

NCC Tender File #	NG272
Project Description	Gatineau Park – Meech Lake Shoreline Rehabilitation
Site Visit	A NON MANDATORY site visit will be held on Tuesday, August 5, 2014 at 10am Ottawa Time. The meeting place will be at Meech Lake in Chelsea QC at parking lot P13 by Blanchet Beach. All costs incurred by the Bidder to attend the site visit will be at their expense. The NCC will not reimburse any Bidder for expenses related to the site visit. To confirm your attendance at the site visit and to gain access to the grounds, please communicate with Susan Fisher by phone at 613-239-5678 ext 5047 or by email at susan.fisher@ncc-ccn.ca.
Closing date and time	Tuesday August 12, 2104 at 3pm Ottawa time



RET	TURN TENDERS TO:	National Capital Commission	NCC Tender Number
		40 Elgin Street, 3rd Floor, Service Centr	e
		Ottawa, ON K1P 1C7	NG272
			NCC Contract Number
	DER CLOSING DATE	August 12, 2014	
ANL	TIME:	at 3:00 p.m., Ottawa time	
DES	CRIPTION OF WORK	: MEECH LAKE SHORELINE REHA	BILITATION – GATINEAU PARK
1.	BUSINESS NAME AN	D ADDRESS OF BIDDER	
	Name:		
	A 11		
	<u></u>		_
	Telephone number:		Fax number:
	Email address:		
2.	THE OFFER		
			erform and complete the work for the above mentioned er amount (to be expressed in numbers only) of:
	Sub Total \$		
	GST-QST 14.975% \$	·	
	TOTAL \$		
3.	TENDER VALIDITY IN The tender shall not be w	PERIOD vithdrawn for a period of 60 days followin	ng the date and time of tender closing.
4.	CONTRACT DOCUM	ENTS	
4.	1. The following are the		
		der & Acceptance Form when signed by t	he NCC:
		Invitation to Tender & Acceptance Form	
	(c) Drawings and Sp	ecifications;	•
	(d) General Condition		
	(e) Supplementary C		
	(f) Insurance Terms		
		alth and Safety Requirements;	
	(h) Addenda	sissued on one allowable tenden nervision o	society of hafare the data and time got for tander
	(i) Any amendments closing;	s issued of any anowable tender revision	received before the date and time set for tender
	U ,	incorporated by mutual agreement betwe	en the NCC and the Contractor before acceptance of
	the tender; and	mest parameter of manual agreement between	in the 1.55 and the contractor before acceptance of
		or variation of the contract documents that	at is made in accordance with the General
	(l) Security Require	ments.	

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2. The language of the contract documents shall be the language of the Invitation to Tender & Acceptance Form submitted.



NCC Tender Number	NG272		NCC Contract Number
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5. APPENDICES

The tender includes Appendix(ces) Nos I and II to the Invitation to Tender & Acceptance Form.

6. ACCEPTANCE AND CONTRACT

Upon acceptance of the Contractor's offer by the NCC, a binding Contract shall be formed between the NCC and the Contractor. The documents forming the Contract shall be the contract documents referred to in 4 – CONTRACT DOCUMENTS.

7. CONSTRUCTION TIME

The Contractor shall begin Work on September 2, 2014 and perform and complete the Work no later than October 31, 2014.

8. UNIT PRICE TABLE

The Bidder agrees that

- (a) the Unit Price Table designates that part of the Work to which a Unit Price Arrangement applies.
- (b) the Price per Unit and the Estimated Total Price must be entered for each item listed;
- (c) the Price per Unit as tender governs in calculating the Total Estimated Amount, and any errors in the extension of the Price per Unit and in the addition of the Estimated Total Prices shall be corrected by the NCC in order to obtain the Total Estimated Amount; and
- (d) the following table is the Unit Price Table for the purposes of the tender and the Contract:

UNIT PRICE TABLE

Note: Transfer the Total Estimated Amount from the Unit Price Table to item 2 – THE OFFER of this Invitation to Tender & Acceptance Form

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ltem	Description	UOM	QTY	Unit price	Amount
1	Mobilisation and site preparation	lump sum	1		
2	Temporary protection barrier -détail G1	lin. m	54		
3	Environmental Protection Measures	lump sum	1		
4	Demolition and removals	lump sum	1		
5	Gravel removal	lump sum	1		
6	Hydro seeding and erosion control mat (incl. topsoil) -detail B1	m²	221		
7	Vitus riparia planting	unit	10		
8	Shrub planting, small size (40cm ht.) -detail B4 and E1	unit	185		
9	Shrub planting, large size (80 cm ht.) -detail F3	unit	34		
10	Lower bank stabilization: live fascine -detail C1	lin. m	31		
11	Lower bank stabilization: single boulders -detail C2	lin. m	36		
12	Lower bank stabilization, double boulders -detail C3	lin. m	36		
13	Granite stone dust surface -detail F1	lump sum	1		
14	Natural boulder -detail F2	unit	2		
15	Stone steps -detail F4	lump sum	1		
16	Maintenance and plant material warranty	lump sum	1		
			Su	b-total (excl. taxes)	

9.	The basis of award is low total cost to the NCC including all taxes.
10.	I/We acknowledge receipt of the following addenda and have included for the requirement of it/them in my/our tendered

price: _______(Bidder to ender number of addenda issued, if any).

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NCC Tender Number NG272	NCC Contract Number
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11. TENDER SECURITY

- 1. The Bidders shall enclose tender security with its tender in accordance with GI08 TENDER SECURITY REQUIREMENTS.
- 2. If the security furnished does not comply fully with the requirements referred to in paragraph 1) herein, the tender shall be disqualified.
- 3. If a security deposit is furnished as tender security, it shall be forfeited in the event that the tender is accepted by the NCC and the Contractor fails to provide Contract Security in accordance with GC9 CONTRACT SECURITY, provided that the NCC may, if it is in the public interest, waive the forfeiture of the security deposit.

We hereby offer to supply to the NCC in accordance with the te above and on any attached sheets at the submitted price(s).	erms and conditions set out herein, the constr	action work listed
Name and title of person authorized to sign on behalf of Bidder	Signature	Date
(please print or type)	Signature	Date
Your tender is accepted to supply to the NCC, in accordance wi attached hereto, the construction services listed herein and on an		
Name and title of the person authorized to sign on behalf of the NCC (please print or type)	Signature	Date

INVOICING

Send the original invoice and 1 copy to:

Accounts Payable National Capital Commission 202-40 Elgin Street Ottawa, ON K1P 1C7

Or by email at the following address: payables@ncc-ccn.ca

To ensure prompt payment, please prepare your invoice in accordance with the prices quoted. Errors in invoicing can cause delay of payment. Submit your invoice to the address shown above and clearly indicate the Purchase Order number.

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LIST OF SUB-CONTRACTORS

INVITATION TO TENDER & ACCEPTANCE FORM

APPENDIX 1

- 1) The Bidder will subcontract the parts of the work listed below to the subcontractor named for each part. The Bidder agrees not to make changes in the list of subcontractors without the written consent of the NCC Representative. The Bidder understands that for each part of the work identified as Mandatory, if more than one subcontractor is named or no subcontractor is named, or, the Bidder fails to state that the work will be done by its own forces where applicable, the tender will be disqualified.
- 2) The Bidder certifies that tenders for the part(s) of the Work listed below were received from the following subcontractors:

	NON-MANDATORY REQUIREMENT:	:
(a)	Any other work not listed below	
	Type of Work:	Sub-contractor:
(a)	Sub contractor:	
	Sub-contractor:	
	Address:	
(b)	<u>n/a</u>	
	Sub contractor:	
	Address:	
(c)	-<u>n/a</u>	
	Sub-contractor:	
	Address:	
(d)	<u>n/a</u>	
	Sub-contractor:	
	A 11	

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New supplier Nouveau fournisseu
Update / Mise à jour

Supplier No. / No du fournisseur

For NCC use only / À l'usage de la CCN seulement

SUPPLIER – DIRECT PAYMENT AND TAX INFORMATION FORM FOURNISSEUR – FORMULAIRE DE PAIEMENT DIRECT ET RENSEIGNEMENTS POUR FINS D'IMPÔT

PART 'A' – IDENTIFICATION / PARTIE 'A' - IDENTIFICATION				
Legal name of entity or individual / Nom légal de l'entité ou du particulier	Operating name of entity Nom commercial de l'enti			
	Nom commercial de l'ent	ite ou du particulier (s	ii dillere da florii le	gai)
Former Public Servant in receipt of a PSSA Pension / Ancien fonctionnaire qui	•		Yes / Oui	☐ No / Non
An entity, incorporated or sole proprietorship, which was created by a Former partnership made of former public servants in receipt of PSSA pension or whe interest in the entity. / Une entité, constituée en société ou à propriétaire uniqu pension en vertu de la LPFP, ou un partenariat formé d'anciens fonctionnaires entités dans lesquelles ils détiennent le contrôle ou un intérêt majoritaire.	re the affected individual has e, créée par un ancien fonction	a controlling or major onnaire touchant une	Yes / Oui	☐ No / Non
Address / Adresse				
	Tele	ephone no. /	Fax no	
	No. d	le elephone :	No. De télé	copieur :
Postal code / Code postal	eeeiib		()	
PART 'B' - STATUS OF SUPPLIER / PARTIE 'B' - STATUT DU FOURNI	Last Name / Nom de fam	nille First name / F	Prénom Ini	tial / Initiale
(1) Sole proprietor Propriétaire unique If sole proprietor, provide Si propriétaire unique, indiquez :	_			
(2) Partnership / Société SIN – mandatory for (1) & (2) NAS – obligatoire pour (1) & (2) de personnes	Corporation /Société	Business No.	(BN) / No de l'entr	reprise (NE)
GST/HST / TPS et de TVH	QST / TVQ (Québec)			
Number / Numéro :	Number / Numéro :	erit 🔲		
The regions of the re	Not registered / non insc	:iii		
Type of contract / Genre de contrat Contract for services only Contract for mixed goods & services / Contract for services seulement Contract for mixed goods & services / Contract for goods only /Contrat de biens seulement Type of goods and/or services offered / Genre de biens et/ou services rendus :				
DART (O) FINANCIAL INSTITUTION (DARTIE (O) DENOTIONEMENT	O OUR LUNGTITUTION FIN	NANOIÈ DE		
PART 'C' – FINANCIAL INSTITUTION / PARTIE 'C' – RENSEIGNEMENT Please send a void cheque with this form / Veuillez, s.v.p., envoyer un				
Branch number / Institution no. /	n oposinion do unoque di	Account no. /		
No de la succursale No de l'institution :		No de compte :		
Institution name / Address / Nom de l'institution :				
DART (D) DAVMENT NOTIFICATION (DARTIE (D) AVIO DE DAIEME	Postal Code /	Code postal :		
PART 'D' – PAYMENT NOTIFICATION / PARTIE 'D' – AVIS DE PAIEMEI E-mail address / Adresse courriel :	NI .			
PART 'E' – CERTIFICATION / PARTIE 'E' – CERTIFICATION				
I certify that I have examined the information provided above and it is correct and complete, and fully discloses the identification of this supplier.	Je déclare avoir examiné exacts et constituent une fournisseur.			
Where the supplier identified on this form completes part C, he hereby requests and authorizes the National Capital Commission to directly deposit into the bank account identified in part C, all amounts payable to the supplier.	Lorsque le fournisseur inc demande et autorise la C dans le compte bancaire	ommission de la capitale	nationale à déposer	directement
Name of authorized person / Title / Titre Nom de la personne autorisée		Signature		Date
Telephone number of contact person / Numéro de téléphone de la person	ne ressource : ()			
IMPORTANT	,			
Please fill in and return to the National Capital Commission with one of <u>your</u> <u>business cheque unsigned and marked « VOID</u> » (for verification purposes).	Veuillez remplir ce form	nulaire et le retourner à		
business cheque unsigned and marked « VOID » (for verification purposes).	nationale avec <u>un spéci</u> <u>la mention « ANNULÉ</u> »			né et portant
Mail or fax to : Procurement Assistant, Procurement Services National Capital Commission 202-40 Elgin Street Ottawa, ON K1P 1C7 Fax : (613) 239-5007	nationale avec un spéci		on). onnement ionnement vitale nationale	<u>né et portant</u>

SUPPLIER – DIRECT PAYMENT AND TAX INFORMATION FORM

FOURNISSEUR – FORMULAIRE DE PAIEMENT DIRECT ET RENSEIGNEMENTS AUX FINS D'IMPÔT

Supplier Tax Information

Pursuant to paragraph 221(1) (d) of the Income Tax Act, NCC must declare form T-1204, contractual payments of government for services, all payments made to suppliers during the calendar year in accordance to related service contracts (including contracts for mixed goods and services).

The paragraph 237(1) of the Income Tax Act and the article 235 of the Income Tax Regulations require the supplier to provide all necessary information below to the organization who prepares the fiscal information forms.

Questions: Marcel Sanscartier, Manager, Accounts Payable and Receivable – (613) 239-5241.

Direct payment information

All amounts payable by NCC to the supplier will be deposited directly into the account you identified in part C. A NCC payment advice notice will also be sent to you by e-mail detailing the particularities of the payment.

Until we process your completed form, we will still pay you by check.

You must notify the NCC of any changes to your financial institution, branch or account number. You will then have to complete a new form.

The account you identified has to hold Canadian funds at a financial institution in Canada.

The advantages of direct payment

Direct payment is a convenient, dependable and timesaving way to receive your invoice payment. Direct payment is completely confidential.

There is less risk of direct payment being lost, stolen, or damaged as may happen with cheques.

Funds made by direct payment will be available in your bank account on the same day that we would have mailed your cheque.

Renseignements sur les fournisseurs aux fins d'impôt

En vertu de l'alinéa 221(1) (d) de la Loi de l'impôt sur le revenu, la CCN est tenu de déclarer, à l'aide du formulaire T-1204, Paiements contractuels de services du gouvernement, tous paiements versés aux fournisseurs pendant une année civile en vertu de marchés de services pertinents (y compris les marchés composés à la fois de biens et de services).

Le paragraphe 237 (1) de la Loi de l'impôt sur le revenu et l'article 235 du Règlement de l'impôt sur le revenu obligent les fournisseurs à fournir toutes les informations demandées ci-dessous à l'organisme qui prépare les formulaires de renseignements fiscaux.

Questions: Marcel Sanscartier, Gestionnaire, comptes fournisseurs et comptes clients – (613) 239-5241.

Renseignements sur le paiement direct

Tous les montants versés par la CCN au fournisseur seront déposés directement dans le compte identifié à la partie C. Un avis de paiement de la CCN détaillant les particularités du paiement vous sera envoyé par courriel

Nous continuerons à vous payer par chèque jusqu'à ce que nous ayons traité votre formulaire.

Vous devez aviser la CCN de tout changement d'institution financière, de succursale ou de numéro de compte. Vous devrez donc remplir un nouveau formulaire.

Le compte que vous désignez doit être un compte en monnaie canadienne, détenu dans une institution financière au Canada.

Avantages du paiement direct

Le paiement direct est une méthode pratique, fiable, qui permet de gagner du temps dans la réception de vos paiements de factures. Le paiement direct est entièrement confidentiel.

Avec les paiements direct, il y a moins de risques de perte, de vol ou de dommage, comme cela peut se produire dans le cas des chèques.

Les paiements effectués par paiement direct sont versés dans votre compte le jour même où nous aurions posté votre chèque.



SPECIAL INSTRUCTIONS TO BIDDERS

- SI01 Tender Documents
- SI02 Enquiries during the Solicitation Period
- SI03 [Mandatory] Site Visit
- SI04 Revision of Tender
- SI05 Tender Results
- SI06 Negotiations
- SI07 Tender Validity Period SI08 Construction Documents
- SI09 Public Tender Opening

SI01 TENDER DOCUMENTS

- 1) The following are the tender documents:
 - (a) Invitation to Tender & Acceptance Form and any Appendices attached thereto;
 - (b) Special Instructions to Bidders; and
 - (c) General Instructions to Bidders.

Submission of a tender constitutes acknowledgement that the Bidder has read and agrees to be bound by these documents.

SI02 ENQUIRIES DURING THE SOLICITATION PERIOD

- Enquiries regarding this tender must be submitted in writing to the following: Sr. Contract Officer, Nicole Galipeau, telephone number 613-239-5678 ext. 5191, facsimile number 613-239-5007 or e-mail address nicole.galipeau@ncc-ccn.ca as early as possible within the solicitation period. Except for the approval of alternative materials as described in GI15 of the General Instructions to Bidders, enquiries should be received no later than five (5) calendar days prior to the date set for solicitation closing to allow sufficient time to provide a response. Enquiries received after that time may result in an answer not being provided.
- 2) To ensure consistency and quality of the information provided to Bidders, the Sr. Contract Officer shall examine the content of the enquiry and shall decide whether or not to issue an amendment.
- 3) All enquiries and other communications related to this tender sent throughout the solicitation period are to be directed ONLY to the Sr. Contract Officer named above. Non-compliance with this requirement during the solicitation period can, for that reason alone, result in disqualification of a tender.

SI03 [MANDATORY] SITE VISIT

1) A NON MANDATORY site visit will be held on xxxx, xxxx xxxx, 2014 at 10am Ottawa Time. The meeting place will be at Rideau Hall (Ottawa, Ontario) outside the gate off Princess Avenue. All costs incurred by the Bidder to attend the site visit will be at their expense. The NCC will not reimburse any Bidder for expenses related to the site visit.

To confirm your attendance at the site visit and to gain access to the grounds, please communicate with NCC Corporate Security at **613-239-5222 or** securityscreening@ncc-ccn.ca at least 24 hours prior to the site visit.

Please note that all visits to sensitive sites (official residences and Parliament Hill) shall be coordinated with, and approved by NCC Corporate Security.

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SPECIAL INSTRUCTIONS TO BIDDERS

[The site visit for this project is MANDATORY. The representative of the Bidder will be required to sign the Site Visit Attendance Sheet at the site visit. Tenders submitted by Bidders who have not signed the attendance sheet will not be accepted.]

SI04 REVISION OF TENDER

1) A tender may be revised by letter or facsimile in accordance with GI10 of the General Instructions to Bidders. The facsimile number for receipt of revisions is 613-239-5012.

SI05 TENDER RESULTS

1) Following solicitation closing, tender results may be obtained by calling the Sr. Contract Officer, Nicole Galipeau, telephone number 613-239-5678 ext. 5191, facsimile number 613-239-5007 or e-mail address nicole.galipeau@ncc-ccn.ca.

SI06 NEGOTIATIONS

- 1) In the event that the lowest compliant tender exceeds the amount of funding the NCC has allocated for the construction phase of the work:
 - (a) by 15% or less, the NCC, at its sole discretion, shall either:
 - (i) cancel the invitation to tender; or
 - (ii) obtain additional funding and, subject to the provisions of GI11 and GI09 of the General Instructions to Bidders, award the Contract to the Bidder submitting the lowest compliant tender; or
 - (iii) revise the scope of the work accordingly and negotiate, with the Bidder submitting the lowest compliant tender, a corresponding reduction in its tender price.
 - (b) by more than 15%, the NCC, at its sole discretion, shall either:
 - (i) cancel the invitation to tender; or
 - (ii) obtain additional funding and, subject to the provisions of GI11 and GI09 of the General Instructions to Bidders, award the Contract to the Bidder submitting the lowest compliant tender; or
 - (iii) revise the scope of the work accordingly and invite those who submitted compliant tenders at the original invitation to tender to re-tender the work.
- 2) If negotiations or a re-tender are undertaken as is contemplated in subparagraphs 1)(a)(iii) or 1)(b)(iii) above, Bidders shall retain the same subcontractors and suppliers as they carried in their original tenders.
- 3) If the NCC elects to negotiate a reduction in the tender price as is contemplated in subparagraph 1)(a)(iii) herein and the negotiations fail to reach an agreement, the NCC shall then exercise either of the options referred to subparagraphs 1)(a)(i) or 1)(a)(ii).

SI07 TENDER VALIDITY PERIOD

1) The NCC reserves the right to seek an extension to the tender validity period prescribed in 3 of the Invitation to Tender & Acceptance Form. Upon notification in writing from the NCC, Bidders shall have the option to either accept or reject the proposed extension.

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SPECIAL INSTRUCTIONS TO BIDDERS

- 2) If the extension referred to in paragraph 1) of SI07 is accepted, in writing, by all those who submitted tenders, then the NCC shall continue immediately with the evaluation of the tenders and its approvals processes.
- 3) If the extension referred to in paragraph 1) of SI07 is not accepted in writing by all those who submitted tenders then the NCC shall, at its sole discretion, either:
 - (a) continue to evaluate the tenders of those who have accepted the proposed extension and seek the necessary approvals; or
 - (b) cancel the invitation to tender.
- 4) The provisions expressed herein do not in any manner limit the NCC's rights in law or under GI11 of the General Instructions to Bidders.

SI08 CONSTRUCTION DOCUMENTS

1) The successful contractor will be provided with one paper copy of the sealed and signed plans, the specifications and the amendments upon acceptance of the offer. Additional copies, may be available free of charge upon request by the contractor. If not, obtaining more copies shall be the responsibility of the contractor including costs.

SI09 PUBLIC TENDER OPENING

1) A public tender opening will be held on xxxx, xxxx, 2010 shortly after 3:00pm Ottawa time at 40 Elgin Street, Ottawa, Ontario in Room 306.

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- GI01 Completion of Tender
- GI02 Identity or Legal Capacity of the Bidder
- GI03 Goods and Services Tax / Harmonized Sales Tax
- GI04 Ouébec Sales Tax
- GI05 Capital Development and Redevelopment Charges
- GI06 Registry and Pre-qualification of Floating Plant
- GI07 Listing of Subcontractors and Suppliers
- GI08 Tender Security Requirements
- GI09 Submission of Tender
- GI10 Revision of Tender
- GI11 Acceptance of Tender
- GI12 Procurement Business Number
- GI13 Bid Depository
- GI14 Compliance with Applicable Laws
- GI15 Approval of Alternative Materials
- GI16 Performance Evaluation

GI01 Completion of Tender

- 1) The tender shall be:
 - (a) submitted on the Invitation to Tender and Acceptance Form provided through the Government Electronic Tendering Service (GETS) or on a clear and legible reproduced copy of such Invitation to Tender and Acceptance Form that must be identical in content and format to the Invitation to Tender and Acceptance Form provided through GETS;
 - (b) based on the Tender Documents listed in the Special Instructions to Bidders;
 - (c) correctly completed in all respects;
 - (d) signed by a duly authorized representative of the Bidder; and
 - (e) accompanied by
 - (i) tender security as specified in GI08; and
 - (ii) any other document or documents specified elsewhere in the solicitation where it is stipulated that said documents are to accompany the tender.
- Subject to paragraph 6) of GI11, any alteration to the pre-printed or pre-typed sections of the Invitation to Tender and Acceptance Form, or any condition or qualification placed upon the tender shall be cause for disqualification. Alterations, corrections, changes or erasures made to statements or figures entered on the Invitation to Tender and Acceptance Form by the Bidder shall be initialled by the person or persons signing the tender. Initials shall be original(s). Alterations, corrections, changes or erasures that are not initialled shall be deemed void and without effect.
- 3) Unless otherwise noted elsewhere in the Tender Documents, facsimile copies of tenders are not acceptable.

GI02 Identity or Legal Capacity of the Bidder

1) In order to confirm the authority of the person or persons signing the tender or to establish the legal capacity under which the Bidder proposes to enter into Contract, any Bidder who carries on business in other than its own personal name shall, if requested by the NCC prior to award of contract, provide satisfactory proof of:

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- (a) such signing authority; and
- (b) the legal capacity under which it carries on business.

Proof of signing authority may be in the form of a certified copy of a resolution naming the signatory(ies) that is (are) authorized to sign this tender on behalf of the corporation or partnership. Proof of legal capacity may be in the form of a copy of the articles of incorporation or the registration of the business name of a sole proprietor or partnership.

GI03 Goods and Services Tax / Harmonized Sales Tax

The National Capital Commission (NCC) is a Crown Corporation subject to the Goods and Services Tax (GST), the Ontario Provincial Sales Tax (OST) and the Quebec Sales Tax (QST). The rates quoted are exclusive of the GST and the OST/QST. The successful firm will be required to indicate separately, on all invoices or requests for payments, the amount of Goods and Services Sales Tax (GST), the amount of Ontario Sales Tax (OST) and the amount of Quebec Sales Tax (QST), to the extent applicable, that the Commission must pay. These amounts will be paid to the successful Bidder who is required to make the appropriate remittances to Revenue Canada and the respective provincial governments.

Pursuant to paragraph 221 (1)(d) of the Income Tax Act, payments made by Crown Corporations under applicable service contracts (including contracts involving a mix of goods and services) must be reported on a "T1204" slip. To comply with this requirement, the Bidder is required to provide the following information on the "Supplier – Direct Payment and Tax Information Form" (see Appendix 11).

By signing this form, the Bidder/Proponent certifies that he/she has examined the information provided on the form and that it is correct, complete, and fully discloses the identification of the Contractor.

This "Supplier – Direct Payment and Tax Information Form" must be completed and returned to the Commission prior to any contract being awarded to your firm (see Appendix 11).

GI04 Quebec Sales Tax

1) See GI03.

GI05 Capital Development and Redevelopment Charges

1) For the purposes of GC1.8 LAWS, PERMITS AND TAXES in the General Conditions of the Contract, only fees or charges directly related to the processing and issuing of building permits shall be included. The Bidder shall not include any monies in the tender amount for special municipal development, redevelopment or other fees or charges which a municipal authority may seek as a prerequisite to the issuance of building permits.

GI06 Registry and Pre-qualification of Floating Plant

Dredges or other floating plant to be used in the performance of the Work must be on Canadian registry. For dredges or other floating plant that are not of Canadian make or manufacture, the Bidder must obtain a certificate of qualification from Industry Canada, if applicable, and this certificate must accompany the tender. Plant so qualified by Industry Canada may be accepted on this project.

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GI07 Listing of Subcontractors and Suppliers

Notwithstanding any list of Subcontractors that the Bidder shall be required to submit as part of the tender, the Bidder submitting the lowest acceptable tender shall, within 24 hours of receipt of a notice to do so, submit all information requested in the said notice including the names of Subcontractors and Suppliers for the part or parts of the Work listed. Failure to do so may result in the disqualification of its tender.

GI08 Tender Security Requirements

 The Bidder shall submit tender security with the tender in the form of a bid bond or a security deposit in an amount that is equal to not less than 10% of the tender amount including all applicable taxes.

The maximum amount of tender security required with any tender is \$2,000,000.00.

2) A bid bond shall be in an approved form, properly completed, with original signature(s) and issued by an approved company whose bonds are acceptable to the NCC either at the time of solicitation closing or as identified on the list displayed at the following Website:

http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=12027

The approved form for the bid bond is enclosed at the end of this section.

- 3) A security deposit shall be an original, properly completed, signed where required and be either:
 - (a) a bill of exchange, bank draft or money order payable to the NCC;
 - (b) bonds of, or unconditionally guaranteed as to principal and interest by, the Government of Canada; or
- 4) A bill of exchange, bank draft or money order referred to in subparagraph 3)(a) of GI08 shall be certified by or drawn on:
 - (a) a corporation or institution that is a member of the Canadian Payments Association;
 - (b) a corporation that accepts public deposits and repayment of the deposits is unconditionally guaranteed by Her Majesty in right of a province;
 - (c) 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;
 - (d) a corporation, association or federation incorporated or organized as a credit union or cooperative credit society that conforms to the requirements of a credit union which are more particularly described in paragraph 137 (6)(b) of the *Income Tax Act*; or
 - (e) Canada Post Corporation.
- 5) If a bill of exchange, bank draft or money order is drawn on an institution or corporation other than a chartered bank, it must be accompanied by proof that the said institution or corporation meets at least one of the criteria described in paragraph 4) of GI08, either by letter or by a stamped certification on the bill of exchange, bank draft, or money order.
- 6) For the purposes of this section, a bill of exchange is an unconditional order in writing signed by the Bidder and addressed to an approved financial institution, requiring the said institution to pay, on demand, at a fixed or determinable time, a certain sum of money to, or to the order of, the NCC.

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- 7) Bonds referred to in subparagraph 3)(b) of GI08 shall be provided on the basis of their market value current at the date of solicitation closing, and shall be:
 - (a) payable to bearer;
 - (b) accompanied by a duly executed instrument of transfer of the bonds to the NCC in the form prescribed by the Domestic Bonds of Canada Regulations; or
 - (c) registered as to principal or as to principal and interest in the name of the NCC pursuant to the Domestic Bonds of Canada Regulations.
- As an alternative to a security deposit an irrevocable standby letter of credit is acceptable to the NCC and the amount shall be determined in the same manner as a security deposit referred to above.
- 9) An irrevocable standby letter of credit referred to in paragraph 8) of GI08 shall:
 - (a) be an arrangement, however named or described, whereby a financial institution (the "Issuer") acting at the request and on the instructions of a customer (the "Applicant) or on its own behalf:
 - (i) is to make a payment to, or to the order of, the NCC as the beneficiary;
 - (ii) is to accept and pay bills of exchange drawn by the NCC;
 - (iii) authorizes another financial institution to effect such payment or accept and pay such bills of exchange; or
 - (iv) authorizes another financial institution to negotiate against written demand(s) for payment provided that the terms and conditions of the letter of credit are complied with.
 - (b) state the face amount which may be drawn against it;
 - (c) state its expiry date;
 - (d) provide for sight payment to the NCC by way of the financial institution's draft against presentation of a written demand for payment signed by the NCC Contract Administrator identified in the letter of credit by his/her office;
 - (e) provide that more than one written demand for payment may be presented subject to the sum of those demands not exceeding the face value of the letter of credit;
 - (f) provide that it is subject to the International Chamber of Commerce (ICC) Uniform Customs and Practice for Documentary Credits, 2007 Revision, ICC Publication No. 600;
 - (g) clearly specify that it is irrevocable or deemed to be irrevocable pursuant to article 6 c) of the International Chamber of Commerce (ICC) Uniform Customs and Practice for Documentary Credits, 2007 Revision, ICC Publication No. 600; and
 - (h) be issued or confirmed, in either official language, by a financial institution which is a member of the Canadian Payments Association and is on the letterhead of the Issuer or Confirmer. The format is left to the discretion of the Issuer or Confirmer.
- 10) Tender security shall lapse or be returned as soon as practical following:
 - (a) the solicitation closing date, for those Bidders submitting non-compliant tenders; and

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- (b) the administrative tender review, for those Bidders submitting compliant tenders ranked fourth to last on the schedule of tenders; and
- (c) the award of contract, for those Bidders submitting the second and third ranked tenders; and
- (d) the receipt of contract security for the successful Bidder; or
- (e) the cancellation of the solicitation, for all Bidders.
- 11) Notwithstanding the provisions of paragraph 10) of GI08 and provided more than three (3) compliant tenders have been received, if one or more of the tenders ranked third to first is withdrawn or rejected for whatever reason, then the NCC reserves the right to hold the security of the next highest ranked compliant tender in order to retain the tender security of at least three (3) valid and compliant tenders.

GI09 Submission of Tender

- 1) The Invitation to Tender and Acceptance Form, duly completed with the bid security, shall be enclosed and sealed in an envelope provided by the Bidder, and shall be addressed and submitted to the office designated on the front page of the Invitation to Tender and Acceptance Form for the receipt of tenders.
- 2) Unless otherwise specified in the Special Instructions to Bidders:
 - (a) the tender shall be in Canadian currency;
 - (b) exchange rate fluctuation protection is not offered; and
 - (c) any request for exchange rate fluctuation protection shall not be considered.
- 3) Prior to submitting the tender, the Bidder shall ensure that the following information is clearly printed or typed on the face of the tender envelope:
 - (a) Solicitation Number;
 - (b) Name of Bidder.
- 5) Timely and correct delivery of the tender is the sole responsibility of the Bidder. The tender must be received on or before the date and time set for solicitation closing. Late tenders shall be disqualified.

GI10 Revision of Tender

- 1) A tender submitted in accordance with these instructions may be revised by letter or facsimile (fax number only 613-239-5012 provided the revision is received at the office designated for the receipt of tenders, on or before the date and time set for the closing of the solicitation. The letter or facsimile shall:
 - (a) be on the Bidder's letterhead or bear a signature that identifies the Bidder;
 - (b) for the Total Bid Amount, clearly identify the amount of the current revision. The total aggregate sum of all revisions submitted, including the current revision, shall be shown separately; and
 - (c) for the Price per unit portion of a tender, clearly identify the current revision(s) to the Price(s) per unit and the specific item(s) to which each revision applies. If a revision is to be applied to a specific Item that was previously amended then, in addition to the amount of the current

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revision, the total aggregate sum of all revisions submitted, including the current revision, for that Item shall be shown separately.

- 2) A letter or facsimile submitted to confirm an earlier revision shall be clearly identified as "CONFIRMATION ONLY", for each contemplated change.
- 3) Failure to comply with any of the above provisions shall result in the rejection of the non-compliant revision(s) only. The tender shall be evaluated based on the original tender submitted and all other compliant revision(s).

GI11 Acceptance of Tender

- 1) The NCC may accept any tender, whether it is the lowest or not, or may reject any or all tenders.
- 2) Without limiting the generality of paragraph 1) of GI11, the NCC may reject a tender if any of the following circumstances are present:
 - (a) the Bidder, or any employee or subcontractor included as part of the tender, have been convicted under section 121 ("Frauds on the government" & "Contractor subscribing to election fund"), 124 ("Selling or purchasing office"), 380 (Fraud committed against Her Majesty) or 418 ("Selling defective stores to Her Majesty") of the Criminal Code of Canada, or under paragraph 80(1)(d) (False entry, certificate or return), subsection 80(2) (Fraud against her Majesty) or Section 154.01 (Fraud against her Majesty) of the Financial Administration Act;
 - (b) the Bidder's bidding privileges are suspended or are in the process of being suspended;
 - (c) the bidding privileges of any employee or subcontractor included as part of the tender are suspended or are in the process of being suspended, which suspension or pending suspension would render that employee or subcontractor ineligible to tender on the Work, or the portion of the Work the employee or subcontractor is to perform;
 - (d) with respect to current or prior transactions with the NCC
 - (i) the Bidder is bankrupt or if, for whatever reason, its activities are rendered inoperable for an extended period;
 - (ii) evidence, satisfactory to the NCC, of fraud, bribery, fraudulent misrepresentation or failure to comply with any law protecting individuals against any manner of discrimination, has been received with respect to the Bidder, any of its employees or any subcontractor included as part of its tender;
 - (iii) the NCC has exercised, or intends to exercise, the contractual remedy of taking the work out of the contractor's hands with respect to a contract with the Bidder, any of its employees or any subcontractor included as part of its tender; or
 - (iv) the NCC determines that the Bidder's performance on other contracts is sufficiently poor to jeopardize the successful completion of the requirement being tendered on.
- 3). In assessing the Bidder's performance on other contracts pursuant to subparagraph 2)(d)(iv) of GI11, the NCC may consider, but not be limited to, such matters as:
 - (a) the quality of workmanship in performing the Work;
 - (b) the timeliness of completion of the Work;

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- (c) the overall management of the Work and its effect on the level of effort demanded of the NCC and its representative; and
- (d) the completeness and effectiveness of the Contractor's safety program during the performance of the Work.
- 4) Without limiting the generality of paragraphs 1), 2) and 3) of GI11, the NCC may reject any based on an unfavourable assessment of the:
 - (a) adequacy of the tender price to permit the work to be carried out and, in the case of a tender providing prices per unit, whether each such price reasonably reflects the cost of performing the part of the work to which that price applies;
 - (b) Bidder's ability to provide the necessary management structure, skilled personnel, experience and equipment to perform competently the work under the Contract; and
 - (c) Bidder's performance on other contracts.
- 5) If the NCC intends to reject a tender pursuant to a provision of paragraphs 1), 2), 3) or 4) of GI11, other than subparagraph 2)(b)of GI11, the NCC shall so inform the Bidder and provide the Bidder ten (10) days within which to make representation, prior to making a final decision on the tender rejection.
- 6) The NCC may waive informalities and minor irregularities in tenders received, if the NCC determines that the variation of the tender from the exact requirements set out in the Tender Documents can be corrected or waived without being prejudicial to other Bidders.

GI12 Procurement Business Number

1) Not applicable.

