaces of loose and foreign material. Vacuum debris as frequently necessary. As Work is to be conducted adjacent to active runways FOD (Foreign Object Debris) will not be tolerated.
- .5 Cold plane lap joints to the details indicated on drawing OPSD 905 where new asphalt interfaces with existing asphalt or concrete pavements. Mill surfaces to the extent required to achieve a constant thickness surface course.
- .6 Where sealing material of adjacent areas has been disturbed due to preparation, immediately repair seal at no cost to the NRC Department Representative, and or Stantec Engineer.
- .7 Prior to paving, survey the surface of existing pavement or previously laid course to determine the required thickness of compacted material for subsequent course. The thickness of course shall be planed to ensure that the surface course is one consistent thickness. Provide NRC Department Representative, and or Stantec Engineer with a detailed plan of paving for each area including the proposed course thicknesses. Do not alter course thickness without the approval of NRC Department Representative, and or Stantec Engineer.

3.3.4 Transportation of Mix

- .1 Transport mix to job site in vehicles cleaned of foreign material. Paint or spray truck beds with limewater, soap or detergent solution, or non petroleum based commercial product, at least once daily or as required. Elevate truck bed and thoroughly drain. No excess solution to remain in truck bed. Deposit mix from surge or storage silo to trucks in multiple drops to reduce segregation. Do not dribble mix into trucks.
- .2 Deliver material to material transfer vehicle at a uniform rate and in an amount within capacity of paving and compacting equipment.
- .3 Deliver loads continuously in covered vehicles and immediately spread and compact. Deliver and place mixes at temperature within range as directed by NRC Department Representative, and or Stantec Engineer, but **not less than 135°C**.

3.4 PLACING

3.4.1 Approval:

Obtain NRC Department Representative, and or Stantec Engineer's approval of milled asphalt surfaces, and tack coat application prior to placing asphalt. Place asphalt concrete to thicknesses, grades and lines as indicated or as directed by NRC Department Representative, and or Stantec Engineer.

3.4.2 Conditions:

- .1 Place asphalt mixtures only when air temperature is above 5°C and the temperature of asphalt mixture is above 135°C.
- .2 When temperature of surface on which material is to be placed falls below 10°C, provide extra rollers as necessary to obtain required compaction before cooling. Reduce length of paving sections as requested by NRC Department Representative, and or Stantec Engineer.
- .3 Do not place hot-mix asphalt when pools of standing water exist on surface to be paved, during rain, or when surface is damp.
- .4 When directed by NRC Department Representative, and or Stantec Engineer and paving must be completed for Airport Operations reasons when outside temperatures are below 5°C, the Contractor shall take all measures as recommended by AASHTO and NAPA for cold weather asphalt paving at no additional cost to the Owner.

3.4.3 Placing:

- .1 Place asphalt concrete in compacted lifts of thickness as follows:
 - .1 Surface course in one layer with a constant thickness of 50 mm.
 - .2 Padding will be placed so that the surface course will be a constant thickness. When the thickness of a layer has been established for an area, the thickness cannot be altered without the approval of the NRC Department Representative, and or Stantec Engineer.
 - .3 Total thickness not less than 50 mm.
 - .4 Apply tack coat of emulsion between lifts.
- .2 Place individual strips no longer than 500 m. Reduce length when air temperature drops below 8°C as directed by NRC Department Representative, and or Stantec Engineer. Ensure temperature is within specified limits to achieve required compaction.
- .3 Commence spreading at high side of pavement or at crown and span crowned centerlines with initial strip, unless otherwise shown.
- .4 Provide asphalt material transfer vehicle (MTV) such as a Shuttle Buggy by Roadtec 2500-B to reduce the segregation in the mix.
- .5 The placement of the mixture shall be discontinued in the event of failure of the MTV, except placement will be permitted of mixture already produced at the time of the failure. All mixtures shall be spread and finished with asphalt pavers to the required section leaving the mixture uniformly dense, smooth, and free from irregularities.
- .6 Spread and strike off mixture with self propelled mechanical finisher.
 - .1 Construct longitudinal joints and edges true to line markings. Establish lines for paver to follow parallel to centerline of proposed pavement. NRC Department Representative, and or Stantec Engineer will review established lines. Position and operate paver to follow established line closely.
 - .2 Maintain constant head of mix in auger chamber of paver during placing.
 - .3 If segregation occurs, immediately suspend spreading operation until cause is determined and corrected.
 - .4 Correct irregularities in alignment left by paver by trimming directly behind machine.

- .5 Correct irregularities in surface of pavement course directly behind paver. Remove by shovel or lute excess material forming high spots. Fill and smooth depressed areas with hot mix. Do not broadcast material over such areas. .6 Do not throw surplus material on freshly screed surfaces.
- .7 After placing and before rolling, check surface with templates and straightedges and correct irregularities.
- .8 Provide heating equipment to keep hand tools free from asphalt. Control temperature to avoid burning material. Do not use tools at higher temperature than temperature of mix being placed.

3.5 COMPACTING

3.5.1 Conditions:

Roll asphalt continuously using established rolling pattern and to density of not less than 94% of Maximum Relative Density as determined from the project job mix formula (JMF) or as determined for test strip in accordance with AASHTO T245. Temperature range for compaction is 130°C-145°C. Complete compaction work prior to temperature drop to 100°C.

Do not change rolling pattern unless mix changes or lift thickness changes. Change rolling pattern as approved by NRC Department Representative, and or Stantec Engineer.

3.5.2 General:

- .1 Provide at least three (3) rollers and as many additional rollers as necessary to achieve specified pavement density. One roller must be pneumatic tyred type.
- .2 Start rolling operations as soon as placed mix can bear weight of roller without excess displacement of material or cracking of surface.
- .3 Operate roller slowly initially to avoid displacement of material. Do not exceed 5 km/h for breakdown and intermediate rolling for static steel-wheeled and pneumatic tired rollers. Do not exceed 9 km/h for finish rolling.
- .4 Use static compaction for levelling course less than 25 mm thick.
- .5 For lifts greater than 50 mm thick (60 to 70mm), adjust speed and vibration frequency of vibratory rollers to produce minimum of 25 impacts per metre of travel.
- .6 Overlap successive passes of roller by minimum of 200 mm and vary pass lengths.
- .7 Keep wheels of roller slightly moistened with water to prevent pick-up of material but do not over-water.
- .8 Do not stop vibratory rollers on pavement that is being compacted with vibratory mechanism operating.
- .9 Do not permit heavy equipment or rollers to stand on finished surface before it has been compacted and has thoroughly cooled.

- .10 After transverse and longitudinal joints and outside edge has been compacted; start rolling longitudinally at low side and progress to high side. Ensure that all points across width of pavement receive essentially equal number of passes of compactors.
- .11 During paving in echelon, as specified, leave unrolled minimum 150 mm of edge which second paver or second pass is following and roll when joint between lanes is rolled.
- .12 Where rolling causes displacement of material, loosen affected areas at once with lutes or shovels and restore to original grade of loose material before re-rolling.

3.5.3 Breakdown Rolling:

- .1 Commence breakdown rolling with static steel wheeled roller followed by vibratory roller immediately following rolling of transverse and longitudinal joint and edges.
- .2 Operate rollers as close to paver as necessary to obtain adequate density without causing undue displacement.
- .3 Operate breakdown roller with drive roll or wheel nearest finishing machine. When working on steep slopes or super-elevated sections use operation approved by NRC Department Representative, and or Stantec Engineer.
- .4 Only experienced roller operators shall be engaged on this contract.

3.5.4 Intermediate Rolling:

- .1 Use pneumatic-tired, steel wheel or vibratory rollers and follow breakdown rolling **as** closely as possible and while paving mix temperature allows maximum density from this operation.
- .2 Rolling to be continuous after initial rolling until mix placed has been thoroughly compacted.

3.5.5 Finish Rolling:

- .1 Accomplish finish rolling with two-axle or three axle tandem steel wheeled rollers while material is still sufficiently warm enough, for removal of roller marks. If necessary to obtain desired surface finish, NRC Department Representative, and or Stantec Engineer may specify use of pneumatic-tyred rollers.
- .2 Conduct rolling operations in close sequence.

3.5.6 Quality Control:

- .1 Cooperate with all testing agencies and quality personnel in conducting quality control or quality assurance sampling and testing, to the extent specified or directed.
- .2 Make good all works disturbed by sampling and testing such as filling and compacting holes resulting from coring asphalt pavement. Extent and frequency of testing as specified below and in Section 4.0 or as directed by the NRC Department Representative, and or Stantec Engineer.
- .3 Cost to be borne by the contractor.

Test	Frequency*
Marshall stability, AASHTO T245	1 ea/1000 tonnes or/days operation
Max. specific gravity, ASTM D2041	as above
Quat. Extraction of bitumen, ASTM D2041	as above
Degree of particle coating, ASTM D2489	as above
Bulk density, ASTM D1188:	as above
Retained stability, MTO, LS-283	as above
Ductility recovered asphalt, ASTM D113:	1 ea/500 tonnes or/days operation
Sieve analysis extracted mineral filler,	as above

Test	Frequency*
ASTM C136	
Sampling, ASTM D979:	as above
Asphalt cement content, ASTM D2172	as above
Bulk density, ASTM D1188:	1 ea/5000 m²/lift but 1 ea/days operation
Marshall Stability, AASHTO T245:	as above
Quantitative Extraction of bitumen, ASTM D2172:	as above
Thickness of compacted mix, ASTM D3549:	as above
Air voids in mix, ASTM D3203;	as above
Sampling & testing by coring, ASTM D5361:	as above

3.6 JOINTS

3.6.1 General:

- .1 Remove surplus material from surface of previously laid strip. Do not deposit on surface of freshly laid strip.
- .2 Paint all contact surfaces of existing pavement and/or structures with tack coat prior to placing adjacent asphalt pavement materials.

3.6.2 Transverse joints:

- .1 Offset transverse joint in succeeding lifts by at least 600 mm.
- .2 Construct and compact transverse joints to provide smooth riding surface. Use methods to prevent rounding of compacted surface at joints.
- .3 Stagger joint locations between adjoining passes a minimum of 2 m.

3.6.3 Longitudinal joints:

.1 Cold joint is defined as joint where asphalt mix is placed, compacted and left to cool below 80°C prior to paving of adjacent lane.

- .2 Avoid cold joint construction. If cold joint can not be avoided, cut back by saw cutting or by using an approved grader-mounted steel cutting wheel on previously placede lane, by at least 200 mm, to full depth vertical clean face, and spray face with thin uniform continuous coat of polymer modified tack coat.
- .3 Overlap adjoining mat (lane) paver by no more than 25 mm.
- .4 Before rolling, carefully remove and discard coarse aggregate in material overlapping joint with lute or rake.
- .5 Roll longitudinal joints directly behind paving operation.
- .6 When rolling with static or vibratory rollers, have most of drum width ride on newly placed lane with remaining 150 mm extending onto previously placed and compacted lane.
- .7 Construct butt joints at locations and to details shown in the Contract documents and in the case of deep repairs in accordance with OPSD 509.010 or as directed NRC Department Representative, and or Stantec Engineer.

3.7 ROUTING, SAWCUTTING & SEALING JOINTS

3.7.1

Saw cut joints to dimensions and details as indicated. Unless otherwise specified, sawcut cold butt joints, and new asphaltic concrete pavement abutting existing flexible pavement.

3.7.2 Sealant

- .1 Sealant to be applied in accordance with manufacturer's instructions. Sealant to be heated in a heating kettle to temperature as recommended by sealant manufacturer but not less than 10°C below recommended temperature. At no time shall the sealant be heated to greater than 200°C. Do not use joint sealant material that has been frozen.
- .2 Do not apply joint sealant in rainy weather or when air temperature is less than 5°C.
- .3 Ensure joints are clean and dry immediately before applying sealant.
- .4 Immediately remove and replace sealant which fails to bond or cure properly at no cost to the Engineer.
- .5 Keep traffic off newly sealed crack or joint for minimum of two (2) hours or longer as may be recommended by sealant manufacturer.

3.8 FINISH TOLERANCES

- 3.8.1. Finished asphalt surface:
 - .1 Maintain slopes existing ensuring the drainage paths are constructed to catchbasins.
 - .2 Asphalt surface to be within 5 mm of design elevation for surface course, but not uniformly high or low.

- .3 Finished asphalt surface not to have irregularities exceeding 5 mm for surface course when checked with 4.5 m straight edge placed in any direction.
- .4 Contractor to provide straight edge for use by NRC Department Representative, and or Stantec Engineer.

SECTION 4.0 - QUALITY MANAGEMENT

4.1 INSPECTION

4.1.1 Access:

- .1 Allow NRC Department Representative, and or Stantec Engineer access to Work. If part of Work is in preparation at locations other than Place of Work, allow access to such Work whenever it is in progress.
- .2 Inspection services are to be done under security escorts within the 15 day project schedule. These escort services are considered integral to the work. If the schedule is beyond that time, the contractor will assume the security cost beyond that period.

4.1.2 Notice and Process:

- .1 Give timely notice requesting inspection if Work is designated for special tests, inspections or approvals by NRC Department Representative, and or Stantec Engineer instructions, or in accordance with requirements of authorities having jurisdiction.
- .2 If Contractor covers or permits to be covered Work that has been designated for special tests, inspections or approvals before such is made, uncover such Work, have inspections or tests satisfactorily completed and make good such Work.
- .3 NRC Department Representative, and or Stantec Engineer may order any part of the Work to be examined. Upon examination if such Work is found not in accordance with Contract Documents, the contractor shall correct such Work at no cost to the Owner and pay all costs of examination by the QA laboratory. If such Work is found to be in accordance with Contract Documents, the Owner shall pay cost of examination and reinstatement of sample areas.
- .4 Submit samples and/or materials required for testing, as specifically requested in the specifications. Submit with reasonable promptness and in an orderly sequence so as not to cause delay in Work.
- .5 Provide labour and facilities to obtain and handle samples and materials on site as directed by all and any staff conducting quality verification activities QA and or QC. Provide sufficient space to store and cure test samples.

4.1.3 Reports:

Submit three (3) copies of inspection and test reports to NRC Department Representative, and or Stantec Engineer. Provide copies to Subcontractor of work being inspected or tested, manufacturer or fabricator of material being inspected or tested.

4.2 INDEPENDENT INSPECTION AGENCY

4.2.1 Quality Control / Quality Assurance Consultant

- .1 An Independent QA Inspection/Testing Agencies will be engaged by NRC Department Representative under the direction of the Stantec Engineer for purpose of quality assurance of the Work. Qualifications of the QA laboratory shall be equivalent or better than the QC laboratory. All QA laboratories shall be CCIL certified and have participated in the most recent CCIL HMA correlation program. Cost of such QA services will be borne by Owner.
- .2 Provide assistance as required for executing inspection and testing, as specified or as directed.
- .3 Employment of inspection/testing agencies does not relieve Contractor of responsibility to perform Work in accordance with Contract Documents and to implement internal quality control practices.
- .4 If defects are revealed during inspection and/or testing, NRC Department Representative, and or Stantec Engineer will request additional inspection and/or testing to ascertain full degree of defect. Correct defect and irregularities as advised by NRC Department Representative, and or Stantec Engineer at no cost to NRC Department Representative, and or Stantec Engineer. Contractor shall pay all costs for retesting and reinspection including security services.

SECTION 5.0 – CASH ALLOWANCES

5.1 GENERAL

5.1.1 General

Expend each allowance as directed by the NRC Department Representative. Each cash allowance will be adjusted to actual cost as defined hereunder and Contract Amount will be amended accordingly by written order.

Progress payments for work and material authorized under cash allowance will be made in accordance with Contract terms of payment.

Carry \$10,000 cash allowance to cover the cost of re-instating defective concrete revealed after milling. It shall address severe areas only and shall be defined in a contemplated change request (CCR) submitted by the Contractor and subject to review and approval by the NRC Department Representative and or the Stantec Engineer. The cash allowance amount to be adjusted by contract change notice (CCN) at the end of the project.

National Research Council Canada Hangar U-61, Ottawa, Ontario Pavement Rehabilitation Apron Area Construction Specification
Cold Mill Removal and Repaying

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P:\2009\1042471 - Ottawa Airport Standing Offer 2006-2009\2009 Taxi Rehab and Various Repairs\PLH Rehabilitation 2009\2009 Project description and specifications PRW.doc

TP1 Amount Payable - General

- 1.1 Subject to any other provisions of the contract, Her Majesty shall pay the Contractor, at the times and in the manner hereinafter set out, the amount by which
 - 1.1.1 the aggregate of the amounts described in TP2 exceeds
 - 1.1.2 the aggregate of the amounts described in TP3

and the Contractor shall accept that amount as payment in full satisfaction for everything furnished and done by him in respect of the work to which the payment relates.

TP2 Amounts Payable to the Contractor

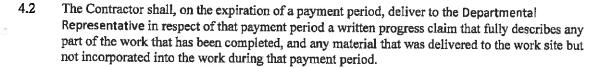
- 2.1 The amounts referred to in TP1.1.1 are the aggregate of
 - 2.1.1 the amounts referred to in the Articles of Agreement, and
 - 2.1.2 the amounts, if any, that are payable to the Contractor pursuant to the General Conditions.

