



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

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

**REQUEST FOR PROPOSAL  
DEMANDE DE PROPOSITION**

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

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

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

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

**Comments - Commentaires**

**Vendor/Firm Name and Address**

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

**Issuing Office - Bureau de distribution**

Construction Services Division/Division des services de  
construction  
140 O'Connor Street  
140, rue O'Connor  
Ontario  
Ottawa  
K1A 0S5

<b>Title - Sujet</b> Confederation Heights Campus CM	
<b>Solicitation No. - N° de l'invitation</b> EP635-192601/A	<b>Date</b> 2019-07-18
<b>Client Reference No. - N° de référence du client</b> 20192601	
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$FG-347-77501	
<b>File No. - N° de dossier</b> fg347.EP635-192601	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2019-09-12</b>	<b>Time Zone Fuseau horaire</b> Eastern Daylight Saving Time EDT
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Boujenoui(fg347), Nabil	<b>Buyer Id - Id de l'acheteur</b> fg347
<b>Telephone No. - N° de téléphone</b> (873) 469-4905 ( )	<b>FAX No. - N° de FAX</b> (819) 956-8335
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> DEPARTMENT OF PUBLIC WORKS AND GOVERNMENT SERVICES CANADA IAM / ESAP-GBI / PASE RIVERSIDE DR, A400 OTTAWA Ontario K1A0M2 Canada	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

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

# **BID SOLICITATION**

## **CONSTRUCTION MANAGEMENT SERVICES**

### **CONFEDERATION HEIGHTS CAMPUS**

### **USER BUILDING CONVERSIONS PLAN**

#### **TABLE OF CONTENTS**

<b>PART 1 - GENERAL INFORMATION .....</b>	<b>3</b>
1.1 INTRODUCTION.....	3
1.2 SUMMARY.....	3
1.3 IMPORTANT NOTICE TO BIDDERS .....	4
1.4 DEBRIEFINGS .....	5
<b>PART 2 - BIDDER INSTRUCTIONS.....</b>	<b>6</b>
2.1 STANDARD INSTRUCTIONS, CLAUSES AND CONDITIONS .....	6
2.2 DEFINITION OF BIDDER .....	6
2.3 BID DOCUMENTS.....	6
2.4 ENQUIRIES - BID SOLICITATION .....	6
2.5 OPTIONAL SITE VISIT .....	7
2.6 BID VALIDITY PERIOD.....	7
2.7 RIGHTS OF CANADA.....	7
2.8 COMMUNICATIONS NOTIFICATION .....	8
2.9 ENTIRE REQUIREMENT .....	8
2.10 JOINT VENTURE .....	8
2.11 WEB SITES.....	9
2.12 SUBMISSION AND COMPLETION OF BIDS.....	9
2.13 ENVELOPE 1- TECHNICAL BID: .....	11
2.14 ENVELOPE 2- FINANCIAL BID:.....	13
<b>PART 3 - EVALUATION PROCEDURES AND BASIS OF SELECTION .....</b>	<b>15</b>
3.1 OPENING OF BIDS AND OVERVIEW OF EVALUATION PROCEDURES .....	15
3.2 TECHNICAL EVALUATION- MANDATORY TECHNICAL CRITERIA AND POINT-RATED TECHNICAL CRITERIA.....	15
3.3 FINANCIAL EVALUATION.....	23
3.4 BASIS OF SELECTION.....	24
3.5 CONDUCT OF EVALUATION .....	25
<b>PART 4 - CERTIFICATIONS, SECURITY AND ADDITIONAL INFORMATION .....</b>	<b>26</b>
4.1 CERTIFICATIONS/INFORMATION REQUIRED WITH THE TECHNICAL BID .....	26
4.2 CERTIFICATIONS/INFORMATION REQUIRED WITH FINANCIAL BID .....	26
4.3 ADDITIONAL CERTIFICATIONS PRECEDENT TO CONTRACT AWARD .....	26
4.4 ADDITIONAL CERTIFICATIONS REQUIRED AFTER CONTRACT AWARD.....	27
<b>PART 5 - SECURITY.....</b>	<b>28</b>
5.1 INDUSTRIAL SECURITY REQUIREMENT .....	28
<b>PART 6 - RESULTING CONTRACT CLAUSES .....</b>	<b>29</b>