GI13 Bid Depository

1) If the solicitation advertisement states that a Bid Depository shall be used, the Bidder shall obtain bids in accordance with local Bid Depository rules and procedures.

GI14 Compliance with Applicable Laws

- By submission of a tender, the Bidder certifies that the Bidder has the legal capacity to enter into a contract and is in possession of all valid licences, permits, registrations, certificates, declarations, filings, or other authorizations necessary to comply with all federal, provincial and municipal laws and regulations applicable to the submission of the tender and entry into any ensuing contract for the performance of the work.
- 2) For the purpose of validating the certification in paragraph 1) of GI14, a Bidder shall, if requested, provide a copy of every valid licence, permit, registration, certificate, declaration, filing or other authorization listed in the request, and shall provide such documentation within the time limit(s) set out in the said request.
- 3) Failure to comply with the requirements of paragraph 2) of GI14 shall result in the disqualification of the tender.

GI15 Approval of Alternative Materials

1) When materials are specified by trade names or trademarks, or by manufacturers' or suppliers' names, the tender shall be based on use of the named materials. During the solicitation period,

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alternative materials may be considered provided full technical data is received in writing by the Contracting Officer at least seven (7) calendar days, unless otherwise noted in the Tender documents, prior to the solicitation closing date. If the alternative materials are approved for the purposes of the tender, an addendum to the tender documents shall be issued.

GI16 Performance Evaluation

1) Bidders shall take note that the performance of the Contractor during and upon completion of the work shall be evaluated by the NCC. The evaluation shall be based on the quality of workmanship, timeliness of completion of the work, project management, contract management and management of health and safety. Should the Contractor's performance be considered unsatisfactory, the Contractor's bidding privileges on future work may be suspended indefinitely. Contractor Evaluation Report Form is enclosed at the end of this section.

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BID BOND

	Bond Number
	Amount _\$
KNOW ALL MEN BY THESE PRESENTS, that	as Principal,
nereinafter called the Principal, and	as Surety, hereinafter
called the Surety, are, subject to the conditions hereinafter contained, held	and firmly bound unto the National Capital Commission as
Obligee, hereinafter called the NCC, In the amount of	dollars
\$), lawful money of Canada, for the paymen	t of which sum, well and truly to be made, the Principal and
the Surety bind themselves, their heirs, executors, administrators, successor	ors and assigns, jointly and severally, firmly by these presents.
SIGNED AND SEALED this day of	, WHEREAS, the Principal has
submitted a written tender to the NCC, dated the day of	of , ,
for:	
NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION are such	that if:
(a) The Principal, should his tender be accepted within the period be days after closing date of the tender:	specified by the NCC, or, if no period be specified, within sixty (60)
	no period be specified therein, within fourteen (14) days after the e such further contractual documents, if any, as may be required by
furnish a Performance Bond and a Labour and Material Pay satisfactory to the NCC, or other security acceptable to the N	yment Bond, each in the amount of 50% of the Contract price and NCC; or
	amount of the Principal's tender and the amount of the Contract which were specified in the said tender, if the latter amount be in
hen, this obligation shall be void; otherwise it shall remain in full force and	effect.
PROVIDED, HOWEVER , that the Surety and the Principal shall not be lial the bond.	ble to the NCC for an amount greater than the amount specified in
PROVIDED FURTHER that the Surety shall not be subject to any suit or a served upon the Surety at its Head Office in Canada, within twelve (12) mo	action unless such suit or action is instituted and process therefore on the date of this bond.
N TESTIMONY WHEREOF, the Principal has hereto set its hand and affix with its corporate seal duly attested by the signature of its authorized signing.	
SIGNED, SEALED AND DELIVERED in the presence of:	Note: Affix Corporate seal if applicable.
Principal	
Witness	
Surety	



CONTRACTOR PERFORMANCE EVALUATION REPORT FORM FORMULAIRE - RAPPORT D'ÉVALUATION DU RENDEMENT DE L'ENTREPRENEUR

Date		Contract no. / No du contrat					
Description of work / Description des travaux							
Contractor's business name / Nom de l'entreprise de	l'antropropour		Contractor's site su	unarintandant / Ca	ontremaître de l'entreprene		
Contractor's business name / Nom de l'entreprise de	rentrepreneur		Contractor's site su	iperintendent / Co	miremaiire de l'entreprene	ur	
Contractor's business address / Adresse de l'entrepr	ise de l'entrepren	eur					
NCC representative / Représentant de la Co	-N						
Name / Nom	JIN	Telephone no. /	' N°. de téléphone	E	E-mail address / Adresse é	electro	onique
		•	•				•
Contract information / Information sur le co	ontrat						
Contract award amount / Montant du marché adjugé			Contract award dat	te / Date de l'adjud	dication du marché		
Final amount / Montant final			Actual contract con	npletion date / Da	te réelle d'achèvement du	contr	at
Number of change orders / Nombre d'ordres de char	ngement		Final certificate dat	te / Date du certific	cat final		
Quality of workmanship / Qualité des trava	ux exécutés		Category /	Catégorie	Scale / Échelle	Poi	nts / Pointage
This is the rating of the quality of the workmanship. A			Unacceptable / Inac		0 – 5		
the materials and equipment incorporated in the work set out in the plans and specifications.	c must meet the re	equirements	Not satisfactory / N	lon-satisfaisant	6 – 10		
Il s'agit de l'évaluation de la qualité des travaux exéc	utés. À l'achèvem	nent des	Satisfactory / Satisf	faisant	11 – 16		
travaux, la qualité des matériaux et de l'équipement établies dans les plans et devis.	doit satisfaire les	exigences	Superior / Supérieu	ır	17 - 20		
Time / Délai d'exécution							
This is the rating of the timeliness of completion considering the actual completion date compared with the original (or amended) contract completion date and allowing for conditions beyond the control of the contractor.		Unacceptable / Ina	cceptable	0 – 5			
		Late / En retard		6 – 10			
Il s'agit de l'évaluation du délai d'exécution des travaux en prenant en considération la date actuelle d'achèvement des travaux par rapport à la date originale (ou modifiée) et en tenant compte des conditions indépendantes de la volonté de		On time / À temps		11 – 16			
		Ahead of schedule	/ En avance sur				
l'entrepreneur.	~1		le calendrier		17 - 20		
Project management / Gestion de proj	et		l leggesentable / leg	a a a nta h la	0 – 5		
This is the rating of how the project, as described in twas managed including co-ordination, quality control			Unacceptable / Ina Not satisfactory / N	•	6-10		
development and implementation.			Satisfactory / Satisf		11 – 16		
Voici l'évaluation de la façon dont le projet décrit dan			Superior / Supérieu		17 - 20		
été géré, y compris la coordination, le contrôle de la calendrier efficace et la mise en œuvre.	quaiite, i elaborati	on a un					N/A / S/O
Contract management / Gestion de co	ntrat		Criteria not applicable / Critère non-applicable N/A / S				14717 676
	THE COLUMN		Unacceptable / Ina	cceptable	0 – 5		
This is the rating of how the contract was administered	ad in accordance	with the	Not satisfactory / N	·	6 – 10		
provisions expressed in the "front end" portion of the		with the	Satisfactory / Satisf		11 – 16		
Voici l'évaluation de la façon dont le contrat a été ad		ment aux	,				
dispositions comprises dans la partie « prioritaire » d	es documents.		Superior / Satisfaisant		17 - 20		
			Criteria not	applicable / Critèr	e non-applicable		N/A / S/O
Health and safety / Santé et sécurité This is the rating of the effectiveness of how the occu	inational health a	nd safety					
provisions (whether identified in the contract or those	of provincial legi:	,	Unacceptable / Ina	•	0-5		
otherwise applicable) were managed and administer		à la aanté at à	Not satisfactory / Non-satisfaisant 6 – 10		11 – 16		
Voici l'évaluation de l'efficacité avec laquelle les dispositions relatives à la santé et à la sécurité au travail (dans le contrat, dans les règlements provinciaux ou dans tout		Satisfactory / Satisfaisant 11 – 16 Superior / Satisfaisant 17 - 20					
autre document) ont été gérées et administrées.		Total points / Pointage total				/100	
Comments / Commentaires				Total politi	is / Follitage total		7100
Comments / Commentalies							
Name / Nom	Title / Titre			Signature			Date
				1			

INSTRUCTIONS AND ADDITIONAL INFORMATION (Contractor Performance Evaluation Report) INSTRUCTIONS ET RENSEIGNEMENTS SUPPLÉMENTAIRES (Rapport d'évaluation du rendement de l'entrepreneur)

QUALITY OF WORKMANSHIP – QUALITÉ DES TRAVAUX EXÉCUTÉS

The NCC representative is to consider how the workmanship compares with:

- the norms in the area in which the work was carried out
- the contractor's compliance with any quality provisions outlined in the drawings and specification
- the quality of workmanship provided by other contractors on similar projects in the same facility/facilities

Le représentant de la CCN doit évaluer la qualité de l'exécution en fonction de ce qui suit :

- le respect des normes s'appliquant aux travaux réalisés
- la conformité de l'entrepreneur aux exigences de qualité comprises dans les dessins et dans les devis
- la qualité de l'exécution des travaux accomplis par d'autres entrepreneurs dans le cadre de projets similaires réalisés dans la même installation ou dans des installations semblables.

TIME / DÉLAIS D'EXÉCUTION

For the purpose of evaluation the contractor's time performance, consideration must be given to conditions beyond the contractor's control including NCC / Consultant / Client performance.

Consider conditions beyond the contractor's control, e.g.,

- availability of, and access to the site
- changes in soil or site conditions
- weather extremes
- strikes
- material / equipment supply problems originating from manufacturers/suppliers
- quality of plans and specifications
- major change(s) in scope
- cumulative effect of changes
- was the NCC able to meet its obligations?
- timely decisions, clarifications, approvals, payments in due time
- delays caused by other contractors in the same facility

Afin d'évaluer le rendement de l'entrepreneur en matière de délai d'exécution, on doit prendre en considération les conditions indépendantes de la volonté de l'entrepreneur, y compris le rendement de la CCN, de l'expert-conseil et du client.

Prendre en considération les conditions indépendantes de la volonté de l'entrepreneur, par exemple :

- disponibilité du chantier et accès au chantier
- modifications des conditions du sol ou du chantier
- température
- grèves
- problèmes d'approvisionnement en matériel et en équipement provenant des manufacturiers/fournisseurs
- qualité des plan et devis
- modifications importantes à l'étendue des travaux
- effets cumulatifs des modifications
- la CCN a-t-elle été capable de remplir ses obligations?
- décisions, clarifications, approbations, paiements en temps opportun
- les retards occasionnés par d'autres entrepreneurs travaillant dans la même installation.

The NCC representative's estimate of a reasonable maximum time allowance resulting from conditions beyond the contractor's control is L'estimation, par le représentant de la CCN, du temps maximum alloué pour les conditions indépendantes de la volonté de l'entrepreneur est

The period of delay attributable to the contractor is La période de retard attribuable à l'entrepreneur est

Did the contractor make an effective effort / Est-ce que l'entrepreneur s'est efforcé :

- to meet the schedule / de respecter l'échéancier des travaux
- to clean up deficiencies in a reasonable time / de corriger les vices dans un délai raisonnable

Have you recommended assessments and damages for late completion under the contract? Avez-vous recommandé des dédommagements pour retard d'exécution aux termes du marché?

	Yes
	Oui
	Vac

	Yes
	Oui

No Non

Nο

Non No

Non

PROJECT MANAGEMENT / GESTION DU PROJET

The extent to which the contractor takes charge of and effectively manages the work has a direct effect on the inputs required of the NCC.

La mesure dans laquelle l'entrepreneur assume efficacement la gestion des travaux a une incidence directe sur les services qu'on attend de la CCN.

Consideration should be given to: Did the contractor

- employ a knowledgeable site superintendent
- required additional input from the NCC staff above that which is normal for a project of similar size and nature
- promptly commence the work
- provide realistic schedules and updates in accordance with the terms of the contract
- provide a comprehensive work plan and adhere to its milestones
- order material promptly and in such a way as to expedite the progress of the work
- provide shop drawings promptly and were they of sufficient detail

Il faut examiner si l'entrepreneur a :

- fait appel aux services d'un surintendant de chantier expérimenté
- demandé au personnel de la CCN une plus grande contribution que ce qui est normal pour un projet de cette importance et de cette nature
- commencé les travaux dans les plus brefs délais
- fourni un calendrier réaliste et des mises à jour conformément aux modalités du contrat
- présenté un plan de travail complet et a respecté les échéances
- commandé le matériel rapidement et de façon à accélérer l'avancement des travaux.
- fourni rapidement des dessins d'atelier comprenant suffisamment de détails

PROJECT MANAGEMENT (cont'd) / GESTION DU PROJET (suite)

- effectively manage and complete all Division 1 work site activities
- promptly provide reasonable quotations for changes to the original scope of work
- cooperate when issued directions by the NCC representative
- interpret the contract documents accurately
- establish effective quality control procedures
- effectively coordinate and manage the work of its subcontractors
- promptly correct defective work as the project progressed
- promptly clean-up all deficiencies and incomplete work after issuance of the Interim Certificate of Completion
- satisfactorily clean the work site periodically and at the completion of the project

- géré et achevé efficacement toutes les activités sur le chantier de la Division 1
- proposé rapidement des prix raisonnables pour les modifications à l'énoncé des travaux initial
- accepté les directives du représentant de la CCN
- interprété les documents contractuels avec exactitude
- mis en place des procédures de contrôle de la qualité efficaces
- coordonné et géré efficacement les travaux confiés à des soustraitants
- corrigé promptement le travail défectueux en cours de projet
- corrigé rapidement les travaux non acceptables et terminé les travaux incomplets après réception du certificat provisoire d'achèvement
- nettoyé de façon satisfaisante le chantier périodiquement ainsi qu'à la fin du projet.

CONTRACT MANAGEMENT / GESTION DU CONTRAT

The effectiveness of the contractor to administer the contract in accordance with the provisions expressed in the "front end" portion of the contract documents.

Consideration should be given to: Did the contractor

- in the time frame specified, provide its contract security, Insurance Certificate fully executed and WSIB form where applicable
- submit progress claims in the correct format, accurately representing the work successfully completed and material delivered to the site but not yet installed for each payment period
- submit a Statutory Declaration correctly completed with each progress
- submit an updated Schedule if so specified
- pay subcontractors and suppliers in a timely fashion in accordance with the terms and conditions of its subcontracts
- promptly appoint a competent site superintendent
- notify the NCC representative of all its subcontracting activities
- apply for, obtain and pay for all necessary permits, licenses and certificates
- cooperate with other contractors sent onto the site of the work
- remove a superintendent or unsuitable worker when requested by the NCC representative to do so
- effectively protect the work and the contract documents provided by
- comply with all warranty provisions up to the date of the Contractor Performance Evaluation Report Form (CPERF)
- effectively manage the site during a suspension or termination of the work to mitigate any additional costs to the NCC
- deal promptly with any claims from creditors
- maintain complete records of the project
- provide information promptly when requested to do so
- expedite and co-operate in the settlement of all disputes

Efficacité avec laquelle l'entrepreneur a administré le contrat conformément aux dispositions continues dans la partie « prioritaire » des documents contractuels.

Il faut examiner si l'entrepreneur a :

- fourni, dans le délai prescrit, une garantie contractuelle, un certificat d'assurance dûment signés et le formulaire de la CSST, le cas échéant
- présenté des réclamations périodiques dans le bon format, en décrivant avec précision les travaux exécutés et le matériel livré sur le chantier mains non encore installé, pour chaque période de paiement
- présenté une déclaration solennelle correctement remplie avec chaque réclamation périodique
- fourni un calendrier à jour, sur demande
- payé rapidement les sous-traitants et les fournisseurs conformément aux conditions des contrats de sous-traitance
- désigné dans les plus brefs délais un surintendant de chantier qualifié
- tenu au courant le représentant de la CCN de toutes les activités de sous-traitance
- demandé, obtenu et payé tous les permis, licences et certificats nécessaires
- collaboré avec les autres entrepreneurs envoyés sur le lieu des travaux
- remplacé un surintendant ou un travailleur inapte à la demande du représentant de la CCN
- protégé efficacement les travaux et les documents relativement aux travaux et au contrat fournis par la CCN
- respecté toutes les dispositions de garantie jusqu'à la date du Formulaire Rapport d'évaluation du rendement de l'entrepreneur (FRERE)
- géré efficacement le chantier pendant une suspension des travaux ou lors de leur achèvement, afin de limiter tout coût supplémentaire pour la CCN
- traité dans les plus brefs délais les demandes de paiement des créanciers
- tenu des dossiers complets sur le projet
- fourni promptement les renseignements demandés
- accélère et coopère dans le règlement des différends

HEALTH AND SAFETY / SANTÉ ET SÉCURITÉ

The effectiveness to which the contractor managed and administered the occupational health and safety provisions as stipulated in the contract documents and those required by provincial legislation or those that would otherwise be applicable to the site of the work.

Consideration should be given to: Did the contractor

- provide the NCC with a copy of its health and safety program prior to award of contract
- provide the NCC with a copy of its site specific hazardous assessment prior to award of contract
- apply for and obtain the provincial Notice of Project prior to commencement of the work
- apply for and obtain the Building Permit prior to commencement of the work
- provide a competent superintendent who
 - is qualified in health and safety matters because of her/his knowledge, training and experience
 - is familiar with the OH&S Act and its Regulations that apply to the site of the work
 - remedies any potential or actual danger of health and safety to those employed at the work site
- respond in a timely manner to any non-compliance safety issues noted by the NCC or a representative of the authority having jurisdiction
- implement its safety program in a proactive manner

Efficacité avec laquelle l'entrepreneur a géré et administré les dispositions relatives à la santé et à la sécurité au travail telles que stipulées dans les documents contractuels et dans les règlements provinciaux ou ceux s'appliquant normalement au lieu des travaux.

Il faut examiner si l'entrepreneur a :

- fourni à la CCN une copie de son programme en matière de santé et de sécurité avant l'octroi du contrat
- fourni à la CCN une copie de son évaluation des dangers pouvant survenir sur les lieux avant l'octroi du contrat
- demandé et obtenu l'avis de projet provincial avant le début des travaux
- demandé et obtenu le permis de construction avant le début des travaux
- engagé un surintendant qui :
 - est qualifié en matière de santé et de sécurité de par ses connaissances, sa formation et son expérience
 - connaît bien les dispositions de la Loi sur la santé et la sécurité au travail et de son règlement qui s'applique sur le lieu des travaux
 - remédie à tout danger possible ou réel en matière de santé et de sécurité pouvant toucher toutes les personnes travaillant sur le lieu des travaux
- traité rapidement tous les problèmes de non-conformité à la sécurité relevés par la CCN ou par un représentant de l'autorité qui a juridiction
- mis en œuvre son programme de sécurité de façon proactive

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GC1.1 INTERPRETATION

GC1.1.1 Headings and References

- 1) The headings in the contract documents, other than those in the drawings and specifications, form no part of the Contract but are inserted for convenience of reference only.
- 2) A reference made to a part of the Contract by means of numbers preceded by letters is 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.
- 3) A reference to a paragraph or subparagraph followed by an identifying number, letter or combination thereof is, unless specifically stated otherwise, a reference to the paragraph or subparagraph that forms part of the clause within which the reference is made.

GC1.1.2 Terminology

1) In the Contract

"Contract" means the contract documents referred to as such therein and every other document specified or referred to in any of them as forming part of the Contract, all as amended by agreement of the parties;

"Contract Amount" means the amount set out in the Contract to be payable to the Contractor for the Work, subject to the terms and conditions of the Contract;

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"Contract Security" means any security given by the Contractor to the NCC in accordance with the Contract:

"Contractor" means the person contracting with the NCC to provide or furnish all labour, Material and Plant for the execution of the Work under the Contract, and includes the Contractor's superintendent as designated in writing to the NCC;

"Certificate of Completion" means a certificate issued by the NCC when the Work reaches Completion;

"Certificate of Measurement" means a certificate issued by the NCC certifying the correctness of the final quantities, prices per unit and values of labour, Plant and Material performed, used and supplied by the Contractor for the construction of the part of the Work to which a Unit Price Arrangement applies;

"Certificate of Substantial Performance" means a certificate issued by the NCC when the Work reaches Substantial Performance;

"NCC Representative" means the person designated in the Contract, or by written notice to the Contractor, to act as the NCC Representative for the purposes of the Contract, and includes a person, designated and authorized in writing by the NCC Representative to the Contractor;

"herein", "hereby", "hereof", "hereunder" and similar expressions refer to the Contract as a whole and not to any particular section or part thereof;

"Lump Sum Arrangement" means that part of the Contract that prescribes a lump sum as payment for performance of the Work to which it relates;

"Material" includes all commodities, articles, machinery, equipment, fixtures and things required to be furnished in accordance with the Contract for incorporation into the Work;

"NCC" means the National Capital Commission;

"Person" also includes, unless there is an express stipulation in the Contract to the contrary, any partnership, proprietorship, firm, joint venture, consortium or corporation;

"Plant" includes all tools, implements, machinery, vehicles, structures, equipment, articles and things that are necessary for the performance of the Contract, other than Material and those tools customarily provided by a tradesperson in practicing a trade;

"Security screening" is a generic term that applies to all types and levels of personnel security screening including Reliability Status, Site Access, and CONFIDENTIAL, SECRET and TOP SECRET security clearances conducted by the NCC;

"Sensitive Information and Assets" means information or assets that have been identified by the NCC as TOP SECRET, SECRET, CONFIDENTIAL or protected;

"Subcontractor" means a person having a direct contract with the Contractor, subject to GC3.6 SUBCONTRACTING, to perform a part or parts of the Work, or to supply Material customized for the Work;

"Superintendent" means the employee or representative of the Contractor designated by the Contractor to act pursuant to GC2.6 SUPERINTENDENT;

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"Supplementary Conditions" means the part of the Contract that amends or supplements the General Conditions;

"Supplier" means a person having a direct contract with the Contractor to supply Plant or Material not customized for the Work;

"Unit Price Arrangement" means that part of the Contract that prescribes the product of a price per unit of measurement multiplied by a number of units of measurement for performance of the Work to which it relates;

"Unit Price Table" means the table of prices per unit set out in the Contract;

"Work" means, 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 in accordance with the contract documents; and

"Working Day" means a day other than a Saturday, Sunday, or a statutory holiday that is observed by the construction industry in the area of the place of the Work.

GC1.1.3 Application of Certain Provisions

- 1) Any 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 Lump Sum Arrangement applies.
- 2) Any provisions of the Contract that are expressly stipulated to be applicable only to a Lump Sum Arrangement are not applicable to any part of the Work to which a Unit Price Arrangement applies.

GC1.1.4 Substantial Performance

- 1) The Work shall be considered to have reached Substantial Performance when:
 - (a) the Work or a substantial part thereof has passed inspection and testing and is, in the opinion of the NCC, ready for use by the NCC or is being used for the intended purposes; and
 - (b) the Work is, in the opinion of the NCC, capable of completion or correction at a cost of not more than
 - (i) 3% of the first \$500,000;
 - (ii) 2% of the next \$500,000; and
 - (iii) 1% of the balance

of the Contract Amount at the time this cost is calculated.

- 2) Where the Work or a substantial part thereof is ready for use or is being used for the purposes intended and:
 - (a) the remainder of the Work or a part thereof cannot be completed by the time specified in the Contract, or as amended in accordance with GC6.5 DELAYS AND EXTENSION OF TIME, for reasons beyond the control of the Contractor; or
 - (b) the NCC and the Contractor agree not to complete a part of the Work within the specified time;

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the cost of that part of the Work that was either beyond the control of the Contractor to complete or the NCC and the Contractor have agreed not to complete by the time specified, shall be deducted from the value of the Contract referred to in subparagraph 1)(b) of GC1.1.4, and the said cost shall not form part of the cost of the Work remaining to be done in determining Substantial Performance.

GC1.1.5 Completion

1) The Work shall be deemed to have reached Completion when all labour, Plant and Material required have been performed, used or supplied, and the Contractor has complied with the Contract and all orders and directions made pursuant thereto, all to the satisfaction of the NCC.

GC1.2 CONTRACT DOCUMENTS

GC1.2.1 General

- 1) The contract documents are complementary, and what is required by any one shall be as binding as if required by all.
- References in the contract documents to the singular shall be considered to include the plural as the context requires.
- 3) Nothing contained in the contract documents shall create a contractual relationship between the NCC and any Subcontractor or Supplier, their subcontractors or suppliers, or their agents or employees.

GC1.2.2 Order of Precedence

- 1) In the event of any discrepancy or conflict in the contents of the following documents, such documents shall take precedence and govern in the following order:
 - (a) any amendment or variation of the contract documents that is made in accordance with the General Conditions;
 - (b) any amendment issued prior to tender closing;
 - (c) Supplementary Conditions;
 - (d) General Conditions;
 - (e) the duly completed Invitation to Tender and Acceptance Form when accepted;
 - (f) drawings and specifications.

later dates shall govern within each of the above categories of documents.

- 2) In the event of any discrepancy or conflict in the information contained in the drawings and specifications, the following rules shall apply:
 - (a) specifications shall govern over drawings;
 - (b) dimensions shown in figures on a drawings shall govern where they differ from dimensions scaled from the same drawing; and
 - (c) drawings of larger scale govern over those of smaller scale.

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GC1.2.3 Security and Protection of Documents and Work

- The Contractor shall guard and protect all sensitive contract information (TOP SECRET, SECRET, CONFIDENTIAL and PROTECTED) including printed and digital documents, drawings, information, models, copies thereof and processing systems, whether supplied by the NCC or the Contractor, against loss or compromise and damage from any cause.
- 2) The Contractor shall limit access to sensitive NCC information only to those with a "need-to-know" and who have been successfully security screened to at least the level of sensitivity of the information.
- 3) The Contractor shall ensure all contract information indicated in paragraph 1) is guarded and protected by any subcontractors, agents or suppliers and access limited only to those with a "need-to-know" and who have been successfully security screened to at least the level of sensitivity of the information.
- 4) The Contractor shall keep confidential all information provided to the Contractor by or on behalf of the NCC in connection with the Work, and all information developed by the Contractor as part of the Work, and shall not disclose any such information to any person without the written permission of the NCC, except that the Contractor may disclose to a subcontractor, authorized in accordance with the Contract, information necessary to the performance of a subcontract. This section does not apply to any information that:
 - (a) is publicly available from a source other than the Contractor; or
 - (b) is or becomes known to the Contractor from a source other than the NCC, except any source that is known to the Contractor to be under an obligation to the NCC not to disclose the information.
- 5) When the Contract, the Work, or any information referred to in paragraph 4) is identified as TOP SECRET, SECRET, CONFIDENTIAL or PROTECTED by the NCC, the Contractor shall, at all times, take all measures reasonably necessary for the safeguarding of the material so identified, including such measures as may be further specified elsewhere in the Contract or provided, in writing, from time to time by the NCC.
- 6) Without limiting the generality of paragraphs 4) and 5) of GC1.2.3, when the Contract, the Work, or any information referred to in paragraph 4) is identified as TOP SECRET, SECRET, CONFIDENTIAL or PROTECTED by the NCC, the NCC shall be entitled to inspect the Contractor's premises and the premises of its subcontractors or suppliers and any other person at any tier, for security purposes at any time during the term of the Contract, and the Contractor shall comply with, and ensure that any such subcontractors or suppliers comply with all written instructions issued by the NCC dealing with the material so identified, including any requirement that employees of the Contractor and its subcontractors and suppliers and any other person at any tier execute and deliver declarations relating to reliability status, site access security clearances and other procedures.
- 7) The Contractor shall report any suspected or actual security incidents immediately to the NCC involving loss, compromise or damage of NCC information or assets.
- 8) The Contractor shall safeguard the Work and the Contract, the specifications, drawings and any other information provided by the NCC to the Contractor, and shall be liable to the NCC for any loss or damage from any causes.

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GC1.3 STATUS OF THE CONTRACTOR

- 1) The Contractor is engaged under the Contract as an independent contractor.
- 2) The Contractor, its subcontractors and suppliers and any other person at any tier and their employees are not engaged by the Contract as employees, servants or agents of the NCC.
- 3) For the purposes of the contract 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, Employment Insurance, Worker's Compensation, provincial health or insurance plans, and Income Tax.

GC1.4 RIGHTS AND REMEDIES

1) Except as expressly provided in the Contract, the duties and obligations imposed by the Contract and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights, and remedies otherwise imposed or available by law.

GC1.5 TIME OF THE ESSENCE

1) Time is of the essence of the Contract.

GC1.6 INDEMNIFICATION BY CONTRACTOR

- The Contractor shall pay all royalties and patent fees required for the performance of the Contract and, at the Contractor's expense, shall defend all claims, actions or proceedings against the NCC charging or claiming that the Work or any part thereof provided or furnished by the Contractor to the NCC infringes any patent, industrial design, copyright trademark, trade secret or other proprietary right enforceable in Canada.
- 2) The Contractor shall indemnify and save the NCC harmless from and against all claims, demands, losses, costs, damages, actions, suits, or proceedings by any third party, brought or prosecuted and in any manner based upon, arising out of, related to, occasioned by, or attributable to the activities of the Contractor, its subcontractors and suppliers and any other person at any tier, in performing the Work.
- 3) For the purposes of paragraph 2) of GC1.6, "activities" means any act improperly carried out, any omission to carry out an act and any delay in carrying out an act.

GC1.7 INDEMNIFICATION BY THE NCC

- Subject to the Crown Liability and Proceedings Act, the Patent Act, and any other law that affects the NCC's rights, powers, privileges or obligations, the NCC shall indemnify and save the Contractor harmless from and against all claims, demands, losses, costs, damage, actions, suits or proceedings arising out of the Contractor's activities under the Contract that are directly attributable to:
 - (a) a lack of or a defect in the NCC's title to the Work site if owned by the NCC, whether real or alleged; or
 - (b) 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 the NCC to the Contractor.

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GC1.8 LAWS, PERMITS AND TAXES

- 1) The Contractor shall comply with all federal, provincial and municipal laws and regulations applicable to the performance of the Work or any part thereof including, without limitation, all laws concerning health and labour conditions and the protection of the environment, and shall require compliance therewith by all of its subcontractors and suppliers at any tier as if the Work were being performed for an owner other than the NCC. The Contractor shall furnish evidence of compliance with such laws and regulations to the NCC at such times as the NCC may reasonably request.
- 2) Unless stipulated otherwise in the Contract, the Contractor shall obtain and maintain all permits, certificates, licences, registrations and authorizations required for the lawful performance of the Work.
- 3) Prior to the commencement of the Work at the site, the Contractor shall 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 an owner other than the NCC.
- 4) Within 10 days of making a tender pursuant to paragraph 3) of GC1.8, the Contractor shall notify the NCC of the amount properly tendered and whether or not the municipal authority has accepted that amount.
- 5) If the municipal authority has not accepted the amount tendered, the Contractor shall pay that amount to the NCC within 6 days after the time stipulated in paragraph 4) of GC1.8.
- 6) For the purposes of this clause, "municipal authority" means any authority that would have jurisdiction respecting permission to perform the Work if the owner were not the NCC.
- 7) 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.
- 8) In accordance with the Statutory Declaration referred to in paragraph 4) of GC5.5 SUBSTANTIAL PERFORMANCE OF THE WORK, a Contractor who has neither residence nor place of business in the province or territory in which work under the Contract is being performed shall provide the NCC with proof of registration with the provincial sales tax authorities in the said province.
- 9) 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, and notwithstanding the provision that all Material, Plant and interest of the Contractor in all real property, licences, powers and privileges, become the property of the NCC after the time of purchase in accordance with GC3.10 MATERIAL PLANT AND REAL PROPERTY BECOME PROPERTY OF THE NCC, the Contractor shall 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.

GC1.9 WORKERS' COMPENSATION

1) Prior to award of contract, at the time of submitting its first progress claim, at the time of Substantial Performance of the Work, and prior to issuance of the Certificate of Completion, the Contractor shall provide evidence of compliance with workers' compensation legislation applicable to the place of the Work, including payments due thereunder.

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GC1 GENERAL PROVISIONS

2) At any time during the term of the Contract, when requested by the NCC, the Contractor shall provide such evidence of compliance by the Contractor, its subcontractors and any other person at any tier and any other person performing part of the Work who is required to comply with such legislation.

GC1.10 NATIONAL SECURITY

- 1) If the NCC determines that the Work is of a class or kind that involves national security, the NCC may order the Contractor to:
 - (a) provide the NCC with any information concerning persons employed or to be employed by the Contractor for purposes of the Contract; and
 - (b) remove any person from the site of the Work if, in the opinion of the NCC, that person may be a risk to the national security;

and the Contractor shall comply with the order.

2) In all contracts with persons who are to be employed in the performance of the Contract, the Contractor shall make provision for the performance of any obligation that may be imposed upon the Contractor under paragraph 1) of GC1.10.

GC1.11 UNSUITABLE WORKERS

1) The NCC shall instruct the Contractor to remove from the site of the Work any person employed by the Contractor for purposes of the Contract who, in the opinion of the NCC, is incompetent or is guilty of improper conduct, and the Contractor shall not permit a person who has been removed to return to the site of the Work.

GC1.12 PUBLIC CEREMONIES AND SIGNS

- The Contractor shall not permit any public ceremony in connection with the Work without the prior consent of the NCC.
- 2) The Contractor shall not erect nor permit the erection of any sign or advertising on the Work or its site without the prior consent of the NCC.

GC1.13 CONFLICT OF INTEREST

1) It is a term of the Contract that no individual, for whom the post-employment provisions of the Conflict of Interest and Post-Employment Code for Public Office Holders or the Values and Ethics Code for the Public Service apply, shall derive a direct benefit from the Contract unless that individual is in compliance with the applicable post-employment provisions.

GC1.14 AGREEMENTS AND AMENDMENTS

- The Contract constitutes the entire and sole agreement between the parties with respect to the subject matter of the Contract and supersedes all previous negotiations, communications and other agreements, whether written or oral, relating to it, unless they are incorporated by reference in the Contract. There are no terms, covenants, representations, statements or conditions binding on the parties other than those contained in the Contract.
- 2) The failure of either party at any time to require performance by the other party of any provision hereof shall not affect the right thereafter to enforce such provision. Nor shall the waiver by either

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GC1 GENERAL PROVISIONS

party of any breach of any covenant, term or condition hereof be taken to be held to be a waiver of any further breach of the same covenant, term or condition.

3) The Contract may be amended only as provided for in the Contract.

GC1.15 SUCCESSION

1) The Contract shall inure to the benefit of and be binding upon the parties hereto and their lawful heirs, executors, administrators, successors and, subject to GC1.16 ASSIGNMENT, permitted assigns.

GC1.16 ASSIGNMENT

 The Contractor shall not make any assignment of the Contract, either in whole or in part, without the written consent of the NCC.

GC1.17 NO BRIBE

1) The Contractor represents and covenants that no bribe, gift, benefit, nor other inducement has been nor shall be paid, given, promised or offered directly or indirectly to any official or employee of the NCC or to a member of the family of such a person, with a view to influencing the entry into the Contract or the administration of the Contract.

GC1.18 CERTIFICATION - CONTINGENCY FEES

- 1) In this clause:
 - (a) "contingency fee" means any payment or other compensation that is contingent upon or is calculated upon the basis of a degree of success in soliciting or obtaining a Government contract or negotiating the whole or any part of its terms;
 - (b) "employee" means a person with whom the Contractor has an employer/employee relationship; and
 - (c) "person" includes an individual or a group of individuals, a corporation, a partnership, an organization and an association and, without restricting the generality of the foregoing, includes any individual who is required to file a return with the registrar pursuant to section 5 of the Lobbyists Registration Act R.S.C. 1985 c.44 (4th Supplement) as the same may be amended from time to time.
- The Contractor certifies that it has not directly or indirectly paid nor agreed to pay and covenants that it shall not directly or indirectly pay nor agree to pay a contingency fee for the solicitation, negotiation or obtaining of the Contract to any person other than an employee acting in the normal course of the employee's duties.
- All accounts and records pertaining to payments of fees or other compensation for the solicitation, obtaining or negotiation of the Contract shall be subject to the accounts and audit provisions of the Contract.
- 4) If the Contractor certifies falsely under this section or is in default of the obligations contained therein, the NCC may either take the Work out of the Contractor's hands in accordance with the provisions of the Contract or recover from the Contractor by way of reduction to the Contract Amount or otherwise, the full amount of the contingency fee.