TP3 Amounts Payable to Her Majesty

- 3.1 The amounts referred to in TP1.1.2 are the aggregate of the amounts, in any, that the Contractor is liable to pay Her Majesty pursuant to the contract.
- 3.2 When making any payments to the Contractor, the failure of Her Majesty to deduct an amount referred to in TP3.1 from an amount referred to in TP2 shall not be constitute a waiver of the right to do so, or an admission of lack of entitlement to do so in any subsequent payment to the Contractor.

TP4 Time of Payment

- 4.1 In these Terms of Payment
 - 4.1.1 The "payment period" means a period of 30 consecutive days or such other longer period as is agreed between the Contractor and the Departmental Representative.
 - 4.1.2 An amount is "due and payable" when it is due and payable by Her Majesty to the Contractor according to TP4.4, TP4.7 or TP4.10.
 - 4.1.3 An amount is overdue when it is unpaid on the first day following the day upon which it is due and payable.
 - 4.1.4 The "date of payment" means the date of the negotiable instrument of an amount due and payable by the Receiver General for Canada and given for payment.
 - 4.1.5 The "Bank Rate" means the discount rate of interest set by the Bank of Canada in effect at the opening of business on the date of payment.



- 4.3 The Departmental Representative shall, not later than ten days after receipt by him of a progress claim referred to in TP4.2,
 - 4.3.1 inspect the part of the work and the material described in the progress claim; and
 - 4.3.2 issue a progress report, a copy of which the Departmental Representative will give to the Contractor, that indicates the value of the part of the work and the material described in the progress claim that, in the opinion of the Departmental Representative,
 - 4.3.2.1 is in accordance with the contract, and
 - 4.3.2.2 was not included in any other progress report relating to the contract.
- 4.4 Subject to TP1 and TP4.5 Her Majesty shall, not later than 30 days after receipt by the Departmental Representative of a progress claim referred to in TP4.2, pay the Contractor
 - 4.4.1 an amount that is equal to 95% of the value that is indicated in the progress report referred to in TP4.3.2 if a labour and material payment bond has been furnished by the Contractor, or
 - 4.4.2 an amount that is equal to 90% of the value that is indicated in the progress report referred to in TP4.3.2 if a labour and material payment bond has not been furnished by the Contractor.
- 4.5 It is a condition precedent to Her Majesty's obligation under TP4.4 that the Contractor has made and delivered to the Departmental Representative.
 - 4.5.1 a statutory declaration described in TP4.6 in respect of a progress claim referred to in TP4.2,
 - 4.5.2 in the case of the Contractor's first progress claim, a construction schedule in accordance with the relevant sections of the Specifications, and
 - 4.5.3 if the requirement for a schedule is specified, an update of the said schedule at the times identified in the relevant sections of the Specifications.
- 4.6 A statutory declaration referred to in TP4.5 shall contain a deposition by the Contractor that
 - 4.6.1 up to the date of the Contractor's progress claim, the Contractor has complied with all his lawful obligations with respect to the Labour Conditions; and
 - 4.6.2 up to the date of the Contractor's immediately preceding progress claim, all lawful obligations of the Contractor to subcontractors and suppliers of material in respect of the

work under the contract have been fully discharged.

- 4.7 Subject to TP1 and TP4.8, Her Majesty shall, not later than 30 days after the date of issue of an Interim Certificate of Completion referred to in GC44.2, pay the Contractor the amount referred to in TP1 less the aggregate of
 - 4.7.1 the sum of all payments that were made pursuant to TP4.4;
 - 4.7.2 an amount that is equal to the Departmental Representative's estimate of the cost to Her Majesty or rectifying defects described in the Interim Certificate of Completion; and
 - 4.7.3 an amount that is equal to the Departmental Representative's estimate of the cost to Her Majesty of completing the parts of the work described in the Interim Certificate of Completion other than the defects referred to in TP4.7.2.
- 4.8 It is a condition precedent to Her Majesty's obligation under TP4.7 that the Contractor has made and delivered to the Departmental Representative.
 - 4.8.1 a statutory declaration described in TP4.9 in respect of an Interim Certificate of Completion referred to in GC44.2, and
 - 4.8.2 if so specified in the relevant sections of the Specifications, and update of the construction schedule referred to in TP4.5.2 and the updated schedule shall, in addition to the specified requirements, clearly show a detailed timetable that is acceptable to the Departmental Representative for the completion of any unfinished work and the correction of all defects.
- 4.9 A statutory declaration referred to in TP4.8 shall contain a deposition by the contractor that up to the date of the Interim Certificate of Completion the Contractor has
 - 4.9.1 complied with all of the Contractor's lawful obligations with respect to the Labour Conditions;
 - 4.9.2 discharged all of the Contractor's lawful obligations to the subcontractors and suppliers of material in respect of the work under the contract; and
 - 4.9.3 discharged the Contractor's lawful obligations referred to in GC14.6.
- 4.10 Subject to TP1 and TP4.11, Her Majesty shall, not later than 60 days after the date of issue of a Final Certificate of Completion referred to in GC44.1, pay the Contractor the amount referred to in TP1 less the aggregate of
 - 4.10.1 the sum of all payments that were made pursuant to TP4.4; and
 - 4.10.2 the sum of all payments that were made pursuant to TP4.7.
- 4.11 It is a condition precedent to Her Majesty's obligation under TP4.10 that the Contractor has made and delivered a statutory declaration described in TP4.12 to the Departmental Representative.



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4.12 A statutory declaration referred to in TP4.11 shall, in addition to the depositions described in TP4.9, contain a deposition by the Contractor that all of the Contractor's lawful obligations and any lawful claims against the Contractor that arose out of the performance of the contract have been discharged and satisfied.

TP5 Progress Report and Payment Thereunder Not Binding on Her Majesty

Neither a progress report referred to in TP4.3 nor any payment made by Her Majesty pursuant to these Terms of Payment shall be construed as an admission by Her Majesty that the work, material or any part thereof is complete, is satisfactory or is in accordance with the contract.

TP6 Delay in Making Payment

- Nothwithstanding GC7 any delay by Her Majesty in making any payment when it is due pursuant to these Terms of Payment shall not be a breach of the contract by Her Majesty.
- 6.2 Her Majesty shall pay, without demand from the Contractor, simple interest at the Bank Rate plus 1-1/4 per centum on any amount which is overdue pursuant to TP4.1.3, and the interest shall apply from and include the day such amount became overdue until the day prior to the date of payment except that
 - 6.2.1 interest shall not be payable or paid unless the amount referred to in TP6.2 has been overdue for more that 15 days following
 - 6.2.1.1 the date the said amount became due and payable, or
 - 6.2.1.2 the receipt by the Departmental Representative of the Statutory Declaration referred to in TP4.5, TP4.8 or TP4.11.

whichever is the later, and

6.6.2 interest shall not be payable or paid on overdue advance payments if any.

TP7 Right of Set-off

- 7.1 Without limiting any right of set-off or deduction given or implied by law or elsewhere in the contract, Her Majesty may set off any amount payable to Her Majesty by the Contractor under this contract or under any current contract against any amount payable to the Contractor under this contract.
- 7.2 For the purposes of TP7.1, "current contract" means a contract between Her Majesty and the Contractor
 - 7.2.1 under which the Contractor has an undischarged obligation to perform or supply work, labour or material, or
 - 7.2.2 in respect of which Her Majesty has, since the date of which the Articles of Agreement were made, exercised any right to take the work that is the subject of the contract out of the Contractor's hands.

TP8 Payment in Event of Termination

8.1 If the contract is terminated pursuant to GC41, Her Majesty shall pay the Contractor any amount that is lawfully due and payable to the Contractor as soon as is practicable under the circumstances.

TP9 Interest on Settled Claims

- 9.1 Her Majesty shall pay to the Contractor simple interest on the amount of a settled claim at an average Bank Rate plus 1 ¼ per centum from the date the settled claim was outstanding until the day prior to the date of payment.
- 9.2 For the purposes of TP9.1,
 - a claim is deemed to have been settled when an agreement in writing is signed by the Departmental Representative and the Contractor setting out the amount of the claim to be paid by Her Majesty and the items or work for which the said amount is to be paid.
 - 9.2.2 an "average Bank Rate" means the discount rate of interest set by the Bank of Canada in effect at the end of each calendar month averaged over the period the settled claim was outstanding.
 - 9.2.3 a settled claim is deemed to be outstanding from the day immediately following the date the said claim would have been due and payable under the contract had it not been disputed.
- 9.3 For the purposes of TP9 a claim means a disputed amount subject to negotiation between Her Majesty and the Contractor under the contract.

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GC1 Interpretation

1.1 In the contract

- 1.1.1 where reference is made to a part of the contract by means of numbers preceded by letters, the reference shall be construed to be a reference to the particular part of the contract that is identified by that combination of letters and numbers and to any other part of the contract referred to therein:
- 1.1.2 "contract" means the contract document referred to in the Articles of Agreement;
- 1.1.3 "contract security" means any security given by the Contractor to Her Majesty in accordance with the contract:
- 1.1.4 "Departmental Representative" means the officer or employee or Her Majesty who is designated pursuant to the Articles of Agreement and includes a person specially authorized by him to perform, on his behalf, any of his functions under the contract and is so designated in writing to the Contractor;
- 1.1.5 "material" includes all commodities, articles and things required to be furnished by or for the Contractor under the contract for incorporation into the work;
- 1.1.6 "Minister" includes a person acting for, or if the office is vacant, in place of the Minister and his successors in the office, and his or their lawful deputy and any of his or their representatives appointed for the purposes of the contract;
- 1.1.7 "person" includes, unless the context otherwise requires, a partnership, proprietorship, firm, joint venture, consortium and a corporation;
- 1.1.8 "plant" includes all animals, tools, implements, machinery, vehicles, buildings, structures, equipment and commodities, articles and things other than material, that are necessary for the due performance of the contract;
- 1.1.9 "subcontractor' means a person to whom the Contractor has, subject to GC4, subcontracted the whole or any part of the work;
- 1.1.10 "superintendant" means the employee of the Contractor who is designated by the Contractor to act pursuant to GC19;
- 1.1.11 "work includes, subject only to any express stipulation in the contract to the contrary, everything that is necessary to be done, furnished or delivered by the Contractor to perform the contract.
- 1.2 The headings in the contract documents, other than in the Plans and Specifications, form no part of the contract but are inserted for convenience of reference only.
- 1.3 In interpreting the contract, in the event of discrepancies or conflicts between anything in the Plans and Specifications and the General Conditions, the General Conditions govern.

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- 1.4 In interpreting the Plans and Specifications, in the event of discrepancies or conflicts between
 - 1.4.1 the Plans and Specifications, the Specifications govern;
 - 1.4.2 the Plans, the Plans drawn with the largest scale govern; and
 - 1.4.3 figured dimensions and scaled dimensions, the figured dimensions govern.

GC2 Successors and Assigns

2.1 The contract shall inure to the benefit of and be binding upon the parties hereto and their lawful heirs, executors, administrators, successors and assigns.

GC3 Assignment of Contract

3.1 The contract may not be assigned by the Contractor, either in whole or in part, without the written consent of the Minister.

GC4 Subcontracting by Contractor

- 4.1 Subject to this General Condition, the Contractor may subcontract any part of the work.
- 4.2 The Contractor shall notify the Departmental Representative in writing of his intention to subcontract.
- 4.3 A notification referred to in GC4.2 shall identify the part of the work, and the subcontractor with whom it is intended to subcontract.
- 4.4 The Departmental Representative may object to the intended subcontracting by notifying the Contractor in writing within six days of receipt by the Departmental Representative of a notification referred to in GC4.2.
- 4.5 If the Departmental Representative objects to a subcontracting pursuant to GC4.4, the Contractor shall not enter into the intended subcontract.
- The contractor shall not, without the written consent of the Departmental Representative, change a subcontractor who has been engaged by him in accordance with this General Condition.
- 4.7 Every subcontract entered into by the Contractor shall adopt all of the terms and conditions of the contract that are of general application.
- 4.8 Neither a subcontracting nor the Departmental Representative's consent to a subcontracting by the Contractor shall be construed to relieve the Contractor from any obligation under the contract or to impose any liability upon Her Majesty.

GC5 Amendments



No amendment or change in any of the provisions of the contract shall have any force or effect until it is reduced to writing.

GC6 No Implied Obligations

- No implied terms or obligations of any kind by or on behalf of Her Majesty shall arise from anything in the contract and the express covenants and agreements therein contained and made by Her Majesty are the only covenants and agreements upon which any rights against Her Majesty are to be founded.
- 6.2 The contract supersedes all communications, negotiations and agreements, either written or oral, relating to the work that were made prior to the date of the contract.

GC7 Time of Essence

7.1 Time is of the essence of the contract.

GC8 Indemnification by Contractor

- 8.1 The Contractor shall indemnify and save Her Majesty harmless from and against all claims, demand, losses, costs, damages, actions, suits, or proceedings by whomever made, brought or prosecuted and in any manner based upon, arising out of, related to, occasioned by or attributable to the activities of the Contractor, his servants, agents, subcontractors and sub-subcontractors in performing the work including an infringement or an alleged infringement of a patent of invention or any other kind of intellectual property.
- 8.2 For the purpose of GC8.1, "activities" includes any act improperly carried out, any omission to carry out an act and any delay in carrying out an act.

GC9 Indemnification by Her Majesty

- 9.1 Her Majesty shall, subject to the Crown Liability Act, the Patent Act, and any other law that affects Her Majesty's rights, powers, privileges or obligations, indemnify and save the Contractor harmless from and against all claims, demands, losses, costs, damage, actions, suits or proceedings arising out of his activities under the contract that are directly attributable to
 - 9.1.1 lack of or a defect in Her Majesty's title to the work site whether real or alleged; or
 - 9.1.2 an infringement or an alleged infringement by the Contractor of any patent of invention or any other kind of intellectual property occurring while the Contractor was performing any act for the purposes of the contract employing a model, plan or design or any other thing related to the work that was supplied by Her Majesty to the Contractor.

GC10 Members of House of Commons Not to Benefit

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10.1 As required by the Parliament of Canada Act, it is an express condition of the contract that no member of the House of Commons shall be admitted to any share of part of the contract or to any benefit arising therefrom.

GC11 Notices

- Any notice, consent, order, decision, direction or other communication, other than a notice referred to in GC11.4, that may be given to the Contractor pursuant to the contract may be given in any manner.
- Any notice, consent, order, decision, direction or other communication required to be given in writing, to any party pursuant to the contract shall, subject to GC11.4, be deemed to have been effectively given
 - 11.2.1 to the Contractor, if delivered personally to the Contractor or the Contractor's superintendent, or forwarded by mail, telex or facsimile to the Contractor at the address set out in A4.1, or
 - 11.2.2 to Her Majesty, if delivered personally to the Departmental Representative, or forwarded by mail, telex or facsimile to the Departmental Representative at the address set out in A1.2.1.
- 11.3 Any such notice, consent, order, decision, direction or other communication given in accordance with GC11.2 shall be deemed to have been received by either party
 - 11.3.1 if delivered personally, on the day that it was delivered,
 - 11.3.2 if forwarded by mail, on the earlier of the day it was received and the sixth day after it was mailed, and
 - 11.3.3 if forwarded by telex or facsimile, 24 hours after it was transmitted.
- A notice given under GC38.1.1, GC40 and GC41, if delivered personally, shall be delivered to the Contractor if the Contractor is doing business as sole proprietor or, if the Contractor is a partnership or corporation, to an officer thereof.

GC12 Material, Plant and Real Property Supplied by Her Majesty

- 12.1 Subject to GC12.2, the Contractor is liable to Her Majesty for any loss of or damage to material, plant or real property that is supplied or placed in the care, custody and control of the Contractor by Her Majesty for use in connection with the contract, whether or not that loss or damage is attributable to causes beyond the Contractor's control.
- 12.2 The Contractor is not liable to Her Majesty for any loss or damage to material, plant or real property referred to in GC12.1 if that loss or damage results from and is directly attributable to reasonable wear and tear.
- 12.3 The Contractor shall not use any material, plant or real property referred to in GC12.1 except for

the purpose of performing this contract.

- When the Contractor fails to make good any loss or damage for which he is liable under GC12.1 within a reasonable time after being required to do so by the Departmental Representative, the Departmental Representative may cause the loss or damage to be made good at the Contractor's expense, and the Contractor shall thereupon be liable to Her Majesty for the cost thereof and shall, on demand, pay to Her Majesty an amount equal to that cost.
- 12.5 The Contractor shall keep such records of all material, plant and real property referred to in GC12.1 as the Departmental Representative from time to time requires and shall satisfy the Departmental Representative, when requested, that such material, plant and real property are at the place and in the condition which they ought to be.

GC13 Material, Plant and Real Property Become Property of Her Majesty

- 13.1 Subject to GC14.7 all material and plant and the interest of the Contractor in all real property, licenses, powers and privileges purchased, used or consumed by the Contractor for the contract shall, after the time of their purchase, use or consumption be the property of Her Majesty for the purposes of the work and they shall continue to be the property of Her Majesty.
 - 13.1.1 in the case of material, until the Departmental Representative indicates that he is satisfied that it will not be required for the work, and
 - 13.1.2 in the case of plant, real property, licenses, powers and privileges, until the Departmental Representative indicates that he is satisfied that the interest vested in Her Majesty therein is no longer required for the purposes of the work.
- 13.2 Material or plant that is the property of Her Majesty by virtue of GC13.1 shall not be taken away from the work site or used or disposed of except for the purposes of the work without the written consent of the Departmental Representative.
- 13.3 Her Majesty is not liable for loss of or damage from any cause to the material or plant referred to in GC13.1 and the Contractor is liable for such loss or damage notwithstanding that the material or plant is the property of Her Majesty.