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GC1 GENERAL PROVISIONS

GC1.19 INTERNATIONAL SANCTIONS

- Persons and companies in Canada, and Canadians outside of Canada are bound by economic sanctions imposed by the Government of Canada. As a result, the the NCC cannot accept delivery of goods or services that originate, either directly or indirectly, from the countries or persons subject to economic sanctions.
 - Details on existing sanctions can be found at: http://www.dfait-maeci.gc.ca/trade/sanctions-en.asp.
- 2) It is a condition of the Contract that the Contractor not supply to the NCC any goods or services which are subject to economic sanctions.
- 3) By law, the Contractor must comply with changes to the regulations imposed during the life of the Contract. During the performance of the Contract should the imposition of sanctions against a country or person or the addition of a good or service to the list of sanctioned goods or services cause an impossibility of performance for the Contractor, the Contractor may request that the Contract be terminated in accordance with GC7.3 TERMINATION OF CONTRACT.

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GC2 ADMINISTRATION OF THE CONTRACT

- GC2.1 NCC REPRESENTATIVE'S AUTHORITY
- GC2.2 INTERPRETATION OF CONTRACT
- GC2.3 NOTICES
- GC2.4 SITE MEETINGS
- GC2.5 REVIEW AND INSPECTION OF WORK
- GC2.6 SUPERINTENDENT
- GC2.7 NON-DISCRIMINATION IN HIRING AND EMPLOYMENT OF LABOUR
- GC2.8 ACCOUNTS AND AUDITS

GC2.1 NCC REPRESENTATIVE'S AUTHORITY

- 1) The NCC shall designate an NCC Representative and shall notify the Contractor of the name, address and telephone number of the NCC Representative.
- 2) The NCC Representative shall perform the NCC's duties and functions under the contract.
- 3) The NCC Representative shall be authorized to issue notices, instructions and directions to the Contractor and to accept on behalf of the NCC any notice, order or other communication from the contractor relating to the Work.
- 4) The NCC Representative shall, within a reasonable time, review and respond to submissions made by the Contractor in accordance with the requirements of the Contract.

GC2.2 INTERPRETATION OF CONTRACT

- If, at any time before the NCC has issued a Certificate of Completion, 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:
 - (a) the meaning of anything in the drawings and specifications;
 - (b) the meaning to be given to the drawings and specifications in case of any error therein, omission therefrom, or obscurity or discrepancy in their wording or intention;
 - (c) 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;
 - (d) whether or not the labour, Plant or Material performed, used and supplied by the Contractor for performing the Work and carrying out the Contract are adequate to ensure that the Work shall be performed in accordance with the Contract and that the Contract shall be carried out in accordance with its terms;
 - (e) what quantity of any of the Work has been completed by the Contractor; or
 - (f) the timing and scheduling of the various phases of the performance of the Work as specified in the Contract;

the question shall be decided, subject to the provisions of GC8 DISPUTE RESOLUTION, by the NCC.

2) The Contractor shall perform the Work in accordance with any decisions of the NCC that are made under paragraph 1) of GC2.2 and in accordance with any consequential directions given by the NCC.

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GC2 ADMINISTRATION OF THE CONTRACT

3) If the Contractor fails to comply with any instruction or direction issued by the NCC pursuant to the Contract, the NCC may employ such methods as the NCC deems advisable to do what the Contractor failed to do, and the Contractor shall, on demand, pay the NCC an amount that is equal to the aggregate of all costs, expenses and damages incurred or sustained by the NCC by reason of the Contractor's failure to comply with such instruction or direction, including the cost of any methods employed by the NCC in doing what the Contractor failed to do.

GC2.3 NOTICES

- 1) Subject to paragraph 3) of GC2.3, any notice, order or other communication may be given in any manner, and if required to be in writing, shall be addressed to the party to whom it is intended at the address in the Contract or at the last address of which the sender has received written notice in accordance with this section.
- 2) Any notice, order or other communication given in writing in accordance with paragraph 1) of GC2.3 shall be deemed to have been received by either party:
 - (a) if delivered personally, on the day that it was delivered;
 - (b) if forwarded by mail, on the earlier of the day it was received or the sixth day after it was mailed: and
 - (c) if forwarded by facsimile or electronic mail, 24 hours after it was transmitted.
- 3) A notice given under GC7.1 TAKING THE WORK OUT OF THE CONTRACTOR'S HANDS, GC7.2 SUSPENSION OF WORK, and GC7.3 TERMINATION OF CONTRACT shall be given in writing and, if delivered personally, shall be delivered, if the Contractor is a sole proprietor, to the Contractor or, if the Contractor is a partnership or corporation, to an officer thereof.

GC2.4 SITE MEETINGS

In consultation with the NCC, the Contractor shall arrange site meetings at regular intervals, with all
involved parties who are to attend, in order to ensure, among other things, the proper co-ordination
of the Work.

GC2.5 REVIEW AND INSPECTION OF WORK

- 1) The NCC shall review the Work to determine if it is proceeding in conformity with the Contract and to record the necessary data to make an assessment of the value of Work completed. The NCC shall measure and record the quantities of labour, Plant and Material performed, used or supplied by the Contractor in performing the Work or any part thereof that is subject to a Unit Price Arrangement and, on request, shall inform the Contractor of those measurements, and permit the Contractor to inspect any records pertaining thereto.
- 2) The NCC shall reject Work or Material which in the NCC's opinion does not conform to the requirements of the Contract, and shall require inspection or testing of Work, whether or not such Work is fabricated, installed, or completed. If such Work is not in accordance with the requirements of the Contract, the Contractor shall correct the Work and shall pay the NCC, on demand, all reasonable costs and expenses that were incurred by the NCC in having the examination performed.
- 3) The Contractor shall provide the NCC with access to the Work and its site at all times, and at all times shall provide sufficient, safe, and proper facilities for the review and inspection of the Work by persons authorized by the NCC and any representatives of those authorities having jurisdiction. If parts of the Work are in preparation at locations other than the site of the Work, the NCC shall be given access to such Work whenever it is in progress.

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GC2 ADMINISTRATION OF THE CONTRACT

- 4) The Contractor shall furnish the NCC with such information respecting the performance of the Contract as the NCC may require, and render every possible assistance to enable the NCC to verify that the Work is performed in accordance with the Contract, carry out any other duties and exercise any powers in accordance with the Contract.
- 5) If Work is designated for tests, inspections, or approvals in the Contract or by the NCC's instructions, or by laws or ordinances of the place of the Work, the Contractor shall give the NCC reasonable notice of when such Work shall be ready for review and inspection. The Contractor shall arrange for and shall give the NCC reasonable notice of the date and time of inspections, tests or approvals.
- 6) If the Contractor covers, or permits to be covered, Work that has been designated for tests, inspections or approvals before such tests, inspections or approvals are made, completed or given, the Contractor shall, if so directed by the NCC, uncover such Work, have the inspections, tests or approvals satisfactorily made, completed or given and make good the covering of the Work at the Contractor's expense.

GC2.6 SUPERINTENDENT

- 1) Prior to commencing the Work, the Contractor shall designate a Superintendent and shall notify the NCC of the name, address and telephone number of the Superintendent. The Contractor shall keep the Superintendent at the Work site during working hours until the Work has reached completion.
- 2) The Superintendent shall be in full charge of the operations of the Contractor during the performance of the Work and shall be authorized to accept on behalf of the Contractor any notice, order or other communication given to the Superintendent or the Contractor relating to the Work.
- 3) Upon request of the NCC, the Contractor shall remove any Superintendent who, in the opinion of the NCC, is incompetent or has been guilty of improper conduct, and shall forthwith designate another Superintendent who is acceptable to the NCC.
- 4) The Contractor shall not substitute a Superintendent without the written consent of the NCC. If a Superintendent is substituted without such consent, the NCC shall be entitled to refuse to issue any documentation or certification relating to progress payments, Substantial Performance or Completion of the Work until the Superintendent has returned to the Work site or another Superintendent who is acceptable to the NCC has been substituted.

GC2.7 NON-DISCRIMINATION IN HIRING AND EMPLOYMENT OF LABOUR

- 1) For the purposes of this clause, "persons" include the Contractor, its subcontractors and suppliers at any tier and their respective employees, agents, licensees or invitees and any other individual involved in the performance of the Work or granted access to the Work site. A "person" includes any partnership, proprietorship, firm, joint venture, consortium and corporation.
- 2) Without restricting the provisions of paragraph 3) of GC2.6, SUPERINTENDENT, the Contractor shall not refuse to employ and shall not discriminate in any manner against any person because:
 - (a) of that person's race, national origin, colour, religion, age, sex or marital status;
 - (b) of the race, national origin, colour, religion, age, sex, or marital status of any person having any relationship or association with that person; or
 - (c) a complaint has been made or information has been given by or in respect of that person relating to an alleged failure by the Contractor to comply with subparagraphs 2)(a) and 2)(b) of GC2.7.

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GC2 ADMINISTRATION OF THE CONTRACT

- 3) Within two Working Days immediately following receipt of a written complaint pursuant to paragraph 2) of GC2.7, the Contractor shall:
 - (a) cause to have issued a written direction to the person or persons named by the complainant to cease all actions that form the basis of the complaint;
 - (b) forward a copy of the complaint to the NCC by registered mail or courier service; and
 - (c) when the Labour Conditions are applicable under the circumstances of the complaint, forward a copy of the complaint to HRSDC Labour to the attention of the appropriate Director as described in the Labour Conditions ("HRSDC Labour" means the labour component of the federal Department of Human Resources and Skills Development).
- 4) Within twenty four (24) hours immediately following receipt of a direction from the NCC to do so, the Contractor shall cause to have removed from the site of the Work and from the performance of Work under the Contract, any person or persons whom the NCC believes to be in breach of the provisions of paragraph 2) of GC2.7.
- 5) No later than thirty (30) days after receipt of the direction referred to in paragraph 4) of GC2.7, the Contractor shall cause the necessary action to be commenced to remedy the breach described in the direction.
- 6) If a direction is issued pursuant to paragraph 4) of GC2.7, the NCC may withhold from monies that are due and payable to the Contractor or setoff pursuant to GC5.9 RIGHT OF SETOFF, whichever is applicable, an amount representing the sum of the costs and payment referred to in paragraph 8) of GC2.7.
- 7) If the Contractor fails to proceed in accordance with paragraph 5) of GC2.7, the NCC shall take the necessary action to have the breach remedied, and shall determine all supplementary costs incurred by the NCC as a result.
- 8) The NCC may make a payment directly to the complainant from monies that are due and payable to the Contractor upon receipt from the complainant of:
 - (a) a written award issued pursuant to the federal Commercial Arbitration Act, R.S.C. 1985, c. 17 (2nd Supp.);
 - (b) a written award issued pursuant to the Canadian Human Rights Act, RS.C. 1985, c. H-6;
 - (c) a written award issued pursuant to provincial or territorial human rights legislation; or
 - (d) a judgement issued by a court of competent jurisdiction.
- 9) If the NCC is of the opinion that the Contractor has breached any of the provisions of this clause, the NCC may take the Work out of the Contractor's hands pursuant to GC7.1 TAKING THE WORK OUT OF THE CONTRACTOR'S HANDS.
- Subject to paragraph 7) of GC3.6 SUBCONTRACTING, the Contractor shall ensure that the provisions of this clause are included in all agreements and contracts entered into as a consequence of the Work.

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GC2 ADMINISTRATION OF THE CONTRACT

GC2.8 ACCOUNTS AND AUDITS

- 1) The Contractor shall, in addition to the requirements expressed in paragraph 6) of GC3.4 EXECUTION OF THE WORK, maintain full records of the Contractor's estimated and actual cost of the Work together with all tender calls, quotations, contracts, correspondence, invoices, receipts and vouchers relating thereto, and shall make them available on request to audit and inspection by the NCC or by persons designated to act on behalf of the NCC.
- 2) The Contractor shall allow any of the persons referred to in paragraph 1) of GC2.8 to make copies of and take extracts from any of the records and material, and shall furnish such persons or entities with any information those persons or entities may require from time to time in connection with such records and material.
- 3) The Contractor shall maintain and keep the records intact until the expiration of two years after the date that a Certificate of Completion has been issued or until the expiration of such other period of time as the NCC may direct.
- 4) The Contractor shall cause all subcontractors at any tier 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 the requirements of this clause as if they were the Contractor.

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- GC3.1 PROGRESS SCHEDULE
- GC3.2 ERRORS AND OMISSIONS
- GC3.3 CONSTRUCTION SAFETY
- GC3.4 EXECUTION OF THE WORK
- GC3.5 MATERIAL
- GC3.6 SUBCONTRACTING
- GC3.7 CONSTRUCTION BY OTHER CONTRACTORS OR WORKERS
- GC3.8 LABOUR
- GC3.9 TRUCK HAULAGE RATES (CANCELLED)
- GC3.10 MATERIAL, PLANT AND REAL PROPERTY BECOME PROPERTY OF THE NCC
- GC3.11 DEFECTIVE WORK
- GC3.12 CLEANUP OF SITE
- GC3.13 WARRANTY AND RECTIFICATION OF DEFECTS IN WORK

GC3.1 PROGRESS SCHEDULE

- 1) The Contractor shall:
 - (a) prepare and submit to the NCC, prior to the submission of the Contractor's first progress claim, a progress schedule in accordance with the requirements set out in the Contract;
 - (b) monitor the progress of the Work relative to the schedule and update the schedule as stipulated by the contract documents;
 - (c) advise the NCC of any revisions to the schedule required as the result of any extension of time for completion of the Contract that was approved by the NCC; and
 - (d) prepare and submit to the NCC, at the time of issuance of an Certificate of Substantial Performance, an update of any schedule clearly showing a detailed timetable that is acceptable to the NCC for the completion of any unfinished Work and the correction of all listed defects.

GC3.2 ERRORS AND OMISSIONS

The Contractor shall report promptly to the NCC any errors, discrepancies, or omissions the Contractor may discover when reviewing the contract documents. In making a review, the Contractor does not assume any responsibility to the NCC for the accuracy of the review. The Contractor shall not be liable for damage or costs resulting from such errors, discrepancies, or omissions in the contract documents prepared by or on behalf of the NCC that the Contractor did not discover.

GC3.3 CONSTRUCTION SAFETY

- Subject to GC3.7 CONSTRUCTION BY OTHER CONTRACTORS OR WORKERS, the Contractor shall be solely responsible for construction safety at the place of the Work and for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Work. In any emergency, the Contractor shall either, stop the Work, make changes or order extra work to ensure the safety of life and the protection of the Work and neighbouring property.
- 2) Prior to commencing the Work, the Contractor shall notify the authorities having jurisdiction for construction safety at the site of the Work with respect to the intended commencement of the Work, and shall provide such authority with whatever additional information may be required by that authority.

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GC3.4 EXECUTION OF THE WORK

- 1) The Contractor shall perform, use or supply and pay for, all labour, Plant, Material, tools, construction machinery and equipment, water, heat, light, power, transportation and other facilities and services necessary for the performance of the Work in accordance with the Contract.
- 2) The Contractor shall, at all times, perform the Work in a proper, diligent and expeditious manner as is consistent with construction industry standards and in accordance with the progress schedule prepared pursuant to GC3.1 PROGRESS SCHEDULE and shall provide sufficient personnel to fulfil the Contractor's obligations in accordance with that schedule.
- 3) Subject to paragraph 4) of GC3.4, the Contractor shall have complete care, custody and control of the Work and shall direct and supervise the Work so as to ensure compliance with the Contract. The Contractor shall be responsible for construction means, methods, techniques, sequences and procedures and for co-ordinating the various parts of the Work.
- When requested in writing by the NCC, the Contractor shall make appropriate alterations in the method, Plant or workforce at any time the NCC considers the Contractor's actions to be unsafe or damaging to either the Work, existing facilities, persons at the site of the Work or the environment.
- 5) The Contractor shall have sole responsibility for the design, erection, operation, maintenance and removal of temporary structures and other temporary facilities and for the construction methods used in their erection, operation, maintenance and removal. The Contractor shall engage and pay for registered professional engineering personnel, skilled in the appropriate discipline to perform these functions if required by law or by the Contract, and in all cases when such temporary facilities and their methods of construction are of such a nature that professional engineering skill is required to produce safe and satisfactory results.
- 6) The Contractor shall keep at least one copy of current contract documents, submittals, reports, and records of meetings at the site of the Work, in good order and available to the NCC.
- 7) Except for any part of the Work that is necessarily performed away from or off the site of the Work, the Contractor shall confine Plant, storage of Material, and operations of employees to limits indicated by laws, ordinances, permits or the contract documents.

GC3.5 MATERIAL

- 1) Unless otherwise specified in the Contract, all Material incorporated in the Work shall be new.
- 2) Subject to paragraph 3) of GC3.5, if a specified reused, refurbished, or recycled item of Material is not available, the Contractor shall apply to the NCC to substitute a similar item for the one specified.
- 3) If the NCC agrees that the Contractor's application for substitution of a reused, refurbished or recycled item is warranted, and that the substitute item is of acceptable quality and value to that specified and is suitable for the intended purpose, the NCC may approve the substitution, subject to the following:
 - (a) the request for substitution shall be made in writing to the NCC and shall be substantiated by information in the form of the manufacturer's literature, samples and other data that may be required by the NCC;
 - (b) the Contractor shall make the request for substitution in a manner that shall not negatively affect the progress schedule of the Contract and well in advance of the time the item of Material must be ordered;

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- (c) substitution of Material shall be permitted only with the prior written approval of the NCC, and any substituted items that are supplied or installed without such approval shall be removed from the site of the Work at the expense of the Contractor, and specified items installed at no additional cost to the NCC; and
- (d) the Contractor shall be responsible for all additional expenses incurred by the NCC, the Contractor, its subcontractors and suppliers at any tier due to the Contractor's use of the substitute.

GC3.6 SUBCONTRACTING

- Subject to the provisions of this clause, the Contractor may subcontract any part of the Work but not the whole of the Work.
- 2) The Contractor shall notify the NCC in writing of the Contractor's intention to subcontract.
- 3) A notification referred to in paragraph 2) of GC3.6 shall identify the part of the Work and the Subcontractor with whom the Contractor intends to subcontract.
- 4) The NCC may for reasonable cause, object to the intended subcontracting by notifying the Contractor in writing within six (6) days of receipt by the NCC of a notification referred to in paragraph 2) of GC3.6.
- 5) If the NCC objects to a subcontracting, the Contractor shall not enter into the intended subcontract.
- 6) The Contractor shall not change, nor permit to be changed, a Subcontractor engaged by the Contractor, in accordance with this clause, without the written consent of the NCC.
- 7) The Contractor shall ensure that all the terms and conditions of the Contract that are of general application shall be incorporated in every other contract issued as a consequence of the Contract, at whatever tier, except those contracts issued solely to suppliers at any tier for the supply of Plant or Material.
- 8) Neither a subcontracting nor the NCC's consent to a subcontracting shall be construed to relieve the Contractor from any obligation under the Contract or to impose any liability upon the NCC.

GC3.7 CONSTRUCTION BY OTHER CONTRACTORS OR WORKERS

- The NCC reserves the right to send other contractors or workers, with or without Plant and Material, onto the site of the Work.
- 2) When other contractors or workers are sent on to the site of the Work, the NCC shall:
 - (a) enter into separate contracts, to the extent it is possible, with the other contractors under conditions of contract that are compatible with the conditions of the Contract;
 - (b) ensure that the insurance coverage provided by the other contractors is co-ordinated with the insurance coverage of the Contractor as it affects the Work; and
 - (c) take all reasonable precautions to avoid labour disputes or other disputes arising from the work of the other contractors or workers.
- 3) When other contractors or workers are sent on to the site of the Work, the Contractor shall:
 - (a) co-operate with them in the carrying out of their duties and obligations;

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- (b) co-ordinate and schedule the Work with the work of the other contractors and workers;
- (c) participate with other contractors and workers in reviewing their construction schedules when directed to do so;
- (d) where part of the Work is affected by or depends upon the work of other contractors or workers for its proper execution, promptly report to the NCC in writing and prior to proceeding with that part of the Work, any apparent deficiencies in such work. Failure by the Contractor to so report shall invalidate any claims against the NCC by reason of the deficiencies in the work of other contractors or workers except those deficiencies that are not then reasonably discoverable; and
- (e) when designated as being responsible for construction safety at the place for work, in accordance with the applicable provincial or territorial laws, carry out its duties in that role and in accordance with those laws.
- 4) If, when entering into the Contract, the Contractor could not have reasonably foreseen nor anticipated the sending of other contractors or workers on to the site of the Work and provided the Contractor:
 - (a) incurs extra expense in complying with the requirements of paragraph 3) of GC3.7; and
 - (b) gives the NCC written notice of a claim for that extra expense within thirty (30) days of the date that the other contractors or workers were sent onto the Work or its site,

the NCC shall pay the Contractor the cost of the extra labour, Plant and Material that was necessarily incurred, calculated in accordance with GC6.4 DETERMINATION OF PRICE.

GC3.8 LABOUR

 The Contractor shall maintain good order and discipline among the Contractor's employees and workers engaged in the Work shall not employ, on the site of the Work, anyone not skilled in the tasks assigned.

GC3.9 TRUCK HAULAGE RATES

CANCELLED

GC3.10 MATERIAL, PLANT AND REAL PROPERTY BECOME PROPERTY OF THE NCC

- Subject to paragraph 9) of GC1.8 LAWS PERMITS AND TAXES, all Material and Plant and the interest of the Contractor in all real property, licences, powers and privileges purchased, used or consumed by the Contractor for the Work shall, immediately after the time of their purchase, use or consumption be the property of the NCC for the purposes of the Work and they shall continue to be the property of the NCC:
 - (a) in the case of Material, until the NCC indicates that the Materials shall not be required for the Work; and
 - (b) in the case of Plant, real property, licences, powers and privileges, until the NCC indicates that the interest vested in the NCC therein is no longer required for the purposes of the Work.
- 2) Material or Plant, that is the property of the NCC by virtue of paragraph 1) of GC3.10, shall not be taken away from the site of the Work nor used nor disposed of except for the purposes of the Work without the written consent of the NCC.

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3) The NCC is not liable for loss of nor damage from any cause to the Material or Plant referred to in paragraph 1) of GC3.10, and the Contractor is liable for such loss or damage notwithstanding that the Material or Plant is the property of the NCC.

GC3.11 DEFECTIVE WORK

- 1) The Contractor shall promptly remove from the site of the Work and replace or re-execute defective Work whether or not the defective Work has been incorporated in the Work and whether or not the defect is the result of poor workmanship, use of defective Material, or damage through carelessness or other act or omission of the Contractor.
- 2) The Contractor, at the Contractor's expense, shall promptly make good other work destroyed or damaged by such removals or replacements.
- 3) If, in the opinion of the NCC, it is not expedient to correct defective Work or Work not performed as provided for in the Contract documents, the NCC may deduct from the amount otherwise due to the Contractor the difference in value between the Work as performed and that called for by the Contract documents.
- 4) The failure of the NCC to reject any defective Work or Material shall not constitute acceptance of the defective Work or Material.

GC3.12 CLEANUP OF SITE

- 1) The Contractor shall maintain the Work and its site in a tidy condition and free from an accumulation of waste material and debris.
- Before the issue of a Certificate of Substantial Performance, the Contractor shall remove waste material and debris, and all Plant and Material not required for the performance of the remaining Work and, unless otherwise stipulated in the Contract Documents, shall cause the Work and its site to be clean and suitable for occupancy by the NCC.
- 3) Before the issue of a Certificate of Completion, the Contractor shall remove all surplus Plant and Materials and any waste products and debris from the site of the Work.
- 4) The Contractor's obligations described in paragraphs 1) to 3) of GC3.12 do not extend to waste products and other debris caused by the NCC's servants, or by other contractors and workers referred to in GC3.7 CONSTRUCTION BY OTHER CONTRACTORS OR WORKERS.

GC3.13 WARRANTY AND RECTIFICATION OF DEFECTS IN WORK

- 1) Without restricting any warranty or guarantee implied or imposed by law or contained in the Contract, the Contractor shall, at the Contractor's expense:
 - (a) rectify and make good any defect or fault that appears in the Work or comes to the attention of the NCC with respect to those parts of the Work accepted in connection with the Certificate of Substantial Performance within 12 months from the date of Substantial Performance; and
 - (b) rectify and make good any defect or fault that appears in or comes to the attention of the NCC in connection with those parts of the Work described in the Certificate of Substantial Performance within 12 months from the date of the Certificate of Completion;
 - (c) transfer and assign, to the NCC, any subcontractor, manufacturer or supplier extended warranties or guarantees implied or imposed by law or contained in the Contract covering periods beyond the 12 months stipulated above. Extended warranties or guarantees referred to

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herein shall not extend the 12-month period whereby the Contractor, except as may be provided elsewhere in the Contract, must rectify and make good any defect or fault that appears in the Work or comes to the attention of the NCC;

- (d) provide, to the NCC prior to the issuance of the Certificate of Completion, a list of all extended warranties and guarantees referred to in paragraph (c) above.
- 2) The NCC may direct the Contractor to rectify and make good any defect or fault referred to in paragraph 1) of GC3.13 or covered by any other expressed or implied warranty or guarantee and the Contractor shall rectify and make good such defect within the time stipulated in the direction.
- 3) A direction referred to in paragraph 2) GC3.13 shall be in writing and shall be given to the Contractor in accordance with GC2.3 NOTICES.

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GC4 PROTECTIVE MEASURES

- GC4.1 PROTECTION OF WORK AND PROPERTY
- GC4.2 PRECAUTIONS AGAINST DAMAGE, INFRINGEMENT OF RIGHTS, FIRE AND OTHER HAZARDS
- GC4.3 MATERIAL, PLANT AND REAL PROPERTY SUPPLIED BY THE NCC
- GC4.4 CONTAMINATED SITE CONDITIONS

GC4.1 PROTECTION OF WORK AND PROPERTY

- 1) The Contractor shall protect the Work and its site against loss or damage from any cause and shall similarly protect all Material, Plant and real property under the Contractor's care, custody and control whether or not such Material, Plant and real property are supplied by the NCC to the Contractor.
- 2) The Contractor shall provide all facilities necessary for the purpose of maintaining security, and shall assist any person authorized by the NCC to inspect or to take security measures in respect of the Work and its site.
- 3) The NCC may direct the Contractor to do such things and to perform such work as the NCC considers reasonable and necessary to ensure compliance with or to remedy a breach of paragraphs 1) or 2) of GC4.1, and the Contractor, shall comply with such direction.

GC4.2 PRECAUTIONS AGAINST DAMAGE, INFRINGEMENT OF RIGHTS, FIRE AND OTHER HAZARDS

- 1) The Contractor shall do whatever is necessary to ensure that:
 - (a) no person, property, right, easement nor privilege is injured, damaged or infringed upon by reasons of the Contractor's activities in performing the Work;
 - (b) pedestrian and other traffic on any public or private road or waterway is not unduly impeded, interrupted nor endangered by the performance or existence of the Work, Material or Plant;
 - (c) fire hazards in or about the site of the Work are eliminated and any fire is promptly extinguished;
 - (d) the health and safety of all persons employed in the performance of the Work is not endangered by the methods nor means of their performance;
 - (e) adequate medical services are available to all persons employed on the Work or its site at all times during the performance of the Work;
 - (f) adequate sanitation measures are taken in respect of the Work and its site; and
 - (g) all stakes, buoys and marks placed on the Work or its site by the NCC are protected and are not removed, defaced, altered nor destroyed.
- 2) The NCC may direct the Contractor to do such things and to perform such work as the NCC considers reasonable and necessary to ensure compliance with or to remedy a breach of paragraph 1) of GC4.2, and the Contractor shall comply with the direction of the NCC.

GC4.3 MATERIAL, PLANT AND REAL PROPERTY SUPPLIED BY THE NCC

1) Subject to paragraph 2) of GC4.3, the Contractor is liable to the NCC 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 the NCC for use in connection with the Contract, whether or not that loss or damage is attributable to causes beyond the Contractor's control.

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GC4 PROTECTIVE MEASURES

- 2) The Contractor is not liable to the NCC for any loss or damage to Material, Plant or real property referred to in paragraph 1) of GC4.3 if that loss or damage results from and is directly attributable to reasonable wear and tear.
- 3) The Contractor shall not use any Material, Plant or real property supplied by the NCC except for the purpose of performing the Contract.
- 4) When the Contractor fails to make good any loss or damage for which the Contractor is liable under paragraph 1) within a reasonable time, the NCC may cause the loss or damage to be made good at the Contractor's expense, and the Contractor shall thereupon be liable to the NCC for the cost thereof and shall, on demand, pay to the NCC an amount equal to that cost.
- 5) The Contractor shall keep records of all Material, Plant and real property supplied by the NCC as the NCC requires and shall satisfy the NCC, when requested, that such Material, Plant and real property are at the place and in the condition in which they ought to be.

GC4.4 CONTAMINATED SITE CONDITIONS

- 1) For the purposes of GC4.4, a contaminated site condition exists when a solid, liquid, gaseous, thermal or radioactive irritant or contaminant, or other hazardous or toxic substance or material, including moulds and other forms of fungi, is present at the site of the Work to an extent that constitutes a hazard, or potential hazard, to the environment, property, or the health or safety of any person.
- 2) If the Contractor encounters a contaminated site condition of which the Contractor is not aware or about which the Contractor has not been advised, or if the Contractor has reasonable grounds to believe that such a site condition exists at the site of the Work, the Contractor shall:
 - (a) take all reasonable steps, including stopping the Work, to ensure that no person suffers injury, sickness or death, and that neither property nor the environment is injured or destroyed as a result of the contaminated site condition;
 - (b) immediately notify the NCC of the circumstances in writing; and
 - (c) take all reasonable steps to minimize additional costs that may accrue as a result of any work stoppage.
- 3) Upon receipt of a notification from the Contractor, the NCC shall promptly determine whether a contaminated site condition exists, and shall notify the Contractor in writing of any action to be taken, or work to be performed, by the Contractor as a result of the NCC's determination.
- 4) If the Contractor's services are required by the NCC, the Contractor shall follow the direction of the NCC with regard to any excavation, treatment, removal and disposal of any polluting substance or material.
- 5) The NCC, at the NCC's sole discretion, may enlist the services of experts and specialty contractors to assist in determining the existence of, and the extent and treatment of contaminated site conditions, and the Contractor shall allow them access and co-operate with them in the carrying out of their duties and obligations.
- 6) Except as may be otherwise provided for in the Contract, the provisions of GC6.4 DETERMINATION OF PRICE shall apply to any additional work made necessary because of a contaminated site condition.

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GC5 TERMS OF PAYMENT

- GC5.2 AMOUNT PAYABLE
- GC5.3 INCREASED OR DECREASED COSTS
- GC5.4 PROGRESS PAYMENT
- GC5.5 SUBSTANTIAL PERFORMANCE OF THE WORK
- GC5.6 FINAL COMPLETION
- GC5.7 PAYMENT NOT BINDING ON THE NCC
- GC5.8 CLAIMS AND OBLIGATIONS
- GC5.9 RIGHT OF SETOFF
- GC5.10 ASSESSMENTS AND DAMAGES FOR LATE COMPLETION
- GC5.11 DELAY IN MAKING PAYMENT
- GC5.12 INTEREST ON SETTLED CLAIMS
- GC5.13 RETURN OF SECURITY DEPOSIT

GC5.1 INTERPRETATION

In these Terms of Payment

- 1) The "payment period" means a period of 30 consecutive days or such other longer period as may be agreed between the Contractor and the NCC.
- 2) An amount is "due and payable" when it is due and payable by the NCC to the Contractor according to GC5.4 PROGRESS PAYMENT, GC5.5 SUBSTANTIAL PERFORMANCE OF THE WORK or GC5.6 FINAL COMPLETION.
- 3) An amount is overdue when it remains unpaid on the first day following the day upon which it is due and payable.
- 4) The "date of payment" means the date of the negotiable instrument of an amount due and payable by the NCC.
- 5) The "Bank Rate" means the rate of interest established by the Bank of Canada as the minimum rate at which it makes short term advances to members of the Canadian Payments Association.
- 6) The "Average Bank Rate" means the simple arithmetic mean of the Bank Rate in effect at 4:00 p.m. Ottawa Time each day during the calendar month which immediately precedes the calendar month in which payment is made.

GC5.2 AMOUNT PAYABLE

- Subject to any other provisions of the Contract, the NCC shall pay the Contractor, at the times and in the manner hereinafter set out, the amount by which the amounts payable by the NCC to the Contractor in accordance with the Contract exceed the amounts payable by the Contractor to the NCC, and the Contractor shall accept that amount as payment in full satisfaction for everything furnished and done by the Contractor in respect of the Work to which the payment relates.
- 2) When making any payment to the Contractor, the failure of the NCC to deduct an amount payable to the NCC by the Contractor shall not 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.
- No payment other than a payment that is expressly stipulated in the Contract, shall be made by the NCC to the Contractor for any extra expense or any loss or damage incurred or sustained by the Contractor.

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GC5 TERMS OF PAYMENT

GC5.3 INCREASED OR DECREASED COSTS

- 1) The Contract Amount shall not be increased nor 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, Material or any wage adjustment arising pursuant to the Labour Conditions.
- 2) Notwithstanding paragraph 1) of GC5.3, if any change, including a new imposition or repeal, of any tax, customs or other duty, charge, or any similar imposition that is imposed under sales, customs or excise tax legislation of the Government of Canada or any Provincial or Territorial legislation, affects the cost of the Work to the Contractor, and occurs:
 - (a) after the date of submission by the Contractor of its tender; or
 - (b) after the date of submission of the last revision, if the Contractor's tender was revised,

the Contract Amount shall be adjusted in the manner provided in paragraph 3) of GC5.3.

- 3) If a change referred to in paragraph 2) of GC5.3 occurs, the Contract Amount shall be increased or decreased by an amount established by an examination by the NCC of the relevant records of the Contractor referred to in GC2.8 ACCOUNTS AND AUDITS to be the increase or decrease in the cost incurred by the Contractor that is directly attributable to that change.
- 4) For the purpose of paragraph 2) of GC5.3, if a tax is changed after the tender closing, but public notice of the change has been given by the Minister of Finance or the corresponding Provincial or Territorial authority before that closing, the change shall be deemed to have occurred before the solicitation closing.
- 5) Notwithstanding paragraphs 2) to 4) of GC5.3, no adjustment to the Contract Amount in respect of the Work or a part thereof shall be made for a change in any imposition referred to in this section that occurs after the date required by the Contract for completion of the Work or that part of the Work.

GC5.4 PROGRESS PAYMENT

- 1) On the expiration of a payment period, the Contractor shall deliver to the NCC:
 - (a) a written progress claim in a form acceptable to the NCC that fully describes any part of the Work that has been completed, and any Material that was delivered to the Work site but not incorporated into the Work, during that payment period: and
 - (b) a completed and signed statutory declaration containing a declaration that, up to the date of the progress claim, the Contractor has complied with all lawful obligations with respect to the Labour Conditions and that, in respect of the Work, all lawful obligations of the Contractor to its Subcontractors and Suppliers, referred to collectively in the declaration as "subcontractors and suppliers", have been fully discharged.
- 2) Within 10 days of receipt of a progress claim and statutory declaration from the Contractor, the NCC shall inspect, or cause to have inspected, the part of the Work and the Material described in the progress claim, and shall issue a progress report 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 NCC:
 - (a) is in accordance with the Contract; and
 - (b) was not included in any other progress report relating to the Contract.

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- 3) Subject to GC5.2 AMOUNT PAYABLE, and paragraph 5) of GC5.4, the NCC shall pay the Contractor an amount that is equal to:
 - (a) 95% of the value that is indicated in the NCC's progress report if a labour and material payment bond has been furnished by the Contractor; or
 - (b) 90% of the value that is indicated in the NCC's progress report if a labour and material payment bond has not been furnished by the Contractor.
- 4) Subject to GC5.2, "Amount Payable", and paragraph 5) of GC5.4, the NCC shall pay the Contractor an amount that is equal to 90% of the value that is indicated in the NCC's progress report
- 5) In the case of the Contractor's first progress claim, it is a condition precedent to the NCC's obligation under paragraph 3) of GC5.4 that the Contractor has provided all necessary documentation required by the Contract for the first progress claim and has provided evidence of compliance with workers' compensation legislation applicable to the place of the Work in accordance with GC1.9 WORKERS' COMPENSATION.

GC5.5 SUBSTANTIAL PERFORMANCE OF THE WORK

- 1) If, at any time before the issuance of a Certificate of Completion, the NCC determines that the Work has reached Substantial Performance as described in subparagraph 1) (b) of GC1.1.4 SUBSTANTIAL PERFORMANCE, the NCC shall issue a Certificate of Substantial Performance to the Contractor. The Certificate of Substantial Performance shall state or describe:
 - (a) the date of Substantial Performance:
 - (b) the parts of the Work not completed to the satisfaction of the NCC; and
 - (c) all things that must be done by the Contractor before a Certificate of Completion is issued and before the 12-month warranty period referred to in GC3.13 WARRANTY AND RECTIFICATION OF DEFECTS IN WORK commences for the said parts and all the said things.
- 2) The issuance of a Certificate of Substantial Performance does not relieve the Contractor from the Contractor's obligations under GC3.11 DEFECTIVE WORK.
- 3) Subject to GC5.2 AMOUNT PAYABLE and paragraph 4) of GC5.5, the NCC shall pay the Contractor the amount referred to in paragraph 1) of GC5.2 AMOUNT PAYABLE, less the aggregate of:
 - (a) the sum of all payments that were made pursuant to GC5.4 PROGRESS PAYMENT;
 - (b) an amount that is equal to the NCC's estimate of the cost to the NCC of rectifying defects described in the Certificate of Substantial Performance; and
 - (c) an amount that is equal to the NCC's estimate of the cost to the NCC of completing the parts of the Work described in the Certificate of Substantial Performance other than defects listed therein.
- 4) The NCC shall pay the amount referred to in paragraph 3) of GC5.5 not later than:
 - (a) 30 days after the date of issue of a Certificate of Substantial Performance, or
 - (b) 15 days after the Contractor has delivered to the NCC:

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- (i) a statutory declaration containing a declaration by the Contractor that up to the date of the Certificate of Substantial Performance, the Contractor has complied with all lawful obligations with respect to the Labour Conditions, discharged all its lawful obligations to its Subcontractors and Suppliers in respect of the work under the Contract, and discharged its lawful obligations referred to in GC1.8 LAWS, PERMITS AND TAXES;
- (ii) evidence of compliance with workers' compensation legislation in accordance with GC1.9 WORKERS' COMPENSATION; and
- (iii) an update of the progress schedule in accordance with the requirements of GC3.1 PROGRESS SCHEDULE;

whichever is later.

GC5.6 FINAL COMPLETION

- 1) When the NCC is of the opinion that the Contractor has complied with the Contract and all orders and directions made pursuant thereto, and that the Work has been completed as described in GC1.1.5 COMPLETION, the NCC shall issue a Certificate of Completion to the Contractor and, if the Work or a portion of the Work is subject to a Unit Price Arrangement, the NCC shall issue a Certificate of Measurement that shall, subject to GC8, be binding upon and conclusive between the NCC and the Contractor as to the quantities referred to therein.
- 2) Subject to GC5.2 AMOUNT PAYABLE and paragraph 3) of GC5.6, the NCC shall pay the Contractor the amount referred to in GC5.2 AMOUNT PAYABLE, less the aggregate of the sum of all payments that were made pursuant to GC5.4 PROGRESS PAYMENT and GC5.5 SUBSTANTIAL PERFORMANCE OF WORK.
- 3) The NCC shall pay the amount referred to in paragraph 2) of GC5.6 not later than:
 - (a) 60 days after the date of issue of a Certificate of Completion; or
 - (b) 15 days after the Contractor has delivered to the NCC:
 - (i) a statutory declaration which contains a declaration 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; and
 - (ii) evidence of compliance with workers' compensation legislation in accordance with GC1.9 WORKERS' COMPENSATION;

whichever is later.

GC5.7 PAYMENT NOT BINDING ON NCC

 Neither acceptance of a progress claim or progress report, nor any payment made by the NCC under the Contract, nor partial or entire use or occupancy of the Work by the NCC shall constitute an acceptance by the NCC of any portion of the Work or Material that is not in accordance with the requirements of the Contract.

GC5.8 CLAIMS AND OBLIGATIONS

1) The Contractor shall discharge all the Contractor's lawful obligations and shall satisfy all lawful claims against the Contractor arising out of the performance of the Work at least as often as the Contract requires the NCC to pay the Contractor.

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- Whenever requested to do so by the NCC, the Contractor shall make a statutory declaration declaring to the existence and condition of any obligations and claims against the Contractor arising out of the performance of the Work.
- 3) In order to discharge lawful obligations of and satisfy lawful claims against the Contractor or its Subcontractors arising out of the performance of the Contract, the NCC may pay an amount that is due and payable to the Contractor directly to the claimant. Such payment is, to the extent of the payment, a discharge of the NCC's liability to the Contractor under the Contract and may be deducted from any amount payable to the Contractor under the Contract.
- 4) For the purposes of paragraph 3) of GC5.8, and subject to paragraph 6) of GC5.8, a claim or obligation shall be considered lawful when it is so determined by:
 - (a) a court of legal jurisdiction;
 - (b) an arbitrator duly appointed to arbitrate the claim; or
 - (c) the written consent of the Contractor authorizing payment of the claim or obligation.
- 5) If a claim or obligation would have been subject to the provisions of Provincial or Territorial lien legislation or, in the Province of Quebec, the law relating to legal hypothecs had the Contractor been performing the Work for an entity other than the NCC:
 - (a) such amount as may be paid by the NCC pursuant to paragraphs 3) and 4) of GC5.8 shall not exceed the amount that the Contractor would have been obliged to pay had the provisions of such legislation or law been applicable to the Work;
 - (b) a 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 the claimant might have had; and
 - (c) for the purposes of determining the entitlement of a claimant, the notice required by paragraph 8) of GC5.8 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 such legislation.
- 6) The Contractor shall, at the request of any claimant, submit to binding arbitration those questions that need to be answered to establish the entitlement of the claimant to payment. The arbitration shall have as parties to it any Subcontractor or Supplier to whom the claimant supplied Material, performed work or rented equipment should such Subcontractor or Supplier wish to be adjoined, and the NCC shall not be a party to such arbitration. Subject to any agreement between the Contractor and the claimant, the arbitration shall be conducted in accordance with the governing Provincial or Territorial legislation applicable to the site of the Work.
- 7) Paragraph 3) of GC5.8 shall apply only to claims and obligations:
 - (a) the notification of which has set forth the amount claimed to be owing and the person who by contract is primarily liable and has been received by the NCC in writing before final payment is made to the Contractor pursuant to GC5.6 FINAL COMPLETION, and within 120 days of the date on which the claimant:

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- (i) should have been paid in full under the claimant's contract with the Contractor, its Subcontractor or Supplier if the claim is for money that was lawfully required to be held back from the claimant; or
- (ii) 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 its Subcontractor or Supplier where the claim is for money not lawfully required to be held back from the claimant; and
- (b) the proceedings to determine the right to payment of which, pursuant to paragraph 5) of GC5.8, shall have commenced within one year from the date that the notification required by subparagraph 7)(a) of GC5.8 was received by the NCC.
- 8) Upon receipt of a notice of claim, the NCC may 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.
- 9) The NCC shall notify the Contractor in writing in a timely manner of receipt of any claim and of the intention of the NCC to withhold funds. At any time thereafter and until payment is made to the claimant, the Contractor may be entitled to post, with the NCC, security in a form acceptable to the NCC in an amount equal to the value of the claim, and upon receipt of such security the NCC shall release to the Contractor any funds that would be otherwise payable to the Contractor, that were withheld pursuant to the provisions of this clause in respect of the claim of any claimant for whom the security stands.

GC5.9 RIGHT OF SETOFF

- Without limiting any right of setoff or deduction given or implied by law or elsewhere in the Contract, the NCC may set off any amount payable to the NCC by the Contractor under the Contract, or under any current contract, against any amount payable to the Contractor under the Contract.
- 2) For the purposes of paragraph 1) of GC5.9, "current contract" means a contract between the NCC and the Contractor:
 - under which the Contractor has an undischarged obligation to perform or supply work, labour or material: or
 - (b) in respect of which the NCC has, since the date of the Contract, exercised any right to take the work that is the subject of that contract out of the Contractor's hands.

GC5.10 ASSESSMENTS AND DAMAGES FOR LATE COMPLETION

- 1) For the purposes of this clause:
 - (a) the Work shall be deemed to be completed on the date of the Certificate of Completion; and
 - (b) the "period of delay" means the number of days commencing on the day fixed 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 GC6.5 DELAYS AND EXTENSION OF TIME and any other day on which, in the opinion of the NCC, completion of the Work was delayed for reasons beyond the control of the Contractor.
- 2) If the Contractor does not complete the Work by the day fixed for its completion but completes it thereafter, the Contractor shall pay the NCC an amount equal to the aggregate of:
 - (a) all salaries, wages and travelling expenses incurred by the NCC in respect of persons overseeing the performance of the Work during the period of delay;

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- (b) the cost incurred by the NCC as a result of the inability to use the completed Work for the period of delay; and
- (c) all other expenses and damages incurred or sustained by the NCC during the period of delay as a result of the Work not being completed by the day fixed for its completion.
- 3) The NCC may waive the right of the NCC to the whole or any part of the amount payable by the Contractor pursuant to paragraph 2) of GC5.10 if, in the opinion of the NCC, it is in the public interest to do so.

GC5.11 DELAY IN MAKING PAYMENT

- Notwithstanding GC1.5 TIME OF THE ESSENCE, any delay by the NCC in making any payment when it is due pursuant to GC5 TERMS OF PAYMENT, shall not be a breach of the Contract by the NCC.
- 2) Subject to paragraph 3) of GC5.11, the NCC shall pay to the Contractor simple interest at the Average Bank Rate plus 3 percent per annum on any amount that is overdue pursuant to paragraph 3) of GC5.1 INTERPRETATION, and the interest shall apply from and include the day such amount became overdue until the day prior to the date of payment.
- 3) Interest shall be paid, on demand by the Contractor, except that:
 - (a) in respect of amounts that are less than 15 days overdue, no interest shall be paid in respect of payment made within such 15 days; and
 - (b) interest shall not be payable or paid on overdue advance payments, if any.

GC5.12 INTEREST ON SETTLED CLAIMS

- 1) For the purposes of this clause, a claim means a disputed amount subject to negotiation between the NCC and the Contractor under the Contract.
- 2) A claim is deemed to have been settled when an agreement in writing is signed by the NCC and the Contractor setting out the amount of the claim to be paid by the NCC and the items of work for which the said amount is to be paid.
- 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.
- 4) The NCC shall pay to the Contractor simple interest on the amount of a settled claim at the Average Bank Rate plus 3 per cent per annum from the date the settled claim was deemed to be outstanding until the day prior to the date of payment.

GC5.13 RETURN OF SECURITY DEPOSIT

- 1) After a Certificate of Substantial Performance has been issued, and if the Contractor is not in breach of nor in default under the Contract, the NCC shall return to the Contractor all or any part of a Security Deposit that, in the opinion of the NCC, is not required for the purposes of the Contract.
- 2) After a Certificate of Completion has been issued, the NCC shall return to the Contractor the remainder of any security deposit unless the Contract stipulates otherwise.
- 3) If the security deposit was paid to the NCC, the NCC shall pay interest thereon to the Contractor at a rate established pursuant to section 21(2) of the Financial Administration Act.

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- GC6.1 CHANGES IN THE WORK
- GC6.2 CHANGES IN SUBSURFACE CONDITIONS
- GC6.3 HUMAN REMAINS, ARCHAEOLOGICAL REMAINS AND ITEMS OF HISTORICAL OR SCIENTIFIC NTEREST
- GC6.4 DETERMINATION OF PRICE
 - GC6.4.1 Price Determination Prior to Undertaking Changes
 - GC6.4.2 Price Determination Following Completion of Changes
 - GC6.4.3 Price Determination Variations in Tendered Quantities
- GC6.5 DELAYS AND EXTENSION OF TIME
- GC6.6 ALLOWABLE COSTS FOR CONTRACT CHANGES UNDER GC6.4.1
 - GC6.6.1 General
 - GC6.6.2 Hourly Labour Rates
 - GC6.6.3 Material, Plant and Equipment Costs
 - GC6.6.4 Allowance to the Contractor or Subcontractor

GC6.1 CHANGES IN THE WORK

- 1) At any time before issuance of a Certificate of Completion, Canada may issue orders for additions, deletions or other changes to the Work, or changes in the location or position of the whole or any part of the Work, if the addition, deletion, change or other revision is deemed by Canada to be consistent with the general intent of the Contract.
- 2) An order referred to in paragraph 1) of GC6.1 shall be in writing and given to the Contractor in accordance with GC2.3 NOTICES.
- 3) Upon receipt of an order, the Contractor shall promptly perform the work in accordance with the order as if the order had appeared in and been part of the original Contract.
- 4) If anything done or omitted by the Contractor pursuant to an order increases or decreases the cost of the Work to the Contractor, payment for the work shall be made in accordance with GC6.4 DETERMINATION OF PRICE.

GC6.2 CHANGES IN SUBSURFACE CONDITIONS

- If, during the performance of the Work, the Contractor encounters subsurface conditions that are substantially different from the subsurface conditions described in the tender documents supplied to the Contractor, or a reasonable assumption of fact based thereon, the Contractor shall give notice to Canada immediately upon becoming aware of the situation.
- 2) If the Contractor is of the opinion that the Contractor may incur or sustain any extra expense or any loss or damage that is directly attributable to the changed subsurface conditions, the Contractor shall within 10 days of the date the changed subsurface conditions were encountered, give Canada written notice of intention to claim for that extra expense, loss or damage.
- 3) If the Contractor has given a notice referred to in paragraph 2) of GC6.2, the Contractor shall give Canada a written claim for extra expense, loss or damage no later than 30 days after the date that a Certificate of Substantial Performance is issued.
- 4) A written claim referred to in paragraph 3) of GC6.2 shall contain a sufficient description of the facts and circumstances of the occurrence that is the subject of the claim to enable Canada to determine whether or not the claim is justified, and the Contractor shall supply such further and other information for that purpose as Canada requires.

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- 5) If Canada determines that a claim referred to in paragraph 3) of GC6.2 is justified, Canada shall make an extra payment to the Contractor in an amount that is calculated in accordance with GC6.4 DETERMINATION OF PRICE.
- 6) If, in the opinion of Canada, the Contractor effects a saving of expenditure that is directly attributable to a substantial difference between the information relating to subsurface conditions at the site of the Work that is contained in the tender documents, or a reasonable assumption of fact based thereon, and the actual subsurface conditions encountered by the Contractor, the Contract Amount shall be reduced by the amount of the saving of expenditure determined in accordance with GC6.4 DETERMINATION OF PRICE.
- 7) If the Contractor fails to give a notice referred to in paragraph 2) of GC6.2 and a claim referred to in paragraph 3) of GC6.2 within the times stipulated, an extra payment shall not be made to the Contractor in respect of the occurrence.
- 8) Canada does not warrant the content expressed in any subsurface report available for the perusal of the Contractor that does not form part of the tender and contract documents.

GC6.3 HUMAN REMAINS, ARCHAEOLOGICAL REMAINS AND ITEMS OF HISTORICAL OR SCIENTIFIC INTEREST

- 1) For the purposes of this clause
 - (a) "human remains" means the whole or any part of a deceased human being, irrespective of the time of death;
 - (b) "archaeological remains" are items, artefacts or things made, modified or used by human beings in antiquity and may include, but not be limited to, stone, wood or iron structures or monuments, dump deposits, bone artefacts, weapons, tools, coins, and pottery; and
 - (c) "items of historical or scientific interest" are naturally occurring or manufactured objects or things of any age that are not archaeological remains but may be of interest to society because of their historical or scientific significance, value, rarity, natural beauty, or other quality.
- 2) If, during the course of the Work, the Contractor encounters any object, item or thing which is described in paragraph 1) of GC6.3 or which resembles any object, item or thing described in paragraph 1) of GC6.3, the Contractor shall
 - (a) take all reasonable steps, including stopping work in the affected area, to protect and preserve the object, item or thing;
 - (b) immediately notify Canada of the circumstances in writing; and
 - (c) take all reasonable steps to minimize additional costs that may accrue as a result of any work stoppage.
- 3) Upon receipt of a notification in accordance with subparagraph 2)(b) of GC6.3, Canada shall promptly determine whether the object, item or thing is one described in, or contemplated by paragraph 1) of GC6.3, and shall notify the Contractor in writing of any action to be performed, or work to be carried out, by the Contractor as a result of Canada's determination.
- 4) Canada may, at any time, enlist the services of experts to assist in the investigation, examination, taking of measurements or other such recordings, placing of permanent protection around or removing of the object, item or thing encountered by the Contractor, and the Contractor shall, to the satisfaction

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- of Canada, allow them access and co-operate with them in the carrying out of their duties and obligations.
- 5) Human remains, archaeological remains and items of historical or scientific interest encountered at the site of the Work shall be deemed to be the property of Canada.
- 6) Except as may be otherwise provided for in the Contract, the provisions of GC6.4 DETERMINATION OF PRICE and GC6.5 DELAYS AND EXTENSION OF TIME shall apply.

GC6.4 DETERMINATION OF PRICE

GC6.4.1 Price Determination Prior to Undertaking Changes

- 1) If a Lump Sum Arrangement applies to the Contract or a part thereof, the price of any change shall be the aggregate estimated cost of labour, Plant and Material that is required for the change as agreed upon in writing by the Contractor and Canada plus an allowance for supervision, co-ordination, administration, overhead, margin and the risk of undertaking the work within the stipulated amount, which allowance shall be equal to
 - (a) 20% of the aggregate costs referred to herein for that portion of the Work done by the Contractor's own forces, if the aggregate cost of the Work does not exceed \$50,000;
 - (b) 15% of the aggregate costs referred to herein for that portion of the Work that is done by subcontract, if the aggregate cost of the Work does not exceed \$50,000; or
 - (c) a negotiated percentage of the aggregate costs referred to herein or a negotiated amount
 - (i) if the aggregate cost of the Work exceeds \$50,000; or
 - (ii) if the Contractor and Canada agree in writing.
- 2) If a Unit Price Arrangement applies to the Contract or a part thereof, the Contractor and Canada may, by agreement in writing, add items, units of measurement, estimated quantities and prices per unit to the Unit Price Table.
- 3) A price per unit referred to in paragraph 2) of GC6.4.1 shall be determined on the basis of the aggregate estimated cost of labour, Plant and Material that is required for the additional item as agreed upon by the Contractor and Canada, plus an allowance determined in accordance with paragraph 1) of GC6.4.1.
- 4) To facilitate approval of the price of the change or the additional price per unit as applicable, the Contractor shall submit a cost estimate breakdown identifying, as a minimum, the estimated cost of labour, Plant, Material, each subcontract amount, and the amount of the allowance.
- 5) If no agreement is reached as contemplated in paragraph 1) of GC6.4.1, the price shall be determined in accordance with GC6.4.2.
- 6) If no agreement is reached, as contemplated in paragraphs 2) and 3) of GC6.4.1, Canada shall determine the class and the unit of measurement of the item of labour, Plant or Material and the price per unit shall be determined in accordance with GC6.4.2.

GC6.4.2 Price Determination Following Completion of Changes

1) If it is not possible to predetermine, or if there is failure to agree upon the price of a change in the Work, the price of the change shall be equal to the aggregate of

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- (a) all reasonable and proper amounts actually expended or legally payable by the Contractor in respect of the labour, Plant and Material that fall within one of the classes of expenditure described in paragraph 2) of GC6.4.2, that are directly attributable to the performance of the Contract;
- (b) an allowance for profit and all other expenditures or costs, including overhead, general administration costs, financing and interest charges, in an amount that is equal to 10% of the sum of the expenses referred to in subparagraph 1)(a) of GC6.4.2; and
- (c) interest on the amounts determined under subparagraphs 1)(a) and 1)(b) of GC6.4.2 calculated in accordance with GC5.12 INTEREST ON SETTLED CLAIMS;
- 2) The cost of labour, Plant and Material referred to in subparagraph 1)(a) of GC6.4.2 shall be limited to the following categories of expenditure:
 - (a) payments to Subcontractors and Suppliers;
 - (b) wages, salaries, bonuses and, if applicable, travel and lodging expenses of employees of the Contractor located at the site of the Work and that portion of wages, salaries, bonuses and, if applicable, travel and lodging expenses of personnel of the Contractor generally employed at the head office or at a general office of the Contractor provided they are actually and properly engaged on the Work under the Contract;
 - (c) assessments payable under any statutory authority relating to workers' compensation, employment insurance, pension plan or holidays with pay, provincial health or insurance plans, environmental reviews, and GST / HST collection costs;
 - (d) rent that is paid for Plant, or an amount equivalent to 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 or the equivalent amount is reasonable and use of that Plant has been approved by Canada;
 - (e) payments for maintaining and operating Plant necessary for and used in the performance of the Work, and payments for effecting repairs thereto that, in the opinion of Canada, are necessary for 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;
 - (f) 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;
 - (g) 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
 - (h) any other payments made by the Contractor with the approval Canada that are necessary for the performance of the Contract in accordance with the Contract Documents.

GC6.4.3 Price Determination - Variations in Tendered Quantities

- 1) Except as provided in paragraphs 2), 3), 4) and 5) of GC6.4.3, if it appears that the final quantity of labour, Plant and Material under a price per unit item shall exceed or be less than the estimated tendered quantity, the Contractor shall perform the Work or supply the Plant and Material required to complete the item and payment shall be made for the actual Work performed or Plant and Material supplied at the price per unit set out in the Contract.
- 2) If the final quantity of the price per unit item exceeds the estimated tendered quantity by more than 15%, either party to the Contract may make a written request to the other party to negotiate an

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amended price per unit for that portion of the item which exceeds 115% of the estimated tendered quantity, and to facilitate approval of any amended price per unit, the Contractor shall, on request, provide Canada with

- (a) detailed records of the actual cost to the Contractor of performing or supplying the tendered quantity for the price per unit item up to the time the negotiation was requested; and
- (b) the estimated unit cost of labour, Plant and Material required for the portion of the item that is in excess of 115% of the tendered quantity.
- 3) If agreement is not reached as contemplated in paragraph 2) of GC6.4.3, the price per unit shall be determined in accordance with GC6.4.2.
- 4) If it appears that the final quantity of labour, Plant and Material under a price per unit item shall be less than 85% of the estimated tendered quantity, either party to the Contract may make a written request to the other party to negotiate a change to the price per unit for the item if
 - (a) there is a demonstrable difference between the unit cost to the Contractor of performing or supplying the estimated tendered quantity and the unit cost to the Contractor for performing or supplying the final quantity; and
 - (b) the difference in unit cost is due solely to the decrease in quantity and not to any other cause.
- 5) For the purposes of the negotiation referred to in paragraph 4) of GC6.4.3
 - (a) the onus of establishing, justifying and quantifying a proposed change lies with the party making the request for negotiation; and
 - (b) in no event shall the total price for an item that has been amended as a result of a reduction in quantity pursuant to paragraph 4) of GC6.4.3 exceed the amount that would have been payable to the Contractor had 85% of the tendered quantity actually been performed or supplied.

GC6.5 DELAYS AND EXTENSION OF TIME

- Upon application of the Contractor made before the date first fixed for completion of the Work or before any other date previously fixed under this clause, Canada may extend the time for completion of the Work by fixing a new date if Canada determines that causes beyond the control of the Contractor have delayed its completion.
- 2) The Contractor's application shall be accompanied by the written consent of the bonding company whose bond forms part of the Contract Security.
- 3) Subject to paragraph 4) of GC6.5, no payment, other than a payment that is expressly stipulated in the Contract, shall be made by Canada to the Contractor for any extra expense, loss or damage incurred or sustained by the Contractor due to delay, whether or not the delay is caused by circumstances beyond the control of the Contractor.
- 4) If the Contractor incurs or sustains any extra expense or any loss or damage that is directly attributable to any neglect or delay that occurs after the date of the Contract on the part of Canada in providing any information or in doing any act that the Contract either expressly requires Canada to do or that would ordinarily be done by an owner in accordance with the practice of the trade, the Contractor shall give Canada written notice of intention to claim for that extra expense or loss or damage within ten working days of the date the neglect or delay first occurred.

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- 5) When the Contractor has given a notice referred to in paragraph 4) of GC6.5, the Contractor shall give Canada a written claim for the extra expense, loss or damage no later than 30 days after the date that a Certificate of Completion is issued and not afterwards.
- 6) A written claim referred to in paragraph 5) of GC6.5 shall contain a sufficient description of the facts and circumstances of the occurrence that is the subject of the claim to enable Canada to determine whether or not the claim is justified and the Contractor shall supply such further and other information for that purpose as Canada may require.
- 7) If Canada determines that a claim referred to in paragraph 5) of GC6.5 is justified, Canada shall make an extra payment to the Contractor in an amount that is calculated in accordance with GC6.4 DETERMINATION OF PRICE.
- 8) If the Contractor fails to give a notice referred to in paragraph 4) and a claim referred to in paragraph 5) of GC6.5 within the times stipulated, an extra payment shall not be made to the Contractor in respect of the occurrence.

GC6.6 ALLOWABLE COSTS FOR CONTRACT CHANGES UNDER GC6.4.1

GC6.6.1 General

- 1) The Contractor shall submit a cost estimate breakdown for each contemplated change, in accordance with paragraph 4) of GC6.4.1 PRICE DETERMINATION PRIOR TO UNDERTAKING CHANGES. The breakdown shall itemize all labour, material, plant and equipment costs estimated by the Contractor and subcontractors, and the amount of each allowance.
- 2) It is the responsibility of the Contractor to ensure that all prices included in the Contractor's breakdown to the NCC, including those of subcontractors, are fair and reasonable in view of the terms expressed herein.
- 3) The labour hours required for the contemplated change shall be based on the estimated number of hours to perform the work.
- 4) Time spent by a working foreman may be included in the number of labour hours, at a rate agreed to in writing by the Contractor and the NCC.
- 5) Time attributable to material handling, productivity factors and approved rest periods is to be included in the number of hours required by the contemplated change and will not be paid as a separate item under hourly rates.
- 6) Allowances referred to in section 04 below are not to be included in the hourly labour rates.
- 7) Credit for work deleted will only be for the work directly associated with the change.
- 8) When a change deletes work which has not yet been performed, the NCC is entitled to an adjustment in the Contract Amount equal to the cost the Contractor would have incurred had the work not been deleted.
- Allowances referred to in Section 04 below shall not be applied to any credit amounts for deleted work.
- 10) In those cases where the change involves additions and deletions to the work, the allowances referred to in section 04 below shall apply only when the cost of the additions minus the cost of the deletions would result in an increase in the Contract Amount. The percentage allowance shall only be applied to that portion of the costs of the additions that is in excess of the cost of the deletions.

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11) If the contemplated change in the work necessitates a change in the contract completion date, or has an impact on the work, the Contractor shall identify and include the resulting cost in the breakdown.

GC6.6.2 Hourly Labour Rates

- 1) The hourly labour rates listed in the Contractor's breakdown shall be determined in accordance with the collective agreements that are applicable at the site of the work and shall include:
 - (a) the base rate of pay;
 - (b) vacation pay:
 - (c) benefits which includes:
 - (i) welfare contributions;
 - (ii) pension contributions;
 - (iii) union dues;
 - (iv) training and industry funds contributions; and
 - (v) other applicable benefits, if any, that can be substantiated by the Contractor.
 - (d) statutory and legislated requirements, assessed and payable under statutory authority, which includes:
 - (i) Employment Insurance contributions;
 - (ii) Canada Pension Plan or Québec Pension Plan contributions;
 - (ii) Worker's Compensation Board or Commission de la santé et de la sécurité du travail premiums;
 - (iv) Public Liability and Property Damage insurance premiums; and
 - (v) health tax premiums.
- In the case of nonunion labour, all rates claimed shall be in accordance with the terms of the Labour Conditions forming part of this contract and the Contractor must provide satisfactory proof of the rates actually paid.

GC6.6.3 Material, Plant and Equipment Costs

1) The costs of all purchases and rentals must be based on the actual amount paid to the suppliers by the Contractor or subcontractor and said costs are to include all applicable discounts.

GC6.6.4 Allowance to the Contractor or Subcontractor

- 1) The allowances determined in accordance with paragraph 1) of GC6.4.1 PRICE DETERMINATION PRIOR TO UNDERTAKING CHANGES shall be considered as full compensation for:
 - (a) supervision, co-ordination, administration, overhead, margin and the risk of undertaking the work within the stipulated amount; and

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- (b) miscellaneous additional costs related to:
 - (i) the purchase or rental of material, plant and equipment;
 - (ii) the purchase of small tools and supplies;
 - (iii) safety and protection measures; and
 - (iv) permits, bonds, insurance, engineering, as built drawings, commissioning and site office.

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GC7 DEFAULT, SUSPENSION OR TERMINATION OF CONTRACT

- GC7.1 TAKING THE WORK OUT OF THE CONTRACTOR'S HANDS
- GC7.2 SUSPENSION OF WORK
- GC7.3 TERMINATION OF CONTRACT
- GC7.4 SECURITY DEPOSIT FORFEITURE OR RETURN

GC7.1 TAKING THE WORK OUT OF THE CONTRACTOR'S HANDS

- 1) By giving notice in writing to the Contractor in accordance with GC2.3 NOTICES, the NCC, without any other authorization, may take all or any part of the Work out of the Contractor's hands, and may employ such means as the NCC sees fit to have the Work completed if the Contractor:
 - (a) fails to remedy any delay in the commencement or default in the diligent performance of the Work to the satisfaction of the NCC within six days of the NCC giving notice to the Contractor in writing in accordance with GC2.3 NOTICES;
 - (b) defaults in the completion of any part of the Work within the time fixed for its completion by the Contract;
 - (c) becomes insolvent, or has committed an act of bankruptcy, and has neither made a proposal to its creditors nor filed a notice of intention to make such a proposal, pursuant to the Bankruptcy and Insolvency Act;
 - (d) abandons the work;
 - (e) makes an assignment of the Contract without the consent required by GC1.16 ASSIGNMENT;or
 - (f) otherwise fails to observe or perform any of the provisions of the Contract.
- 2) If the whole or any part of the Work is taken out of the Contractor's hands, the Contractor's right to any further payment that is due or accruing due under the Contract is, subject only to paragraph 3) of GC7.1, extinguished, and the Contractor is liable to pay the NCC, upon demand, an amount that is equal to the amount of all loss and damage incurred or sustained by the NCC in respect of the Contractor's failure to complete the Work.
- 3) If the whole or any part of the Work that is taken out of the Contractor's hands is completed by the NCC, the NCC may pay the Contractor the amount, if any, of the holdback or a progress claim as determined by the NCC 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 the NCC for any other loss or damage incurred or sustained by reason of the Contractor's default.
- 4) The taking of the Work or any part thereof out of the Contractor's hands does not relieve the Contractor from any obligation under the Contract or imposed by law except the obligation to complete the performance of that part of the Work that was taken out of the Contractor's hands.
- 5) If the Work or any part thereof is taken out of the Contractor's hands, all Plant and Material and the interest of the Contractor, or its suppliers or subcontractors at any tier, in all real property, licences, powers and privileges acquired, used or provided by the Contractor, or its suppliers or subcontractors at any tier, under the Contract shall continue to be the property of the NCC without compensation.
- 6) When the NCC certifies that any Plant, Material, or any interest of the Contractor is no longer required for the purposes of the Work, or that it is not in the interests of the NCC to retain that Plant, Material, or interest, it shall revert to the Contractor.

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GC7 DEFAULT, SUSPENSION OR TERMINATION OF CONTRACT

7) If the Contractor has become insolvent or has committed an act of bankruptcy, and has either made a proposal to its creditors or filed a notice of intention to make such a proposal, pursuant to the Bankruptcy and Insolvency Act, the Contractor shall immediately forward a copy of the proposal or the notice of intention to the NCC.

GC7.2 SUSPENSION OF WORK

- 1) When, in the NCC's opinion, it is in the public interest to do so, the NCC may require the Contractor to suspend performance of the Work either for a specified or an unspecified period, by giving a notice of suspension in writing to the Contractor in accordance with GC2.3 NOTICES.
- 2) When a notice of suspension is received by the Contractor, the Contractor shall suspend all operations in respect of the Work except those that the NCC determines are necessary for the care and preservation of the Work, Plant and Material.
- 3) During a period of suspension, the Contractor shall not remove any part of the Work, Plant or Material from its site without the consent of the NCC.
- 4) If a period of suspension is 60 days or less, the Contractor shall resume the performance of the Work on the expiration of that period, and the Contractor is entitled to be paid the extra costs necessarily incurred by the Contractor as a result of the suspension, determined in accordance with GC6.4 DETERMINATION OF PRICE.
- 5) If a period of suspension is more than 60 days, the NCC and the Contractor may agree that the performance of the Work shall be continued by the Contractor, and the Contractor shall resume performance of the Work subject to any terms and conditions agreed upon by the NCC and the Contractor. If the NCC and the Contractor do not agree that performance of the Work shall be continued by the Contractor, or upon the terms and conditions under which the Contractor shall continue the Work, the notice of suspension shall be deemed to be a notice of termination pursuant to GC7.3 TERMINATION OF CONTRACT.

GC7.3 TERMINATION OF CONTRACT

- 1) The NCC may terminate the Contract at any time by giving a notice of termination in writing to the Contractor in accordance with GC2.3 NOTICES.
- 2) If the Contractor receives a notice of termination, the Contractor shall forthwith cease all operations in performance of the Contract, subject to any conditions stipulated in the notice.
- 3) Subject to paragraph 4) of GC7.3, if the Contract is terminated, the NCC shall pay the Contractor an amount determined to be due to the Contractor pursuant to GC6.4 DETERMINATION OF PRICE less the aggregate of all amounts that were paid to the Contractor by the NCC and all amounts that are due to the NCC from the Contractor pursuant to the Contract.
- 4) In no event shall the total amount payable by the NCC to the Contractor exceed the amount, calculated in accordance with GC5 TERMS OF PAYMENT, that would have been payable to the Contractor had the Contractor completed the Work.
- 5) Payment to the Contractor, if any, shall be made as soon as practicable under the circumstances.

GC7.4 SECURITY DEPOSIT - FORFEITURE OR RETURN

1) If the Work is taken out of the Contractor's hands, or the Contractor is in breach of, or in default under, the Contract, the NCC may convert a security deposit to the NCC's own use.

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GC7 DEFAULT, SUSPENSION OR TERMINATION OF CONTRACT

- 2) If the NCC converts a security deposit, the amount realized shall be deemed to be an amount due from the NCC to the Contractor under the Contract.
- 3) Any balance of the amount realized that remains after payment of all losses, damage and claims of the NCC and others shall be paid by the NCC to the Contractor if, in the opinion of the NCC, it is not required for the purposes of the Contract.

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GC8 DISPUTE RESOLUTION

- 1) The Contractor may, within 10 days after the communication to the Contractor of any decision or direction referred to in GC6.1 CHANGES IN THE WORK and GC2.2 INTERPRETATION OF CONTRACT, protest that decision or direction.
- 2) A protest referred to in paragraph 1) of GC8 shall be in writing, contain full reasons for the protest, be signed by the Contractor and be given to the NCC.
- 3) If the Contractor gives a protest pursuant to paragraph 2) of GC8, 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 the Contractor considers appropriate in the circumstances.
- 4) The giving of a protest by the Contractor pursuant to paragraph 2) of GC8 shall not relieve the Contractor from complying with the decision or direction that is the subject of the protest.
- 5) Subject to paragraph 6) of GC8, the Contractor shall take any action referred to in paragraph 3) of GC8 within 3 months after the date of the Certificate of Completion referred to in GC5.6 FINAL COMPLETION and not afterwards, except where it is otherwise provided by law.
- 6) The Contractor shall take any action referred to in paragraph 3) of GC8 resulting from a direction under GC3.13 WARRANTY AND RECTIFICATION OF DEFECTS IN WORK, within 3 months after the expiry of a warranty or guarantee period and not afterwards, except where it is otherwise provided by law.
- 7) Subject to paragraph 8) of GC8, if the NCC determines that the Contractor's protest is justified, the NCC 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.
- Costs referred to in paragraph 7) of GC8 shall be calculated in accordance with GC6.4 DETERMINATION OF PRICE.