GC14 Permits and Taxes Payable

- 14.1 The Contractor shall, within 30 days after the date of the contract, tender to a municipal authority an amount equal to all fees and charges that would be lawfully payable to that municipal authority in respect of building permits as if the work were being performed for a person other than Her Majesty.
- Within 10 days of making a tender pursuant to GC14.1, the Contractor shall notify the Departmental Representative of his action and of the amount tendered and whether or not the municipal authority has accepted that amount.
- 14.3 If the municipal authority does not accept the amount tendered pursuant to GC14.1 the Contractor shall pay that amount to Her Majesty within 6 days after the time stipulated in GC14.2.

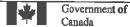
- 14.4 For the purposes of GC14.1 to GC14.3 "municipal authority" means any authority that would have jurisdiction respecting permission to perform the work if the owner were not Her Majesty.
- 14.5 Notwithstanding the residency of the Contractor, the Contractor shall pay any applicable tax arising from or related to the performance of the work under the contract.
- 14.6 In accordance with the Statutory Declaration referred to in TP4.9, a Contractor who has neither residence nor place of business in the province in which work under the contract is being performed shall provide Her Majesty with proof of registration with the provincial sales tax authorities in the said province.
- 14.7 For the purpose of the payment of any applicable tax or the furnishing of security for the payment of any applicable tax arising from or related to the performance of the work under the contract, the Contractor shall, notwithstanding the fact that all material, plant and interest of the Contractor in all real property, licenses, powers and privileges, have become the property of Her Majesty after the time of purchase, be liable, as a user or consumer, for the payment or for the furnishing of security for the payment of any applicable tax payable, at the time of the use or consumption of that material, plant or interest of the Contractor in accordance with the relevant legislation.

GC15 Performance of Work under Direction of Departmental Representative

- 15.1 The Contractor shall
 - 15.1.1 permit the Departmental Representative to have access to the work and its site at all times during the performance of the contract;
 - 15.1.2 furnish the Departmental Representative with such information respecting the performance of the contract as he may require; and
 - 15.1.3 give the Departmental Representative every possible assistance to enable the Departmental Representative to carry out his duty to see that the work is performed in accordance with the contract and to carry out any other duties and exercise any powers specially imposed or conferred on the Departmental Representative under the contract.

CG16 Cooperation with Other Contractors

- Where, in the opinion of the Departmental Representative, it is necessary that other contractors or workers with or without plant and material, be sent onto the work or its site, the Contractor shall, to the satisfaction of the Departmental Representative, allow them access and cooperate with them in the carrying out of their duties and obligation.
- 16.2 If
 - 16.2.1 the sending onto the work or its site of other contractors or workers pursuant to GC16.1 could not have been reasonably foreseen or anticipated by the Contractor when entering into the contract, and



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- 16.2.2 the Contractor incurs, in the opinion of the Departmental Representative, extra expense in complying with GC16.1, and
- 16.2.3 The Contractor has given the Departmental Representative written notice of his claim for the extra expense referred to in GC16.2.2 within 30 days of the date that the other contractors or workers were sent onto the work or its site,

Her Majesty shall pay the Contractor the cost, calculated in accordance with GC48 to GC50, of the extra labour, plant and material that was necessarily incurred.

GC17 Examination of Work

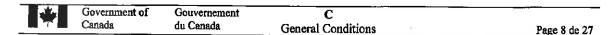
- 17.1 If, at any time after the commencement of the work but prior to the expiry of the warranty or guarantee period, the Departmental Representative has reason to believe that the work or any part thereof has not been performed in accordance with the contract, the Departmental Representative may have that work examined by an expert of his choice.
- 17.2 If, as a result of an examination of the work referred to in GC17.1, it is established that the work was not performed in accordance with the contract, then, in addition to and without limiting or otherwise affecting any of Her Majesty's rights and remedies under the contract either at law or in equity, the Contractor shall pay Her Majesty, on demand, all reasonable costs and expenses that were incurred by Her Majesty in having that examination performed.

GC18 Clearing of Site

- 18.1 The Contractor shall maintain the work and its site in a tidy condition and free from the accumulation of waste material and debris, in accordance with any directions of the Departmental Representative.
- 18.2 Before the issue of an interim certificate referred to in GC44.2, the Contractor shall remove all the plant and material not required for the performance of the remaining work, and all waste material and other debris, and shall cause the work and its site to be clean and suitable for occupancy by Her Majesty's servants, unless otherwise stipulated in the contract.
- 18.3 Before the issue of a final certificate referred to in GC44.1, the Contractor, shall remove from the work and its site all of the surplus plant and material and any waste material and other debris.
- 18.4 The Contractor's obligations described in GC18.1 to GC18.3 do not extend to waste material and other debris caused by Her Majesty's servants or contractors and workers referred to in GC16.1.

GC19 Contractor's Superintendent

- 19.1 The Contractor shall, forthwith upon the award of the contract, designate a superintendent.
- 19.2 The Contractor shall forthwith notify the Departmental Representative of the name, address and telephone number of a superintendent designate pursuant to GC19.1.



- 19.3 A superintendent designated pursuant to GC19.1 shall be in full charge of the operations of the Contractor in the performance of the work and is authorized to accept any notice, consent, order, direction, decision or other communication on behalf of the Contractor that may be given to the superintendent under the contract.
- 19.4 The Contractor shall, until the work has been completed, keep a competent superintendent at the work site during working hours.
- 19.5 The Contractor shall, upon the request of the Departmental Representative, remove any superintendent who, in the opinion of the Departmental Representative, is incompetent or has been conducting himself improperly and shall forthwith designate another superintendent who is acceptable to the Departmental Representative.
- 19.6 Subject to GC19.5, the Contractor shall not substitute a superintendent without the written consent of the Departmental Representative.
- 19.7 A breach by the Contractor of GC19.6 entitles the Departmental Representative to refuse to issue any certificate referred to in GC44 until the superintendent has returned to the work site or another superintendent who is acceptable to the Departmental Representative has been substituted.

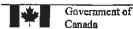
GC20 National Security

- 20.1 If the Minister is of the opinion that the work is of a class or kind that involves the national security, he may order the Contractor
 - 20.1.1 to provide him with any information concerning persons employed or to be employed by him for purposes of the contract; and
 - 20.1.2 to remove any person from the work and its site if, in the opinion of the Minister, that person may be a risk to the national security.
- 20.2 The Contractor shall, in all contracts with persons who are to be employed in the performance of the contract, make provision for his performance of any obligation that may be imposed upon him under GC19 to GC21.
- 20.3 The Contractor shall comply with an order of the Minister under GC20.1

GC21 Unsuitable Workers

21.1 The Contractor shall, upon the request of the Departmental Representative, remove any person employed by him for purposes of the contract who, in the opinion of the Departmental Representative, is incompetent or has conducted himself improperly, and the Contractor shall not permit a person who has been removed to return to the work site.

GC22 Increased or Decreased Costs



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- 22.1 The amount set out in the Articles of Agreement shall not be increased or decreased by reason of any increase or decrease in the cost of the work that is brought about by an increase or decrease in the cost of labour, plant or material or any wage adjustment arising pursuant to the Labour Conditions.
- 22.2 Notwithstanding GC22.1 and GC35, an amount set out in the Articles of Agreement shall be adjusted in the manner provided in GC22.3, if any change in a tax imposed under the Excise Act, the Excise Tax Act, the Old Age Security Act, the Customs Act, the Customs Tariff or any provincial sales tax legislation imposing a retail sales tax on the purchase of tangible personal property incorporated into Real Property
 - 22.2.1 occurs after the date of the submission by the Contractor of his tender for the contract,
 - 22.2.2 applies to material, and
 - 22.2.3 affects the cost to the Contractor of that material.
- 22.3 If a change referred to in GC22.2 occurs, the appropriate amount set out in the Articles of Agreement shall be increased or decreased by an amount equal to the amount that is established by an examination of the relevant records of the Contractor referred to in GC51 to be the increase or decrease in the cost incurred that is directly attributable to that change.
- For the purpose of GC22.2, where a tax is changed after the date of submission of the tender but public notice of the change has been given by the Minister of Finance before that date, the change shall be deemed to have occurred before the date of submission of the tender.

GC23 Canadian Labour and Material

- 23.1 The Contractor shall use Canadian labour and material in the performance of the work to the full extent to which they are procurable, consistent with proper economy and expeditious carrying out of the work.
- 23.2 Subject to GC23.1, the Contractor shall, in the performance of the work, employ labour from the locality where the work is being performed to the extent to which it is available, and shall use the offices of the Canada Employment Centres for the recruitment of workers wherever practicable.
- 23.3 Subject to GC23.1 and GC23.2, the Contractor shall, in the performance of the work, employ a reasonable proportion of persons who have been on active service with the armed forces of Canada and have been honourably discharged therefrom.

GC24 Protection of Work and Documents

24.1 The Contractor shall guard or otherwise protect the work and its site, and protect the contract, specifications, plans, drawings, information, material, plant and real property, whether or not they are supplied by Her Majesty to the Contractor, against loss or damage from any cause, and he shall not use, issue, disclose or dispose of them without the written consent of the Minister, except as may be essential for the performance of the work.



- 24.2 If any document or information given or disclosed to the Contractor is assigned a security rating by the person who gave or disclosed it, the Contractor shall take all measures directed by the Departmental Representative to be taken to ensure the maintenance of the degree of security that is ascribed to that rating.
- 24.3 The Contractor shall provide all facilities necessary for the purpose of maintaining security, and shall assist any person authorized by the Minister to inspect or to take security measures in respect of the work and its site.
- 24.4 The Departmental Representative may direct the Contractor to do such things and to perform such additional work as the Departmental Representative considers reasonable and necessary to ensure compliance with or to remedy a breach of GC24.1 to GC24.3.

GC25 Public Ceremonies and Signs

- The Contractor shall not permit any public ceremony in connection with the work without the prior consent of the Minister.
- The Contractor shall not erect or permit the erection of any sign or advertising on the work or its site without the prior consent of the Departmental Representative.

GC26 Precautions against Damage, Infringement of Rights, Fire, and Other Hazards

- 26.1 The Contractor shall, at his own expense, do whatever is necessary to ensure that
 - 26.1.1 no person, property, right, easement or privilege is injured, damaged or infringed by reasons of the Contractor's activities in performing the contract;
 - 26.1.2 pedestrian and other traffic on any public or private road or waterway is not unduly impeded, interrupted or endangered by the performance or existence of the work or plant;
 - 26.1.3 fire hazards in or about the work or its site are eliminated and, subject to any direction that may be given by the Departmental Representative, any fire is promptly extinguished;
 - 26.1.4 the health and safety of all persons employed in the performance of the work is not endangered by the method or means of its performance;
 - 26.1.5 adequate medical services are available to all persons employed on the work or its site at all times during the performance of the work;
 - 26.1.6 adequate sanitation measures are taken in respect of the work and its site; and
 - 26.1.7 all stakes, buoys and marks placed on the work or its site by or under the authority of the Departmental Representative are protected and are not removed, defaced, altered or destroyed.
- 26.2 The Departmental Representative may direct the Contractor to do such things and to perform such additional work as the Departmental Representative considers reasonable and necessary to ensure

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compliance with or to remedy a breach of GC26.1.

26.3 The Contractor shall, at his own expense, comply with a direction of the Departmental Representative made under GC26.2.

GC27 Insurance

- 27.1 The Contractor shall, at his own expense, obtain and maintain insurance contracts in respect of the work and shall provide evidence thereof to the Departmental Representative in accordance with the requirements of the Insurance Conditions "E".
- 27.2 The insurance contracts referred to in GC27.1 shall
 - 27.2.1 be in a form, of the nature, in the amounts, for the periods and containing the terms and conditions specified in Insurance Conditions "E", and
 - 27.2.2 provide for the payment of claims under such insurance contracts in accordance with GC28.

GC28 Insurance Proceeds

- 28.1 In the case of a claim payable under a Builders Risk/Installation (All Risks) insurance contract maintained by the Contractor pursuant to GC27, the proceeds of the claim shall be paid directly to Her Majesty, and
 - 28.1.1 the monies so paid shall be held by Her Majesty for the purposes of the contract, or
 - 28.1.2 if Her Majesty elects, shall be retained by Her Majesty, in which event they vest in Her Majesty absolutely.
- 28.2 In the case of a claim payable under a General Liability insurance contract maintained by the Contractor pursuant to GC27, the proceeds of the claim shall be paid by the insurer directly to the claimant.
- 28.3 If an election is made pursuant to GC28.1, the Minister may cause an audit to be made of the accounts of the Contractor and of Her Majesty in respect of the part of the work that was lost, damaged or destroyed for the purpose of establishing the difference, if any, between
 - 28.3.1 the aggregate of the amount of the loss or damage suffered or sustained by Her Majesty, including any cost incurred in respect of the clearing and cleaning of the work and its site and any other amount that is payable by the Contractor to Her Majesty under the contract, minus any monies retained pursuant to GC28.12, and
 - 28.3.2 the aggregate of the amounts payable by Her Majesty to the Contractor pursuant to the contract up to the date of the loss or damage.
- A difference that is established pursuant to GC28.3 shall be paid forthwith by the party who is determined by the audit to be the debtor to the party who is determined by the audit to be the

creditor.

- When payment of a deficiency has been made pursuant to GC28.4, all rights and obligations of Her Majesty and the Contractor under the contract shall, with respect only to the part of the work that was the subject of the audit referred to in GC28.3, be deemed to have been expended and discharged.
- 28.6 If an election is not made pursuant to GC28.1.2 the Contractor shall, subject to GC28.7, clear and clean the work and its site and restore and replace the part of the work that was lost, damaged or destroyed at his own expense as if that part of the work had not yet been performed.
- 28.7 When the Contractor clears and cleans the work and its site and restores and replaces the work referred to in GC 28.6, Her Majesty shall pay him out of the monies referred to in GC28.1 so far as they will thereunto extend.
- 28.8 Subject to GC28.7, payment by Her Majesty pursuant to GC28.7 shall be made in accordance with the contract but the amount of each payment shall be 100% of the amount claimed notwithstanding TP4.4.1 and TP4.4.2.

GC29 Contract Security

- 29.1 The Contractor shall obtain and deliver contract security to the Departmental Representative in accordance with the provisions of the Contract Security Conditions.
- 29.2 If the whole or a part of the contract security referred to in GC29.1 is in the form of a security deposit, it shall be held and disposed of in accordance with GC43 and GC45.
- 29.3 If a part of the contract security referred to in GC29.1 is in the form of a labour and material payment bond, the Contractor shall post a copy of that bond on the work site.

GC30 Changes in the Work

- 30.1 Subject o GC5, the Departmental Representative may, at any time before he issues his Final Certificate of Completion,
 - 30.1.1 order work or material in addition to that provided for in the Plans and Specifications; and
 - 30.1.2 delete or change the dimensions, character, quantity, quality, description, location or position of the whole or any part of the work or material proved for in the Plans and Specifications or in any order made pursuant to GC30.1.1.

if that additional work or material, deletion, or change is, in his opinion, consistent with the general intent of the original contract.

30.2 The Contractor shall perform the work in accordance with such orders, deletions and changes that are made by the Departmental Representative pursuant to GC30.1 from time to time as if they had appeared in and been part of the Plans and Specifications.

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- 30.3 The Departmental Representative shall determine whether or not anything done or omitted by the Contractor pursuant to an order, deletion or change referred to in GC30.1 increased or decreased the cost of the work to the Contractor.
- 30.4 If the Departmental Representative determines pursuant to GC30.3 that the cost of the work to the Contractor has been increased, Her Majesty shall pay the Contractor the increased cost that the Contractor necessarily incurred for the additional work calculated in accordance with GC49 or GC50.
- 30.5 If the Departmental Representative determines pursuant to GC303.3 that the cost of the work to the Contractor has been decreased, Her Majesty shall reduce the amount payable to the Contractor under the contract by an amount equal to the decrease in the cost caused by the deletion or change referred to in GC30.1.2 and calculated in accordance with GC49.
- 30.6 GC30.3 to GC30.5 are applicable only to a contract or a portion of a contract for which a Fixed Price Arrangement is stipulated in the contract.
- An order, deletion or change referred to in GC30.1 shall be in writing, signed by the Departmental Representative and given to the Contractor in accordance with GC11.

GC31 Interpretation of Contract by Departmental Representative

- 31.1 If, ar any time before the Departmental Representative has issued a Final Certificate of Completion referred to in GC44.1, any question arises between the parties about whether anything has been done as required by the contract or about what the Contractor is required by the contract to do, and, in particular but without limiting the generality of the foregoing, about
 - 31.1.1 the meaning of anything in the Plans and Specification,
 - 31.1.2 the meaning to be given to the Plans and Specifications in case of any error therein, omission therefrom, or obscurity or discrepancy in their working or intention,
 - 31.1.3 whether or not the quality or quantity of any material or workmanship supplied or proposed to be supplied by the Contractor meets the requirements of the contract,
 - 31.1.4 whether or not the labour, plant or material provided by the Contractor for performing the work and carrying out the contract are adequate to ensure that the work will be performed in accordance with the contract and that the contract will be carried out in accordance with its terms,
 - 31.1.5 what quantity of any kind of work has been completed by the Contractor, or
 - 31.1.6 the timing and scheduling of the various phases of the performance of the work,

the question shall be decided by the Departmental Representative whose decision shall be final and conclusive in respect of the work.

31.2 The Contractor shall perform the work in accordance with any decisions of the Departmental

Representative that are made under GC31.1 and in accordance with any consequential directions given by the Departmental Representative.

GC32 Warranty and Rectification of Defects in Work

- Without restricting any warranty or guarantee implied or imposed by law or contained in the contract documents, the Contractor shall, at his own expense,
 - 32.1.1 rectify and make good any defect or fault that appears in the work or comes to the attention of the Minister with respect to those parts of the work accepted in connection with the Interim Certificate of Completion referred to GC44.2 within 12 months from the date of the Interim Certificate of Completion;
 - 32.1.2 rectify and make good any defect or fault that appears in or comes to the attention of the Minister in connection with those parts of the work described in the Interim Certificate of Completion referred to in GC44.2 within 12 months from the date of the Final Certificate of Completion referred to in GC44.1.
- 32.2 The Departmental Representative may direct the Contractor to rectify and make good any defect or fault referred to in GC32.1 or covered by any other expressed or implied warranty or guarantee.
- 32.3 A direction referred to in GC32.2 shall be in writing, may include a stipulation in respect of the time within which a defect or fault is required to be rectified and made good by the Contractor, and shall be given to the Contractor in accordance with GC11.
- 32.4 The Contractor shall rectify and make good any defect or fault described in a direction given pursuant to GC32.2 within the time stipulated therein.

GC33 Non-Compliance by Contractor

- 33.1 If the Contractor fails to comply with any decision or direction given by the Departmental Representative pursuant to GC18, GC24, GC26, GC31 or GC32, the Departmental Representative may employ such methods as he deems advisable to do that which the Contractor failed to do.
- The Contractor shall, on demand, pay Her Majesty an amount that is equal to the aggregate of all cost, expenses and damage incurred or sustained by Her Majesty by reason of the Contractor's failure to comply with any decision or direction referred to in GC33.1, including the cost of any methods employed by the Departmental Representative pursuant to GC33.1.

GC34 Protesting Departmental Representative's Decisions

- 34.1 The Contractor may, within ten days after the communication to him of any decision or direction referred to in GC30.3 or GC33.1, protest that decision or direction.
- 34.2 A protest referred to in GC34.1 shall be in writing, contain full reasons for the protest, be signed

by the Contractor and be given to Her Majesty by delivery to the Departmental Representative.

- 34.3 If the Contractor gives a protest pursuant to GC34.2, any compliance by the Contractor with the decision or direction that was protested shall not be construed as an admission by the Contractor of the correctness of that decision or direction, or prevent the Contractor from taking whatever action he considers appropriate in the circumstances.
- 34.4 The giving of a protest by the Contractor pursuant to GC34.2 shall not relieve him from complying with the decision or direction that is the subject of the protest.
- 34.5 Subject to GC34.6, the Contractor shall take any action referred to in GC34.3 within three months after the date that a Final Certificate of Completion is issued under GC44.1 and not afterwards.
- 34.6 The Contractor shall take any action referred to in GC34.3 resulting from a direction under GC32 within three months after the expiry of a warranty or guarantee period and not afterwards.
- 34.7 Subject to GC34.8, if Her Majesty determines that the Contractor's protest is justified, Her Majesty shall pay the Contractor the cost of the additional labour, plant and material necessarily incurred by the Contractor in carrying out the protested decision or direction.
- 34.8 Costs referred to in GC34.7 shall be calculated in accordance with GC48 to GC50.

GC35 Changes in Soil Conditions and Neglect or Delay by Her Majesty

- 35.1 Subject to GC35.2 no payment, other than a payment that is expressly stipulated in the contract, shall be made by Her Majesty to the Contractor for any extra expense or any loss or damage incurred or sustained by the Contractor.
- 35.2 If the Contractor incurs or sustains any extra expense or any loss or damage that is directly attributable to
 - 35.2.1 a substantial difference between the information relating to soil conditions at the work site that is contained in the Plans and Specifications or other documents supplied to the Contractor for his use in preparing his tender or a reasonable assumption of fact based thereon made by the Contractor, and the actual soil conditions encountered by the Contractor at the work site during the performance of the contract, or
 - 35.2.2 any neglect or delay that occurs after the date of the contract on the part of Her Majesty in providing any information or in doing any act that the contract either expressly requires Her Majesty to do or that would ordinarily be done by an owner in accordance with the usage of the trade,

he shall, within ten days of the date the actual soil conditions described in GC35.2.1 were encountered or the neglect or delay described in GC35.2.2 occurred, give the Departmental Representative written notice of his intention to claim for that extra expense or that loss or damage.

When the Contractor has given a notice referred to in GC35.2, he shall give the Departmental Representative a written claim for extra expense or loss or damage within 30 days of the date that



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a Final Certificate of Completion referred to in GC44.1 is issued and not afterwards.

- A written claim referred to in GC35.3 shall contain a sufficient description of the facts and circumstances of the occurrence that is the subject of the claim to enable the Departmental Representative to determine whether or not the claim is justified and the Contractor shall supply such further and other information for that purpose as the Departmental Representative requires from time to time.
- 35.5 If the Departmental Representative determines that a claim referred to in GC35.3 is justified, Her Majesty shall make an extra payment to the Contractor in an amount that is calculated in accordance with GC47 to GC50.
- 35.6 If, in the opinion of the Departmental Representative, an occurrence described in GC35.2.1 results in a savings of expenditure by the Contractor in performing the contract, the amount set out in the Articles of Agreement shall, subject to GC35.7, be reduced by an amount that is equal to the saving.
- 35.7 The amount of the saving referred to in GC35.6 shall be determined in accordance with GC47 to GC49.
- 35.8 If the Contractor fails to give a notice referred to in GC35.2 and a claim referred to in GC35.3 within the times stipulated, an extra payment shall not be made to him in respect of the occurrence.

GC36 Extension of Time

- 36.1 Subject to GC36.2, the Departmental Representative may, on the application of the Contractor made before the day fixed by the Articles of Agreement for completion of the work or before any other date previously fixed under this General Condition, extend the time for its completion by fixing a new date if, in the opinion of the Departmental Representative, causes beyond the control of the Contractor have delayed its completion.
- An application referred to in GC36.1 shall be accompanied by the written consent of the bonding company whose bond forms part of the contract security.

GC37 Assessments and Damages for Late Completion

- 37.1 For the purposes of this General Condition
 - 37.1.1 the work shall be deemed to be completed on the date that an Interim Certificate of Completion referred to in GC44.2 is issued, and
 - 37.1.2 "period of delay" means the number of days commencing on the day fixed by the Articles of Agreement for completion of the work and ending on the day immediately preceding the day on which the work is completed but does not include any day within a period of extension granted pursuant to GC36.1, and any other day on which, in the opinion of the Departmental Representative, completion of the work was delayed for reasons beyond the control of the Contractor.

- 37.2 If the Contractor does not complete the work by the day fixed for its completion by the Articles of Agreement but completes it thereafter, the Contractor shall pay Her Majesty an amount equal to the aggregate of
 - 37.2.1 all salaries, wages and travelling expenses incurred by Her Majesty in respect of persons overseeing the performance of the work during the period of delay;
 - 37.2.2 the cost incurred by Her Majesty as a result of the inability to use the completed work for the period of delay; and
 - 37.2.3 all other expenses and damages incurred or sustained by Her Majesty during the period of delay as a result of the work not being completed by the day fixed for its completion.
- 37.3 The Minister may waive the right of Her Majesty to the whole or any part of the amount payable by the Contractor pursuant to GC37.2 I, in the opinion of the Minister, it is in the public interest to do so.

GC38 Taking the Work Out of the Contractor's Hands

- The Minister may, at his sole discretion, by giving a notice in writing to the Contractor in accordance with GC11, take all or any part of the work out of the Contractor's hands, and may employ such means as he sees fit to have the work completed if the Contractor
 - 38.1.1 Has not, within six days of the Minister or the Departmental Representative giving notice to the Contractor in writing in accordance with GC11, remedied any delay in the commencement or any default in the diligent performance of the work to the satisfaction of the Departmental Representative;
 - 38.1.2 has defaulted in the completion of any part of the work within the time fixed for its completion by the contract;
 - 38.1.3 has become insolvent;
 - 38.1.4 has committed an act of bankruptcy;
 - 38.1.5 has abandoned the work;
 - 38.1.6 has made an assignment of the contract without the consent required by GC3.1; or
 - 38.1.7 has otherwise failed to observe or perform any of the provisions of the contract.
- 38.2 If the whole or any part of the work is taken out of the Contractor's hands pursuant to GC38.1,
 - 38.2.1 the Contractor's right to any further payment that is due or accruing due under the contract is, subject only to GC38.4, extinguished, and
 - 38.2.2 the Contractor is liable to pay Her Majesty, upon demand, an amount that is equal to the amount of all loss and damage incurred or sustained by Her Majesty in respect of the

Contractor's failure to complete the work.

- 38.3 If the whole or any part of the work that is taken out of the Contractor's hands pursuant to GC38.1 is completed by Her Majesty, the Departmental Representative shall determine the amount, if any, of the holdback or a progress claim that had accrued and was due prior to the date on which the work was taken out of the Contractor's hands and that is not required for the purposes of having the work performed or of compensating Her Majesty for any other loss or damage incurred or sustained by reason of the Contractor's default.
- Her Majesty may pay the Contractor the amount determined not to be required pursuant to GC38.3.

GC39 Effect of Taking the Work Out of the Contractor's Hands

- 39.1 The taking of the work or any part thereof out of the Contractor's hands pursuant to GC38 does not operate so as to relieve or discharge him from any obligation under the contract or imposed upon him by law except the obligation to complete the performance of that part of the work that was taken out of his hands.
- 39.2 If the work or any part thereof is taken out of the Contractor's hands pursuant to GC38, all plant and material and the interest of the Contractor is all real property, licenses, powers and privileges acquired, used or provided by the Contractor under the contract shall continue to be the property of Her Majesty without compensation to the Contractor.
- When the Departmental Representative certifies that any plant, material, or any interest of the Contractor referred to in GC39.2 is no longer required for the purposes of the work, or that it is not in the interest of Her Majesty to retain that plant, material or interest, it shall revert to the Contractor.

G40 Suspension of Work by Minister

- 40.1 The Minister may, when in his opinion it is in the public interest to do so, require the Contractor to suspend performance of the work either for a specified or an unspecified period by giving a notice of suspension in wiring to the Contractor in accordance with GC11.
- When a notice referred to in GC40.1 is received by the Contractor in accordance with GC11, he shall suspend all operations in respect of the work except those that, in the opinion of the Departmental Representative, are necessary for the care and preservation of the work, plant and material.
- 40.3 The Contractor shall not, during a period of suspension, remove any part of the work, plant or material from its site without the consent of the Departmental Representative.
- 40.4 If a period of suspension is 30 days or less, the Contractor shall, upon the expiration of that period, resume the performance of the work and he is entitled to be paid the extra cost, calculated in accordance with GC48 to GC50, of any labour, plant and material necessarily incurred by him as a result of the suspension.



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- 40.5 If, upon the expiration of a period of suspension of more than 30 days, the Minister and the Contractor agree that the performance of the work will be continued by the Contractor, the Contractor shall resume performance of the work subject to any terms and conditions agreed upon by the Minister and the Contractor.
- 40.6 If, upon the expiration of a period of suspension of more than 30 days, the Minister and the Contractor do not agree that performance of the work will be continued by the Contractor or upon the terms and conditions under which the Contractor will continue the work, the notice of suspension shall be deemed to be a notice of termination pursuant to GC41.

GC41 Termination of Contract

- 41.1 The Minister may terminate the contract at any time by giving a notice of termination in writing to the Contractor in accordance with GC11.
- When a notice referred to in GC41.1 is received by the Contractor in accordance with GC11, he shall, subject to any conditions stipulated in the notice, forthwith cease all operations in performance of the contract.
- 41.3 If the contract is terminated pursuant to GC41.1, Her Majesty shall pay the Contractor, subject to GC41.4, an amount equal to
 - 41.3.1 the cost to the contractor of all labour, plant and material supplied by him under the contract up to the date of termination in respect of a contract or part thereof for which a Unit Price Arrangement is stipulated in the contract, or

41.3.2 the lesser of

- 41.3.2.1 an amount, calculated in accordance with the Terms and Payment, that would have been payable to the Contractor had he completed the work, and
- 41.3.2.2 an amount that is determined to be due to the Contractor pursuant to GC49 in respect of a contract or part thereof for which a Fixed Price Arrangement is stipulated in the contract

less the aggregate of all amounts that were paid to the Contractor by Her Majesty and all amounts that are due to Her Majesty from the Contractor pursuant to the contract.

41.4 If Her Majesty and the Contractor are unable to agree about an amount referred to in GC41.3 that amount shall be determined by the method referred to in GC50.

GC42 Claims Against and Obligations of the Contractor or Subcontractor

42.1 Her Majesty may, in order to discharge lawful obligations of and satisfy claims against the Contractor or a subcontractor arising out of the performance of the contract, pay any amount that is due and payable to the Contractor pursuant to the contract directly to the obligees of and the claimants against the Contractor or the subcontractor but such amount if any, as is paid by Her Majesty, shall not exceed that amount which the Contractor would have been obliged to pay to

such claimant had the provisions of the Provincial or Territorial lien legislation, or, in the Province of Quebec, the law relating to privileges, been applicable to the work. Any such claimant need not comply with the provisions of such legislation setting out the steps by way of notice, registration or otherwise as might have been necessary to preserve or perfect any claim for lien or privilege which claimant might have had;

- 42.2 Her Majesty will not make any payment as described in GC42.1 unless and until that claimant shall have delivered to Her Majesty:
 - 42.2.1 a binding and enforceable Judgment or Order of a court of competent jurisdiction setting forth such amount as would have been payable by the Contractor to the claimant pursuant to the provisions of the applicable Provincial or Territorial lien legislation, or, in the Province of Quebec, the law relating to privileges, had such legislation been applicable to the work; or
 - 42.2.2 a final and enforceable award of an arbitrator setting forth such amount as would have been payable by the Contractor to the claimant pursuant to the provisions of the applicable Provincial or Territorial lien legislation, or, in the Province of Quebec, the law relating to privileges, had such legislation been applicable to the work; or
 - 42.2.3 the consent of the Contractor authorizing a payment.

For the purposes of determining the entitlement of a claimant pursuant to GC42.2.1 and GC42.2.2, the notice required by GC42.8 shall be deemed to replace the registration or provision of notice after the performance of work as required by any applicable legislation and no claim shall be deemed to have expired, become void or unenforceable by reason of the claimant not commencing any action within the time prescribed by any applicable legislation.

- 42.3 The Contractor shall, by the execution of his contract, be deemed to have consented to submit to binding arbitration at the request of any claimant those questions that need be answered to establish the entitlement of the claimant to payment pursuant to the provisions of GC42.1 and such arbitration shall have as parties to it any subcontractor to whom the claimant supplied material, performed work or rented equipment should such subcontractor wish to be adjoined and the Crown shall not be a party to such arbitration and, subject to any agreement between the Contractor and the claimant to the contrary, the arbitration shall be conducted in accordance with the Provincial or Territorial legislation governing arbitration applicable in the Province or Territory in which the work is located.
- A payment made pursuant to GC42.1 is, to the extent of the payment, a discharge of Her Majesty's liability to the Contractor under the contract and may be deducted from any amount payable to the Contractor under the contract.
- 42.5 To the extent that the circumstances of the work being performed for Her Majesty permit, the Contractor shall comply with all laws in force in the Province or Territory where the work is being performed relating to payment period, mandatory holdbacks, and creation and enforcement of mechanics' liens, builders' liens or similar legislation or in the Province of Quebec, the law relating to privileges.
- 42.6 The Contractor shall discharge all his lawful obligations and shall satisfy all lawful claims against him arising out of the performance of the work at least as often as the contract requires Her

Majesty to pay the Contractor.

- 42.7 The Contractor shall, whenever requested to do so by the Departmental Representative, make a statutory declaration deposing to the existence and condition of any obligations and claims referred to in GC42.6.
- 42.8 GC42.1 shall only apply to claims and obligations
 - 42.8.1 the notification of which has been received by the Departmental Representative in writing before payment is made to the Contractor pursuant to TP4.10 and within 120 days of the date on which the claimant
 - 42.8.1.1 should have been paid in full under the claimant's contract with the Contractor or subcontractor where the claim is for money that was lawfully required to be held back from the claimant; or
 - 42.8.1.2 performed the last of the services, work or labour, or furnished the last of the material pursuant to the claimant's contract with the Contractor or subcontractor where the claim is not for money referred to in GC42.8.1.1, and
 - 42.8.2 the proceedings to determine the right to payment of which, pursuant to GC42.2. shall have commenced within one year from the date that the notice referred to in GC42.8.1 was received by the Departmental Representative, and

the notification required by GC42.8.1 shall set forth the amount claimed to be owing and the person who by contract is primarily liable.