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GC9 CONTRACT SECURITY

- GC9.1 OBLIGATION TO PROVIDE CONTRACT SECURITY
- GC9.2 TYPES AND AMOUNTS OF CONTRACT SECURITY
- GC9.3 IRREVOCABLE STANDBY LETTER OF CREDIT

GC9.1 OBLIGATION TO PROVIDE CONTRACT SECURITY

- The Contractor shall, at the Contractor's expense and within 7 days after the date that the Contractor receives notice that the Contractor's bid was accepted by the NCC, obtain and deliver Contract Security to the NCC in one or more of the forms prescribed in GC9.2 TYPES AND AMOUNTS OF CONTRACT SECURITY.
- 2) If the whole or a part of the Contract Security provided is in the form of a security deposit, it shall be held and disposed of in accordance with GC5.13 RETURN OF SECURITY DEPOSIT and GC7.4 SECURITY DEPOSIT - FORFEITURE OR RETURN.
- 3) If a part of the Contract Security provided is in the form of a labour and material payment bond, the Contractor shall post a copy of that bond at the site of the Work.
- 4) It is a condition precedent to the release of the first progress payment that the Contractor has provided the Contract Security as specified herein.
- 5) In addition to the limitation imposed in paragraph 4) of GC9.1, the Contractor further acknowledges and agrees that it will not be entitled to have access to the site, nor to commence work pursuant to this contract until it has delivered the Contract Security as specified herein.

GC9.2 TYPES AND AMOUNTS OF CONTRACT SECURITY

- 1) The Contractor shall deliver to the NCC (a), (b) or (c):
 - (a) 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 including taxes
 - (b) A labour and material payment bond in an amount that is equal to not less than 50% of the Contract Amount including taxes, and a security deposit in an amount that is equal to not less than 10% of the Contract Amount including taxes.
 - (c) A security deposit in an amount prescribed by subparagraph 1)(b) of GC9.2, plus an additional amount that is equal to 10% of the Contract Amount including taxes.
- 2) The amount of a security deposit referred to in subparagraph 1)(b) of GC9.2 shall not exceed \$2,000,000 regardless of the Contract Amount including taxes.
- 3) A performance bond and a labour and material payment bond referred to in paragraph 1) of GC9.2 shall be in a form and be issued by a bonding or surety company that is approved by the NCC.
 - (a) The approved form for the performance bond is enclosed at the end of GC9.
 - (b) The approved form for the labour and material payment bond is enclosed at the end of GC9
 - (c) The list of approved bonding or surety companies is displayed at the following Website:

http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=12027.

4) A security deposit referred to in subparagraphs 1)(b) and 1)(c) of GC9.2 shall be in the form of:

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GC9 CONTRACT SECURITY

- (a) a bill of exchange, bank draft or money order made payable to the NCC and certified by an approved financial institution or drawn by an approved financial institution on itself; or
- (b) bonds of, or unconditionally guaranteed as to principal and interest by, the Government of Canada.
- 5) For the purposes of subparagraph 4)(a) of GC9.2:
 - (a) 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 certain sum of money to, or to the order of, the NCC;
 - (b) if a bill of exchange, bank draft or money order is certified by or drawn on an institution or corporation other than a chartered bank, it must be accompanied by proof that the said institution or corporation meets at least one of the criteria described in subparagraph 5)(c) of GC9.2, either by letter or by a stamped certification on the bill of exchange, bank draft or money; and
 - (c) An approved financial institution is:
 - (i) a corporation or institution that is a member of the Canadian Payments Association as defined in the Canadian Payments Act;
 - (ii) a corporation that accepts deposits that are insured, to the maximum permitted by law, by the Canada Deposit Insurance Corporation or the Régie de l'assurance-dépôts du Québec;
 - (iii) a corporation that accepts deposits from the public if repayment of the deposit is guaranteed by Her Majesty the Queen in right of a province;
 - (iv) a corporation, association or federation incorporated or organized as a credit union or cooperative credit society that conforms to the requirements of a credit union which are more particularly described in paragraph 137(6) of the Income Tax Act; or
 - (v) Canada Post Corporation.
- 6) Bonds referred to in subparagraph 4)(b) of GC9.2 shall be provided on the basis of their market value current at the date of the Contract, and shall be:
 - (a) made payable to bearer; or
 - (b) accompanied by a duly executed instrument of transfer of the bonds to the NCC in the form prescribed by the Domestic Bonds of Canada Regulations; or
 - (c) registered as to principal, or as to principal and interest, in the name of the NCC pursuant to the Domestic Bonds of Canada Regulations.

GC9.3 IRREVOCABLE STANDBY LETTER OF CREDIT

- As an alternative to a security deposit, an irrevocable standby letter of credit is acceptable to the NCC, the amount of which shall be determined in the same manner as a security deposit referred to in GC9.2 TYPES AND AMOUNTS OF CONTRACT SECURITY.
- 2) An irrevocable standby letter of credit shall:
 - (a) be an arrangement, however named or described, whereby a financial institution (the "Issuer") acting at the request and on the instructions of a customer (the "Applicant") or on its own behalf:

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GC9 CONTRACT SECURITY

- (i) is to make a payment to, or to the order of, the NCC as the beneficiary;
- (ii) is to accept and pay bills of exchange drawn by the NCC;
- (ii) authorizes another financial institution to effect such payment or accept and pay such bills of exchange; or
- (iv) authorizes another financial institution to negotiate against written demand(s) for payment provided that the terms and conditions of the letter of credit are complied with;
- (b) state the face amount that may be drawn against it;
- (c) state its expiry date;
- (d) provide for sight payment to the NCC by way of the financial institution's draft against presentation of a written demand for payment signed by the NCC;
- (e) provide that more than one written demand for payment may be presented subject to the sum of those demands not exceeding the face value of the letter of credit;
- (f) provide that it is subject to the International Chamber of Commerce (ICC) Uniform Customs and Practice for Documentary Credits, 2007 Revision, ICC Publication No. 600;
- (g) clearly specify that it is irrevocable or deemed to be irrevocable pursuant to article 6 c) of the International Chamber of Commerce (ICC) Uniform Customs and Practice for Documentary Credits, 2007 Revision, ICC Publication No. 600; and
- (h) be issued or confirmed, in either official language in a format left to the discretion of the issuer or confirmer, by an approved financial institution on its letterhead.

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PERFORMANCE BOND

	Bond Number	
	Amount \$	
KNOW ALL MEN BY THESE PRESENTS, that	as Principal,	
hereinafter called the Principal, and	as Surety, hereinafter	
called the Surety, are, subject to the conditions hereinafter contained, he	eld and firmly bound unto the National Capital Commission as	
Obligee, hereinafter called the NCC, In the amount of	dollars	
(\$), lawful money of Canada, for the payment	t of which sum, well and truly to be made, the Principal and the	
Surety bind themselves, their heirs, executors, administrators, successor	rs and assigns, jointly and severally, firmly by these presents.	
SIGNED AND SEALED this day of	, WHEREAS, the Principal has	
	ay of , ,	
for:		
work in accordance with the Contract provided that if a contract (i) it shall be between the Surety and the completing contracto (ii) the selection of such completing contractor shall be subject (c) if the work is taken out of the Principal's hands and the NCC, undertake the completion of the work, assume the financial available to the NCC under the Contract, (d) be liable for and pay all the excess costs of completion of the C (e) not be entitled to any Contract moneys earned by the Princip relating to such earned Contract moneys held by the NCC, ar provided, however, and without restricting the generality of the	ed in connection with the Contract, then this obligation shall be void, following conditions: lefault under the Contract, the Surety shall default of the Principal, rects the Surety to undertake the completion of the work, complete the is entered into for the completion of the work, or, and to the approval of the NCC, after reasonable notice to the Surety, does not direct the Surety to responsibility for the cost of completion in excess of the moneys contract, and oal, up to the date of his default on the Contract and any holdbacks and the liability of the Surety under this Bond shall remain unchanged to foregoing, upon the completion of the Contract to the satisfaction of dibacks related thereto held by the NCC may be paid to the Surety by	
No suit or action shall be instituted by the NCC herein against the Sui	rety pursuant to these presents after the expiration of two (2) years	
from the date on which final payment under the Contract is payable.		
IN TESTIMONY WHEREOF , the Principal has hereto set its hand and at with its corporate seal duly attested by the signature of its authorized sig		
SIGNED, SEALED AND DELIVERED in the presence of:	Note: Affix Corporate seal if applicable.	
Principal		
Surety		



LABOUR AND MATERIAL PAYMENT BOND

			Bond Number	
			Amount	\$
KNOW ALL MEN BY THESE	E PRESENTS, that			as Principal,
hereinafter called the Principa	al, and		as	s Surety, hereinafter
called the Surety, are, subjec	ct to the conditions hereinafte	r contained, held and firmly bound ur	nto the National Capital Commission	as Obligee,
hereinafter called the NCC,	In the amount of			dollars
(\$), lawful money of Canada,	for the payment of which sum, well a	and truly to be made, the Principal an	nd the Surety
bind themselves, their heirs,	executors, administrators, su	ccessors and assigns, jointly and se	verally, firmly by these presents.	
SIGNED AND SEALED this	day of	,	. WHEREAS, the Principal ha	as entered into a Contract
with the NCC, dated the	day of	·	, for:	
		which contract is by reference	made a part hereof, and is hereinafte	er referred to as the Contract

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION are such that, if payment is promptly made to all Claimants who have performed labour or services or supplied material in connection with the Contract and any and all duly authorized modifications and extensions of the Contract that may hereafter be made, notice of which modifications and extensions to the Surety being hereby waived, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

- 1. For the purpose of this bond, a Claimant is defined as one having a direct contract with the Principal or any Sub-Contractor of the Principal for labour, material or both, used or reasonably required for use in the performance of the Contract, labour and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone services or rental of equipment (but excluding rental of equipment where the rent pursuant to an agreement is to be applied towards the purchase price thereof) directly applicable to the Contract.
- 2. For the purpose of this Bond, no payment is required to be made in respect of a claim for payment for labour or services performed or material supplied in connection with the Contract that represents a capital expenditure, overhead or general administration costs incurred by the Principal during the currency or in respect of the Contract.
- 3. The Principal and the Surety hereby jointly and severally agree with the NCC that if any Claimant has not been paid as provided for under the terms of his contract with the Principal or a Sub-Contractor of the Principal before the expiration of a period of ninety (90) days after the date on which the last of such Claimant's labour or service was done or performed or materials were supplied by such Claimant, the NCC may sue on this bond, have the right to prosecute the suit to final judgment for such sum or sums as may be due and have execution thereon; and such right of the NCC is assigned by virtue of Part VIII of the Financial Administration Act to such Claimant.
- 4. For the purpose of this bond the liability of the Surety and the Principal to make payment to any claimant not having a contract directly with the Principal shall be limited to that amount which the Principal would have been obliged to pay to such claimant had the provisions of the applicable provincial or territorial legislation on lien or privileges been applicable to the work. A claimant need not comply with provisions of such legislation setting out steps by way of notice, registration or otherwise as might have been necessary to preserve or perfect any claim for lien or privilege which the claimant might have had. Any such claimant shall be entitled to pursue a claim and to recover judgment hereunder subject to the terms and notification provisions of the Bond.
- 5. Any material change in the Contract between the Principal and the NCC shall not prejudice the rights or interest of any Claimant under this Bond who is not instrumental in bringing about or has not caused such change.
- 6. No suit or action shall be commenced hereunder by any Claimant:
 - a) Unless such Claimant shall have given written notice within the time limits hereinafter set forth to the Principal and the Surety above named, stating with substantial accuracy the amount claimed. Such notice shall be served by mailing the same by registered mail to the Principal and the Surety at any place where an office is regularly maintained for the transaction of business by such persons or served in any manner in which legal process may be served in the Province or other part of Canada in which the subject matter of the Contract is located. Such notice shall be given
 - (i) in respect of any claim for the amount or any portion thereof required to be held back from the Claimant by the Principal or by the Sub-Contractor of the Principal under either the terms of the Claimant's Contract with the Principal or the Claimant's Contract with the Sub-Contractor of the Principal within one hundred and twenty (120) days after such Claimant should have been paid in full under this Contract;

.../2

- (ii) in respect of any claim other than for the holdback or portion thereof referred to above within one hundred and twenty (120) days after the date upon which such Claimant did or performed the last of the service, work or labour or furnished the last of the materials for which such claim is made under the Claimant's Contract with the Principal or a Sub-Contractor of the Principal
- (b) After the expiration of one (1) year following the date on which the Principal ceased work on the said Contract, including work performed under the guarantees provided in the Contract;
- (c) Other than in a court of competent jurisdiction in the province or district of Canada in which the subject matter of the Contract or any part thereof is situated and not elsewhere, and the parties hereto hereby agree to submit to the jurisdiction of such court.
- 7. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder.
- 8. The Surety shall not be entitled to claim any moneys relating to the Contract and the liability of the Surety under this Bond shall remain unchanged and, without restricting the generality of the foregoing, the Surety shall pay all valid claims of Claimants under this Bond before any moneys relating to the Contract held by the NCC are paid to the Surety by the NCC.
- 9. The Surety shall not be liable for a greater sum that the amount specified in this bond.

IN TESTIMONY WHEREOF, the Principal has hereto set its hand and affixed its seal, and the Surety has caused these presents to be sealed with its corporate seal duly attested by the signature of its authorized signing authority, the day and year first above written.

SIGNED, SEALED AND DELIVERED in the presence of:	Note: Affix Corporate seal if applicable.
Principal	
Witness	
Surety	





GC10.1	INSURANC	E CONTRACT	'S
GC10.2	INSURANCE PROCEEDS		
GC10.3	INSURANCE TERMS		
	GC10.3.1	General	
		GC10.3.1.1	Proof of Insurance
		GC10.3.1.2	Payment of Deductible
	GC10.3.2	Commercial General Liability	
		GC10.3.2.1	Scope of Policy
		GC10.3.2.2	Insured
		GC10.3.2.3	Period of Insurance
	GC10.3.3	Builder's Rick / Installation Floater	
		GC10.3.3.1	Scope of Policy
		GC10.3.3.2	Amount of Insurance
		GC10.3.3.3	Insurance Proceeds

GC10.1 INSURANCE CONTRACTS

- 1) The Contractor shall, at the Contractor's expense, obtain and maintain insurance contracts in respect of the work and shall provide evidence thereof to the NCC in accordance with the requirements of GC10.
- 2) The insurance contracts referred to in paragraph 1) of GC10.1 shall:
 - (a) be in a form, of the nature, in the amounts, for the periods and containing the terms and conditions specified in GC10; and
 - (b) provide for the payment of claims under such insurance contracts in accordance with GC10.2 INSURANCE PROCEEDS.

GC10.2 INSURANCE PROCEEDS

- 1) In the case of a claim payable under a Builders Risk/Installation (All Risks) insurance contract maintained by the Contractor pursuant to GC10.1 INSURANCE CONTRACTS, the proceeds of the claim shall be paid directly to the NCC, and:
 - (a) the monies so paid shall be held by the NCC for the purposes of the contract; or
 - (b) if the NCC elects, shall be retained by the NCC, in which event they vest in the NCC absolutely.
- 2) In the case of a claim payable under a General Liability insurance contract maintained by the Contractor pursuant to GC10.1 INSURANCE CONTRACTS, the proceeds of the claim shall be paid by the insurer directly to the claimant.
- 3) If an election is made pursuant to paragraph 1) of GC10.2, the NCC may cause an audit to be made of the accounts of the Contractor and of the NCC in respect of the part of the work that was lost, damaged or destroyed for the purpose of establishing the difference, if any, between:
 - (a) the aggregate of the amount of the loss or damage suffered or sustained by the NCC, including any costs incurred in respect of the clearing of the work and its site and any other amount that is payable by the Contractor to the NCC under the contract, minus any monies retained pursuant to subparagraph 1)(b) of GC10.2; and
 - (b) the aggregate of the amounts payable by the NCC to the Contractor pursuant to the contract up to the date of the loss or damage.

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GC10 INSURANCE

- 4) A difference that is established pursuant to paragraph 3) of GC10.2 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.
- 5) When payment of a deficiency has been made pursuant to paragraph 4) of GC10.2, all rights and obligations of the NCC 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 paragraph 3) of GC10.2, be deemed to have been expended and discharged.
- 6) If an election is not made pursuant to subparagraph 1)(b) of GC10.2, the Contractor shall, subject to paragraph 7) of GC10.2, clear and clean the work and its site and restore and replace the part of the work that was lost, damaged or destroyed at the Contractor's expense as if that part of the work had not yet been performed.
- 7) When the Contractor clears and cleans the work and its site and restores and replaces the work referred to in paragraph 6) of GC10.2, the NCC shall pay the Contractor out of the monies referred to in paragraph 1) of GC10.2 so far as they will thereunto extend.
- 8) Subject to paragraph 7) of GC10.2, payment by the NCC pursuant to paragraph 7) of GC10.2 shall be made in accordance with the contract but the amount of each payment shall be 100% of the amount claimed notwithstanding subparagraphs 3)(a) and 3)(b) of GC5.4 PROGRESS PAYMENT.

GC10.3 INSURANCE TERMS

GC10.3.1 General

GC10.3.1.1 Proof of Insurance

- 1) Before commencement of the Work, and prior to contract award, the Contractor shall deposit with the NCC a Certificate of Insurance (approved Insurance form is enclosed at the end of this section).
 - 2) Upon request by the NCC, the Contractor shall provide originals or certified true copies of all contracts of insurance maintained by the Contractor pursuant to the provisions contained herein.
 - 3) The insurance policies shall be endorsed to provide the NCC with no less than 30 days notice in writing in advance of a cancellation of insurance or any reduction in coverage.

GC10.3.1.2 Payment of Deductible

 Any moneys paid or payable in respect of a deductible amount shall be borne exclusively by the Contractor.

GC10.3.2 Commercial General Liability

GC10.3.2.1 Scope of Policy

- The insurance coverage provided shall not be less than that provided by IBC Form 2100, as amended from time to time, and shall have:
 - (a) an Each Occurrence Limit of not less than \$5,000,000;
 - (b) a Products/Completed Operations Aggregate Limit of not less than \$5,000,000; and
 - (c) a General Aggregate Limit of not be less than \$10,000,000 per policy year, if the policy is subject to such a limit.

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Canada

GC10 INSURANCE

- 2) The policy shall either include or be endorsed to include coverage for the following exposures or hazards if the Work is subject thereto:
 - (a) Blasting;
 - (b) Pile driving and caisson work;
 - (c) Underpinning;
 - (d) Removal or weakening of support of any building or land whether such support be natural or otherwise if the work is performed by the insured Contractor.

GC10.3.2.2 Insured

1) The policy shall insure the Contractor and shall include the NCC as an additional Insured, with respect to liability arising out of the operations of the Contractor with regard to the work.

GC10.3.2.3 Period of Insurance

1) Unless otherwise directed in writing by the NCC, or, otherwise stipulated elsewhere herein, the policy required herein shall be in force and be maintained from the date of contract award until the day of issue of the Certificate of Completion except that the coverage for Completed Operations Liability shall, in any event, be maintained for a period of at least six (6) years beyond the date of the Certificate of Substantial Performance.

GC10.3.3 Builder's Risk / Installation Floater

GC10.3.3.1 Scope of Policy

- 1) The insurance coverage provided by a Builder's Risk policy or an Installation Floater policy shall not be less than that provided by IBC Forms 4042 and 4047, as amended from time to time.
- 2) The policy shall permit use and occupancy of the project, or any part thereof, where such use and occupancy is for the purposes for which the project is intended upon completion.
- 3) The policy may exclude or be endorsed to exclude coverage for loss or damage caused by any of the following:
 - (a) Asbestos;
 - (b) Fungi or spores;
 - (c) Cyber;
 - (d) Terrorism.

GC10.3.3.2 Amount of Insurance

1) 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 the NCC at the site of the project to be incorporated into and form part of the finished Work. If the value of the Work is changed, the policy shall be changed to reflect the revised contract value.

GC10.3.3.3 Insurance Proceeds

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GC10 INSURANCE

- 1) The policy shall provide that the proceeds thereof are payable to the NCC may direct in accordance with GC10.2, "Insurance Proceeds".
- 2) The Contractor shall, without delay, do such things and execute such documents as are necessary to effect payment of the proceeds.

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CERTIFICAT OF INSURANCE ATTESTATION D'ASSURANCE

 To be completed by the insurer / À être rempli par l'assureur CONTRACT / MARCHÉ Description and location of work / Description et endroit des travaux Contract no. / Nº de contrat **INSURER / ASSUREUR** Name / Nom No., Street / No, rue Address / Adresse City / Ville Postal code / Code postal Province **BROKER / COURTIER** Name / Nom No., Street / N°, rue Address / Adresse City / Ville Province Postal code / Code postal **INSURED / ASSURÉ** Name of contractor / Nom de l'entrepreneur No., Street / No, rue Address / Adresse City / Ville Postal code / Code postal Province ADDITIONAL INSURED / ASSURÉ ADDITIONNEL The National Capital Commission / La Commission de la capitale nationale This insurer certifies that the following policies of insurance are at present in force covering all operations of the Insured, in connection with the contract made between the named insured and the National Capital Commission. L'assureur atteste que les polices d'assurances suivantes sont présentement en vigueur et couvrent toutes les activités de l'assuré en fonction du marché conclu entre l'Assuré dénommé la Commission de la capitale nationale **POLICY / POLICE** Number **Expiry Date** Limit of Liability Inception Date Type Genre Numéro Date d'effet Date d'expiration Limites de garantie Commercial General Liability Responsabilité civile des entreprises Builder's Risk "All Risks" Assurance des chantiers « tous risques » Installation Floater "All Risks" Risques d'installation « tous risques » Other (list) / Autre (énumérer) Each of these policies includes the coverages and provisions as specified Chacune des présentes polices renferment des garanties et dispositions in Insurance Terms and each policy has been endorsed to cover the spécifiées aux Conditions d'assurance, et chaque police a été amendée pour couvrir la Commission de la capitale nationale en tant qu'assuré National Capital Commission as an Additional Insured. The Insurer agrees to notify the National Capital Commission in writing thirty (30) additionnel. L'assureur convient de donner un préavis de trente (30) jours days prior to any material change in, or cancellation of any policy or à la Commission de la capitale nationale en cas de changement visant la coverage. garantie d'assurance ou les conditions ou de l'annulation de n'importe quelle police ou garantie. Name of Insurer's Office or Authorized Employee / Nom du cadre ou de la personne autorisée Telephone number / Numéro de téléphone Date Signature



1. General

- 1.1 In this Contract "OHS" means "occupational health and safety".
- 1.2 With respect to the work to be performed under the Contract, the Contractor covenants and agrees to perform at, and to enforce conformity with, a standard equivalent to or greater than the best practices prevailing in the construction industry at that time.
- 1.3 The Contractor acknowledges that, to the extent that the following matters may be affected by conduct of the work, it is responsible for the:
 - 1.3.1 health and safety of persons on site;
 - 1.3.2 safety of property on site;
 - 1.3.3 protection of persons adjacent to the site; and,
 - 1.3.4 protection of the environment.
- 1.4 Without limiting the generality of section 1.3, the Contractor acknowledges that it is required to, and covenants and agrees to, comply and to enforce compliance with all laws or regulations that may be applicable to the conduct of the work including, without limitation:
 - (a) the provisions of the *Occupational Health and Safety Act* of Ontario and all regulations, policies or directives issued thereunder for work performed in Ontario;
 - (b) La *Loi sur la santé et la sécurité du travail* of Québec and all regulations, policies or directives issued thereunder for work performed in Québec;
 - (c) Applicable provisions of the Canada Labour Code, Part II;
 - (d) Employment standards legislation in the province(s) in which any part of the work is performed; and
 - (e) Any policies or directives issued by the NCC in respect of the subject matter of the contract.

The NCC will present any such policies or directives referred to in paragraph (e) to the Contractor in written form by not later than the pre-construction meeting. The Contractor is obliged to ensure that the relevant policies and directives have been communicated to and acknowledged by all its employees and that they will be complied with. The NCC reserves the right to require the Contractor to produce evidence satisfactory to the NCC acting reasonably that the Contractor has discharged the foregoing obligations.

- 1.5 By entering into the Contract with the NCC, the Contractor represents and warrants to the NCC that it has informed itself of and is knowledgeable about the obligations imposed by the legislation referred to in 1.4. above.
- 1.6 For purposes of the relevant provincial OHS legislative regime the Contractor acknowledges and agrees that it is the "Constructor" and covenants to discharge and accept all liability for the performance of the obligations of the "Constructor" in respect of the work provided for in the Contract. Notwithstanding a determination by the relevant authority having jurisdiction that the NCC is the "Constructor" in the event of a dispute between the Contractor and the NCC, the Contractor acknowledges and agrees that the Contractor shall be financially responsible for the implementation of protective measures necessary to fulfill the obligations of the "Constructor".

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- 1.7 As between the NCC and the Contractor, the NCC's decision as to whether the Contractor is discharging its obligations in respect of OHS issues shall be definitive. Without limiting the generality of the foregoing, in the event of any dispute with respect to instructions given by the NCC's designated representative, the Contractor may note such dispute, but must nevertheless forthwith comply with any such instructions.
- 1.8 The Contractor hereby indemnifies and agrees to hold harmless the NCC, its agents and employees, from and against any and all claims, demands, losses, costs (including legal fees on a full indemnity basis), damages, actions, suits or proceedings (hereinafter collectively referred to as "claims") by third parties that arise out of or are attributable to the Contractor's errors or omissions in the performance of the Contract. Without limiting the generality of the foregoing, this indemnification extends to any claims related to any violation of any statute or regulation relating to OHS matters.
- 1.9 The NCC shall provide the contractor:
 - 1.9.1 a written description of every known and foreseeable health and safety hazard to which persons employed in the performance of the work may be exposed because of the nature of the site;
 - 1.9.2 a list of any prescribed materials, equipment, devices and clothing necessary because of the nature of the site;
 - 1.9.3 with written information indicating the prescribed circumstances and manner to use all prescribed materials, equipment, devices and clothing listed pursuant to 1.9.2; and,
 - 1.9.4 with a copy of any NCC policies and procedures that may be applicable in relation to the work site.
- 1.10 Without limiting the generality of 1.9, prior to the commencement of the work by the contractor, the contractor shall, at the contractor's expense:
 - 1.10.1 take all reasonable care to ensure that all persons employed in the performance of the work or granted access to the work or its site are informed of any health and safety hazard described pursuant to 1.9.1;
 - 1.10.2 provide all persons employed in the performance of the work or granted access to the work or its site with prescribed materials, equipment, devices and clothing listed pursuant to 1.9.2;
 - 1.10.3 take all reasonable care to ensure that all persons employed in the performance of the work or granted access to the work or its site are familiar with the prescribed circumstances and manner all prescribed materials, equipment, devices and clothing listed pursuant to 1.9.2; and
 - 1.10.4 take all reasonable care to ensure that all persons employed in the performance of the work or granted access to the work or its site are familiar with policies and procedures referred to in 1.9.4.

2. Qualifications of Personnel

- 2.1 By entering into this agreement the contractor represents and warrants the it has the requisite experience, training, formal certification and equipment to enable it to discharge the obligations enumerated in sections 1.3. 1.4, 1.5 and 1.6 above.
- 2.2 The Contractor represents and warrants that supervisory personnel employed by the Contractor in respect of performance of any part of the work have the requisite experience, authority, training, formal certification and equipment to ensure that the obligations enumerated in sections 1.3 1.4, 1.5

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and 1.6 above are discharged and agrees to deliver such evidence as may be required by the NCC from time to time to verify same.

3. Certification

- 3.1 After receiving notification that its bid has been retained and prior to and as a condition of contract award, the Contractor covenants and agrees to deliver a Worker's Compensation Clearance Certificate. Where the duration of the project is greater than sixty days, the Contractor covenants and agrees to deliver up-dated certificates at least every 60 days. In the event of a failure by the Contractor to deliver up-dated certificates, the NCC shall be entitled to immediately terminate the contract without notice and without incurring any liability to the Contractor.
- 3.2 After receiving notification that its bid has been retained and prior to and as a condition of contract award, the Contractor covenants and agrees to deliver historical information on its injury experience including any pertinent Worker's Compensation Experience Reports. Such historical information shall report data for the previous three years.

4. Plans Policies and Procedures

- 4.1 After receiving notification that its bid has been retained and prior to and as a condition of contract award, the Contractor covenants and agrees to deliver for the review and approval of the NCC:
 - (a) A copy of the contractor's OHS policy;
 - (b) A safety program and plan specific to the work to be performed pursuant to the Contract which plan shall include a risk assessment and analysis, a description of safe working methods, injury and incident reporting protocols, regular periodic reporting on compliance with OHS obligations including any policies, practices and procedures otherwise provided for herein, and a site-specific contingency and emergency response plan; and
 - (c) Health and safety training records of personnel and alternates responsible for OHS issues on site.

The Contractor covenants and agrees to deliver the necessary material safety data sheets for the review and approval of the NCC prior to entering the site to perform work related to the relevant material.

Approval by the NCC does not amend the provisions of the Contract with respect to the allocation of liability for discharging or failing to discharge OHS obligations. Such liability remains with the Contractor notwithstanding the granting of such approval.

- 4.2 The Contractor acknowledges and agrees that prior to commencement of work it must attend a preconstruction briefing at which any special or additional practices and procedures to be followed in completing the work are to be established. Without limiting the provisions of section 1.4(e) above, the representatives of the Contractor attending the briefing will be required to deliver a signed acknowledgement that the practices and procedures set out in the pre-construction briefing have been understood and will be complied with.
- 4.3 At any time and from time to time during the performance of the work, the NCC shall have the right to audit the manner in which the Contractor is discharging its OHS obligations and to determine whether the project specification and/or OHS policies, practices and procedures are being complied with. In the event that the audit discloses any failure by the Contractor to discharge such OHS obligations, the NCC shall be entitled to forthwith rectify at the Contractor's expense any such deficiency and the NCC shall have the further right to immediately terminate the contract without notice and without incurring any liability to the Contractor.

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- 4.4 The Contractor covenants and agrees to conform with all requirements of the Workplace Hazardous Materials Information System.
- 4.5 The Contractor acknowledges and agrees that where required by any law or regulation applicable to the performance of the work it must establish and maintain a project health and safety committee. The contractor further acknowledges and agrees that it must enable staff to attend all relevant safety meetings, and that the cost of same, including costs attributable to standing down equipment is included in its bid price and is not independently recoverable.
- 4.6 Where required by the relevant provincial regulatory regime, the Contractor acknowledges and agrees that it is responsible for delivery of notice of the project to the relevant regulatory authority, and for the performance of any other administrative activity required to meet the obligations imposed in the pertinent provincial regulatory regime.
- 4.7 **(Optional depending on hazard or scope of project).** The contractor covenants and agrees that it shall employ and assign to the work, a competent OHS professional as Health and Safety Coordinator that must:
 - (a) have a minimum two (2) years' site-related working experience specific to activities associated with.(identify specific subject matter)
 - (b) have basic working knowledge of specified occupational safety and health regulations,
 - (c) be responsible for completing health and safety training session and ensuring that personnel not successfully completing the required training are not permitted to enter the site to perform the Work,
 - (d) be responsible for implementing, enforcing daily and monitoring the site-specific Health and Safety Plan, and
 - (e) be on site during execution of the Work.

The parties acknowledge that in lieu of employing an OHS professional, the Contractor may provide same by sub-contracting for such services.

- 4.8 Upon completion of the work the Contractor covenants and agrees to participate with the NCC in a post performance interview to evaluate the performance of the Contractor in respect of the OHS obligations under the contract. Without limiting the generality of the foregoing, the interview will identify areas of compliance and non-compliance in terms of:
 - (a) actual performance of the work;
 - (b) reporting or procedural requirements;
 - (c) resolution of deficiencies.

The contractor acknowledges and agrees that the results of the post-completion interview may be relied upon by the NCC in evaluating bids subsequently submitted by the Contractor on other NCC projects.

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SECURITY REQUIREMENTS

Security Requirements

The NCC complies with Treasury Board's *Policy on Government Security* and consequently, it will require that the Contractor's employees submit to a personal security screening process (Security Clearance Form TBS/SCT 330-60E). The NCC may also perform a credit check when the duties or tasks to be performed require it or in the event of a criminal record containing a charge/offence of a financial nature.

The NCC reserves the right to not award the Contract until such time as the Contractor's core employees have obtained the required level of security screening as identified by the NCC's Corporate Security. In this case the level of security required will be **Reliability/Site Access/Secret**.

The NCC also reserves the right to request that the Contractor submit to a *Designated Organisation Screening* and/or *Facility Security Clearance*— depending on the nature of the information it will be entrusted with. In the event that the Contractor does not meet the requirements to obtain the requested clearance, the Contractor shall take the corrective measures recommended by the Canadian Industrial Security Directorate (of PWGSC) or by the NCC's Corporate Security in order to meet these requirements. If no corrective measures are possible or if the Contractor fails to take the recommended measures, then the Contractor shall be in default of its obligations under this Contract and the NCC shall have the rights and remedies listed in section 2.14, including the right to terminate the Contract without further notice to the Contractor.

Additional information

As part of their personal screening, individuals may be required to provide evidence of their status as a Canadian citizen or permanent resident as well as any other information/documentation requested by the NCC's Corporate Security in order to complete the screening.

The NCC reserves the right to refuse access to personnel who fail to obtain the required level of security screening.

The NCC reserves the right to impose additional security measures with respect to this Contract as the need

Company Security Representative

The Contractor shall appoint one Company Security Representative (CSR) as well as one alternate (for companies who have more than five employees).

Selection criteria for the CSR and the alternate are the following:

- They must be employees of the Contractor;
- They must have a security clearance (the NCC will process the clearances once the individuals have been identified).

Responsibilities of the Company Security Representative

The CSR's responsibilities are the following:

- Act as liaison between the NCC's Corporate Security and the Contractor to ensure coordination;
- In collaboration with the NCC's Corporate Security, identify the Contractor's employees who will require access to NCC information/assets/sites <u>as well as any recurring subcontractors</u> (and their employees) who will require similar access and may not be supervised by the Contractor at all times during such access. Ensure that accurate and complete Personnel Security Screening documentation is

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SECURITY REQUIREMENTS

submitted to the NCC's Corporate Security for the employees/subcontractors who have been identified;

- Ensure that employees/subcontractors, upon notification of having been granted a reliability status, sign the *Security Screening Certificate and Briefing Form* and return to the NCC's Corporate Security;
- Ensure that only persons who have been security screened to the appropriate level and who are on a "need-to-know basis" will have access to information and assets;
- Maintain a current list of security screened employees/subcontractors;
- Ensure proper safeguard of all information and assets, including any information/assets entrusted to subcontractors;
- If a Security incident or suspected breach of security occurs, prepare and submit to the NCC an occurrence report as soon as possible.

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MEECH LAKE SHORE REHABILITATION GATINEAU PARK

CONTRACT SPECIFICATIONS

JUNE 2014

Project No: DC30750610

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DRAWING LIST

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GENERAL INSTRUCTIONS

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Project No. DC30750610 June 2014

1.1 TIME OF COMPLETION

- .1 Work must begin immediately following contract award and be substantially completed by the agreed time.
- .2 On-site work shall be limited from Monday to Friday, unless otherwise approved by NCC Representative.

1.2 SCOPE OF WORK

- .1 Work under this contract is situated in Gatineau Park, Quebec, on the NCC property. The present plans and specifications describe the work for two (2) intervention zones, along the South shore of Meech Lake. The shore rehabilitation work involves, without being limited to, the following works:
 - .1 Protection of existing vegetation and environment
 - .2 Gravel cleaning and site grading
 - .3 Bank stabilisation with vegetation
 - .4 Planting and hydro-seeding
 - .5 Bank stabilisation with stone works
 - .6 Trail obstruction
 - .7 Site restoration
- .2 Contractors are advised to carefully examine contract documents and current site conditions for the feasibility of any proposed construction activities. If Contractor is of the opinion that part of work is not feasible, the Contractor must notify the Owner at least five (5) days before the date of tender submission. The Contractor, by submitting bid, acknowledges that he/she has reviewed the contract documents and existing conditions and recognizes the feasibility of all proposed construction activities.