- 42.9 Her Majesty may, upon receipt of a notice of claim under GC42.8.1, withhold from any amount that is due and payable to the Contractor pursuant to the contract the full amount of the claim or any portion thereof.
- 42.10 The Departmental Representative shall notify the Contractor in writing of receipt of any claim referred to in GC42.8.1 and of the intention of Her Majesty to withhold funds pursuant to GC42.9 and the Contractor may, at any time thereafter and until payment is made to the claimant, be entitled to post, with Her Majesty, security in a form acceptable to Her Majesty in an amount equal to the value of the claim, the notice of which is received by the Departmental Representative and upon receipt of such security Her Majesty shall release to the Contractor any funds which would be otherwise payable to the Contractor, that were withheld pursuant to the provisions of GC42.9 in respect of the claim of any claimant for whom the security stands.

GC43 Security Deposit - Forfeiture or Return

- 43.1 If
 - 43.1.1 the work is taken out of the Contractor's hands pursuant to GC38,
 - 43.1.2 the contract is terminated pursuant to GC41, or
 - 43.1.3 the Contractor is in breach of or in default under the contract,

Her Majesty may convert the security deposit, if any, to Her own use.

- 43.2 If Her Majesty converts the contract security pursuant to GC43.1, the amount realized shall be deemed to be an amount due from Her Majesty to the Contractor under the contract.
- 43.3 Any balance of an amount referred to in GC43.2 that remains after payment of all losses, damage and claims of Her Majesty and others shall be paid by Her Majesty to the Contractor if, in the opinion of the Departmental Representative, it is not required for the purposes of the contract.

GC44 Departmental Representative's Certificates

- 44.1 On the date that
 - 44.1.1 the work has been completed, and
 - 44.1.2 the Contractor has complied with the contract and all orders and directions made pursuant thereto,

both to the satisfaction of the Departmental Representative, the Departmental Representative shall issue a Final Certificate of Completion to the Contractor.

- 44.2 If the Departmental Representative is satisfied that the work is substantially complete he shall, at any time before he issues a certificate referred to in GC44.1, issue an Interim Certificate of Completion to the Contractor, and
 - 44.2.1 for the purposes of GC44.2 the work will be considered to be substantially complete,
 - 44.2.1.1 when the work under the contract or a substantial part thereof is, in the opinion of the Departmental Representative, ready for use by Her Majesty or is being used for the purpose intended; and
 - 44.2.1.2 when the work remaining to be done under the contract is, in the opinion of the Departmental Representative, capable of completion or correction at accost of not more that
 - 44.2.1.2.1 -3% of the first \$500,000, and
 - 44.2.1.2.2 -2% of the next \$500,000, and
 - 44.2.1.2.3 -1% of the balance

of the value of the contract at the time this cost is calculated.

44.3 For the sole purpose of GC44.2.1.2, where the work or a substantial part thereof is ready for use or is being used for the purposes intended and the remainder of the work or a part thereof cannot be completed by the time specified in A2.1, or as amended pursuant to GC36, for reasons beyond the control of the Contractor or where the Departmental Representative and the Contractor agree not to complete a part of the work within the specified time, the cost of that part of the work



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which was either beyond the control of the Contractor to complete or the Departmental Representative and the Contractor have agreed not to complete by the time specified shall be deducted from the value of the contract referred to GC44.2.1.2 and the said cost shall not form part of the cost of the work remaining to be done in determining substantial completion.

- 44.4 An Interim Certificate of Completion referred to in GC44.2 shall describe the parts of the work not completed to the satisfaction of the Departmental Representative and all things that must be done by the Contractor
 - 44.4.1 before a Final Certificate of Completion referred to in GC44.1 will be issued, and
 - 44.4.2 before the 12-month period referred to in GC32.1.2 shall commence for the said parts and all the said things.
- The Departmental Representative may, in addition to the parts of the work described in an Interim Certificate of Completion referred to in GC44.2, require the Contractor to rectify any other parts of the work not completed to his satisfaction and to do any other things that are necessary for the satisfactory completion of the work.
- 44.6 If the contract or a part thereof is subject to a Unit Price Arrangement, the Departmental Representative shall measure and record the quantities of labour, plant and material, performed, used and supplied by the Contractor in performing the work and shall, at the request of the Contractor, inform him of those measurements.
- 44.7 The Contractor shall assist and co-operate with the Departmental Representative in the performance of his duties referred to in GC44.6 and shall be entitled to inspect any record made by the Departmental Representative pursuant to GC44.6.
- 44.8 After the Departmental Representative has issued a Final Certificate of Completion referred to in GC44.1, he shall, if GC44.6 applies, issue a Final Certificate of Measurement.
- 44.9 A Final Certificate of Measurement referred to in GC44.8 shall
 - 44.9.1 contain the aggregate of all measurements of quantities referred to in GC44.6, and
 - 44.9.2 be binding upon and conclusive between Her Majesty and the Contractor as to the quantities referred to therein.

GC45 Return of Security Deposit

- After an Interim Certificate of Completion referred to in GC44.2 has been issued, Her Majesty shall, if the Contractor is not in breach of or in default under the contract, return to the Contractor all or any part of the security deposit that, in the opinion of the Departmental Representative, is not required for the purposes of the contract.
- 45.2 After a Final Certificate of Completion referred to in GC44.1 has been issued, Her Majesty shall return to the Contractor the remainder of any security deposit unless the contract stipulates otherwise.

45.3 If the security deposit was paid into the Consolidated Revenue Fund of Canada, Her Majesty shall pay interest thereon to the Contractor at a rate established from time to time pursuant to section 21(2) of the Financial Administration Act.

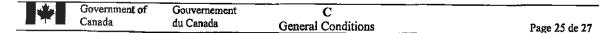
GC46 Clarification of Terms in GC47 to GC50

- 46.1 For the purposes of GC47 to GC50,
 - 46.1.1 "Unit Price Table" means the table set out in the Articles of Agreement, and
 - 46.1.2 "plant" does not include tools customarily provided by a tradesman in practicing his trade.

GC47 Additions or Amendments to Unit Price Table

- Where a Unit Price Arrangement applies to the contract or a part thereof the Departmental Representative and the Contractor may, by an agreement in writing,
 - 47.1.1 add classes of labour or material, and units of measurement, prices per unit and estimated quantities to the Unit Price Table if any labour, plant or material that is to be included in the Final Certificate of Measurement referred to in GC44.8 is not included in any class of labour, plant or material set out in the Unit Price Table; or
 - 47.1.2 subject to GC47.2 and GC47.3, amend a price set out in the Unit Price Table for any class of labour, plant or material included therein if the Final Certificate of Measurement referred to in GC44.8 shows or is expected to show that the total quantity of that class of labour, plant or material actually performed, used or supplied by the Contractor in performing the work is
 - 47.1.2.1 less than 85% of that estimated total quantity, or
 - 47.1.2.2 in excess of 115% of that estimated total quantity.
- In no event shall the total cost of an item set out in the Unit Price Table that has been amended pursuant to GC47.1.2.1 exceed the amount that would have been payable to the Contractor had the estimated total quantity actually been performed, used or supplied.
- 47.3 An amendment that is made necessary by GC47.1.2.2 shall apply only to the quantities that are in excess of 115%.
- 47.4 If the Departmental Representative and the Contractor do not agree as contemplated in GC47.1, the Departmental Representative shall determine the class and the unit of measurement of the labour, plant or material and, subject to GC47.2 and GC47.3, the price per unit therefore shall be determined in accordance with GC50.

GC48 Determination of Cost - Unit Price Table



Whenever, for the purposes of the contract, it is necessary to determine the cost of labour, plant or material, it shall be determined by multiplying the quantity of that labour, plant or material expressed in the unit set out in column 3 of the Unit Price Table by the price of that unit set out in column 5 of the Unit Price Table.

GC49 Determination of Cost - Negotiation

- 49.1 If the method described in GC48 cannot be used because the labour, plant or material is of a kind or class that is not set out in the Unit Price Table, the cost of that labour, plant or material for the purposes of the contract shall be the amount agreed upon from time to time by the Contractor and the Departmental Representative.
- 49.2 For the purposes of GC49.1, the Contractor shall submit to the Departmental Representative any necessary cost information requested by the Departmental Representative in respect of the labour, plant and material referred to in GC49.1

GC50 Determination of Cost – Failing Negotiation

- 50.1 If the methods described in GC47, GC48 or GC49 fail for any reason to achieve a determination of the cost of labour, plant and material for the purposes referred to therein, that cost shall be equal to the aggregate of
 - 50.1.1 all reasonable and proper amounts actually expended or legally payable by the Contractor in respect of the labour, plant and material that falls within one of the classes of expenditure described in GC50.2 that are directly attributable to the performance of the contract,
 - 50.1.2 an allowance for profit and all other expenditures or costs, including overhead, general administration cost, financing and interest charges, and every other cost, charge and expenses, but not including those referred to in GC50.1.1 or GC50.1.3 or a class referred to in GC50.2, in an amount that is equal to 10% of the sum of the expenses referred to in GC50.1.1, and
 - 50.1.3 interest on the cost determined under GC50.1.1 and GC50.1.2, which interest shall be calculated in accordance with TP9,

provide that the total cost of an item set out n the Unit Price Table that is subject to the provisions of GC47.1.2.1 does not exceed the amount that would have been payable to the Contractor had the estimated total quantity of the said item actually be performed, used or supplied.

- For purposes of GC50.1.1 the classes of expenditure that may be taken into account in determining the cost of labour, plant and material are,
 - 50.2.1 payments to subcontractors;
 - 50.2.2 wages, salaries and travelling expenses of employees of the Contractor while they are actually and properly engaged on the work, other than wages, salaries, bonuses, living

and travelling expenses of personnel of the Contractor generally employed at the head office or at a general office of the Contractor unless they are engaged at the work site with the approval of the Departmental Representative,

- 50.2.3 assessments payable under any statutory authority relating to workmen's compensation, unemployment insurance, pension plan or holidays with pay;
- 50.2.4 rent that is paid for plant or an amount equivalent of the said rent if the plant is owned by the Contractor that is necessary for and used in the performance of the work, if the rent of the equivalent amount is reasonable and use of that plant has been approved by the Departmental Representative;
- 50.2.5 payments for maintaining and operating plant necessary for and used in the performance of the work, and payments for effecting such repairs thereto as, in the opinion of the Departmental Representative, are necessary to the proper performance of the contract other than payments for any repairs to the plant arising out of defects existing before its allocation to the work;
- 50.2.6 payments for material that is necessary for and incorporated in the work, or that is necessary for and consumed in the performance of the contract;
- 50.2.7 payments for preparation, delivery, handling, erection, installation, inspection protection and removal of the plant and material necessary for and used in the performance of the contract; and
- 50.2.8 any other payments made by the Contractor with the approval of the Departmental Representative that are necessary for the performance of the contract.

GC51 Records to be kept by Contractor

51.1 The Contractor shall

- 51.1.1 maintain full records of his estimated and actual cost of the work together with all tender calls, quotations, contracts, correspondence, invoices, receipts and vouchers relating thereto.
- 51.1.2 make all records and material referred to in GC5.1.1 available to audit and inspection by the Minister and the Deputy Receiver General for Canada or by persons acting on behalf of either of both of them, when requested;
- 51.1.3 allow any of the person referred to in GC51.1.2 to make copies of and to take extracts from any of the records and material referred to in GC51.1.1; and
- 51.1.4 furnish any person referred to in GC51.1.2 with any information he may require from time to time in connection with such records and material.
- 51.2 The records maintained by the Contractor pursuant to GC51.1.1 shall be kept intact by the Contractor until the expiration of two years after the date that a Final Certificate of Completion referred to in GC44.1 was issued or until the expiration of such other period of time as the



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Minister may direct.

51.3 The Contractor shall cause all subcontractors and all other persons directly or indirectly controlled by or affiliated with the Contractor and all persons directly or indirectly having control of the Contractor to comply with GC51.1 and GC51.2 as if they were the Contractor.

GC52 Conflict of Interest

52.1 It is a term of this contract that no former public office holder who is not in compliance with the Conflict of Interest and Post-Employment Code for Public Office Holders shall derive a direct benefit from this contract.

GC53 Contractor Status

- 53.1 The Contractor shall be engaged under the contract as an independent contractor.
- 53.2 The Contractor and any employee of the said Contractor is not engaged by the contract as an employee, servant or agent of Her Majesty.
- For the purposes of GC53.1 and GC53.2 the Contractor shall be solely responsible for any and all payments and deductions required to be made by law including those required for Canada or Quebec Pension Plans, Unemployment Insurance, Worker's Compensation or Income Tax.



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APPENDIX 'D'

Fair Wages and Hours of Labour

Labour Conditions

Justes Salaires et Heures de Travail Conditions de Travail

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- 02 General Fair Wage Clause
- 03 Hours of Work
- 04 Labour Conditions to be Posted
- 05 The Contractor to Keep Records which are to be Kept Open for Inspection
- 06 Departmental Requirements before Payment made to Contractor
- 07 Authority to pay Wages in the Event of Default by the Contractor
- 08 Conditions of Subcontracting
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- 04 Affichage des conditions de travail
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- 08 Conditions imposées à un sous-traitant
- 09 Non-discrimination dans l'embauchage et l'emploi de main-d'oeuvre

01 Interpretation

In these Conditions

- (a) "Act" means the Fair Wages and Hours of Labour Act;
- (b) "Regulations" means the Fair Wages and Hours of Labour Regulations made pursuant to the Act;
- (c) "contract" means the contract of which these Labour Conditions are part;
- (d) "contracting authority" means the department of Government or a crown corporation with whom the contract is made;
- (e) "contractor" means the person who has entered into the contract with the contracting authority;
- (f) "regional director" means the director of a regional office of the Department of Human Resources Development or the director's designated representative;
- (g) "inspector" has the meaning assigned to the term by Part III of the Canada Labour Code.
- (h) "Minister" means the Minister of Labour of Canada;
- (i) "persons" means those workers employed by the contractor, subcontractor or any other person doing or contracting to do the whole or any part of the work contemplated by the contract;

01 Interprétation

Dans ces conditions

- a) «Loi» désigne la Loi sur les justes salaires et les heures de travail;
- b) «Règlement» désigne le Règlement sur les justes salaires et les heures de travail établi en application de la Loi;
- c) «contrat» désigne le contrat auquel sont annexées les présentes Conditions de travail:
- d) «adjudicateur» désigne le ministère du gouvernement ou la société d'État avec lequel le contrat a été passé;
- e) «entrepreneur» désigne la personne qui a passé le contrat avec l'adjudicateur;
- f) «directeur régional» le responsable d'un bureau régional du ministère du Développement des resources humaines ou son représentant désigné;
- g) «inspecteur» s'entend au sens de la partie III du Code canadien du travail;
- h) «Ministre» désigne le ministre du Travail du Canada;
- i) «personnes» désigne les travailleurs employés par l'entrepreneur, le sous-traitant ou toute autre personne exécutant ou s'engageant par contrat à exécuter la totalité ou une partie quelconque des travaux prévus dans le contrat;

02 General Fair Wage Clause

- (a) All persons in the employ of the contractor, subcontractor, or any other person doing or contracting to do the whole or any part of the work contemplated by the contract, shall during the continuance of the work:
- be paid fair wages that is, such wages as are generally accepted as current for competent workers in the district in which the work is being performed for the character or class of work in which such workers are respectively engaged; and
- ii) in all cases, be paid no less than the minimum hourly rate of pay established by the Labour Program of the Department of Human Resources Development in the Fair Wage Schedules which form a part of this contract as Appendix A to these Labour Conditions; and
- iii) for contracts covering work performed in the province of Quebec, be paid at least the wage rates established by that province for the purposes of the Quebec "Construction Decree".
- (b) Where there is no wage rate in the schedules referred to in (a) for a particular character or class of work, the contractor shall pay wages for that character or class of work at a rate not less than the rate for an equivalent character or class of work.
- (c) Where during the term of the contract, the contractor receives notice from the contracting authority of any change in wage rates, the contractor shall pay not less than the changed wage rate beginning on the first day after receipt, by the contractor, of the notice of the change in wage rates.

03 Hours of Work

- (a) The hours of work in a day and in a week of persons employed in the execution of the contract, including the hours of work in excess of which a person shall be paid overtime at a rate at least equal to one and one half times the fair wage, are the hours of work for the province in which the work is being performed as set out from time to time in an Act of that province.
- (b) The daily or weekly hours of work referred to in paragraph
 (a) may be exceeded in accordance with the applicable provincial law.