1.3 PLAN TO BE SUBMITTED BY CONTRACTOR

- .1 The contractor must transmit a sediment and erosion control plan (see section 01 35 43 Environmental Protection), as well as a circulation and work method plan, coordinated with the information provided by the NCC representative, within a 10 working day period following the notification letter for NCC approval.
- .2 At the very least, a methodology Plan aimed at carrying out the work must identify the Contractor's plans detailing site access, on site stacking, the type of equipment with respective sizes or formats, and all methods pertaining to site conservation and protection.
- .3 The Contractor shall be considered in breach of contract if the execution of the sediment and erosion control management plan is not implemented as previously approved and / or if the NCC Representative considers that the methodology has caused unnecessary damage to the project site.

1.4 SPECIAL CONSTRUCTION REQUIREMENTS

- .1 The Contractor shall not at any time use water from the lake during construction and any circulation within the lakeshore setback must be avoided whenever possible, unless otherwise authorized by the NCC Representative.
- The Contractor shall not at any time move or store equipment or materials outside the site limits unless otherwise authorized by the NCC Representative. Any damages caused to the surrounding natural environment shall be repaired by the Contractor at his expense and without additional cost to the National Capital Commission.
- .3 The Contractor shall be responsible as part of the tender price for storing and reusing existing topsoil and excavated materials if possible, and the removal from the site of non

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June 2014

- reusable material, as well as the supply and placement of all required imported fill material required to execute the work of this contract.
- .4 The Contractor will be responsible to protect the subgrade at all times during construction and in particular following moderate to heavy rainfall. Construction traffic on exposed subgrade should be prohibited or limited to equipment which will not damage subgrade.
- The Contractor shall provide a list of equipment he intends to use for approval by the NCC Representative and ensure that the equipment does not cause any damage or disturbance to the subgrade and the surrounding vegetation, using small-size equipment.
- Any damaged subgrade areas caused as a result of construction traffic or construction techniques must be repaired by the Contractor as part of this contract and at no additional cost to the National Capital Commission.
- .7 The Contractor shall exceed excavation limits, beyond what is specified in the plans and details, without the prior authorization and approval of the NCC Representative if deemed essential by the latter. The Contractor will not be compensated for any additional excavation and/or additional earth or granular backfill materials required as a result of over-excavations not approved and authorized by the NCC Representative prior to undertaking work.
- .8 The Contractor will be responsible for the construction of access roads necessary to perform the contracted work. Subsequent restoration of access roads to their original condition, with the removal of granular materials, compacted soil aeration, and additional seeding of lawn remains the responsibility of the Contractor and shall be included in the lump sum work of the contract.

1.5 CODES

.1 Standards referred to in this Specification (CGSB, CSA, ASTM, OPSD, CHBDC etc.) may be examined at the following location:

Public Works and Government Services Canada Standards and Specifications Branch Place du Portage - Phase 3, 11 Laurier Street Gatineau, Quebec K1A OS5

- .2 Perform work in accordance with the National Building Code of Canada 1995 and any other code of provincial or local application provided that in any case of conflict or discrepancy, the more stringent requirements shall apply.
- .3 Work to meet or exceed requirements of:
 - .1 contract documents
 - .2 specified standards, codes and referenced documents

1.6 FEES, PERMITS AND STANDARDS

- .1 Obtain and pay for permits, inspector approvals, and other licenses required for this project and also pay any charges incidental to such permits. Provide copy of permits to the NCC Representative.
- .2 Contractor is to obtain an entry permit from the National Capital Commission before commencing Work. Permit may be obtained by contacting Catherine Verreault, Manager Land and Natural Resources NCC, 819 827-6012.

1.7 DEFINITIONS

Wherever the term "NCC Representative" "Client's Representative" "Engineer" or "Contract Administrator" appears throughout this specification, it shall be construed to mean an

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Inspector representing the National Capital Commission and including a duly named consultant on their behalf.

.2 Wherever the terms "or equivalent", "or approved equivalent" appear after specific types of materials and items throughout this specification, they shall be construed to mean as being equal in the opinion of the NCC Representative, in material content, workmanship and quality to that designated as being the minimum acceptable standard, and that the NCC Representative's written approval must be obtained prior to submitting an alternative, 7 days before close of tender.

1.8 TAXES

.1 Include in the tender amount, all sales and other taxes levied by the Federal, Provincial and Municipal government or other authority. There will be no refunds made by the National Capital Commission to the Contractor for taxes paid by the Contractor.

1.9 PROTECTION

- .1 Provide and maintain guardrails, fences, barricades, lights and other devices required for protection of workmen and public in accordance with the requirements of Provincial and Local by-laws and the Canadian Construction Safety Code.
- .2 Protect existing structures against damage until completion of work.
- .3 Take all precautions to protect the existing vegetation from any damage.

1.10 DAMAGES

- .1 Damages caused to the existing natural surrounding, plant material, landscaping, lawns, roadways, pathways, structures, finishes and public utilities due to work of this contract, will be restored to their original condition, replaced or adequate compensation made to affected parties by the Contractor.
- .2 It is understood that restored or replaced work includes, labour, equipment and material costs.
- .3 All dirt surfaces exposed in the course of the work, and not indicated on the plans, must be graded and seeded in accordance with section 32 92 19 'Hydro-seeding and Erosion control mat' of this document and in accordance with the NCC Representative.
- .4 The restored or replaced work shall be completed within 7 days of notification by the NCC Representative.

1.11 WORKMANSHIP

- .1 It is a requirement of this contract that qualified tradesmen execute each type of work specified.
- .2 Example: Landscape contractor for landscape work, mason for stonework, carpenter for carpentry work, etc.
- .3 Work unsatisfactorily completed by unqualified tradesmen will be redone and paid for by the Contractor.

1.12 DOCUMENTS REQUIRED

- 1 Maintain at job site, one copy each of following:
 - .1 Contract drawings.
 - .2 Specifications.
 - .3 Addenda.
 - .4 Revised shop drawings.
 - .5 Change orders.
 - .6 Other modifications to Contract.

GENERAL INSTRUCTIONS

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- .7 Field test reports.
- .8 Copy of current and approved work schedule.
- .9 Installation and operating instructions supplied by manufacturers
- .10 All certification documents.

1.13 WORK SCHEDULE

- .1 Provide within 10 working days after Contract award, in form acceptable to NCC Representative, detailed schedule showing anticipated progress stages and final completion of work within time period specified in Contract documents.
- .2 Interim reviews of work progress based on work schedule will be conducted as decided by NCC Representative and schedule updated by Contractor in conjunction with and to approval of NCC Representative.

1.14 CONTRACTOR'S USE OF SITE

- .1 Materials storage and parking of equipment shall be limited to the Site Limit and designated parking and staging areas as shown on the plans or in Section 01 50 00 Temporary Utilities or as otherwise identified by the NCC Representative.
- .2 Do not unnecessarily clutter the site with materials or equipment during construction.
- .3 Move stored products or equipment when they impair the work of the NCC, other contractors, agencies and the general public.
- .4 Find the additional storage or work areas necessary for the execution of the work, and pay the costs of use.
- .5 When security measures have been reduced due to site works, take the necessary means to ensure safety.

1.15 PROJECT MEETINGS

- .1 NCC Representative will arrange project meetings and assume responsibility for setting times and recording and distributing minutes.
- .2 Attend all project meetings at dates and in locations determined by the NCC Representative.

1.16 SITE VISIT

.1 Parties intending to submit tenders on the work must visit the site and obtain for themselves all information pertaining to existing conditions affecting the proper execution and completion of the work. The submission of a tender shall be deemed as proof that the tenderer and his sub-trades have complied with this requirement. After claims for additional compensation will not be entertained for any items of labour, equipment or materials required to complete the work that could have been reasonably ascertained by a site visit.

1.17 SETTING-OUT OF WORK

- .1 Before the work begins, the NCC will stake the beginning and end of the Site Limit for both sites. The intervention zones (areas shown as Proposed Interventions on the plans) will be defined on site in the presence of the NCC Representative.
- 2. The Contractor will install a temporary fence around existing vegetation to be protected for approval by the NCC Representative.
- .3 The Contractor shall supply stakes and other survey markers required for laying out work and shall plant stakes defining layout, alignment and elevations of Work as well as vegetation to be protected.
- .4 The Contractor must assume full responsibility for and execute complete layout of work to locations, lines and elevations indicated.
- .5 Supply such devices as required to facilitate the NCC Representative's layout and

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inspection of work.

1.18 CUTTING, FITTING AND PATCHING

- .1 Obtain approval of NCC Representative before cutting or patching an area that is not indicated on drawings.
- .2 Execute cutting, fitting and patching of work that may be a requirement to make work fit properly together, to receive or be received by other work.
- .3 Make cuts with clean, true, smooth edges. Make patches inconspicuous in final assembly.
- .4 Where new work connects with existing and where existing work is altered, cut, patch and make good to match existing work.

1.19 EXISTING SERVICES

- .1 Before commencing work, establish location and extent of service lines in area of work and notify NCC Representative of findings.
- .2 Where unknown services are encountered, immediately advise NCC Representative and confirm findings in writing.
- .3 Where work involves adjusting of existing services, carry out work as directed by appropriate authorities.
- .4 Make good and pay for damage to existing utility lines resulting from work.

1.20 ADDITIONAL DRAWINGS

.1 The NCC Representative may furnish additional drawings to the Contractor to assist in the proper execution of the work. These additional drawings will be issued for clarification purposes only. Such drawings shall have the same meaning and intent as if they were included with the plans referred to in Contract Documents.

1.21 ADDENDA

.1 Answers to questions directed to the NCC Representative, and any amendments to the drawings and specifications during the tender period will be communicated in the form of addenda to all general contractors tendering. Such addenda to be considered as and read as part of the specifications and thereby included in the contract documents.

1.22 CONTRACT DOCUMENTS

- .1 Drawings and specifications are complementary. Items shown or mentioned in one and not in the other are deemed to be included in the contract work.
- .2 If the drawings and specifications differ, the NCC Representative shall give preference to the Contract document thereof that best insures the attainment of this contract's objectives.

1.23 PAYMENT

- .1 This is a unit price contract. Any minor or miscellaneous items indicated on the drawings as being part of the work of this contract must be included by the Contractor in his overhead and indirect charges and incorporated into the unit price bid.
- .2 No separate payment will be made for work performed in respect to any of the special provisions where there is no specific pay item on the schedule of prices. The cost of these works must be appropriated among, and included in, the lump sum bid price.

1.24 COMMUNCATIONS AND ADVERTISING

- .1 All instructions of NCC Representative that bring changes to contract documents will be in writing.
- .2 Work will be received by the NCC Representative by written memorandum.
- .3 Advertising on site is prohibited.

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1.25 TRAFFIC CONTROL

- .1 Do not infringe on adjacent roads, sidewalks, or recreational paths or interfere with normal traffic flow in carrying out the work. If it is necessary to disrupt traffic or occupy those thoroughfares for purposes of unloading materials, etc., obtain permission from the NCC Representative and the approvals and permits needed from the municipality. Follow the instructions necessary to carry out these operations regarding the manner, time and dates. Incidental costs conforming to these requirements will be paid by Contractor.
- .2 Provide a suitable system of protective barricades, lane markings, signs, lights and other such devices to warn and channel traffic and wherever necessary, the services of a flagman to direct and control traffic. Carry out protection in accordance with the requirements of the Provincial and Local by-laws having jurisdiction over this type of work.
- .3 Printed signage must be provided in both English and French
- .4 The proposed methods and systems of traffic control and maintenance provisions together with supporting sketches must be submitted to the NCC Representative upon request following tender closing.

1.26 COMPACTION OF MATERIALS

1 The thickness of granular materials shown on the drawings shall be the real thickness after the materials have been compacted as specified.

1.27 RECORD DRAWINGS

- .1 As work progress, maintain, accurate record to show deviations from contract documents.
- .2 Just prior to NCC Representative's inspection for issuance of final certificate of completion, supply one (1) set of drawing on white paper with all major and minor deviations neatly inked in. To this end, the NCC Representative will provide two (2) sets of drawings on white paper.

1.28 INSPECTION AND TESTING

- .1 Contractor must provide labour and facilities necessary to:
 - .1 Provide access to work for inspection and testing
 - .2 Facilitate operations of inspection and testing
 - .3 Restore work altered by inspection and testing.
- Notify NCC Representative well in advance of operations, so they may plan the schedule for inspection and testing in order to give a 48-hour notice for inspection and testing.
- .3 Assume costs of overdraft and restoration work before required inspection and testing is completed and approved by NCC Representative
- .4 Contractor to take appropriate action to approve items below by a laboratory test and assume the associated costs:
 - .1 Inspections and test required under laws, decrees, regulations or requests from public authorities.
 - .2 Inspections and tests undertaken solely on behalf of the Contractor.
 - .3 Tests, adjusting and balancing of electrical equipment and systems.
- .5 If test or inspections or a designated laboratory show that work does not meet requirements of contract, the Contractor shall then assume all costs related to additional inspections and test to verify the acceptability of all related work for correction, in accordance with requirements of NCC Representative.

1.29 PROJECT SIGNAGE

.1 The National Capital Commission is responsible for the supply, installation and removal of signage for this project.

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1.30 WARRANTY

- .1 Before completion of work, gather together the various warranties and give them to the NCC Representative.
- .2 All plant materials will be covered by a one (1) year warranty starting from the date of the final certificate of completion. The final inspection will be schedules at the end of the warranty period.
- .3 Extend the warranty for all plant materials that have been replaced.

1.31 INTERPRETATION OF BILINGUAL DOCUMENTS

In the case where two versions of drawings and specification are different, the version with the more rigorous requirements or that demonstrates the best application for work prevails.

END OF SECTION

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BASIS OF PAYMENTS

Payment at the price per item listed in the Tender Form shall be full compensation for all labour, services and equipment as well as the supply, delivery and installation of all materials required for the proper execution of this contract, as well as the maintenance, watering, and replacement of plant materials during the warranty period.

1 Mobilisation and site preparation

- .1 This article covers all general requirements relative to the project, including:
 - .1 Mobilisation/demobilisation of equipment, labour and materials.
 - .2 General instructions, schedules, shop drawings, temporary facilities, protection of public utilities, safety measures, coordination of subcontractor work and management of vehicle and pedestrian circulation.
 - .3 All work associated with road safety and installation of road signs and flagman as required during the construction period
 - .4 Installation of temporary barriers, fencing and all other protection measures necessary to prevent users from accessing the work area and temporary storage.
 - .5 Provide and install temporary access, platform access and all other accessories needed to complete work.
 - .6 All requirements for site preparation, land clearing, removal of invasive plants and restoration of the site after work.
- .2 This lump sum covers all general requirements identified in the plans and specifications, as well as all requirements needed to complete the scope of work listed in the Contract Documents, but that are not contained within specific articles.
- .3 This lump sum includes as-built drawings to be submitted to the NCC representative, once all work is completed.
- .4 This item will not be measured but will be paid as a lump sum according to the following breakdown:
 - 70% of lump sum once this item is completed.
 - 30% of lump sum upon reception of as-built drawings.

2 Temporary protection barrier -G1

- .1 This article includes the supply and installation of a temporary protection barrier, Natureauberme type or equivalent, as indicated in the Contract Documents.
- .2 This article is subject to payment based on a price corresponding to a lump sum listed in the tender form. This amount will be paid once all work has been completed.

3 Environmental Protection Measures

- .1 The payment for this item includes the preparation and installation of sediment control devices along the shoreline (floating silt curtain) and to protect wetlands, as shown on the plans. It includes the price of labor, equipment and materials necessary for the supply, construction, monitoring and maintenance of all the devices for the control of erosion and sediments as described in these specifications.
- .2 All protection of existing vegetation to be protected during construction as well as supply and installation of temporary fences, where indicated in the plans, to protect the newly planted vegetation from being trampled after construction during the warranty period.
- .3 This item will be paid as a lump sum according to the following scale:

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- 25% upon the approval of the sediment and erosion control installation.
- 50% divided into equal payments over the term of the contract.
- 25% after the complete installation and removal of devices.

4 Demolition works

- .1 This item includes the demolition and removal of items listed in the Contract Documents, including all bases or foundations.
- .2 This article is subject to payment based on a price corresponding to a lump sum listed in the tender form. This amount will be paid when the work has been completed.

5 Gravel removal – A1

- .1 This item includes the cleaning and excavation of gravel as indicated in the Contract Documents, including all bases and foundations.
- .2 This item includes the manual removal of gravel in order to completely remove from the existing soil all traces of winter abrasives.
- .3 This item includes excavation and rough grading relative to the finished levels and the specific surface treatments.
- .4 This item includes labor, management and off-site transportation of non-reusable materials.
- .5 This item will be paid per square meter, according to the price listed in the tender form.

6 Hydraulic seeding (Hydro-seeding) with erosion control mat – B1

- .1 This item includes the supply and installation of the specified seed, the soil and grading required to finish at the indicated levels.
- .2 This item includes the supply and installation of erosion control mats made of biodegradable natural fibers, SC150BN type, including anchor stakes as manufactured by "North American Green" or equivalent approved.
- .3 This item will be paid per square meter, according to the price listed in the tender form and based upon the following schedule:
 - .1 60% for supply and installation
 - .2 40% for satisfactory maintenance and establishment of seeded areas.
- .4 The prices include watering, reseeding as needed, and necessary maintenance as described in the Contract Documents.

7 Vitus riparia Planting, 1 gal. pot

- .1 This article covers the supply and installation of 1 gallon pot plantings including topsoil, plant material, and planting as shown in the Contract Documents.
- .2 This item will be paid in accordance with the unit rate listed in the tender form.

8 Shrub Plantings, small size, 40cm ht, potted- B4 and E1

.1 This article covers the supply and installation of small caliber shrub plantings including topsoil, plant material, and planting as shown in the Contract Documents.

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- .2 This article covers the supply and installation of mulch if no anti-erosion mat. as shown in the Contract Documents, is used.
 - i. This item will be paid in accordance with the unit rate listed in the tender form.

9 Shrub plantings, large size, 80cm height, potted – F3

- .1 This article covers the supply and installation of large caliber shrub plantings including excavation, topsoil, grading, plant material, planting, and mulch as shown in the Contract Documents.
- .2 This item will be paid in accordance with the unit rate listed in the tender form.

10 Lower bank stabilization – Live fascines – C1

- .1 This article covers the supply and installation of live fascines including, cross wooden stakes, scarification of existing soil, topsoil, plant material, and planting as shown in the Contract Documents.
- .2 This item will be paid per linear meter, according to the price listed in the tender form

11 Lower bank stabilization – single boulder – C2

- .1 This article covers the supply and installation of boulders, including excavation, grading and installation of a granular foundation, geotextile and river stones as shown in the Contract Documents.
- .2 This item will be paid per linear meter, according to the price listed in the tender form

12 Lower bank stabilization – double boulders – C3

- .1 This article covers the supply and installation of boulders, including excavation, grading and installation of a granular foundation, geotextile and river stones as shown in the Contract Documents.
- .2 This item will be paid per linear meter, according to the price listed in the tender form

13 Granite stone dust surface – F1

- .1 Supply, install and compact stone dust mix, as indicated in the Contract Documents.
- .2 This item will be paid per square meter, according to the price listed in the tender form.

14 Natural boulder – F2

- .1 This article includes the supply and installation of naturally rounded stone, including scarification of existing soil, supply and installation of the granular foundation, as indicated in the Contract Documents.
- .2 This item will be paid in accordance with the unit rate listed in the tender form.

15 Stone steps – F4

.1 This article includes the supply and installation of stone steps, including excavation, grading, supply and installation of the granular foundation and geotextile, as indicated in the Contract Documents.

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 This article is subject to payment based on a price corresponding to a lump sum listed in the tender form. This amount will be paid when the work has been completed.

16 Plant maintenance and warranty

- .1 This item includes the maintenance and warrantee for all plants over a period of one (1) year, including watering, removal and replacement of dead plants, pruning, as well as all related operations necessary for the growth and health of plants.
- .2 This item will not be measured for payment, but will be paid as a lump sum in two installments during the period of maintenance and warranty. Progress payments of the total price specified in tender form will be made according to the following breakdown:
 - 40% at mid-year
 - 60% at the end of the year final approval

END OF SECTION

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PART 1 - GENERAL

- 1.1 Submit to Contract Administrator for review, shop drawings, product data and samples specified.
- 1.2 Until submission is reviewed, work involving relevant product may not proceed.

1.3 Shop Drawings

- .1 As needed, drawings to be originals supplied by contractor, subcontractor, supplier or distributor, illustrating appropriate portion of work:
 - .1 Showing fabrication, layout, settings or erection details as specified in appropriate sections.
 - .2 Identify details by reference to sheet or detail number shown on contract documents.
 - .3 Maximum sheet size 610 x 915 mm.
 - .4 Reproductions for submissions opaque diazo prints.

1.4 Product Data

- .1 Manufacturer's standard schematic drawings, catalogue sheets, diagrams schedules, performance charts, illustrations and other standard descriptive data may be accepted in lieu of shop drawings.
- .2 Above will only be accepted if they conform to following:
 - .1 Delete information not applicable to project;
 - .2 Supplement standard information to provide additional information applicable to project;
 - .3 Show dimensions and clearances required;
 - .4 Show performances characteristics and capacities.

1.5 Samples and Mock-ups

- .1 Submit samples in sizes and quantities specified.
- .2 Where colour, pattern or texture are selection criteria, submit full range of samples.
- .3 Reviewed and approved samples will become standards of workmanship and material against which installed work will be checked on project.

1.6 Co-ordination of Submissions

- Review shop drawings, product data and samples prior to submission.
- .2 Verify:
 - .1 Field measurements;
 - .2 Field construction;
 - .3 Catalogue numbers and similar data.
 - .4 Co-ordinate each submission with requirements of work and contract documents. Individual shop drawings will not be reviewed until all related drawings are available.
 - .5 Contractor's responsibility for errors and omissions in submission is not relieved by Contract Administrator's review of submittals.
 - .6 Contractor's responsibility for deviations in submission from requirements of Contract documents is not relieved by Contract Administrator's review of submission, unless Contract Administrator gives written acceptance of specified deviations.
 - .7 Notify Contract Administrator in writing at time of submission, of deviations from requirements of Contract documents.
 - .8 After Contract Administrator's review, distribute copies.

1.7 Submission Requirements

- .1 Schedule submissions at least 10 days before dates reviewed submissions will be needed.
- .2 Submit number of paper or electronic copies of shop drawings and product data Contractor requires for distribution, plus 2 copies to be retained by Contract Administrator.
- .3 Accompany submissions with transmittal letter, in duplicate, containing:
 - .1 Date;
 - .2 Project title and number;
 - .3 Contractor's name and address;
 - .4 Number of each shop drawings, product data and sample submitted;

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- .5 Other pertinent data.
- 1.8 Submissions shall include:
 - .1 Original date and revisions dates;
 - .2 Project title and number;
 - .3 Name of:
 - .1 Contractor;
 - .2 Subcontractor;
 - .3 Supplier;
 - .4 Manufacturer;
 - .5 Separate detailer when pertinent.
 - 4 Identification of product or material;
 - .5 Relation to adjacent structure or materials;
 - .6 Field dimensions, clearly identified as such;
 - .7 Specification Section number;
 - .8 Applicable standards, such as CSA or CGSB numbers;
 - .9 Contractor's stamp, initialed or signed, verifying review of sub-mission, verification of field measurements and compliance with Contract documents.

END OF SECTION

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Part 1 General

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1.1 REFERENCES

- .1 Government of Canada:
 - .1 Canada Labour Code, Part 2, Canada Occupational Safety and Health Regulations
 - .2 Health Canada/Workplace Hazardous Materials Information System (WHMIS)
- .2 Province of Quebec
 - .1 An Act Respecting Occupational Health and Safety, R.S.Q. chapter S-2.1
 - .2 Règlement sur le programmes de prévention, *(1982)* 114 G.O. II, 2373, modifié par (1983) 15 G.O. II, 1927, (1985) G.O. II, 1552.
- .3 Canadian Standards Association (CSA).
 - .1 CSA S350-(M1980), Code of Practice for Safety in Demolition of Structures.

1.2 COMPLIANCE REQUIREMENTS

- .1 Pertinent Regulations and Laws
 - .1 Comply with National Building Code of Canada, Section 8, SIMDUT, FC 30, FC 302.
 - .2 Comply with Canada Labour Code, Canada Occupational Safety and Health Regulations.
 - .3 An Act Respecting Occupational Health and Safety, R.S.Q chapter S-2.1.
 - .4 Prescribed standards and rules to ensure safe site operations of hazardous or toxic materials.
 - .5 Workers Compensation Act for province of Work.
 - .6 All other regulations and laws that might apply in the workplace and on the construction site.
- .2 Posting and availability of documents
 - .1 Comply with provincial general posting requirements, as well as other posting requirements related to security, in accordance with requirements made, expressed of provided by NCC Representative.
 - .2 Maintain on site a copy of each pertinent standard for Health and Safety.
- .3 Hazardous materials, controlled substances or volatile compounds.
 - .1 Advise the NCC representative 48 hours before commencing work in areas that contain hazardous materials, controlled substances or volatile compounds.
 - .2 Refer to specifications for "Environmental Protection" section 01 35 43.

.4 Responsibility

- .1 Be responsible for health and safety of persons on site, safety of property on site and for protection of persons adjacent to site and environment to extent that they may be affected by conduct of Work.
- .2 Comply with and enforce compliance by employees with safety requirements of Contract Documents, applicable federal, provincial and local statutes, regulations, and ordinances, and with site-specific Health and Safety Plan.

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.3 Employ and assign to Work, competent and authorized representative as Health and Safety Co-ordinator. Co-ordinator is entitled to stop or interrupt work of contract if necessary for reasons of health and safety, always at the discretion of the Co-ordinator.

.4 The NCC Representative may also interrupt work of contract for reasons of health and safety.

1.3 GENERAL REQUIREMENTS

- .1 Health and Safety Plan
 - .1 Contractor shall revise Health and Safety plan based on comments of NCC Representative and submit revised version for review and approval.
 - .2 Healthy and Safety Plan to include a hazard assessment in relation to construction activities on site, including risks identified in or prior to environmental assessment, as well as an analysis of risks and dangers related to health and safety for tasks and operation on the job site.
 - .3 Employ and assign to Work, competent and authorized representative as Health and Safety Co-ordinator during the implementation of work activities covered in this contract.
- .2 On site Contingency and Emergency Response Plan
 - .1 Preceding date of contract and before the initiation of Work on site, produce a map of the On site Contingency and Emergency Response Plan.
 - .2 This plan should include measures that cover potential safety incidents. The plan should also take into account the examination and/or assessment of environmental impacts, as prepared specifically for this project.
 - .3 The plan must address standard procedures to be implemented during an emergency.
 - .4 The Plan will also provide telephone numbers of person to contact in case of emergency, in order of priority, including the landowner's number.

.3 Preparation and Testing of Safety Measures

- .1 Safety inspections of construction activities to be undertaken on site on a regular basis (at least once a week). A summary report of site inspections, identifying areas of non compliance, must be prepared. In the event of non-compliance, ensure that immediate corrective measures are taken. Before beginning construction activities, a checklist of safety measures must be presented.
- On-site safety is to be treated as a separate item. It is subject to revision and should be updated in all arranged site meetings with the Owner, Consultants, Contractor and Sub-Contractors.
- .3 A record of all revisions of construction safety is to be available and stored on site.
- .4 A copy of Health and Safety Manual to be posted on site.
- .5 Prior to commencing Work, submit required notice of Health and Safety Plan to provincial authorities.
- .6 Prepare and keep record of all reports of incidents and accidents related to execution of contract Work.
- .7 Submit for review by NCC Representative all WHMIS MSDS Material Safety Data Sheets for products and materials used on site. Refer to "Environmental Protection" section 01 35 43. Keep available on site a fold a copy of all material safety data sheets.

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- .8 Ensure that all licences and operating permits are valid and up to date with operation machinery, vehicles and other equipment required for the execution of contract Work.
- .9 Examine tools, machinery, and other equipment used on site on a daily basis to ensure that they are in good working condition, and are used only for intended purposes.

1.4 REVIEW OF ON-SITE SAFETY AND TRAINING AND ORIENTATION PROCEDURES

.1 Training: Ensure that all persons entering work areas for the implementation of work for the present contract (this includes persons responsible for shipments, sampling, surveying and such) have received necessary training to safely carry out work activities.

1.5 CORRECTION OF NON-COMPLIANCE

- .1 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by NCC Representative.
- .2 Provide NCC Representative with written report of action taken to correct non-compliance of health and safety issues identified.
- .3 NCC Representative may stop Work if non-compliance of health and safety regulations is not corrected.

1.6 SITE PROTECTION

- .1 Delimiting of site: Clearly distinguish work zones of site from adjacent areas that may be public or private
 - .1 Provide secure and adequate signage for access to site at all times.
 - .2 Modify work area according to work progress on site.
 - .3 Regularly ensure that signage for site access is accessible.
- .2 Vehicular Circulation
 - .1 Provide and maintain safe means for vehicular circulation on site, including access roads to worksite and exit routes from site. Also provide safe means for pedestrian and public circulation within and around site.
 - .2 Maintain convenient access to property by providing sufficient height clearance for emergency vehicles. Ensure that work of this contract does not interrupt access to adjacent properties or buildings.

END OF SECTION

Meech Lake Shore Section 01 35 43

Rehabilitation

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PART 1 - GENERAL

1.1 Related Work

.1 Shrub and Tree Preservation

Section 32 01 91

1.2 Fires

.1 Fires and burning of rubbish on site not permitted.

1.3 Disposal of Wastes

- .1 Burying of rubbish and waste materials on site not permitted.
- .2 Do not dispose of waste or volatile materials, such as mineral spirits, oil or paint thinner into waterways, storm or sanitary sewers.
- .3 Waste will be managed in accordance with Quebec standards.

1.4 Plant Protection

- .1 Protect trees and plants on site and adjacent properties where indicated in Section 32 01 91 Shrub and Tree Preservation.
- .2 Protect roots of designated trees to dripline during excavation and site grading to prevent disturbance or damage. Avoid unnecessary traffic, dumping and storage of materials over root zones.
- .3 Minimize stripping of topsoil and existing vegetation.
- .4 Remove only the plants in Intervention Areas marked by the Representative of the NCC and the Contractor. In these areas, remove only perennials at least 30cm tall and identified invasive plants.
- .5 Where heavy equipment is used around trees, protect trees with temporary fencing.
- .6 Wetlands located at the edge of the work areas will have to be protected with fences prior to work initiation, as indicated on plans.
- .7 Once work is completed, remove all equipment used to protect the wetlands.

1.5 Fish, Reptile and Amphibian Recovery

- .1 Captured fish shall be placed back in the active lake flow.
- .2 Captured turtles, frogs or other wildlife shall be moved to similar habitat outside the work area.
- .3 To prevent reptiles and turtles from accessing the work area after removal, install silt fencing up the slope, minimum 3.0 meters, at both ends of the turbidity curtain.
- .4 NCC Representative to be on site for fish, reptile and amphibian recovery.

1.6 Protection of Bird Nesting Sites

- .1 No clearing shall take place during the avoidance time period for nesting habitat removal from May 1 to July 23.
- .2 In the event such clearing is unavoidable during this time period, vegetation to be removed shall be inspected by an avian biologist to determine whether there are any active nesting sites. If clearance is received from the avian biologist, clearing may proceed.
- .3 The NCC will be responsible for retaining the avian biologist. The Contractor shall provide at least one (1) week advanced notice of the need for such an inspection.

1.7 Shrub and Tree Preservation

- .1 Shrub and tree preservation per Section 32 01 91
- .2 Use existing roads, paths or cleared areas to avoid impacting on terrestrial vegetation.
- .3 Install a protective mat around the trees which are at risk of being damaged.
- .4 Vegetation clearing must be limited to the strict minimum that is to the vegetation that could be a nuisance to the movement of machinery and to the realization of the work. No wood cuts should fall into the watercourses or wetlands. If this happens, the debris should be removed with as little

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disturbance as possible.

- .5 No trees with a diameter (DBH) greater than 10 cm can be cut. If it is necessary to do so, an authorization must be obtained from the Land and Natural Resources Management Section of the Gatineau Park. The trees will have to be replaced, in the area of the work site, in a ratio of 2 to 1, with non-invasive indigenous species approved by the Gatineau Park biologist. Approval of the Contractor's planting plan must be obtained before planting the trees. Any tree with a DBH greater than 10 cm cut in a wetland must be replaced in a ratio of 2 to 1, preferably in the same wetland, by species that will favor the wetland.
- .6 Identify and mark the trees and shrubs that need to be cut (DBH inferior to 10 cm) or preserved (DBH greater than 10 cm).
- .7 All trees and other damaged flora must be replaced.

1.8 Drainage

- .1 Provide temporary drainage and pumping as necessary to keep excavation and site free from water.
- .2 Do not pump water containing suspended materials into adjacent waterway.
- .3 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with the requirements of applicable authorities. No residues should be allowed to fall into streams or wetlands and if it happens the debris should be removed rapidly while causing minimum disturbance.

1.9 Work Adjacent to Waterways

- .1 Limit vehicles and machinery movements to the work areas and to existing temporary access roads. Circulation outside the work areas, in water streams, ditches or wetland will not be tolerated.
- .2 Do not dump excavated fill, waste material or debris in or within 30 m from a watercourse.
- .3 Do not skid logs or construction materials across watercourses.

1.10 Pollution Control

- .1 Maintain temporary erosion and pollution control features installed under this contract.
- .2 Control emissions from equipment and facitilies to local authorities' emission requirements.
- .3 Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads.
- .4 Install on the piles of material, during work activities or following daily shut down of the work site, covers that are in good condition to limit the washing of material.
- .5 Install all material and equipment storage areas on impervious areas, either in the right-of-way of streets or on adjacent paved areas. No storage will be allowed in natural areas.
- .6 Hazardous wastes, if generated on site, will be stored on an impervious site and protected against weather conditions with a tarpaulin before they are loaded and transported off site. These wastes will be eliminated through a facility authorized by the MDDEP.
- .7 Dust abatement products, authorized by the MDDEP, will be applied, as required, to limit dust generation.
- .8 Limit the machinery's movements on exposed soils.

1.11 Watercourse Protection

- 1 The Contractor shall ensure that no contamination, waste or other substances which may be detrimental to marine life or quality of water shall enter the watercourse as either direct or indirect result of construction. The Contractor shall meet all requirements of Government authorities or agencies with respect to environmental protection.
- .2 No storage of hydrocarbons and hazardous materials will be allowed within 30 meters of watercourses.

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- .3 The filling of transportation vehicles and machinery within 60 meters of watercourses is prohibited.
- The Contractor shall be prepared to immediately clean up any spills or contamination which may be .4 either detrimental to marine life or quality of water. In the event of a spill, the Contractor shall immediately commence a clean-up operation. The Contractor shall be liable for all damages and/or charges laid which result from the spill or contamination of any kind resulting directly or indirectly from their construction operations.
- The Contractor shall not make any claim for extra compensation for the cost of fulfilling the .5 obligations set out herein.
- Avoid parking machinery within 30 meters of watercourses on worksite, unless directed otherwise by .6 the NCC.
- Before beginning work, the following prevention measures will be set up along streams and wetlands .7 to avoid directing suspended matter into surface waters: geotextile on catch basins, filtering berm, sediment traps and/or barriers through ditches and sediment barriers along edges of watercourses and wetlands, as shown on the plans.
- Any debris introduced accidentally into a watercourse, a stream or a wetland must be removed as soon as possible.

1.12 Erosion and Sediment Control Plan

- Floating silt curtain, as shown on the plans, must be installed on both sites by September 15.
- .2 Within 10 business days of receipt of letter of notification, the Contractor shall submit an Erosion and Sediment Control Plan. The plan shall indicate how the Contractor intends to provide for securing the site against erosion and siltation problems for the full duration of the construction period, i.e. from start of construction to final completion. The Contractor shall not proceed with the work in or near waterways, drainage channels or wetland areas until approval of the erosion and sediment control plan is received from the NCC Representative.
- A copy of the Erosion and Sediment Control Plan shall be present on-site at all times. The Contractor shall ensure that all workers, including sub-contractors, are aware of the importance of the erosion and sediment control measures and are informed of the consequences of the failure to comply with the requirements of all Regulatory Agencies.
- The Contractor shall ensure that sediment run-off does not enter the watercourse. Berms, silt fences and other best management practices, as determined by the Contractors site work methods, shall be constructed at appropriate locations to ensure that turbidity shall be kept to a minimum as determined by the Government authorities and agencies.
- .5 The minimum erosion and sediment controls shall be:
 - Limit the extent of exposed soils at any given time.
 - Re-vegetate exposed areas as soon as possible. .2
 - Provide temporary protection of exposed slopes 3H:1V or steeper and more than 3 meters .3 height with plastic or mulch material approved by NCC Representative.
 - Install filter cloth between frame and cover on all catchbasins and manholes that will be affected by run-off from the site.
 - .5 Install barriers along streams, lakes, ditches and wetlands present within the worksite, as shown on plans.
 - .6 Install a sediment barrier around the culvert installation worksite to protect wetland water quality.
 - Install adequate support to ensure ground stability and avoid risks of collapse. .7
 - Avoid work on soils sensitive to erosion, fragile, sloping or with a low bearing capacity.
 - A silt fence shall be installed around the perimeter of all stockpiles of any soil to be used or removed from the site. Stockpiles shall be located outside of the floodplain and in locations approved by NCC Representative.
 - .10 Erosion and sediment control measures shall be inspected, maintained and repaired weekly and

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after every rainfall event.