02 Clause générale de justes salaires

- (a) Toutes les personnes employées par l'entrepreneur, le soustraitant ou toute autre personne exécutant ou s'engageant par contrat à exécuter la totalité ou une partie quelconque des travaux prévus dans le contrat seront payées:
- i) des justes salaires tant que dureront les travaux, c'est-à-dire les salaires généralement recomus comme salaires courants pour les travailleurs qualifiés dans la région où les travaux sont exécutés, selon la nature ou la catégorie du travail auquel ces travailleurs sont respectivement affectés; et
- ii) dans tous les cas, pas moins que les taux horaires minima fixés par le Programme du travail du ministère du Développement des resources humaines dans les échelles de justes salaires qui deviennent partie de ce contrat en tant qu'Annexe A de ces Conditions de travail; et
- iii) pour les contrats concernant les travaux effectués dans la province de Québec, pas moins que les taux de salaires qui sont établis par cette province pour les fins du "Décret de la construction" du Québec.
- (b) Lorsqu'il n'y a aucun taux prévu dans l'échelle des taux de salaires à l'égard d'un travail d'une nature ou d'une catégorie données, l'entrepreneur verse à l'employé un taux de salaire qui n'est pas inférieur à celui établi pour un travail de nature ou de catégorie équivalente.
- (c) Lorsque pendant la durée du contrat, l'entrepreneur reçoit de l'adjudicateur un avis de modification à l'échelle de salaires, l'entrepreneur rémunère les employés touchés par cette modification à des taux qui ne sont pas inférieurs aux taux modifiés à compter de la journée qui suit la réception par lui, de l'avis.

3 Durée du travail

- (a) Les heures de travail quotidiennes et hebdomadaires des personnes employées à l'exécution du contrat, notamment les heures au-delà desquelles une personne doit être rétribuée selon le tarif pour heures supplémentaires, soit au moins le juste salaire majoré de 50 pour cent, sont celles fixées et éventuellement modifiées par la législation de la province dans laquelle le travail est effectué.
- (b) Les heures de travail quotidiennes ou hebdomadaires mentionnées à l'alinéa (a) peuvent être dépassées conformément à la législation provinciale applicable.

04 Labour Conditions to be Posted

For the information and the protection of all persons, the contractor agrees to post and keep posted, in a conspicuous place on the premises where work contemplated by the contract is being carried out or on premises occupied or used by persons engaged in carrying out such work, a copy of these Labour Conditions, and a copy of the applicable Fair Wage Schedules along with any subsequent changes.

- 05 The Contractor to Keep Records which are to be Kept Open for Inspection
- (a) The contractor agrees to keep books and records showing the names, addresses, classifications of employment and work of all workers employed under the contract, the rate of wages to be paid, the wages paid and the daily hours worked by the workers.
- (b) The contractor also agrees that the contractor's books, records and premises will be open at all reasonable times for inspection by an inspector.
- (c) The contractor also agrees to furnish the inspector and the contracting authority, on request, with such further information as is required to ascertain that the requirements of the Act, the Regulations and the contract with respect to wages, hours of work and other labour conditions have been complied with.

06 Departmental Requirements before Payment made to Contractor

- (a) The contractor agrees that the contractor will not be entitled to payment of any money otherwise payable under the contract until the contractor has filed with the contracting authority in support of a claim for payment a sworn statement:
- (i) that the contractor has kept the books and records required by these Regulations,
- (ii) that there are no wages in arrears in respect of work performed under the contract, and
- (iii) that to the contractor's knowledge, all the conditions in the contract required by the Act and the Regulations have been complied with.
- (b) The contractor also agrees that, where fair wages have not been paid by the contractor to persons employed under the contract, the contracting authority shall withhold from any money otherwise payable under the contract to the contractor the amount necessary to ensure that fair wages are paid to all employees until fair wages are paid.

04 Affichage des conditions de travail

Pour l'information et la protection de toutes les personnes, l'entrepreneur convient d'afficher et de tenir affichés, bien à la vue, à l'endroit où les travaux prévus dans le contrat sont exécutés, ou dans les locaux occupés ou fréquentés par les personnes employées à l'exécution desdits travaux, un exemplaire des présentes Conditions de travail, un exemplaire de l'échelle de justes salaires applicable et toutes modifications subséquentes,

05 L'entrepreneur tient des dossiers pour fins d'inspection

- (a) L'entrepreneur convient de tenir les registres et dossiers où sont consignés le nom, l'adresse et la catégorie d'emploi et de travail de tous les travailleurs employés à des travaux exécutés en vertu du contrat, de même que le taux de salaire, le salaire payé et la durée journalière du travail pour chacun de ces travailleurs.
- (b) L'entrepreneur convient également à faire en sorte que ses registres, ses dossiers et ses locaux soient accessibles en tout temps opportun, pour fins d'inspection par un inspecteur.
- (c) L'entrepreneur convient en outre de fournir, sur demande, à l'inspecteur et à l'adjudicateur tous les autres renseignements requis pour permettre de constater qu'on a satisfait aux exigences de la Loi, des règlements et du contrat en ce qui concerne les salaires, la durée du travail et les autres conditions de travail.
- 06 Exigences du ministère avant le versement des sommes dues à l'entrepreneur
- (a) L'entrepreneur convient qu'il n'aura droit au paiement d'aucune somme qui autrement devrait lui être versée en vertu du contrat tant qu'il n'aura pas déposé auprès de l'adjudicateur, à l'appui de sa réclamation de paiement, une déclaration sous serment indiquant:
- (i) qu'il a tenu les registres et dossiers requis par les présents règlements,
- (ii) qu'il n'y a pas d'arrérages de salaires à l'égard des travaux exécutés en vertu du contrat, et
- (iii) qu'à sa connaissance, toutes les conditions du contrat exigées par la Lol et les règlements ont été observées.
- (b) L'entrepreneur convient en outre que lorsqu'il n'a pas versé un juste salaire à une personne employée en vertu du contrat, l'adjudicateur sera autorisé à retenir de toute somme autrement payable à l'entrepreneur en vertu du contrat la somme requise pour assurer le paiement de justes salaires à tous les employés jusqu'à ce qu'ils aient touché leur juste salaire.

07 Anthority to pay Wages in the Event of Default by the Contractor

- (a) The contractor agrees that where the contractor is in default of payment of fair wages to an employee, the contractor will pay the Minister the amount the contractor is in default.
- (b) The contractor agrees that where the contractor fails to comply with paragraph (a), the contracting authority will pay to the Receiver General, out of any money otherwise payable to the contractor, the amount for which the contractor is in default.

07 Paiement des salaires par l'adjudicateur si l'entrepreneur omet de le faire

- (a) L'entrepreneur convient qu'à défaut du paiement par ce dernier d'un juste salaire à un travailleur, l'entrepreneur devra verser au ministre le montant qu'il a omis de payer.
- (b) L'entrepreneur convient que s'il omet de se conformer au paragraphe (a), l'adjudicateur paiera au Receveur général, à même les sommes autrement payables à l'entrepreneur, le montant qu'il a omis de payer.

08 Conditions of Subcontracting

The contractor and the subcontractor agree that in subcontracting any part of the work contemplated by the contract, they will place in the subcontract the conditions respecting fair wages, hours of work and other labour conditions set out in the contract and the requirements set out in Section 4. The contractor further agrees that the contractor will be responsible for carrying out these conditions in the event the subcontractor fails to carry them out.

08 Conditions imposées à un sous-traitant

L'entrepreneur et le sous-traitant conviennent, dans l'adjudication à un sous-traitant de toute partie des travaux prévus par le contrat, d'insérer dans le sous-contrat les conditions relatives aux justes salaires, à la durée du travail et autres conditions de travail indiquées dans le contrat ainsi que les obligations énoncées à l'article 4. L'entrepreneur convient en outre qu'il sera responsable du respect de ces conditions si elles ne sont pas respectées par le sous-traitant.

09 Non-discrimination in Hiring and Employment of Labour

The contractor agrees that in the hiring and employment of workers to perform any work under the contract, the contractor will not refuse to employ and will not discriminate in any manner against any person because

- (a) of that person's race, national or ethnic origin, colour, religion, age, sex, sexual orientation, marital status, disability, conviction for which a pardon has been granted, or family status;
- (b) of the race, national or ethnic origin, colour, religion, age, sex, sexual orientation, marital status, disability, conviction for which a pardon has been granted, or family status of any person having a relationship or association with that person, or
- (c) a complaint has been made or information has been given in respect of that person relating to an alleged failure by the contractor to comply with subparagraph (a) or (b).

09 Non-discrimination dans l'embauchage et l'emploi de main-d'oeuvre

L'entrepreneur convient que dans l'embauchage et l'emploi des travailleurs aux fins de l'exécution de tout travail en vertu du contrat, l'entrepreneur ne refusera pas d'employer une personne ou d'exercer de quelque façon que ce soit des distinctions injustes à l'endroit d'une personne en raison

- (a) de la race, de l'origine nationale on ethnique, de la couleur, de la religion, de l'âge, du sexe, de l'orientation sexuelle, de l'état matrimonial, de la situation de famille, de l'état de personne graciée ou d'une déficience de la personne;
- (b) de la race, de l'origine nationale ou ethnique, de la couleur, de la religion, de l'âge, du sexe, de l'orientation sexuelle, de l'état matrimonial, de la situation de famille, de l'état de personne graciée ou d'une déficience de toute personne ayant un lien avec elle;
- (c) du fait que cette personne a porté plainte ou a foumi des renseignements ou parce qu'une plainte a été portée ou des renseignements ont été fournis en son nom relativement à toute prétendue omission de la part de l'entrepreneur de se conformer aux sous-alinéas (a) ou (b).

LABOUR CONDITIONS Appendix A CONDITIONS DE TRAVAIL Annexe A

FAIR WAGE SCHEDULE

FOR FEDERAL CONSTRUCTION CONTRACTS

ÉCHELLE DE JUSTES SALAIRES POUR LES CONTRATS FÉDÉRAUX DE CONSTRUCTION

Ontario – Ottawa Zone / Ontario – Zone d'Ottawa Effective August 15, 2011 / En vigueur le 15 août 2011

Construction trades workers on the federal government construction contract listed in this appendix must be paid a regular hourly wage rate no less than the rate on this schedule for the type of work they are doing under the contract.	Les travailleurs de métiers de la construction, sur un contrat fédéral de construction, doivent être payés à un taux de salaires non moindre que le taux de cette échelle pour le type de travail effectué en vertu du contrat en question.		
The apprentice wage rates are included into this schedule by reference to the Ontario <i>Trades Qualification and Apprenticeship Act</i> and its Regulations. Thus, where the Regulations refer to a percentage of a corresponding journeyperson's wage for a specific occupation, that percentage shall be applied against the wages listed below.	Le salaire des apprentis est inclus dans cette échelle en faisant référence à la Loi sur la qualification professionnelle et l'apprentissage des gens de métier de l'Ontario et ses Règlements. Ainsi, là où les Règlements prescrivent que le salaire d'un apprenti doit correspondre au pourcentage du salaire d'un ouvrier qualifié de la même occupation, le calcul sera effectué en utilisant les taux ci-dessous.		
*Denotes a compulsory trade: a trade license or apprenticeship registration valid in Ontario is required to work in the occupation.	*Dénote un métter obligatoire : un métter qui exige une licence ou un enregistrement d'apprentissage valide en Ontario.		
CLASSIFICATION OF LABOUR CATÉGORIES DE MAIN-D'OEUVRE	FAIR WAGE RATE PER HOUR NOT LESS THAN TAUX DE JUSTE SALAIRE NON INFÉRIEUR À		
*Electricians *Electriciens	33.19		
*Plumbers	30.99		
*Plombiers	* 14.79		
Sprinkler System Installers	36.14		
Poseurs de gicleurs			
*Pipefitters, Steamfitters 34.57			
*Tuyauteurs, monteurs d'appareils de chauffage	THE TOTAL PROPERTY AND THE PARTY AND THE PAR		
*Sheet Metal Workers *Toliers (ouvriers de feuilles de métal)	31.06		
Boilermakers	33.26		
Chaudronnier			
Ironworkers (except Reinforcing Ironworkers (Rebar/Rodman)) 30.17			
Monteurs de charpentes métalliques (sauf ferrailleurs et pl de tiges métalliques dans le béton)	aceurs		
Reinforcing Ironworkers (Rebar/Rodman) 29.50			
Placeurs de tiges métalliques dans le béton			
Carpenters Charpentiers-menuisiers	24.43		
Bricklayers Briqueteurs-maçons	32.15		
Cement Finishers Finisseurs de béton ou ciment	26.98		

(A)	The second respect to the second seco
Tilesetters (including terrazo, marble setters)	24.05
Poseurs de carrelage (de céramique, de marbre, etc.)	31.65
Plasterers and Drywall Tapers	00.40
Pâtriers et jointoyeurs de cloisons sêches	29.19
Drywall Installers, Finishers and Lathers	
Latteurs et poseurs de cloisons sèches, finisseurs	31.67
Interior System Mechanics (including steel stud)	
Mécaniciens de systèmes intérieurs (incluant structure d'acier)	32.38
Roofers	
Couvreurs de revêtement de toiture	21.50
Glaziers	29.20
Vitriers	
Insulators	32.35
Calorifugeurs	
Painters Peintres	18.44
Flooring Installers	30.22
Poseurs de revêtements d'intérieur	44.EE
Construction Millwrights	34.60
Mécaniciens de chantier	34.00
*Heavy-Duty Equipment Mechanics *Mécaniciens d'équipement lourd	23.29
*Refrigeration and Air Conditioning Mechanics	36.65
*Mécaniciens en réfrigération et climatisation	30.03
Elevator Constructors	43.53
Constructeurs d'ascenseurs	70.00
*Mobile Crane Operators *Conducteurs/opérateurs de grue mobile	33.82
*Tower Crane Operators	34.78
*Conducteurs/opérateurs de grue à tour	04.10
Straight Truck Drivers	19.45
Conducteurs de camions unitaires	10.40
Road Tractor Drivers for Semi-Trailers and Trailers	19.57
Conducteurs de tracteurs routiers pour semi-remorques ou emorques	10.07
Operators-Heavy Equipment (ex. Cranes, Graders)	22.10
Conducteurs de machinerie lourdes (sauf grues, niveleuses)	Andri 1 V
Grader Operators Conducteurs de niveleuse (grader)	27.47
Asphalt Plant Operators Defrateurs de machinerie de pavage	22.01
Scraper Operators	29.16
Conducteurs de scraper	29.10
Packer (road roller) Operators	40.06
Conducteurs de rouleau compresseur (Packer)	18.06
ressure Vessel Welder	22.64
	33.61

Soudeur de réservoirs pour fluides sous-pression

Traffic Accommodation/Control Persons

15,54

Ouvriers chargé de diriger la circulation

Labourers (Except Traffic Accommodation/Control Persons)

Manoeuvres (sauf ouvriers chargé de diriger la circulation)

19.29

Fair wage schedule prepared by: Labour Standards and Workplace Equity Division Labour Program, Human Resources and Skills Development Canada

Based on The National Construction industry Wage Rate Survey (2005) conducted by the Small Business and Special Surveys Division, Statistics Canada.

vihe Resée

L'échetle des justes salaires est préparée par : Division des normes du travail et équité en milieu de travail Programme du travail, Ressources humaines et Développement des compétences Canada

Basée sur l'Enquête nationale sur les taux salariaux dans le secteur de la construction (2009) faite par la Division des petites entraprises et enquêtes spéciales, Statistique Canada.

CONTRACTORS SHOULD NOTE:

- that during the term of this contract, the rates listed herein may be revised in accordance with the labour conditions; and
- that in carrying out any of the work contemplated by this contract, the contractor is also subject to any applicable provincial laws and regulations; and
- overtime must be paid according to provincial legislation concerning hours of work at a rate equal to at least one and one-half times the fair wage rate; and
- schedule rates are 'straight' wages and do not include compensation in the form of benefits (for example, medical, dental or pension plans); and
- e) in the event of a complaint under the Fair Wages and Hours of Labour Act, if the occupation of the complainant is not on the posted schedule, the Labour Program inspector will assign the most similar occupation from the schedule by comparing the national occupational classification (NOC) code and the job description that best defines the work actually done by the complainant.

L'ENTREPRENEUR DOIT NOTER :

- que pendant la durée de ce contrat, les taux de salaires énumérés dans l'annexe peuvent être révisés en conformité avec les conditions de travail, et
- due dans l'exécution de tout travail prévu par le contrat, l'entrepreneur est aussi assujetti aux lois et règlements provinciaux, et
- le temps supplémentaire doit être rémunéré conformément aux lois provinciales relatives aux heures de travail à un taux équivalent au moins une fois et demi le taux des justes salaires, et
- d) les taux de l'échelle fait référence à la rémunération en salaire et ne comprennent pas la rémunération sous forme d'avantages sociaux (par exemple, les plans d'assurance médicale ou dentaire, ou les régimes de pension), et
- e) dans le cas d'une plainte sous la Loi sur les justes salalres et les heures de travail, si le métier du plaignant ne figure pas dans l'échelle affichée, l'inspecteur du Programme du travail déterminera le métier le plus semblable dans l'échelle en comparant le code et la description de tâches de la Classification nationale des professions (CNP) qui décrivent le mieux le travail effectué par le plaignant.

FOR INFORMATION CONCERNING THESE
SCHEDULES AND THE FAIR WAGES AND
HOURS OF LABOUR ACT UNDER WHICH THEY
ARE DEVELOPED, OR TO LODGE A
COMPLAINT, CONTACT YOUR NEAREST
LABOUR PROGRAM DISTRICT OFFICE LISTED
IN THE BLUE PAGES OF YOUR
TELEPHONE DIRECTORY UNDER
GOVERNMENT OF CANADA, HUMAN
RESOURCES AND SKILLS DEVELOPMENT
CANADA OR CALL 1-800-OCANADA.