- .11 All water from trench excavations shall be pumped into an approved sedimentation pond for settlement prior to discharge into the river.
- .6 Erosion and sediment control will be reviewed as an item during the weekly site meeting. The status of the work will be recorded by the NCC Representative in the meeting minutes.
- .7 Circulations and storage of equipment, vehicles, machinery, wastes or any other material outside the work site limits, even for a brief period, will be strictly forbidden without a specific authorization from the NCC.
- .8 Once work is completed, the contractor has the responsibility to restore the work site.

1.13 Circulation management

- .1 During construction, install circulation signs where necessary.
- .2 Work areas must be clearly delineated.
- .3 Once work is completed, remove all signs (other than those installed by the NCC), fences and any other equipment and material from the site.

1.14 Noise Control

- All contract requirements regarding noise control will be respected. Reduction at the point of origin must be favored to limit the effects of noise. Articles 7, 11 and 12 of the municipal by-law 44-2003 of the city of Gatineau related to noise will be respected. They require the following:
 - Because of the irritating nature of noise (alarms, chock waves, repetitive impacts, etc.), work on a
 construction, renovation or demolition site, located at less than 150 m from a building used for
 lodging, must be restricted to the period of Monday to Saturday between 7h00AM to 9h00PM,
 except for emergency work on public infrastructures or for work that were specifically authorized
 by the executive committee.
 - 2. The operation of an electric generator or any other type of pump, compressor, motor or machinery generating noise with a level greater than 60 dBA during the day and 55 dBA during the night, as perceived by a resident in a building used for lodging, will be forbidden. For motors or compressors that are not continuously in operation, the acceptable noise levels will be 65 dBA during the day and 60 dBA during the night.
 - 3. The use of engine brake is forbidden within the Gatineau city limits.
- .2 If required, use acoustic screens or other types of temporary noise screens (tarpaulin, earth mounds, etc.).

1.15 Heritage and Archaeology

- .1 Any fortuitous discovery of archaeological remains during construction will force the immediate interruption of work in the discovery area until a complete evaluation of the site is completed by a qualified archaeologist. The archaeologist from the NCC Heritage Program (613-239-5751) shall be contacted.
- .2 The fortuitous discovery of human remains during construction will imply the immediate interruption of work on this site. The contractor will immediately contact the project manager and the NCC's archaeologist (Ian Badgley, 613-239-5751).

1.16 Review Agencies

.1 Various concerned Government agencies may be on site during construction and the Contractor shall provide easy access and meet the requirements of those agencies without delay.

1.17 Accidental Spills

1 The Contractor shall take the following precautions when using hydrocarbons (fuel...) in order to prevent significant environmental impacts due to accidental spills:

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- 1. The Contractor is required to have an Environmental Emergency Plan approved by the Contract Administrator:
- 2. The storage of hydrocarbons is prohibited within 30 meters from a watercourse or wetland and refuelling with hydrocarbons is prohibited within 60 meters;
- Equipment shall be washed before using and entering the Park in order to prevent any oil 3. and grease spills within the work area;
- 4. Inspections shall be performed before work and frequently after in order to detect any leaks (oil, fuel, grease, etc.) If a leak is detected, all necessary measures will immediately be taken and any maintenance that shall be done will be within 60 meters from a watercourse or a wetland:
- 5. An emergency petroleum product clean-up kit shall always be available on site. The kit will include at least 30 meters of sorbent socks, one (1) box of sorbent pads, shovels, one (1) empty 45-gallon barrel, rope and solid sorbent (powder or pellets). The kit shall be stored near the equipment and the work area and will be easily accessible at all time for a quick response:
- If a hydrocarbon spill occurs, the Contractor will contain it and immediately inform 6. URGENCE-ENVIRONNEMENT QUÉBEC at 1 866-694-5454 and call the NCC emergency line at 613-239-5353. The contained hydrocarbons and contaminated soils shall be removed by a company specialized in that field. The company providing the truck will be selected by the NCC.
- .7 Manipulation, including decanting, of fuel, oil, other petroleum product or contaminants will be made under constant supervision to avoid any accidental spills. In case of spill, ensure the presence of container to allow the recuperation of petroleum products and wastes as well as the presence of absorbent.
- 8. Fuelling of machinery will only be allowed in the storage areas and an impervious tarpaulin must be placed under the equipment during the fuelling operation or any other operation implicating oil or other potential contaminant.

END OF SECTION

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Part 1 General

1.1 ACCESS, TEMPORARY PARKING AND STORAGE

- .1 Use existing access routes to access site. Maintain routes during the construction period and repair any damage that may result from use by Contractor.
- .2 Clean all surfaces used for Contractor's equipment.
- .3 Staging and temporary parking for site staff will be at lot P13 as shown on the plans. All vehicles of employees must be parked within this parking area. No personal vehicles are permitted on site. The gravel access road can be used for parking and staging at the Boat Launch area.
- .4 The northern part of lot P13 will be available for the temporary storage area. This designated area must be fenced, locked and separated from public access for security reasons. The staging area must be located at least 10 meters from the nearest catch basin.
- .5 All construction vehicles required on site must be parked a minimum of 10 meters from tree drip line.
- .6 All sites must be protected by construction fences while work is being done in that area.

1.2 SANITARY FACILITES

- .1 Contractor must supply and install sanitary facilities on site for work force. Maintain and clean at all times.
- .2 Post notices and takes such precautions as required by local health authorities. Keep area and premises in sanitary condition.

1.3 ELECTRICITY

.1 Ensure temporary power supply of electricity and assume maintenance according to regulations and ordinances.

1.4 WATER SUPPLY

.1 Provide temporary supply of potable water for construction use. Assume costs and maintenance in accordance with regulations and ordinances.

1.5 SITE SIGNAGE

.1 The installation and removal of project signage will be the responsibility of the NCC.

1.6 PUBLIC SAFETY AND TRAFFIC CONTROL

- .1 Maintain and protect circulation of roads during construction period, unless otherwise indicated by the NCC Representative.
- .2 Protect the traveling public from harm to persons or property. Block public entrance to the site during construction by installing a temporary fence at accessible edges and placing notices at entrances to construction site.

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- .3 Rolling stock of Contractor to transport materials/equipment entering or leaving site shall interfere as little as possible with public travel and recreational trail use.
- .4 The location, slope, width and layout of temporary traffic lanes are subject to approval by the NCC Representative.
- .5 Once completed, dismantle temporary traffic lanes and return to existing conditions or as shown on contract drawings.

1.7 SCAFFOLDING AND SHORING

- .1 Obtain approval of all scaffolding and shoring to erect structures, including all temporary structures during construction.
- .2 Erect scaffolding in accordance with shop drawings stamped by NCC Representative in charge of design. Remove scaffolding as directed by NCC Representative.
- .3 Build scaffolding that is safe, rigid, solid and well secured and maintained.

1.8 TEMPORARY FENCING

- .1 Temporary fencing shall be made of 1.2m high snow fencing, black or dark green, wired to rolled steel T-bar post installed at 2.4m centre.
- .2 When work is completed, install temporary fencing to protect newly planted and seeded areas. If the fence is damaged, repair or replace as directed by the NCC Representative. The temporary fence must remain in place for the entire year warranty period of plant material, and until the NCC Representative's approval for the seeded areas.

1.9 REMOVAL OF TEMPORARY INSTALLATIONS

- .1 Remove temporary facilities from site unless directed otherwise by NCC Representative.
- .2 All areas disturbed shall be reinstated by the Contractor to its original condition at the contractor's expense and to the NCC Representative's satisfaction.

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PART 1 - GENERAL

1.1 General .1 Use new material and equipment unless otherwise specified. .2 Within 7 days of written request by Contract Administrator, submit following information for materials and equipment proposed for supply: .1 Name and address of manufacturer. .2 Trade name, model and catalogue number. .3 Performance, descriptive and test data. .4 Manufacturer's installation or application instructions. .5 Evidence of arrangements to procure. .3 Use products of one manufacturer for material and equipment of same type or classification unless otherwise specified. 1.2 Manufacturers Instructions .1 Unless otherwise specified, comply with manufacturer's latest printed instructions for materials and installation methods .2 Notify Contract Administrator in writing of any conflict between these specifications and manufacturers instructions. Contract Administrator will designate which document is to be followed. 1.3 Delivery and Storage .1 Deliver, store and maintain packaged material and equipment with manufacturer's seals and labels intact. .2 Prevent damage, adulteration and soiling of material and equipment during delivery, handling and storage. Immediately remove rejected material and equipment from Store material and equipment in accordance with suppliers .3 instructions. .4 Touch-up damaged factory finished surfaces to Contract Administrator's satisfaction. Use primer or enamel to match original. Do not paint over name plates. 1.4 Contractor's Options for Selection of Materials for Tendering Materials specified by referenced standard, select any

.2

material that meets or exceeds the specified standard.

any manufacturer so listed.

Where materials are required to be listed on the "Canadian General Standards Board, Qualified Products List" select

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- .3 Materials specified by "Prescriptive" or "Performance" specification, select any material meeting or exceeding specification.
- .4 Materials specified by naming one or more materials, select any material named. For the purpose of these specifications, the term "Acceptable Material" is deemed to be a complete and working commodity as described by a manufacturer's name, catalogue number, trade name or any combination thereof.
- .5 When materials are specified by a Standard, Prescriptive or Performance specification, upon request of the Contract Administrator, obtain from manufacturer an independent testing laboratory report, showing that the material or equipment meets or exceeds the specified requirements.

1.5 Substitution

- .1 No substitutions will be permitted without prior written approval of Contract Administrator.
- .2 Proposals for substitutions to be made in accordance with Instructions to Bidders. Such requests must include statements of respective costs of items originally specified and the proposed substitution.
- .3 Proposals will be considered by Contract Administrator if:
 - .1 Materials selected by tenderer from those specified, are not available.
 - .2 Delivery date of materials selected from those materials specified would unduly delay completion of contract, or
 - .3 Alternative material to those specified, which are brought to the attention of and considered by Contract Administrator as equivalent to the material specified and will result in a credit to the Contract amount.
- .4 Should proposed substitution be accepted either in part or in whole, assume full responsibility and costs when substitution affects other work on project. Pay for design or drawing changes required as result of substitution.
- .5 Amounts of all credits arising from approval of substitutions will be determined by Contract Administrator and contract

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			price will be reduced accordingly.
1.6	Acceptability of Materials	.1	All and only "acceptable" materials, as defined by Construction Materials Board Form 1 are eligible for use in this project. CMB Form 1 forms part of Contract documents.

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PART 1 GENERAL

1.1 GENERAL REQUIREMENTS

- .1 Undertake necessary cleaning and waste removal operations in accordance with local regulations and pollution control legislation.
- .2 Maintain a clean site without any accumulation of waste which could create dangerous conditions.
- .3 Dispose of hazardous waste in sealed metal containers and remove from site every day.
- .4 Preserve environment and prevent pollution and environment damage.
- .5 Take all necessary steps to obtain permits from appropriate authorities for the removal of waste and debris.

1.2 DEFINITIONS

- .1 Class III: non-hazardous waste construction renovation and demolition waste.
- .2 Inert Fill: inert waste exclusively asphalt and concrete.
- .3 Recycle: process by which waste and recyclable materials are transformed or collected for purpose of being transferred into new products.
- .4 Reuse: repeated use of product in same form but not necessarily for same purpose. Reuse includes:
 - .1 Salvaging reusable materials from re-modelling projects, before demolition stage, for resale, reuse on current project or for storage for use on future projects.
 - .2 Returning reusable items including pallets or unused products to vendors.
- .5 Salvage: removal of structural and non-structural materials from deconstruction/disassembly projects for purpose of reuse or recycling.

1.3 STORAGE, HANDLING AND PROTECTION

- .1 Store materials to be reused, recycled and salvaged in locations as directed by NCC Representative.
- .2 Unless specified otherwise, materials for removal do not become Contractor's property.
- .3 Protect, stockpile, store and catalogue salvaged items.
- .4 Separate non-salvageable materials from salvaged items. Transport and deliver non-salvageable items to licensed disposal facility.
- .5 Protect surface drainage, mechanical and electrical from damage and blockage.
- .6 Separate and store materials produced during dismantling of structures in designated areas.
- .7 The sale of unused salvaged, collected or recycled materials from the site is not permitted.

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1.4 DISPOSAL OF WASTES

- .1 Do not bury rubbish or waste materials.
- .2 Do not dispose of waste and volatile materials into waterways, storm, or sanitary sewers.
- .3 Remove waste materials each day and store in temporary storage area.
- .4 Separate storage will be used for oils and lubricants, and containers will be disposed of at facilities licensed for these materials.

1.5 WASTE MANAGEMENT – SALVAGING, REUSE AND RECYCLING

.1 Topsoil is to be stored on site and contained in an approved area, delimited by a sedimentation fence fixed at its base.

1.6 CLEANING PRODUCTS

.1 Only products recommended by the supplier of the surface to be cleaned, following methods recommended by the supplier, are permitted.

1.7 CLEANING DURING CONSTRUCTION

- .1 Provide containers on site to be used for waste and debris.
- .2 Rid site of rubbish and waste materials and transport them to an approved landfill.
- .3 Keep public property and areas of site free of accumulations of rubbish and waste materials throughout the project, cleaning daily.
- .4 Adapt cleaning operations to prevent resulting dust, debris and other contaminants from interfering with road and trail operations.
- .5 Remove all grease, dust, dirt, stains, fingerprints, footprints and other foreign material from all concrete surfaces, granite curbs and paving on a daily basis.

1.8 FINAL CLEANING

- .1 Upon completion of work, remove surplus materials, tools, equipment and construction materials that are no loner necessary for remaining work
- .2 Remove all grease, dust, dirt, stains, labels, fingerprints, footprints and other foreign materials from finished materials.
- .3 Use a broom to clean paved surfaces, and a rake to clean surfaces on ground.

Part 1 General

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1.1 **RELATED SECTIONS**

- Section 01 35 30 Health and Safety Requirements. .1
- Section 01 35 43 Environmental Protection. .2
- .3 Section 01 74 11 - Cleaning
- Section 31 23 10 Excavating, Trenching and Backfilling. .4

1.2 **REFERENCES**

- .1 Department of Justice Canada (Jus).
 - .1 Canadian Environmental Protection Act, 1999 (CEPA), c. 33.
 - .2 Canadian Environmental Assessment Act (CEAA), 1995, c. 37.
 - .3 Transportation of Dangerous Goods Act, 1992 (TDGA), c. 34.
 - .4 Motor Vehicle Safety Act, 1993 (MVSA).

1.3 **DEFINITIONS**

- .1 Demolition: rapid destruction of building following removal of hazardous materials.
- .2 Hazardous Materials: dangerous substances, dangerous goods, hazardous commodities and hazardous products, may include but not limited to: asbestos PCB's, CFC's, HCFC's poisons, corrosive agents, flammable substances, ammunition, explosives, radioactive substances, or other material that can endanger human health or well being or environment if handled improperly.

1.4 STORAGE AND PROTECTION

- Protect work in accordance with Section 31 23 10 Excavating, Trenching and Backfilling. .1
- .2 Protect existing items designated to remain and items designated for salvage. In event of damage to such items, immediately replace or make repairs to approval of NCC Representative at no cost to the NCC.
- .3 Remove and store materials to be salvaged, in a manner to prevent damage. Store and protect materials in a manner to ensure their preservation. Handled salvaged items as if they were new.

1.5 **SCOPE OF WORK**

- Without being limited to the following, provide all necessary equipment, materials and .1 services to carry out work of this section:
 - .1 Removal from site of all materials that cannot or are not intended for reuse on site.

SITE CONDITIONS 1.6

.1 In all circumstances, ensure that selective demolition work does not adversely affect adjacent watercourses, groundwater and wildlife, or contribute to excess air and noise pollution.

- .2 Do not dispose of waste composed of volatile materials including but not limited to, mineral spirits, oil, petroleum based lubricants, or toxic cleaning solutions into watercourses, storm or sanitary sewers. Use appropriate methods for eliminating this type of waste during the construction.
- .3 Do not pump water containing suspended materials into watercourses, storm or sanitary sewers or onto adjacent properties.
- .4 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authorities.
- .5 Protect trees, plants and foliage on site and adjacent properties where indicated.

Part 2 Products

2.1 EQUIPMENT

.1 Leave machinery running only while in use, except where extreme temperatures prohibit shutting machinery down.

Part 3 Execution

3.1 PREPARATION

- .1 Inspect site with NCC Representative and verify extent and location of items designated for removal and items to remain.
- .2 Protect as necessary the surrounding existing vegetation as specified in section 32 01 91
 Shrub and Tree Preservation.

3.2 MANAGEMENT OF INVASIVE PLANTS DURING CONSTRUCTION

- .1 Identification:
 - .1 Prior to starting construction, the NCC Representative will mark all invasive plants to be removed in the Intervention Zones. Each species will be marked with a unique color-code. The NCC Representative will provide the Contractor with a list of each color-code and its corresponding species.

.2 Removal:

- .1 The Contractor will only use hand tools to remove the marked plants. No vehicles are to contact these plants or their soil mass. Remove invasive plants before starting other work in the Intervention Zone.
- .2 Removal techniques are as follows:
 - Ramnus cathartica (Common buckthorn) and Rhamnus frangula (Glossy Buckthorn): cut and dig the roots using a shovel and mechanical levers such as root wrenches to pry up the root system.
 - Aegopodium podagraria (Groutweed): excavate the entire plant including the root system and all root fragments.
 - Lonicera amur, morrow's, tatarian, etc (Honeysuckles): cut and dig the roots using a shovel and mechanical levers such as root wrenches to pry up the root system.
 - Hemerocallis fulva (Common daylily): hand-pull the entire plant including the root system.

- Convallaria majalis (European lily-of-the-valley): excavate the entire plant including the root system and all root fragments.
- Fallopia japonica (Japanese knotweed): excavate the entire plant including the root system and all root fragments.
- .3 In all cases, fill in the holes left by the removal with new soil and new plants. Do not reuse soil contaminated with roots or other plant parts of invasive plants.

.3 Disposal:

- Immediately after removal, place invasive plants and their soil mass in completely closed heavy-duty garbage bags (3mm or thicker) or completely wrapped in heavyduty plastic. Remove them from Gatineau Park and dispose of the removed material using the following methods:
 - Drying/Liquefying: Keep the invasive material covered or bagged for at least one month. Material is nonviable when it is partially decomposed, very slimy, or brittle. Once material is nonviable, it can be disposed of in a landfill or brush pile;
 - Burying: Invasive material can be buried a minimum of 1 meter below grade, except Japanese knotweed; or
 - Burning: plant material can be taken to a designated burn pile. It is the only approved method for Japanese knotweed.
- .2 All methods must conforment à la Loi canadienne sur la protection de l'environnement and all municipal bylaws.

.4 Clean-up:

Place contaminated boots and tools in completely closed heavy-duty garbage bags (3mm or thicker) or completely wrapped in heavy-duty plastic immediately after completing removal of each invasive plant individual or group and before use elsewhere. Clean boots and tools outside of Gatineau Park with a high pressure air hose, brushes, brooms or other manual tools in an area where potential for contamination and seed spread is limited, i.e. gravel covered or paved surface, or well-maintained lawn area at least 30m from any watercourse.

3.3 REMOVAL OPERATIONS

- .1 Remove items as indicated on plans. Remove the wooden ramp, its footings and the two metal posts at the boat launch.
- .2 Do not disturb items designated to remain in place.
- .3 Stockpile topsoil for final grading and landscaping. Provide erosion control and seeding if not immediately used.
- Stockpile forest litter to cover all exposed soil transition areas. Dispose of excess .4 materials off site.

3.4 **SALVAGE AND RELOCATION**

- Carefully remove items to be salvaged or relocated. Store salvaged items in location .1 indicated by NCC Representative.
- .2 It is strictly prohibited to stock material outside the work limits.

3.5 **REMOVAL OF WASTE**

.1 Dispose of materials not designated for salvage or reuse. Transport items off site.

3.6 BACKFILL

.1 Backfill in areas as indicated and in accordance with Section 31 23 10 - Excavating, Trenching and Backfilling.

3.7 RESTORATION

- .1 Once Work is completed, remove all debris and leave work site clean. Level the surrounding interventions with any left over excavation materials, so that the ground surfaces are returned to a natural appearance and returned to the same state as undisturbed adjacent surfaces.
- .2 Use soil treatments and procedures which are not harmful to health, are not injurious to plants, and do not endanger wildlife, adjacent water courses or ground water.

3.8 PRESENTATION OF REPORT

.1 Provide a record of all debris and materials removed from site, as well as all recycled materials that were taken to recycling facilities.

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PART	1 – GENERAL			
1.1	Related Work	.1 .2 .3	Excavating and Backfilling Aggregate Base Course Stone Dust Surface	Section 31 23 10 Section 32 11 23 Section 32 15 40
1.2	Description	.1	This section is the materials specifi granular materials: 1. Granit Stone dust mix 0-15 2. Crushed stone 0-19 mm (N 3. Clean stone 19 mm 4. Well graded gravel 5. River stones 6. Fill material	mm
1.3	References	.1 .2	Cahier des charges et devis généra réparation, 2007 edition, Quebec M Tome VII - Matériaux de la collectio routiers, Quebec Ministry of Transp	linistry of Transport. on des normes et ouvrages
PART	2 - PRODUCTS			
2.1 Gener	Materials; ral Requirements	.1	Any granular materials specified for works, on the drawings or in other sor by direction of NCC Representat material specification for the class of	sections of the specifications ive, shall conform to this
		2	The materials shall be selected or r	produced from nits or quarrie

- s d.
- The materials shall be selected or produced from pits or quarries .2 to conform to the requirements specified herein for each class of granular materials.
- Material retained on the number 4 sieve shall consist of hard .3 durable particles or fragments of stone or gravel.
- .4 Materials that break up when alternatively frozen and thawed or wetted and dried shall not be permitted.
- Fine aggregate passing the Number 4 sieve shall consist of natural or crushed sand, and, material passing the Number 200 .5 sieve shall consist of fine mineral particles.
- .6 The material shall be free from vegetable matter and lumps or balls of clay.
- .7 The material shall be non-plastic and non-frost susceptible.

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		GRANULAR MATERIALS	Page 2 of 2 June 2014
	.8	Blending to obtain the correct gradation will the Contractor demonstrates that he can progradation and has a plant capable of production of NCC Representative.	roduce a correct
	.9	The Contractor shall advise NCC Represer advance of his intended use of any materia time for sampling and testing. The Contrac samples of granular materials to be used in requested by NCC Representative.	ils to allow sufficient tor shall submit
	.10	Approval of a sample does not mean accepsource. Each load of material received at the subject to all the requirements of that mate	ne job site shall be
	.11	All gradation requirements are shown as perpassing U.S. Standards Sieves, A.A.S.H.O	
2.2 Materials: Specific Requirements			

- 1. Granit stone dust: Granit 0-15mm from Bristol, following sieving requirements of section 32 15 40 Stone Dust Surfaces.
- Crushed stone 0-19 mm diameter: MG 20 (0-3/4 in.), crushed carry stone, according to specifications provided by Tome VII - Matériaux de la collection des normes et ouvrages routiers, Quebec Ministry of Transport..
- 3. Clean crushed stone (3/4 in.): Crushed, clean, carry stone, made of natural stone 19 mm of diameter, for drainage purposes.
- 4. Well graded gravel: Crushed, carry stone, made of well grade gravel 10 to 40 mm of diameter, with maximum 5% passing through the 10mm sieve.
- 5. River stones: Clean, rounded natural stone 75 to 100mm of diameter.
- 6. Fill material: according to section 31 23 10.

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PART 1 - GENERAL			
1.1 Related Work	.1 .2	Section 02 41 13 – Selective Site Demolition and Rem Section 32 91 21 - Topsoil and Finished Grading	novals
1.2 Regulations	.1	Shore and brace excavations, protect slopes and ba work in accordance with current federal, provin regulations, whichever is more stringent.	
1.3 Tests and Inspections	.1	Before commencing work, conduct, with the NCC condition survey of structures, trees and other particle poles, wires and hard surfaces, barrier posts marks that may be affected by work.	plants, turf, fences,
1.4 Underground Services	.1	Before commencing work, verify and establish underground services on and adjacent to the site.	the location of all
	.2	If necessary, make arrangements with the approprelocation of underground services that interfere with Pay costs of relocating services.	
	.3	Remove obsolete underground services within 2 m cut-offs.	of foundations. Cap
1.5 Protection	.1	Protect excavations from freezing.	
	.2	Keep excavations clean, free of standing water and lo	oose soil.
	.3	Where soil is subject to significant volume change moisture content, cover and protect to the NC satisfaction.	
	.4	Protect natural and man-made elements that are to Unless otherwise indicated, protect all existing trees f	
	.5	Protect underground services that are to remain undis	sturbed.
PART 2 – PRODUCTS			
2.1 Materials	.1	Backfilling: Use on-site excavated material for permeable and free of construction debris, roots, 75mm of diameter and topsoil.	
	.2	Granular materials from excavation may be used for b	oackfilling.
3.1 Excavation	.1	Strip topsoil in accordance with Section 32 91 21.	
	.2	Excavate as required to carry out earthwork as indic soil or rock below bearing surfaces. Notify the NCC R	

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		EARTHWORK	June 2014
		excavations are completed.	
	.3	Excavate trenches to provide uniform continuou rock fill on solid undisturbed ground.	s bearing and support for
3.2 Backfilling	.1	Inspection: do not commence backfilling until fi be filled have been inspected and approved by t	
	.2	Harmful Material: remove snow, ice, constructio standing water from spaces to be filled.	n debris, organic soil and
	.3	Lateral Support: maintain even levels of back work progresses, to equalize earth pressures.	fill around structures as
	.4	Compaction of subgrade: compact existing subgrades until compacted to prescribed density.	grade under hard covered
	.5	Fill excavated areas with acceptable fill material material by layers of 150 mm maximum. Add w prescribed density.	
	.6	Compaction: compact each layer of material.	
3.3 Grading	.1	Grade by eliminating depressions and protrusi natural drainage.	ons, so as to promote a
3.4 Surplus Material	.1	Dispose of all surplus material off site to the app	roved location.
		For Lat Ocation	

End of Section

Part 1 General

Project No: DC30750610

1.1 RELATED SECTIONS

- .1 Section 01 35 43 Environmental Protection
- .2 Section 01 74 11 Cleaning
- .3 Section 02 41 13 Selective Site Demolition and Removals
- .4 Section 31 05 17 Granular Materials
- .5 Section 31 14 11 Earthworks

1.2 REFERENCES

- .1 ASTM C117-90, Standard Test Method for Material Finer than 0.075 mm (No.200) Sieve in Mineral Aggregates by Washing.
- .2 ASTM C136-92, Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
- .3 ASTM D422-63(1990), Standard Test Method for Particle-Size Analysis of Soils.
- .4 ASTM D698-91, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (600 kN-m/m3).
- .5 ASTM D1557-91, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (2,700 kN-m/m3).
- .6 ASTM D4318-84, Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
- .7 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-8.1-88, Sieves, Testing, Woven Wire, Inch Series.
 - .2 CAN/CGSB-8.2-M88, Sieves, Testing, Woven Wire, Metric.
- .8 Canadian Standards Association (CSA International)
 - .1 CAN/CSA-A3000-98-A5-98, Cementitious Materials Compendium.
 - .2 CSA-A23.1/A23.2-00, Concrete Materials and Methods of Concrete Construction/Methods of Test and Standard Practices for Concrete.

1.3 DEFINITIONS

- .1 Common excavation: excavation of materials of whatever nature, which are not included under definitions of rock excavation.
- .2 Unclassified excavation: excavation of deposits of whatever character encountered in Work.
- .3 Topsoil: Material capable of supporting good vegetative growth and suitable for use in top dressing, landscaping and seeding.
- .4 Waste material: excavated material unsuitable for use in Work or surplus to requirements.
- .5 Borrowed material: material obtained from locations outside area to be graded, and required for construction of fill areas or for other portions of Work. Do not use borrowed material from outside the work Area.

.6 Recycled fill material: material, considered inert, obtained from alternate sources and engineered to meet requirements of fill areas. Use only materials found within the limits of the Park. Contact the NCC Representative for the location of the material, if needed.

- .7 Unsuitable materials:
 - .1 Weak and compressible materials in excavation areas.
 - .2 Fill material coming for sources outside the Park limits.
 - .3 Frost susceptible materials in excavation areas.
 - .4 Frost susceptible materials:
 - .1 Fine grained soils with plasticity index less than 10 when tested to ASTM D4318, and gradation within limits specified when tested to ASTM D422 and ASTM C136: sieve sizes to CAN/CGSB-8.2.

Sieve Designation	% Passing
2.00 mm	100
0.10 mm	45 – 100
0.02 mm	10 - 80
0.005 mm	0 - 45

- .2 Coarse grained soils containing more than 20 % by mass passing 0.075 mm sieve.
- .8 Unshrinkable fill: very weak mixture of cement, concrete aggregates and water that resists settlement when placed in utility trenches, and capable of being readily excavated.

1.4 WASTE MANAGEMENT AND DISPOSAL

.1 Separate waste materials for reuse and recycling in accordance with Section 01 74 21 – Cleaning and Waste Disposal.

1.5 EXISTING CONDITIONS AND PROTECTION

- .1 Examine existing conditions and report any discrepancies to the NCC Representative.
- .2 Existing surface features:
 - .1 Conduct, with NCC Representative, condition survey of vegetation which may be affected by Work.
 - .2 Protect all surface features from damage while Work is in progress. In event of damage, immediately make repair as directed by NCC Representative.
 - .3 If it is necessary to cut roots or branches to execute excavations needed within the scope of the Work, proceed as directed by NCC Representative.
- .3 Protect the existing vegetation according to section 32 01 91 Shrub and tree preservation and the instruction of the NCC Representative. Unless otherwise specified, repair all damaged areas so that they may return to their original state, or in even better condition.

Meech Lake Shore Rehabilitation

Section 31 23 10

EXCAVATING, TRENCHING AND BACKFILLING

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Part 2 **Products**

Project No: DC30750610

2.1 **MATERIALS**

- .1 Fill material reused from site: Unclassified excavation material, approved by NCC Representative for use intended, unfrozen and free from refuse or other deleterious materials.
- .2 Class B fill material: According to specifications of Ministères des Transports du Québec (MTQ), Tome VII - Matériaux de la collection des normes et ouvrages routiers du MTQ.

Part 3 Execution

3.1 TEMPORARY EROSION AND SEDIMENTATION CONTROL

.1 Control erosion and sedimentation according to section 01 35 43 'Environmental Protection'

3.2 STRIPPING OF TOPSOIL AND STOCKPILING

- .1 Strip topsoil to depths as directed by NCC Representative. Do not mix topsoil with subsoil.
- .2 Stockpile in locations as directed by NCC Representative. Stockpile height not to exceed 2 m and should be protected from erosion.

DEWATERING AND HEAVE PREVENTION 3.3

- Keep excavations free of water while Work is in progress. .1
- .2 Provide for NCC Representative details of proposed dewatering or heave prevention methods, including dikes, well points, and sheet pile cut-offs.
- .3 Protect open excavations against flooding and damage due to surface run-off.
- Dispose of water in accordance with Section 01 35 43 Environmental Procedures and in .4 a manner not detrimental to public and private property, or a portion of Work completed or under construction.

3.4 **EXCAVATION**

- .1 Advise the NCC Representative if rock is found during excavation and when the excavations are complete.
- .2 Off profile unauthorized cuttings must be corrected by backfilling following: Backfill with fill Class B type II selective OPSS backfill material compacted to 95%.
- .3 Do not disturb soil within branch spread of trees or shrubs that are to remain. If excavating through roots, excavate by hand and cut roots with sharp axe or saw.
- Do not obstruct flow of surface drainage or natural watercourses. .4
- Earth bottoms of excavations to be undisturbed soil, level, free from loose, soft or organic .5 matter. Hand trim, make firm and remove loose material and debris from excavations. Earth bottoms of excavations to be undisturbed soil, level, free from loose, soft or organic matter. Hand trim, make firm and remove loose material and debris from excavations.

Where material at bottom of excavation is disturbed, compact foundation soil to density at least equal to undisturbed soil. Clean out rock seams and fill with concrete mortar or grout to approval of NCC Representative

.6 Reuse excavation material as fill whenever possible. Regrade excess material around the intervention zones to give a natural appearance. Dispose of all surplus excavation material off site.

3.5 FILL TYPES AND COMPACTION

- .1 Use unclassified fill material for all fill works unless otherwise specified.
- .2 Do not disturb rocks below the bearing surface.

3.6 BACKFILLING

- .1 Do not proceed with backfilling operations until NCC Representative has inspected and approved installations.
- .2 Compact the exposed sub-base before placing base course.
- .3 Areas to be backfilled to be free from debris, snow, ice, water and frozen ground.
- .4 Do not use backfill material which is frozen or contains ice, snow or debris.
- .5 Place backfill material in uniform layers not exceeding 150 mm compacted thickness up to grades indicated. Compact each layer before placing succeeding layer.
- .6 Backfilling around installations:
 - .1 Place fill materials around installations as specified.
 - .2 Backfill to existing grades or to levels indicated on drawings.

3.8 RESTORATION

- .1 Upon completion of Work, remove waste materials and debris, trim slopes, and correct defects as directed by NCC Representative.
- .2 Replace topsoil as indicated.
- .3 Clean and reinstate areas affected by Work as directed by NCC Representative.

Meech Lake Shoreline		Section 31 32 21
Rehabilitation	GEOTEXTILES	Page 1 of 2
Project No. DC 3075-06-10		June 2014

PART 1 - GENERAL

1.1 Related Work	.1 .2 .3	Aggregate Base Courses Excavating, Trenching and Backfilling Stone Works	Section 32 11 23 Section 31 23 10 Section 31 37 00
1.2 References	.1	CAN/CGSB-4.2-[M88], Textile Test Methods.	
	.2	CAN/CGSB-148.1, Methods of Testing Geotextiles and Geomembranes. 1 No. 3-85, Thickness of Geotextiles. 2 No. 7.3-92, Grab Tensile Test for Geotextiles. 3 No. 6.1-93, Bursting Strength of Geotextiles 4 No. 10-94, Filtration Opening Size 5 No. 4-94, Normal Water Permeability	
1.3 Samples	.1	Submit product data and samples in accordance with Section 01 33 00 - Shop Drawings and Samples.	
	.2	Submit following samples to Contract Administrator at least 1 week commencing work. 1 Minimum length of 2 m of roll width of geotextile.	
1.4 Mill Certificates	.1	Submit to Contract Administrator one copy of mill test data and certificates at least 1 week prior to start of work.	
1.5 Delivery and Storage	.1	During delivery and storage, protect geotextiles from direct sunlight, ultraviole rays, excessive heat, mud, dirt, dust, debris and rodents.	

PART 2 - PRODUCTS

2.1 Geotextile for Boulder
and Stone Applications

- .1 Non-woven geotextile, supplied in rolls
- .2 Physical properties:
 - .1 Grab Strength > 330 Newtons
 - .2 Elongation at break ≥ 15 percent
 - .3 Filtration Opening Size < 100 microns

2.2 Geotextile for Silt Fence

- .1 Woven geotextile having a width of 1.0m minimum, supplied in rolls
- .2 Filtration Opening Size (FOS) of ≤ 840 microns meeting CAN/CGSB 148.1, Method 10.2

PART 3 - EXECUTION

- 3.1 Installation of Geotextile for Boulder and Stone Applications
- .1 Place geotextile material by unrolling onto graded surface.
- .2 Place geotextile material smooth and free of tension stress, folds, wrinkles and creases.
- .3 Overlap each successive strip of geotextile at least 450 mm over previously laid strip.