POUR OBTENIR DE L'INFORMATION SUR LES ÉCHELLES ET LA LOI SUR LES JUSTES SALAIRES ET LES HEURES DE TRAVAIL SOUS LAQUELLE ELLES ONT ÉTÉ DÉVELOPPÉES, OU POUR DÉPOSER UNE PLAINTE, CONTACTEZ LE BUREAU LOCAL DU PROGRAMME DU TRAVAIL LE PLUS PRÈS DE CHEZ VOUS EN CHERCHANT DANS LES PAGES BLEUES DE VOTRE ANNUAIRE SOUS GOUVERNEMENT DU CANADA, RESSOURCES HUMAINES ET DÉVELOPPEMENT DES COMPÉTENCES CANADA. VOUS POUVEZ ÉGALEMENT TÉLÉPHONER AU 1-800-OCANADA.



FEDERAL CONSTRUCTION CONTRACTS — SCHEDULE OF WAGE RATES

For: Ontario — East zone (Ottawa)
As of: January 17, 2005

APPRENTICE TABLE

For workers registered in an apprenticeship program established by the provincial government, or its designated agency, in a trade listed below, the rates on the Schedule of wage rates for federal construction contracts for Ontario, East zone, may be modified according to the table below. The rates in the table are in accordance with rates established for apprentices in the province under the authority of the Trades Qualification and Apprenticeship Act.

In the event of an inspection or a complaint investigation by and HRSDC Labour Program inspector, both contractors and workers should be prepared to produce copies of the apprenticeship contract, and evidence of its registration with Ontario Ministry of Training, Colleges and Universities, to demonstrate the worker's eligibility for the modified wage rate, and to confirm the percentage by which that rate may be altered.

If there is no apprenticeship contract, or the document cannot be made available, the worker(s) must be paid the full rate on the Schedule for the occupation most closely resembling the work being performed.

*Denotes a compulsory trade: a trade certificate, trade licence or apprenticeship registration valid in Ontario is required to work in the trade

Properties and the control of the co				Cinetic as Avyor	ECA IO WOLA UI	uie uzue,				
Occupation	1 st p	1st Period	2 nd Period	eriod	3rd p	3rd Period	4th Period	riod	5th Period	zriod
	1st Half	2nd Half	I" Half	2 nd Half	1st Half	2nd Half	1st Half	2 nd Half	1st Half	2nd Half
Bricklaver	4[40%	%09	%	22	20%	80%	9		
	16	\$11,40	\$17.10	.10	\$19	\$19.95	\$22.80	80		
Cement Mason	99	%09	75%	%	%06	*				
	\$14	\$14.10	\$17.63	.63	\$24	\$21.15				
Construction Boilemaker	99	%09	70%	%	%08	%	%06	,,		
	21\$	\$17.38	\$20.28	28	\$23.18	18	\$26.07	20		
Construction Millwright	0.9	%09	70%	*	80%	%	%06	9		
9	\$17	\$17.53	\$20.45	.45	\$23.38	.38	\$26.30	30		
Drwall Finsher and Plasterer	*0*	*	%09	%	%09	%	70%		80%	%
	\$10,58	897	\$13.23	23	\$15.87	.87	\$18,52	22	\$21.16	16
Electrician	40%	%	20%	%	%09	%	%02		80%	28
	\$11.25	.25	\$14.07	20	\$16.88	500	\$19.69	68	\$22.50	50

January 17, 2005

Federal construction contracts – Schedule of wage rates Apprentice table for Ontario – East zone

Occupation	1st p	1st Period	2nd P	2 nd Period	3rd	3rd Period	4th Period	riod	Fth Denical	Poin
	1st Half	2 ^{md} Half	1st Half	2 ^{md} Half	1st Half	2 nd Haif	Ist Half	2nd Linit	14 1.014	21-11 pac
Glazier and Metal Mechanic	%09	55%	%09	65%	75%	80%	%06	95%		1
	\$11.75	\$12.93	\$14.10	\$15,28	\$17.63	\$18.80	\$21.15	\$22.33		
*Hoisting Engineer – Branch 1	40	40%	809	8	60	80%				
	\$5	\$8.64	\$12.97	75	15	\$17.29				
*Hoisting Exgineer - Branch 1 (from Branch3 certificate)	%09	%	80%	*						
	\$12.97	.97	\$17.29	.29						
*Holsting Engineer - Branch 3	40%	%	70%	8						
	\$11.46	.46	\$20.06	90						
*Hoisting Engineer - Branch 3 (from Branch 1 certificate)	70%	%								
	\$20.06	90.								
Ironworker	%09	70%	75%	80%	85%	%06				
	\$15.41	\$17.98	\$19.27	\$20,55	\$21.84	\$23.12				
*Plumber	40%	%	20%	%	. 86	%09	%02	9	80%	20
	\$11.08	90.	\$13.85	85 65	\$10	\$16.81	\$19.38	38	\$22.15	15
*Refrigeration and Air Conditioning Mechanic	40%	*	909	*	96	960%	70%	ş	80%	9
•	\$11.37	37	\$14.22	22	\$17	\$17.06	\$19.90	06	\$22.74	74
"Sheet Metal Worker	40%	%	%09	98	86	80%	20%	J.	80%	9
	\$11.10	10	\$13.87	87	\$16	\$16.54	\$19,42	23	\$22.19	19
Sprinkler and Fire Protection Installer	40%	%	%09	g	70	70%	80%			
	\$12.47	47	\$18.70	70	\$21.82	.82	\$24.94	46		
*Steamfitter	40%	*	20%	V 9	9	60%	%02		80%	4
	\$10.78	78	\$13.48	48	\$16.17	217	\$18.87	7.1	\$21.58	28

*Denoies a compulsory trade: a trade certificate, trade ficence or apprenticeship registration valid in Ontario is required to work in the trade.

Table 2:

Training periods for Carpenters are determined in a different manner than other apprenticeable construction trades. The rate of pay is based on a percentage of a journeyman's wage.

2

	16-20 15:11		7000	0.00	\$19.14
i	11-15 Units	5.400 hours	80%		\$14.35
	6-10 Units	3,600 hours	20%		\$11.96
	1-5 Units	1,800 hours	40%		\$9.57
	Occupation	Up to	General Camenter		

Table 3:

Wage rates for the occupation "Painter and Decorator" are not based on "percentage of journeyman's wage", but are based on the provincial minimum wage and established under the authority of the Trades Qualification and Apprenticeship Act as not less than:

3. ('min wage' = provincial minimum wage)

N.B.: When the province has established minimum wage levels for future years, the schedule uses the rate for the latest year within the schedule update period.

Occupation	First Period	Second Period	Third Period
	1-2,000 hours	2,001-4,000 hours	4.001-6.000 hours
Painter and Decorator	Min wage	min wage + 30%	min wade + 80%
	\$8.00	\$10.40	\$12.80

For complete information about apprenticeship, please contact an Apprenticeship Office of the Ontario Ministry of Training. Colleges and Universities. Addresses and telephone numbers can be found on the Internet at http://www.edu.gov.on.ca/eng/haining/apprenticeship/skills/officelocations.html or in the blue pages of your local telephone directory.

GENERAL CONDITIONS

IC 1	Proof	of Insurance
10.1	1 1 001	OI INSULANCE

- IC 2 Risk Management
- IC 3 Payment of Deductible
- IC 4 Insurance Coverage

GENERAL INSUANCE COVERAGES

- GCI 1 Insured
- GIC 2 Period of Insurance
- GIC 3 Proof of Insurance
- GIC 4 Notification

COMMERCIAL GENERAL LIABILITY

- CGL 1 Scope of Policy
- CGL 2 Coverages/Provisions
- **CGL 3 Additional Exposures**
- **CGL 4 Insurance Proceeds**
- CGL 5 Deductible

BUILDER'S RISK - INSTALLATION FLOATER - ALL RISKS

- BR 1 Scope of Policy
- BR 2 Property Insured
- BR 3 Insurance Proceeds
- BR 4 Amount of Insurance
- BR 5 Deductible
- BR 6 Subrogation
- **BR 7** Exclusion Qualifications

INSURER'S CERTIFICATE OF INSURANCE

General Conditions

IC 1 Proof of Insurance (02/12/03)

Within thirty (30) days after acceptance of the Contractor's tender, the Contractor shall, unless otherwise directed in writing by the Contracting Officer, deposit with the Contracting Officer an Insurer's Certificate of Insurance in the form displayed in this document and, if requested by the Contracting Officer, the originals or certified true copies of all contracts of insurance maintained by the Contractor pursuant to the Insurance Coverage Requirements shown hereunder.

IC 2 Risk Management (01/10/94)

The provisions of the Insurance Coverage Requirements contained hereunder are not intended to cover all of the Contractor's obligations under GC8 of the General Conditions "C" of the contract. Any additional risk management measures or additional insurance coverages the Contractor may deem necessary to fulfill its obligations under GC8 shall be at its own discretion and expense.

IC 3 Payment of Deductible (01/10/94)

The payment of monies up to the deductible amount made in satisfaction of a claim shall be borne by the Contactor.

IC 4 Insurance Coverage (02/12/03)

The Contractor has represented that it has in place and effect the appropriate and usual liability insurance coverage as required by these Insurance Conditions and the Contractor has warranted that it shall obtain, in a timely manner and prior to commencement of the Work, the appropriate and usual property insurance coverage as required by these Insurance Conditions and, further, that it shall maintain all required insurance policies in place and effect as required by these Insurance Conditions.

INSURANCE COVERAGE REQUIREMENTS

PART I GENERAL INSUANCE COVERAGES (GIC)

GCI 1 Insured (02/12/03)

Each insurance policy shall insure the Contractor, and shall include, as an Additional Named Insured, Her Majesty the Queen in right of Canada, represented by the National Research Council Canada.

GIC 2 Period of Insurance (02/12/03)

Unless otherwise directed in writing by the Contracting Officer or otherwise stipulated elsewhere in these Insurance Conditions, the policies required hereunder shall be in force and be maintained from the date of the contract award until the day of issue of the Departmental Representative's Final Certificate of Completion.

GIC 3 Proof of Insurance (01/10/94)

Within twenty five (25) days after acceptance of the Contractor's tender, the Insurer shall, unless otherwise directed by the Contractor, deposit with the Contractor an Insurer's Certificate of Insurance in the form displayed in the document and, if requested, the originals or certified true copies of all contracts of insurance maintained by the Contractor pursuant to the requirements of these Insurance Coverages.

GIC 4 Notification (01/10/94)

Each Insurance policy shall contain a provision that (30) days prior written notice shall be given by the Insurer to Her Majesty in the event of any material change in or cancellation of coverage. Any such notice received by the Contractor shall be transmitted forthwith to Her Majesty.

PART II COMMERCIAL GENERAL LIABILITY

CGL 1 Scope of Policy (01/10/94)

The policy shall be written on a form similar to that known and referred to in the insurance industry as IBC 2100 – Commercial General Liability policy (Occurrence form) and shall provide for limit of liability of not less than \$2,000,000 inclusive for Bodily Injury and Property Damage for any one occurrence or series of occurrences arising out of one cause. Legal or defence cost incurred in respect of a claim or claims shall not operate to decrease the limit of liability.

CGL 2 Coverages/Provisions (01/10/94)

The policy shall include but not necessarily be limited to the following coverages/provisions.

- 2.1 Liability arising out of or resulting from the ownership, existence, maintenance or use of premises by the Contractor and operations necessary or incidental to the performance of this contract.
- 2.2 "Broad Form" Property Damage including the loss of use of property.
- 2.3 Removal or weakening of support of any building or land whether such support be natural or otherwise.
- 2.4 Elevator liability (including escalators, hoists and similar devices).
- 2.5 Contractor's Protective Liability
- 2.6 Contractual and Assumed Liabilities un this contact.
- 2.7 Completed Operations Liability The insurance, including all aspects of this Part II of these Insurance Conditions shall continue for a period of at least one (1) year beyond the date of the Departmental Representative's Final Certificate of Completion for the Completed Operations.
- 2.8 Cross Liability The Clause shall be written as follows:

Cross Liability – The insurance as is afforded by this policy shall apply in respect to any claim or action brought against any one Insured by any other Insured. The coverage shall apply in the same manner and to the same extent as though a separate policy had been issued to each Insured. The inclusion herein of more than one Insured shall not increase the limit of the Insurer's liability.

2.9 Severability of Interests – The Clause shall be written as follows:

Severability of Interests – This policy, subject to the limits of liability stated herein, shall apply separately to each Insured in the same manner and to the same extent as if a separate policy had been issued to each. The inclusion herein of more than one insured shall not increase the limit of the Insurer's liability.

CGL 3 Additional Exposures (02/12/03)

The policy shall either include or be endorsed to include the following exposures of hazards if the Work is subject thereto:

- 3.1 Blasting
- 3.2 Pile driving and calsson work
- 3.3 Underpinning
- 3.4 Risks associated with the activities of the Contractor on an active airport

- 3.5 Radioactive contamination resulting from the use of commercial isotopes
- 3.6 Damage to the portion of an existing building beyond that directly associated with an addition, renovation or installation contract.
- 3.7 Marine risks associated with the contraction of piers, wharves and docks.

CGL 4 Insurance Proceeds (01/10/94)

Insurance Proceeds from this policy are usually payable directly to a Claimant/Third Party.

CGL 5 Deductible (02/12/03)

This policy shall be issued with a deductible amount of not more than \$10,000 per occurrence applying to Property Damage claims only.

PART III BUILDER'S RISK – INSTALLATION FLOATER – ALL RISKS

BR 1 Scope of Policy (01/10/94)

The policy shall be written on an "All Risks" basis granting coverages similar to those provided by the forms known and referred to in the insurance industry as "Builder's Risk Comprehensive Form" or "Installation Floater – All Risks".

BR 2 Property Insured (01/10/94)

The property insured shall include:

- 2.1 The Work and all property, equipment and materials intended to become part of the finished Work at the site of the project while awaiting, during and after installation, erection or construction including testing.
- 2.2 Expenses incurred in the removal from the construction site of debris of the property insured, including demolition of damaged property, de-icing and dewatering, occasioned by loss, destruction or damage to such property and in respect of which insurance is provided by this policy.

BR 3 Insurance Proceeds (01/10/94)

- 3.1 Insurance proceeds from this policy are payable in accordance with GC28 of the General Conditions "C" of the contract.
- 3.2 This policy shall provide that the proceeds thereof are payable to Her Majesty or as the Minister may direct.

3.3 The Contractor shall do such things and execute such documents as are necessary to effect payment of the proceeds.

BR 4 Amount of Insurance (01/10/94)

The amount of insurance shall not be less than the sum of the contract value plus the declared value (if any) set forth in the contract documents of all material and equipment supplied by Her Majesty at the site of the project to be incorporated into and form part of the finished Work.

BR 5 Deductible (02/12/03)

The Policy shall be issued with a deductible amount of not more than \$10,000.

BR 6 Subrogation (01/10/94)

The following Clause shall be included in the policy:

"All rights of subrogation or transfer of rights are hereby waived against any corporation, firm, individual or other interest, with respect to which, insurance is provided by this policy".

BR 7 Exclusion Qualifications (01/10/94)

The policy may be subject to the standard exclusions but the following qualifications shall apply:

- 7.1 Faulty materials, workmanship or design may be excluded only to the extent of the cost of making good thereof and shall not apply to loss or damage resulting therefrom.
- 7.2 Loss or damage caused by contamination by radioactive material may be excluded except for loss or damage resulting from commercial isotopes used for industrial measurements, inspection, quality control radiographic or photographic use.
- 7.3 Use and occupancy of the project or any part of section thereof shall be permitted where such use and occupancy is for the purpose for which the project is intended upon completion.

NRC0204D Page 7 de 7

INSURER'S CERTIFICATE OF INSURANCE

(TO BE COMPLETED BY INSURER (NOT BOKER) AND DELIVERD TO NATIONAL RESEARCH COUNCIL CANADA WITH 30 DAYS FOLLOWING ACCEPTANCE OF TENDER)

CONTRACT					
DESCRIPTION	OF WORK	CONTRACT NU	MBER	AWARD DATE	
LOCATION			_		
INSURER					····
NAME	·		-		
ADDRESS					
BROKER	·	<u> </u>	<u> </u>		<u> </u>
NAME					
ADDRESS	· · · · · ·		·		
INSURED		<u> </u>			<u> </u>
NAME OF CONT	FRACTOR		· <u></u>		
ADDRESS	·	<u> </u>	<u>.</u>		
ADDITIONAL IN	ISURED				
HER MAJESTY THE	QUEEN IN RIGHT OF	CANADA AS REPRESE	NTED BY THE NATIO	NAL RESEARCH CO	JNCIL CANADA
OPERATIONS OF TH	IE INSURE IN CONNI	OLLOWING POLICES OF ECTION WITH THE CON' DA AND IN ACCORDAN	TRACT MADE BETW	EEN THE NAMED INS	LIRED AND THE
		POL:	ICY THE INSUR	ANCE CONDITIONS	<u> </u>
ТҮРЕ	NUMBER	INCEPTION DATE	EXPIRY DATE	LIMITS OF LIABILITY	DEDUCTIBLE
COMMERCIAL GENERAL LIABILITY			•		
BUILDERS RISK "AL RISKS"			· · · · · · · · · · · · · · · · · · ·		
INSTALLATION FLOATER "ALL RISKS"					
				_	
/THE TALES					
THE INSURER AGRE MATERIAL CHANGE	ES TO NOTIFY THE I IN OR CANCELLAT	NATIONAL RESEARCH (ION OF ANY POLICY OF	COUNCIL CANADA I COVERAGE SPECIF	N WRITING 30 DAYS ICALLY RELATED TO	PRIOR TO ANY THE CONTRACT
NAME OF INSURER'S		SIGNATURE		DATE:	
				TELEPHONE NUMB	
SUANCE OF THIS CE	RTIFIATE SHALL N	OT LIMIT OR RESTRICT	THE RIGHT OF THE	NATIONAL RESEARC	H COUNCIL

ISSUANCE OF THIS CERTIFIATE SHALL NOT LIMIT OR RESTRICT THE RIGHT OF THE NATIONAL RESEARCH COUNCIL CANADA TO REQUEST AT ANY TIME DUPLICATE COPIES OF SAID INSURANCE POLICIES

CS1 Obligation to provide Contract Security

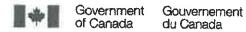
- 1.1 The Contractor shall, at the Contractor's own expense, provide one or more of the forms of contract security prescribed in CS2.
- 1.2 The Contractor shall deliver to the Departmental Representative the contract security referred to in CS1.1 within 14 days after the date that the Contractor receives notice that the Contractor's tender or offer was accepted by Her Majesty.