Meech Lake Shoreline Rehabilitation Project No. DC 3075-06-10		GEOTEXTILES Section 31 32 21 Page 2 of 2 June 2014
	.4	Protect installed geotextile material from displacement, damage or deterioration before and during placement of granular material.
	.5	Cover with granular material within 4 hours of placement of geotextile.
	.6	Replace damaged or deteriorated geotextile to approval of Contract Administrator
3.2 Protection	.1	No vehicles permitted directly on geotextile.

PART 1 - GENERAL

1.1 Related Sections

.1	Excavating, Trenching and Backfilling	Section 31 23 10
.2	Granular materials	Section 31 05 17
.3	Aggregate base course	Section 32 11 23
.4	Geotextile	Section 31 32 21

1.2 SOURCE QUALITY CONTROL

.1 The size and quality of rock fill shall be approved by the NCC Representative prior to delivery to the site.

PART 2 - PRODUCTS

2.1 Materials

- 1. Single and double row boulders for lower bank stabilisation: Large quarry stone boulders shall be non-friable and fairly uniform in colour. The boulders should be sized as prescribed in the plans. Single row stones should be approximately 800 x 800 x 800 mm and rounded while double row stones shall be approximately 1000 x 1200 x 800mm and squared. They must be durable and resistant, of a density equal to or greater than 2600 kg/m3 and free from seams, cracks or other structural defects. Do not use stones that change easily (e.g. shale). The large stone boulders shall be fairly rectangular so their assembly on top of each-other is efficient and stable. All stones have to match existing stones in colour, type, size and texture according to the type (i.e. double or single row).
- 2. Stone steps: Quarry stones that shall be non-friable, fairly uniform in colour and minimum 400 x 600 x 300mm in size. They must be durable and resistant, of a density equal to or greater than 2600 kg/m3 and free from seams, cracks or other structural defects. Do not use stones that change easily (e.g.: shale). The stone steps shall be fairly flat on top and in front so as to create straight and stable steps. All stones have to match adjacent stones in colour, type and texture.
- 3. Rounded natural boulder: Natural rounded stone, non-friable and fairly uniform in colour. They must be durable and resistant, of a density equal to or greater than 2600 kg/m3 and free from seams, cracks or other structural defects. Do not use stones that change easily (e.g.: shale). Stones must be approximately 800 mm in diameter. All stones have to match adjacent stones in colour, type and texture.
- 4. Stones that follow the above specifications can be reused if found during excavation works. Those stones must be approved by the NCC Representative.
- 5. The NCC Representative shall have the right to refuse any stone he deems unsuitable. The Contractor must use those stones elsewhere on site as specified or otherwise dispose of them off-site, without additional cost to the Client, and also replace them with suitable stones as necessary.
- 6. All granular materials used for the foundations must respect the specifications outlined in section 31 05 17 Granular Materials, of the present document.

PART 3 - EXECUTION

- 3.1 Stone and wall placement
 - .1 All placements must be approved by the NCC Representative.

Page 2 of 2 June 2014

- .2 Prepare the surface and install the aggregate base course as per section 32 11 23 'Aggregate base course'.
- .3 Install stones as indicated in the plans and details drawings. Ensure that the finish work is straight, solid and stable.
- .4 Install geotextile and granular material behind stone works as indicated in construction drawings and in section 31 23 10 'Excavating Trenching and Backfilling' and 31 32 21 Geotextile.

3.2 Final grading

.1 Level the area to give it a natural look. Dispose of excess materials off site.

Meech Lake Shore Rehabilitation	SHRUB AND TREE PRESERVATION	Section 32 01 91 Page 1 of 1
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PART 1 - GENERAL

1.1 Related Work Specified Elsewhere

.1 Selective Site Demolition and Removals

Environmental Protection Section 01 35 43

Section 02 41 13

PART 2 - MATERIALS N/A

.2

PART 3 - EXECUTION

3.1 Trees and Shrubs to be Retained

- 1 Unless otherwise indicated on the drawings or instructed on site by the NCC Representative, retain and protect all existing trees and shrubs on site. Do not remove any plant without the express authorization of the NCC Representative.
- .2 The only plants to be removed are in areas clearly marked on-site by the Contractor working with the NCC representative. Invasive plants will be marked on-site by the NCC Representative. Even in these zones, only perennials under 30cm in height and invasive perennials or shrubs are to be removed. Other than these zones, all trees, shrubs and understory plants are to be preserved. These areas are the Intervention Areas marked on the plans as Proposed Interventions.
- The Contractor will include a plan for marking Intervention Areas where plants may be removed as part of the Work Methodology Plan as per Section 01 10 00 General Requirements. The marking should make the areas clear and distinct, for example, a consistent color or type. The Contractor will mark the protection areas on-site with the NCC Representative.
- .4 Take all necessary precautions to protect the existing vegetation from any damage to the satisfaction of the NCC Representative.

3.2 Protection of Existing Trees

- .1 Do not disturb or compact grade outside the Site Limits or Intervention Areas.
- .2 Protect tree trunks, if required, with wooden protective cladding installed vertically around the trunk. Install cladding with straps or other devices which will not damage the tree.

Part	1	General

Project No: DC30750610

1.1 RELATED SECTIONS

- .1 Section 31 05 17 Granular Material
- .2 Section 31 37 00 Stone Works
- .3 Section 31 32 21 -Geotextile

1.2 REFERENCES

- .1 ASTM C 117-[90], Test Method for Material Finer Than 0.075 mm Sieve in Mineral Aggregates by Washing
- .2 ASTM C 131-[89], Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.
- .3 ASTM C 136-[92], Method for Sieve Analysis of Fine and Coarse Aggregates.
- .4 ASTM D 698-[91], Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft) (600 kN-m/m).
- .5 ASTM D 1557-[91], Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft) (2,700 kN-m/m).
- .6 ASTM D 1883-[92], Test Method for CBR (California Bearing Ratio) of Laboratory Compacted Soils.
- .7 ASTM D 4318-[84], Test Method for Liquid Limit, Plastic Limit and Plasticity Index of Soils.
- .8 CAN/CGSB 8.1 [88], Sieves, Testing, Woven Wire, Inch Series.
- .9 CAN/CGSB 8.2 [M88], Sieves, Testing, Woven Wire, Metric.
- .10 Cahier des charges et devis généraux (CCDG) Construction et réparation, 2007 edition, Minister of Transport of Quebec.
- .11 Tome VII Matériaux de la collection des normes et ouvrages routiers, Minister of Transport of Quebec.

Part 2 Products

2.1 MATERIALS

- .1 Granular base: material in accordance with section 31 05 17 'Granular Materials' and the following requirements:
 - .1 Crushed stone or gravel.
 - .2 Gradations to be within limits specified when tested to ASTM C136 and ASTM C117. Sieve sizes to CAN/CGSB-8.1.

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Part 3 Execution

Project No: DC30750610

3.1 SEQUENCE OF OPERATION

.1 Place granular base after sub-base surface is inspected and approved by NCC Representative.

.2 Placing

- .1 Construct granular base to depth and grade in areas indicated.
- .2 Ensure no frozen material is placed.
- .3 Place material only on clean unfrozen surface, free from snow and ice.
- .4 Place material to full width in uniform layers not exceeding 150 mm compacted thickness. The NCC Representative can allow thicker layers if the prescribed compaction rate can be obtained.
- .5 Shape each layer to smooth contour and compact to specified density before succeeding layer is placed.
- .6 Remove and replace that portion of layer in which material becomes segregated during spreading.

.3 Compacting equipment

.1 Compaction equipment to be capable of obtaining required material densities.

.4 Compacting

- .1 Compact to density not less than 90% SPD.
- .2 Shape and roll alternately to obtain smooth, even and uniformly compacted base.
- .3 Apply water as necessary during compacting to obtain specified density.
- .4 In areas not accessible to rolling equipment, compact to specified density with mechanical tampers approved by the the NCC Representative.
- .5 Correct surface irregularities by loosening and adding or removing material until surface is within specified tolerance.

3.2 SITE TOLERANCES

.1 Finished base surface, after compaction, is to be within plus or minus 10 mm of established grade and cross section. The surface cannot be uniformly high or low.

3.3 PROTECTION

.1 Maintain finished base in condition conforming to this Section until succeeding material is applied or until acceptance by NCC Representative.

Part 1 General	Part '	1 (General
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1.1 RELATED REQUIREMENTS

- .1 Section 01 74 11 Cleaning
- .2 Section 31 05 17 Granular Materials
- .3 Section 32 11 23 Aggregate Base Courses

1.2 REFERENCES

- .1 ASTM International
 - .1 ASTM C136-06, Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
 - .2 ASTM C117-04, Standard Test Method for Material Finer Than 0.075 mm (No. 200) Sieve in Mineral Aggregates by Washing.
 - .3 ASTM D4318-05, Standard Test Method for Liquid Limit, Plastic Limit and Plasticity Index of Soils.
 - .4 ASTM D698-07e1, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³).
- .2 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-8.1-88, Sieves, Testing, Woven Wire, Inch Series.
 - .2 CAN/CGSB-8.2-M88, Sieves, Testing, Woven Wire, Metric.

1.3 ADMINISTRATIVE REQUIREMENTS

.1 Scheduling: co-ordinate work schedule to minimize interference with normal use of premises.

1.4 DOCUMENT/SAMPLE SUBMITTALS

.1 Submit submittals in accordance with Section 01 33 00 – Shop Drawings and Samples.

1.5 DELIVERY, STORAGE AND HANDLING

.1 Store stone dust as and where directed by NCC Representative.

Part 2 Products

2.1 MATERIALS: GENERAL REQUIREMENTS

.1 Following the prescription of section 31 05 17 Granular Materials.

2.2 MATERIALS: SPECIFIQUE REQUIREMENTS

.1 Granit stone dust mix: Granit 0-15mm from Bristol, following these sieving requirements.

Sieve (mm)	Pourcentage (5)
20	100
5	35 - 100
0,160	4 - 25
0,080	0,0 - 10,0

Part 3 Execution

3.1 LAYOUT

- .1 Notify NCC Representative after completion of each stage and receive approval of layout prior to proceeding to next stage. Stages:
 - .1 Staking of centerline.
 - .2 Infrastructures
- .2 The centerline alignment shall be determined on site with the NCC Representative to minimize impacts on existing vegetation.

3.2 SUBGRADE

.1 Ensure subgrade preparation conforms to levels and compaction required, to allow for installation of base course.

3.3 BASE COURSE

- .1 Place base course to minimum compacted thickness as indicated.
- .2 Place material in uniform layers not to exceed 150 mm compacted thickness.
 - .1 Compact layer to 95% Standard Density in accordance with ASTM D698.

3.4 SURFACE COURSE

- .1 Place stone dust surface course to minimum compacted thickness as indicated.
- .2 Place material in uniform layers not to exceed 50 mm compacted thickness.
 - .1 Compact layer to 95% Standard Density in accordance with ASTM D698.

3.5 FIELD QUALITY CONTROL

- .1 Inspection and testing of stone dust surface: carried out by designated testing laboratory.
- .2 Costs of tests: paid by NCC Representative.

3.6 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 Cleaning.
 - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 Cleaning.

3.7 PROTECTION

- .1 Prevent damage to the surrounding natural environment over the path limits.
 - .1 Repair any damages incurred.

Meech Lake Shoreline Rehabilitation

TOPSOIL AND FINISH GRADING

Section 32 91 21 Page 1 of 2

Project No. DC 3075-06-10

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PART 1 -**GENERAL**

1.1 Related Works

.1 Excavating, Trenching and Backfilling

Section 31 23 10

.2 Planting

Section 32 93 10

Section 32 92 19

.3 Hydro-seeding and Erosion Control Mat

1.2 Testing

- .1 Obtain Contract Administrator's initial approval of imported topsoil at source.
- .2 Test existing and imported topsoil for nitrogen, phosphorus and potassium (NPK), Mg, soluble salt content, organic matter and pH value prior to delivery to site.
 - Submit 0.5 kg sample of topsoil to testing laboratory and indicate intended use.
 - Determine requirements for amendments to bring pH value of soil to 5.5 to 7.7 level. .2
 - Submit two copies of soil analysis and recommendations for corrections to Contract .3 Administrator.
 - Inspection and testing of topsoil will be carried out by testing laboratory designated by Contract Administrator.
 - National Capital Commission will pay cost of testing. .5

1.3 Scheduling of Work

.1 Schedule placing of topsoil to permit immediate seeding operations and planting.

PART 2 - PRODUCTS

2.1 Materials

.1 Stockpiled topsoil: see Section 31 23 10

.2 Imported topsoil:

Mixture of particulates, micro-organisms and organic matter which provides suitable medium for supporting intended plant growth. Friable loam, free from subsoil, roots, grass, weeds, toxic materials, stones, foreign objects and an acidity range (Ph) of 5.5 to 7.5. Topsoil containing crabgrass, couch grass or other noxious weeds, is not acceptable.

-for seeded areas: 20-70% sand, minimum 7% clay and 5-10% organic matter by weight: -for planted areas: neither heavy clay nor of very light sandy nature containing minimum of 10% organic matter for sandy loams to maximum of 25% by volume. The following soil mixes represent examples of soils to present for approval. This list is not exhaustive and does not guarantee acceptance. Any equivalent soil may be submitted for approval:

- 1. Topsoil number 01-07 distributed by Les Sols Champlain Inc.
- 2. Topsoil number 3275 distribted by Savaria Ltee.
- .3 Organic Matter: aged, well-composted leaf compost or equivalent approved by the Contract Administrator.

PART 3 - EXECUTION

3.1 Preparation

.1 Grade subgrade, eliminating uneven areas and low spots, ensuring positive drainage. Remove stones larger than 50 mm diameter and other deleterious materials. Remove subsoil that has been Project No. DC 3075-06-10

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contaminated with oil, gasoline or calcium chloride. Dispose of removed materials as directed by Contract Administrator.

3.2 Reuse of Existing Topsoil

.1 Unless otherwise indicated, existing stockpiled topsoil shall be used for all reinstatement. Imported sources of topsoil shall only be used when all approved sources of existing topsoil have been used.

3.3 Spreading of Topsoil

- .1 Do not spread topsoil until Contract Administrator has inspected and approved subgrade.
- .2 Spread topsoil with adequate moisture in uniform layers during dry weather over approved, dry, unfrozen subgrade, where sodding or seeding is indicated.
- .3 Bring topsoil up to finished grade.
- .4 Apply topsoil as shown in the drawings with the following minimum depths after settlement:
 - .1 50mm for seed areas;
 - .2 300mm for small size shrubs and 1 gallon potted vines; and
 - .3 500mm for large size shrubs.
- .5 Remove stones, roots, grass, weeds, construction materials, debris and foreign non-organic objects from topsoil.
- .6 Manually spread topsoil around trees, plants, surface utilities and other obstacles.

3.4 Soil Amendments

- .1 If required, apply organic matter at rate determined from soil sample test.
- .2 Mix soil amendment well into full depths of topsoil.

3.5 Finish Grading

- .1 Fine grade entire area of topsoil to contours and elevations as indicated or as directed. Eliminate rough spots and low areas to ensure positive drainage. Prepare loose, friable surface by hand tilling and raking.
- .2 Roll topsoil with 50 kg roller, minimum 900 mm wide, to compact and retain surface.
- .3 Leave surface smooth, uniform, firm against deep foot printing, with fine loose texture.

3.6 Surplus Material

.1 Dispose of surplus topsoil not required for fine grading/landscaping off site.

HYDRO-SEEDING AND EROSION CONTROL MAT

Project No. DC30750610

PART 1 - GENERAL

1.1 Related Work

Shop Drawings and Samples
 Cleaning and Waste Disposal
 Topsoil and Finish Grading
 Section 01 33 01
 Section 01 74 11
 Section 32 91 21

1.2 Submittals

- 1. Submit product data in accordance with Section 01 33 00 Shop Drawings and Samples.
- 2. Provide product data for:
 - 1. Seed.
 - 2. Wood fibre.
 - 3. Fixative.

1.3 Scheduling

- 1. Schedule hydo-seeding to coincide with preparation of soil surface.
- 2. Sowing shall be done during the following periods:
 - 1. Between April 15 and June 15;
 - 2. Between August 15 and October 15.

1.4 Waste management and disposal

1. Separate and recycle waste materials in accordance with Section 01 74 11 – Cleaning and Waste Disposal.

PART 2 - PRODUCTS

2.1 Seed Mix

- .1 The seed mix to be used will constitute of the following mixes, used in equal parts (a mix of 50% of each) and be approved by the Representative of Gatineau Park:
 - Indigo "Mi-Ombre" of the company Indigo (<u>www.horticulture-indigo.com</u>) or an approved equivalent:

Ageratina altissima	2,0 %
Desmodium canadense	39,0 %
Thalictrum pubescens	10,0 %
Anemone virginiana canadense	6,0 %
Clematis virginiana	11,0 %
Maianthemum racemosum	1,0 %
Elymus hystrix	31,0 %

Indigo "Stabilisation – Bande riveraine" of the company Indigo (<u>www.horticulture-indigo.com</u>) or an approved equivalent:

Andropogon gerardii	10,0 %
Calamagrostis canadensis	1,0 %
Carex lurida	7,0 %
Carex scoparia	2,0 %
Deschampsia caespitosa	5,0 %
Dichanthelium clandestinum	7,0 %
Elymus canadensis	19,0 %
Festuca rubra	14,0 %
Glyceria canadensis	1,0 %

Juncus effusus	5,0 %
Panicum virgatum	9,0 %
Poa palustris	7,0 %
Scirpus atrovirens	6,0 %
Spartina pectinata	7,0 %

Sowing rate: 250 kg/ ha (25 gram by m²)

.2 Packages will be individually labeled in accordance with 'Seeds Regulations' and indicate clearly the name of the supplier, species, content, grade and mass.

2.2 Water

- .1 Free of impurities that would inhibit germination and growth.
- .2 Water must be supplied from a source designated by the NCC Representative.

2.3 Wood Fiber

.1 A wood fiber mixed or not with other organic products. When applied on the ground, it shall form a scattered crust or a lattice pattern that will let the light and the water go through while retaining the soil. Its weight is measured when dry. Spreading rate: 1800 kg/ha on prepared soil. In the case of soil without topsoil finish, this rate may be increased to 2500 kg/ha.

2.4 Fixative

.1 Guar gum emulsion diluted in water as indicated by the manufacturer. This product shall be sufficiently diluted to be easily sprayed to form a thin film on the ground. Spreading rate is calculated depending of the slope inclination: the manufacturer's indications must be followed. The J3000 from Rantec (www.ranteccorp.com) or approved equivalent shall be used.

2.5 Erosion control mat and stakes

- 1. Erosion control mat <u>Type 1</u>: biodegradable coir mat with a density of at least COIR 900, such as manufactured by Multi-forme Inc. or approved equivalent.
- 2. Erosion control mat <u>Type 2</u>: biodegradable mat made of 30% coconut fiber and 70% straw placed between two (2) layers of natural bio-degradable fiber netting, listed as type SC150BN, manufactured by "North American Green", or approved equivalent.
- 3. Including wood stakes ("ecostakes") of at least 300 mm long, as manufactured by "North American Green" or approved equivalent (www.nagreen.com/erosion-control-products/fasteners.php). The use of metal or plastic staples or pegs is not acceptable.

PART 3 - EXECUTION

3.1 Workmanship

- .1 Do not perform work under adverse field conditions such as wind speeds over 10 km/h, frozen ground or ground covered with snow, ice or standing water.
- .2 Additional care shall be taken when seeding adjacent to watercourses to ensure that seed are not spread or blown onto those areas.
- .3 Do not spray onto structures, signs, guide rails, fences, plant material, utilities and other than surfaces intended.

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- .4 Clean-up immediately, any material sprayed where not intended, to satisfaction of NCC Representative.
- .5 Protect seeded areas from trespass until plants are established.

3.2 Seed Bed Preparation

- 1. Ensure areas are free of deleterious and refuse materials. Inform NCC Representative of all discrepancies with drawings and obtain approval before proceeding.
- 2. Fine grade areas to be seeded so it produces a uniform slope, free of humps and hollows that follows the adjacent natural slope profile and proper drainage of surfaces.
- Remove and dispose of weeds, debris, gravel, and stones 50 mm in diameter or larger.
 Remove soil that has been contaminated with oil, gasoline or calcium chloride and dispose of removed materials as directed by Contract Administrator.
- 4. Hydro-seeding should include the supply and spreading of 50mm of topsoil. Soil surface to be hydro-seeded no more than one (1) calendar day before the hydro-seeding operation to avoid run-off potential problem.

3.3 Hydro-seeding (Hydraulic seeding)

- .1 Hydro-seeding to be applied on surfaces shown on plans only, using wood fiber, the amount of fixative recommended by the manufacturer for type of slope to cover as well as water and seed mix. Hydro-seeding to be applied in one application.
- .2 Use an appropriate hydraulic seed drill and calibrate the mulching equipment.
- .3 Calculation of the required quantities of material will be presented to the NCC Representative ten (10) days prior to work. This document shall indicate where and when the seeding mixture will be made.
- .4 Hydro-seeding mix shall be projected in order to bond to the surfaces and to create a uniform layer.
- .5 Use the sow rate recommended by the supplier, unless otherwise indicated.
- .6 Hydro-seeding must be done when the wind speed is lower than 10 km/h.
- .7 The seeding projection will be done in a manner that will prevent circulation over the surfaces already seeded.

3.5 Erosion Control Mat

- Install erosion control mats over the hydro-seeded areas where indicated on the plans.
 Cut out the mat to fit around existing vegetation and obstacles (rocks, etc.). Use pegs to stabilize openings.
- 2. Place erosion control mat parallel to the bank, in one continuous length starting at the bottom of the slope. Subsequent rows shall end up at the upper limit of the bank.
- 3. The hydro-seeding of the banks must be dry and well-fixed before installing the erosion control mat.

- 4. The mat shall be buried into the ground over a minimum of 300 mm in the lower limit and upper limit of the bank, in order to anchor the mat, as recommended by the manufacturer and according to the NCC Representative.
- 5. Overlap each successive strip over the previously laid strip by at least 125 mm. Stake through the mat vertically and full length into the ground. Overlap the mat in a downstream fashion.
- 6. The mat shall be firmly anchored in the ground using stakes applied in staggered rows, with a ratio of 2 stakes/m2 for 1(V):2(H) slopes and 1.35 stakes for slopes greater than 1(V):3(H), and as indicated by the manufacturer.
- 7. Use six stakes across the uphill end of each roll. Space the inner stakes alternately to those along the edges.

3.6 Maintenance During Establishment Period

- .1 Proceed with the following maintenance tasks until the project has been accepted by the NCC Representative.
 - 1. Water seeded areas to maintain optimum soil moisture level for germination and continued growth of grass. Control watering to prevent washouts.
 - 2. Repair and reseed areas that are not successfully established, to the satisfaction of the NCC Representative.
 - 3. Control weeds by mechanical means.

3.7 Work acceptance

- .1 Seeded areas shall be accepted by the Contract Administrator provided that they are properly established, without signs of erosion (particularly following precipitations of 20mm a day or more) and are free of weeds and bare or dead spots.
- .2 Areas seeded in fall will be accepted the following spring, one month after the beginning of the growing season, provided the acceptance conditions are met.
- .3 Unacceptable areas will have to be reseeded until deemed acceptable.

3.8 Cleaning

.1 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

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Part 1 General

1.1 SUMMARY

- .1 Section Includes:
 - 1 Materials and installation for plant material, accessories, mulch, planting, mulching and maintenance.
- .2 Related Sections:
 - .1 Section 01 33 00 Shop Drawings and Samples.
 - .2 Section 01 35 30 Health and Safety Requirements.
 - .3 Section 01 74 11 Cleaning.
 - .4 Section 31 23 10 Excavating, Trenching and Backfilling.
 - .5 Section 32 91 21 Topsoil and Finished Grading.

1.2 REFERENCES

- .1 Agriculture and Agri-Food Canada (AAFC).
 - .1 Plant Hardiness Zones in Canada-2000.
- .2 Canadian Nursery Landscape Association (CNLA).
 - .1 Canadian Standards for Nursery Stock-2001.
- .3 Department of Justice Canada (Jus).
 - .1 Canadian Environmental Protection Act (CEPA), 1999, c. 33.
 - .2 Transportation of Dangerous Goods Act (TDGA), 1992, c.34.
- .4 Health Canada/Workplace Hazardous Materials Information System (WHMIS).
 - .1 Material Safety Data Sheets (MSDS).
- .5 Bureau de normalisation du Québec (BNQ).
 - .1 NQ 0605-100 « Aménagement paysager au moyen de végétaux ».

1.3 DEFINITIONS

.1 Mycorrhiza: association between fungus and roots of plants. This symbiosis, enhances plant establishment in newly landscaped and imported soils.

1.4 SUBMITTALS

- .1 Make submittals in accordance with Section 01 33 00 Shop Drawings and Samples.
- .2 Submit product data for:
 - .1 Natural amendments.
 - .2 Mycorrhiza.
 - .3 Mulch.
- .3 Submit samples for:
 - .1 Mulch.
 - .2 Mycorrhiza.

1.5 QUALITY ASSURANCE

- .1 Health and Safety:
 - .1 Do construction occupational health and safety in accordance with Section
 01 35 30 Health and Safety Requirements.

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1.6 STORAGE AND PROTECTION

- .1 Protect plant material from frost, excessive heat, wind and sun during delivery.
- .2 Immediately store and protect plant material which will not be installed within one (1) hour after arrival at site in storage location approved by NCC Representative.
- .3 Protect plant material from damage during transportation:
 - .1 When delivery distance is less than 30 km and vehicle travels at speeds under 80 km/h, tie tarpaulins around plants or over vehicle box.
 - .2 When delivery distance exceeds 30 km or vehicle travels at speeds over 80 km/h, use enclosed vehicle where practical.
 - .3 Protect foliage and root balls using anti-desiccants and tarpaulins, where use of enclosed vehicle is impractical due to size and weight of plant material.
- .4 Protect stored plant material from frost, wind and sun and as follows:
 - .1 For pots and containers, maintain moisture level in containers. Heel-in fibre pots.
 - .2 For bare rooted plants, keep roots moist by heeling them in and watering to the depth of the rhizosphere.
- .5 Waste Management and Disposal:
 - .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 11- Cleaning.
 - .2 Remove from site and dispose of packaging materials at appropriate recycling facilities.
 - .3 Collect and separate for disposal paper, plastic and corrugated cardboard packaging material in appropriate on-site bins for recycling in accordance with Waste Management Plan (WMP).
 - .4 Separate for reuse and recycling and place in designated containers Steel, Metal and Plastic waste in accordance with WMP.
 - .5 Place materials defined as hazardous or toxic in designated containers.
 - .6 Handle and dispose of hazardous materials in accordance with CEPA as well as regional and municipal regulations.
 - .7 Divert unused metal materials from landfill to metal recycling facility as approved by NCC Representative.
 - .8 Fold up metal banding, flatten and place in designated area for recycling.
 - .9 Divert discarded plastic plant containers materials from landfill to plastic recycling facility approved by NCC Representative.
 - .10 Dispose of unused fertilizer at official hazardous material collection site approved by NCC Representative.
 - .11 Dispose of unused anti-desiccant at official hazardous material collections site approved by NCC Representative.
 - .12 Divert unused wood and mulch materials from landfill to recycling or composting facility approved by NCC Representative.

1.7 SCHEDULING

- .1 Obtain approval from the NCC Representative of the schedule 15 days after award of contract.
- .2 Schedule to include:
 - .1 Quantity and type of plant material.

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- .2 Shipping dates.
- .3 Arrival dates on site.
- .4 Planting dates.

.3 Growing season:

.1 Plants to be put in earth between May 15th and June 15th or between August 15th and October 1st, unless indicated otherwise by the NCC Representative.

1.8 WARRANTY

- .1 For plant material as itemized on the plant list, the 12 month warranty period prescribed in paragraph 30 of Section 01 10 00 General Requirements is applied.
- .2 All plant material shall be warranted for a period of one year from the date of substantial performance.
- .3 The warranty shall cover any defects in workmanship.
- .4 Extend warranty on replacement plant material for the same period as the original warranty.

Part 2 Products

2.1 PLANT MATERIAL

- .1 Type of root preparation, sizing, grading and quality: comply to Canadian Standards for Nursery Stock.
 - .1 Plant material must be planted in zone indicated as appropriate for its species.
 - .2 Plant material in location appropriate for its species.
- .2 Plant material: free of disease, insects, defects or injuries and structurally sound with strong fibrous root system.

2.2 LIVE FASCINE (BUNDLES)

- .1 Live fascine bundles made of live willow branches (Salix discolor) 200-300mm in diameter, approximately 1.6 m in length, comprised of approximately 20 to 25 live branches each 15-30mm in diameter.
- .2 Branches must be vigorous and healthy, free of disease. Branches will keep up to a maximum of five (5) days before they need to be planted provided they are stored in a cool area, and watered regularly.
- .3 The Contractor must obtain the branches from a specialized supplier.
- .4 Sharp shears free from rust and oil shall be used to trim the selected plants. Sterilize the shears by soaking in methyl alcohol in order to avoid the spread of disease. Sterilization must be carried out between each work site.
- .5 Branches should be watered regularly throughout the construction period to prevent them from drying out. Branches waiting to be planted must be sheltered from the sun and wind.
- .6 Transport branches in a covered truck to protect them from drying out.

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2.3 WOODEN STAKES

- .1 Live fascine bundles: Wooden stakes 50 x 50mm minimum, approximately 600mm in length.
- .2 Temporary protection barrier (Natureauberme): Wooden stakes 50 x 50mm minimum, approximately 600mm in length.

2.4 TEMPORARY FENCE

.1 Temporary fencing shall be made of 1.2m high snow fencing, black or dark green, wired to rolled steel T-bar post installed at 2.4m centre.

2.5 TEMPORARY PROTECTION BARRIER

- .1 Three-dimensional jute log, 250 mm in diameter, biodegradable in 1 to 2 years, Type Natureauberm from Savaria or approved equivalent.
- .2 Filled with ramial chipped wood (RCW) compressed to 10%, fresh or partially decomposed organic material from pruned branched shredded to less than 70mm, 100% recycled, minimum 90% deciduous content, pH 6.5-7.5.

2.6 WATER

.1 Free of impurities that would inhibit plant growth.

2.7 MULCH

- .1 Natural shredded cedar mulch (sample to be submitted for approval by NCC Representative).
- .2 Use only when the erosion control mat is not specified.

2.8 EROSION CONTROL MAT

1. Conform to 32 92 19 Hydro-seeding and Erosion Control Mat.

2.9 NATURAL AMENDMENTS

.1 Mycorrhiza fungi: Use a natural fertilizer composed of Endomycorrrhizae fungi manufactured by Permier Tech. (www.usemyke.com/mycorise/index.htm) and commercialized under the name Myke or approved equivalent.

2.10 SOURCE QUALITY CONTROL

- .1 Obtain approval from NCC Representative of plant material prior to planting.
 - .1 All material has to be approved at the source and upon delivery to the site;
 - .2 Request for substitutions can be presented with proof of extensive research on behalf of the Contractor;
 - .3 All substitutions must be approved by the NCC Representative.
- .2 Imported plant material must be accompanied with necessary permits and import licenses. Conform to Federal, Provincial or Territorial regulations.

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Part 3 Execution

3.1 PRE-PLANTING PREPARATION

- .1 Do construction occupational health and safety in accordance with Section 01 35 30 -Health and Safety Requirements.
- .2 Ensure plant material is accepted by the NCC Representative.
- .3 Remove damaged roots and branches from plant material.

3.2 PLANTING

- .1 Prepare planting beds as specified in Section 32 91 21 Topsoil and Finished Grading. Apply the natural granular fertilizer of Endomycorrhizae fungi into the planting hole during transplanting according to the recommendations of the manufacturer.
- .2 For container stock or root balls in non-degradable wrapping, remove entire container or wrapping without damaging root ball.
- .3 Plant vertically in locations as indicated. Orient plant material to give best appearance in relation to structure, roads and walks.
- .4 Backfill soil in layers of 150 mm. Tamp each layer to eliminate air pockets. When two thirds of depth of planting pit has been backfilled, fill remaining space with water. After water has penetrated into soil, backfill to finish grade.
- .5 Form watering saucer as indicated.
- .6 Water plant material thoroughly.
- .7 After soil settlement has occurred, fill with soil to finish grade.
- .8 Dispose of burlap, wire and container material off site.

3.3 LIVE FASCINE BUNDLES

- .1 Prepare planting areas in accordance with Section 32 91 21 Topsoil and Finish Grading, and put the topsoil in place.
- .2 Install fascine bundles parallel to the shoreline along the existing water edge.
- .3 Fasten bundles securely with crossed wooden stakes every 600 mm apart.

3.4 TEMPORARY FENCE

- .1 Install the temporary fences where indicated on the plans so as to protect the newly planted and seeding areas that are adjacent to frequently used areas during the warranty period.
- .2 Stake the steel T-bars firmly into the ground and ensure that they maintain the fence straight and tight.
- .3 Signage installation on the fence is the responsibility of the NCC.
- .4 Remove fence at end of warranty period.

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3.5 TEMPORARY PROTECTION BARRIER

- .1 Place the temporary protection barrier where indicated on the plans.
- .2 Install wooden stakes every 600mm behind the log so as to keep it firmly in place at the top of the slope.

3.6 MULCHING

- .1 Ensure soil settlement has been corrected prior to mulching.
- .2 Spread 50 mm of mulch minimum 300mm diameter around material that is not planted within areas of erosion control mat, where specified.

3.7 EROSION CONTROL MAT

- .1 Conform to 32 92 19 Hydro-seeding and Erosion Control Mat.
- .2 Cut maximum 300 mm x 300 mm "X" through the erosion control mat for installation of shrubs.
- .3 All cuts in blanket shall be made with a clean, sharp knife.
- .4 Excavate the soil and store it temporarily on top of the mat beside the hole.
- .5 Install material as per the detail. Replace all excavated soil into the hole around the roots and reinstate the erosion control mat by folding back four triangular flaps as close to the original position as possible. Ensure all soil is placed into the hole and does not remain on top of the mat.

3.8 MAINTENANCE DURING ESTABLISHMENT PERIOD

- .1 Perform the following maintenance operations from time of planting to acceptance by NCC Representative.
 - .1 Water to maintain soil moisture conditions for optimum establishment, growth and health of plant material without causing erosion.
 - .2 Remove weeds monthly.
 - .3 Replace or respread damaged, missing or disturbed mulch.
 - .4 For non-mulched areas, cultivate as required to keep top layer of soil friable.
 - .5 If required to control insects, fungus and disease, use appropriate control methods in accordance with Federal, Provincial and Municipal regulations. Obtain product approval from NCC Representative prior to application.
 - .6 Remove dead or broken branches from plant material.
 - .7 Remove and replace dead plants and plants not in healthy growing condition. Make replacements in same manner as specified for original plantings.

3.9 MAINTENANCE DURING WARRANTY PERIOD

- .1 From time of acceptance by NCC Representative to end of warranty period, perform following maintenance operations.
 - .1 Water to maintain soil moisture conditions for optimum growth and health of plant material without causing erosion.
 - .2 Reform damaged watering saucers.
 - .3 Remove weeds in spring, summer and fall.

PLANTING

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- .4 Replace or respread damaged, missing or disturbed mulch.
- .5 For non-mulched areas, cultivate monthly to keep top layer of soil friable.
- .6 If required to control insects, fungus and disease, use appropriate control methods in accordance with Federal, Provincial and Municipal regulations. Obtain product approval from NCC Representative prior to application.
- .7 Apply fertilizer in early spring as indicated by soil test.
- .8 Remove dead, broken or hazardous branches from plant material.
- .9 Level watering saucers at end of warranty period.
- .10 Remove and replace dead plants or those in unhealthy growing condition. Make replacements in same manner as specified for original plantings.
- .11 Submit monthly written reports to NCC Representative identifying:
 - .1 Maintenance work carried out.
 - .2 Development and condition of plant material.
 - .3 Preventative or corrective measures required which are outside Contractor's responsibility.
- An inspection for security purposes will be carried out two (2) times during the guarantee period, in spring and fall, as determined by the NCC Representative.