CS2 Prescribed Types and Amounts of Contract Security

- 2.1 The Contractor shall deliver to the Departmental Representative pursuant to CS1
 - 2.1.1 a performance bond and a labour and material payment bond each in an amount that is equal to not less than 50% of the contract amount referred to in the Articles of Agreement, or
 - 2.1.2 a labour and material payment bond in an amount that is equal to not less than 50% of the contract amount referred to in the Articles of Agreement, and a security deposit in an amount that is equal to
 - 2.1.2.1 not less than 10% of the contract amount referred to in the Articles of Agreement where that amount does not exceed \$250,000, or
 - 2.1.2.2 \$25,000 plus 5% of the part of the contract amount referred to in the Articles of Agreement that exceeds \$250,000, or
 - 2.1.3 a security deposit in an amount prescribed by CS2.12 plus an additional amount that is equal to 10% of the contract amount referred to in the Articles of Agreement.
- A performance bond and a labour and material payment bond referred to in CS2.1 shall be in a form and be issued by a bonding or surety company that is approved by Her Majesty.
- 2.3 The amount of a security deposit referred to in CS2.1.2 shall not exceed \$250,000 regardless of the contract amount referred to in the Articles of Agreement.
- 2.4 A security deposit referred to in CS2.1.2 and CS2.1.3 shall be in the form of
 - 2.4.1 a bill of exchange made payable to the Receiver General of Canada and certified by an approved financial institution or drawn by an approved financial institution on itself, or
 - 2.4.2 bonds of or unconditionally guaranteed as to principal and interest by the Government of Canada.
- 2.5 For the purposes of CS2.4
 - a bill of exchange is an unconditional order in writing signed by the Contractor and addressed to an approved financial institution, requiring the said institution to pay, on demand, at a fixed or determinable future time a sum certain of money to, or to the order

of, the Receiver General for Canada, and

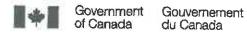
- 2.5.2 If a bill of exchange is certified by a financial institution other than a chartered bank then it must be accompanied by a letter or stamped certification confirming that the financial institution is in a t least one of the categories referred to in CS2.5.3
- 2.5.3 an approved financial institution is
 - 2.5.3.1 any corporation or institution that is a member of the Canadian Payments Association,
 - 2.5.3.2 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,
 - 2.5.3.3 a credit union as defined in paragraph 137(6)(b) of the Income Tax Act,
 - 2.5.3.4 a corporation that accepts deposits from the public, if repayment of the deposit is guaranteed by Her Majesty in right of a province, or
 - 2.5.3.5 The Canada Post Corporation.
- 2.5.4 the bonds referred to in CS2.4.2 shall be
 - 2.5.4.1 made payable to bearer, or
 - 2.5.4.2 accompanied by a duly executed instrument of transfer of the bonds to the Receiver General for Canada in the form prescribed by the Domestic Bonds of Canada Regulations, or
 - 2.5.4.3 registered, as to principal or as to principal and interest in the name of the Receiver General for Canada pursuant to the Domestic Bonds of Canada Regulations, and
 - 2.5.4.4 provided on the basis of their market value current at the date of the contract.



Contract Number / Numéro du contrat	
Security Classification / Classification de sécurité	

SECURITY REQUIREMENTS CHECK LIST (SRCL)

PART A - CONTRACT INFORMATION 7 1. Originating Government Department or	VERIFICATION DES E	XIGENCES RELATIV NICONTRACTUELLE			and the latest the lat	114
Ministère du prantiere de vicente de la company			2. Branch	or Directorate / Direction gener	ale ou Dire	ction
Ministère ou organisme gouvernementa 3. a) Subcontract Number / Numéro du con	d'origine National	Research Council	ASPM			
5. a) Subcontract Number / Numero du col	ntrat de sous-traitance	3. b) Name and Addres	ss of Subco	ntractor / Nom et adresse du se	ous-traitant	
4. Brief Description of Work / Brève descri	-M du A					
She besomption of Facility Diese descrip	puon du mavan					
U-61 Airside Tarmac Resurfaci	ing					
	•					
 a) Will the supplier require access to Co Le fournisseur aura-t-il accès à des n 	narchandises contrôlées?				No Non	Yes
5. b) Will the supplier require access to uni	classified military technical	data subject to the provi	isions of the	Technical Data Control	No.	Yes
regulations?					Non	1 1
Le fournisseur aura-t-il accès à des d Règlement sur le contrôle des donnée	onnees techniques militair	es non classifiées qui so	nt assujettie	es aux dispositions du		_00,
6. Indicate the type of access required / In	diquer le type d'accès regi	ile				
	• • • • • • • • • • • • • • • • • • • •					
6. a) Will the supplier and its employees re	quire access to PROTECT	ED and/or CLASSIFIED	information	or assets?	No No	Yes
Le fournisseur ainsi que les employés (Specify the level of access using the	chart in Ouestion 7 .c.\	iseignements ou a des b	iens PROT	EGES et/ou CLASSIFIÉS?	Non Non	
(Préciser le niveau d'accès en utilisan	it le tableau qui se trouve :	a la question 7. c)				
b) Will the supplier and its employees (e	.g. cleaners, maintenance	personnel) require acces	s to restric	ted access areas? No access	No	N. ZiVon
TO SKOTECTED BUDGOLOTY 22 ILIED	information or assets is no	emitted.			Non	Yes
Le fournisseur et ses employés (p. ex	. nettoyeurs, personnel d'e	entretien) auront-ils accès	à des zon	es d'accès		
restreintes? L'accès à des renseigner 6. c) Is this a commercial courier or deliven	nents ou a des biens PRO	TEGES et/ou CLASSIFIE	ES n'est pa	s autorisé.		
S'agit-il d'un contrat de messagerie or	i de livraison commerciale	nignt storage?	.#G		No.	Yes
					∠ Non	∟∟ Qui
7. a) Indicate the type of information that th	ra avoir acc	ès				
Canada	1	D/OTAN		Foreign / Étranger		
7. b) Release restrictions / Restrictions rela	tives à la diffusion					
No release restrictions	All NATO countri			No release restrictions		
Aucune restriction relative à la diffusion	Tous les pays de	l'OTAN		Aucune restriction relative		
a la uniusion				à la diffusion		L
Not releasable	<u></u> !					
À ne pas diffuser						
Restricted to: / Limité à :	Restricted to: / Li			Restricted to: / Limité a		
Specify country(ies): / Préciser le(s) pays :	Specify country(is	es): / Préciser le(s) pays :	:	Specify country(ies): / Précise	r le(s)	
pays.				pays:		L
7. c) Level of information / Niveau d'informa	tion					
PROTECTED A	NATO UNCLASS	IFIED		PROTECTED A		
PROTĖGĖ A	NATO NON CLAS	SSIFIÉ		PROTÉGÉ A		
PROTECTED B	NATO RESTRICT			PROTECTED B	≓i	
PROTÉGÉ B	NATO DIFFUSIO			PROTÉGÉ B		
PROTECTED C	NATO CONFIDE			PROTECTED C		
PROTEGÉ C	NATO CONFIDE					ł
CONFIDENTIAL	NATO SECRET	11122		PROTÉGÉ C		- 1
CONFIDENTIEL	NATO SECRET			CONFIDENTIAL		i
SECRET	COSMIC TOP SE	CDET -	\	CONFIDENTIEL		
SECRET	COSMIC TOP SE			SECRET		
TOP SECRET	COSMIC TRES S	EOREI L.J		SECRET		1
TRÈS SECRET				TOP SECRET		ļ
TOP SECRET (SIGINT)			ŀ	TRÈS SECRET		1
TRÈS SECRET			j	TOP SECRET (SIGINT)		}
(SIGINT)				TRÈS SECRET (SIGINT)		



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PART A	continued) / PARTIE A (suite)											
8. Will the Le four if Yes, Dans I'	supplier require access to PROTECTED and/or CLASSIFIED COMSEC information or assets? nisseur aura-t-il accès à des renseignements ou à des biens COMSEC désignés PROTÉGÉS et/ou CLASSIFIÉS? indicate the level of sensitivity: affirmative, indiquer le niveau de sensibilité: supplier require access to extremely sensitive INFOSEC information or assets?	No Yes Non Oui										
Le four	nisseur aura-t-il accès à des renseignements ou à des biens INFOSEC de nature extrêmement délicate?	No Yes Non Oui										
Docum	itle(s) of material / Titre(s) abrégé(s) du matériel : ant Number / Numéro du document :											
10. a) Per	PERSONNEL (SÚPPQER) / PARTIÉ B PERSONNEL (ROURNISSEUZ) sonnel security screening level required / Niveau de contrôle de la sécurité du personnel requis											
	RELIABILITY STATUS CONFIDENTIAL SECRET TOP SECRET TRÈS SEC	RET										
	TOP SECRET SIGNT NATO CONFIDENTIAL NATO SECRET COSMIC T	OP SECRET RÈS SECRET										
	SITE ACCESS ACCÈS AUX EMPLACEMENTS											
	Special comments: Commentaires spéciaux :											
	NOTE: If multiple levels of screening are identified, a Security Classification Guide must be provided. REMARQUE: Si plusieurs niveaux de contrôle de sécurité sont requis, un guide de classification de la sécurité doit être fourni. D. b) May unscreened personnel be used for portions of the work?											
Du personnel sans autorisation sécuritaire peut-il se voir confier des parties du travail?												
If Yes, will unscreened personnel be escorted? Dans l'affirmative, le personnel en question sera-t-il escorté? Non Oui												
ARTC	SAFEGUARDS (SUPPLIER) (PARTIE C - MESURES DE PROTECTION (AQURNISSEUR)											
	ATION / ASSETS / RENSEIGNEMENTS / BIENS											
11. a) Will pren	the supplier be required to receive and store PROTECTED and/or CLASSIFIED information or assets on its site or nises?	No Yes										
Le fo	ournisseur sera-t-il tenu de recevoir et d'entreposer sur place des renseignements ou des biens PROTÉGÉS et/ou SSIFIÉS?	Non Oui										
11. b) Will Le fo	the supplier be required to safeguard COMSEC information or assets? ournisseur sera-t-il tenu de protéger des renseignements ou des biens COMSEC?	No Yes										
PRODUC		Non Oui										
44												
OCCII	ne production (manufacture, and/or repair and/or modification) of PROTECTED and/or CLASSIFIED material or equipment rat the supplier's site or premises?	No Yes										
et/ou	nstallations du fournisseur serviront-elles à la production (fabrication et/ou réparation et/ou modification) de matériel PROTÉGÉ CLASSIFIÉ?	_ 113/1 521										
INFORMA	TION TECHNOLOGY (IT) MEDIA / SUPPORT RELATIF À LA TECHNOLOGIE DE L'INFORMATION (TI)											
11. d) Will th	ne supplier be required to use its IT systems to electronically process, produce or store PROTECTED and/or CLASSIFIED	No Yes										
Le fo	nation or data? urnisseur sera-t-il tenu d'utiliser ses propres systèmes informatiques pour traiter, produire ou stocker électroniquement des signements ou des données PROTÉGÉS et/ou CLASSIFIÉS?	Non Oui										
1. e) Will th	ere be an electronic link between the supplier's IT systems and the government department or approve	No Yes										
Dispo	osera-t-on d'un lien électronique entre le système informatique du fournisseur et celui du ministère ou de l'agence ernementale?	Non L Oul										



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PART C - (continu	ued) / P	ART	IE C - (stute)			-		- 8						
For users comp	oleti	ng ti	ne fo	m manually u	ise the sui	mmary c	hart below to	indicate the c	ategory(i	es) and le	vei(s)	of safe	uarding requi	red at the	
supplier's site(: Les utilisateurs niveaux de sau	gui	ren	mise iplise	ss. sent le formulai	re manue	llement	doivent utilis								
For users comp Dans le cas de dans le tableau	s ut	IIISAI	eurs	qui remplissei	it ie toimu	liaire en l	ligne (par ini	rt is automatic ernet), les rép TABLEAU F	onses au	x question	our re ns pré	sponse: cédente	s to previous q es sont automa	uestions. itiquemer	nt saisies
Category Categorie		OTECT			SSIFIED ASSIFIÉ			NATO	<u> </u>				COMSEC		
	A	В	С	CONFIDENTIAL CONFIDENTIAL	SECRET	TOP SECRET TRÊS SECRET	NATO RESTRICTED NATO DIFFUSION	NATO CONFIDENTIAL NATO CONFIDENTIEL	NATO SECRET	COSMIC TOP SECRET COSMIC TRES		TECTED OTÉGE B C	CONFIDENTIAL	SECRET	TOP SECRET TRES SECRET
Information / Assets			-				RESTREINTE		 	SECRET	 	-			
Renseignements / Biens Production												-			
I'l Media /					<u>-L_</u>		<u> </u>		$\sqcup \sqcup$	\square			<u> </u>	\Box	
Support TI			Ш	┝╼┖╌┸┈╌┩	_ _ _										
Lien électronique				L[]			└──				Fi				
[
12. a) Is the descr La descriptio	iptic n du	on of u trav	the vail v	work container risé par la prés	within the	is SRCL RS est-el	PROTECTE le de nature	D and/or CLA PROTÉGÉE (SSIFIED?	? ASSIFIÉE?	•		\boxtimes	No Non	Yes Oui
Dans l'affim	nath	VO, C	lass	by annotatin iffler le préser rité » au haut	it formula	iire en in	idiquant le r	rea entitled " riveau de séc	Security urité dan	Classifica ns la case	ation" intitu	i. Ilée			
12. b) Will the doc La document	ume atio	entat n as	ion a socia	attached to this ée à la présent	SRCL be	PROTE sera-t-ell	CTED and/or le PROTÉGÉ	CLASSIFIED)? SIFIÉE?				\boxtimes	No Non	Yes Oui
with attachn Dans l'affirm	ieni iativ ion	cs (e /e, c de s	.g. S lass iécu	by annotatin ECRET with / ifier le présen rité » au haut	Attachme It formula	nts), ire en in	diquant le n	iveau de séc	urité dar	ne la caso	intitu	láa			



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PART D - AUTHORIZATION / PAR	TIE D. AUTORISATIO	NA)				
13. Organization Project Authority / Charge de projet de l'organisme						
Name (print) - Nom (en lettres moulées) Title -						
Bruno Vallieres		Manager Facilities Engineering Unit		Pol	lall 1	
Telephone No Nº de téléphone Facsimile No Nº de		télècopieur	E-mail address - Adresse cou	il address - Adresse courriel Date		
613-991-5586 613-957-9828		bruno.vallieres@nrc-				
14 Organization Samuel Authority	(B		cnrc.gc.ca			
14. Organization Security Authority / Responsable de la sécurité de l'organisme						
Name (print) - Nom (en lettres moulées) Charlotte Carrier		Title Titre Controlled Goods and Contract Security Coordinator		Signature		
Telephone No N° de téléphone Facsimile No N° de télécopi (613) 993-8956 (613) 990-0946		-	Charlotte Carrier@nrc-cnrc.dc ca 22 May 2013			
15. Are there additional instructions (e.g. Security Guide, Security Classification Guide) attached? Des instructions supplémentaires (p. ex. Guide de sécurité, Guide de classification de la sécurité) sont-elles jointes? No Yes Oui						
16. Procurement Officer / Agent d'approvisionnement						
Name (print) - Nom (en lettres moule MARL BEDAN	Title Titre	Chèce Contractor;	U	Abreli 1		
613 993-2274	Facsimile No Nº de		Email address - Adresse cou	urriel	Date 30/5/13	
17. Contracting Security Authority / Autorité contractante en matière de sécurité						
Name (print) - Nom (en lettres moulées)		Title - Titre		Signature		
			į			
Telephone No Nº de téléphone	Facsimile No Nº de t	élécopieur	E-mail address - Adresse cou	urriel	Date	