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

<b>6.1</b>	REQUIREMENT .....	29
<b>6.2</b>	CONSTRUCTION TIME .....	29
<b>6.3</b>	CONTRACT DOCUMENTS .....	29
(A)	THE FOLLOWING ARE THE CONTRACT DOCUMENTS: .....	29
<b>6.4</b>	CHANGES TO GENERAL CONDITIONS .....	30
<b>6.5</b>	ORDER OF PRECEDENCE .....	33
<b>6.6</b>	AUTHORITIES .....	33
<b>6.7</b>	INDUSTRIAL SECURITY REQUIREMENTS .....	35
<b>6.8</b>	INSURANCE TERMS .....	35
<b>6.9</b>	DETERMINATION OF CONSTRUCTION COST .....	36
<b>6.10</b>	DETERMINATION OF PRICE FOR SUBCONTRACT CHANGES .....	36
<b>6.11</b>	REPLACEMENT OF SPECIFIC INDIVIDUALS .....	40
<b>6.12</b>	PRICE ESCALATION BASED ON CONSUMER PRICE INDEX (CPI) .....	41
<b>INTEGRITY PROVISIONS- LIST OF NAMES .....</b>		<b>12</b>

**List of Annexes to the Resulting Contract:**

**Annex A- Basis of Payment**

**Annex B- Pricing Tables**

**Annex C- Terms of Reference (TOR)**

**Annex D- Security Requirements Check List (SRCL)**

**Annex E- Certificate of Insurance**

**Forms:**

**Form 1- Bid Submission Form**

**Form 2- Client Reference Form for Representative Project- M1a Construction Management Projects**

**Form 3- Client Reference Form for Representative Project- M1b Construction Management Projects**

**Form 4- Client Reference Form for Representative Project- R1.1- Project #1**

**Form 5- Client Reference Form for Representative Project- R1.1- Project #2**

**Form 6- Client Reference Form for Representative Project- R1.1- Project #3**

**Form 7- Integrity Provisions- List of Names Form**

## **PART 1 - GENERAL INFORMATION**

### **1.1 Introduction**

The bid solicitation is divided into six parts plus forms and annexes as follows:

- Part 1 General Information: provides a general description of the requirement;
- Part 2 Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation;
- Part 3 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, and the basis of selection;
- Part 4 Certifications and Additional Information: includes the certifications and information to be provided;
- Part 5 Security: includes specific security requirements that must be addressed by Bidders;
- Part 6 Resulting Contract Documents: includes clauses and conditions that will apply to any resulting contract.

### **1.2 Summary**

- (a) Public Works and Government Services Canada (PWGSC) will be undertaking a number of building conversion projects within the Confederation Heights Campus under its User Building Conversion Plan (UBCP). UBCP is part of a larger PWGSC initiative, the Energy Services Acquisition Program (ESAP), which aims to modernize the system that heats and cools over 80 federal and non-federal buildings in the National Capital Area (NCA). ESAP is in response to Budget 2016 which aims to accelerate federal infrastructure investment and reduce the carbon footprint of federal buildings. The scope of this contract is focused only on the User Building Conversion Plan at Confederation Heights Campus.
- (b) The scope of Construction Management Services is comprised of the following stages:
  - Pre-construction (estimated 7 months)
  - Construction (estimated 18 months)
  - Post Construction (estimated 2 months)
- (c) The Construction Manager must ensure the Confederation Heights Building Conversion Project is delivered on schedule, within the construction estimate and to the level of quality required for a building of this stature and must deliver the following benefits to the Confederation Heights Building Conversion Project including but not limited to:
  - Advisory and support services
  - Sustainable construction
  - Project Administration
  - Work Packaging
  - Cost Management
  - Time Management (Scheduling)
  - Risk Management
  - Scope Control and Management
  - Quality Control
  - General Contractor Services

- Provide full time site staff and site facilities
- Act as Constructor under the Ministry of Labour (Ontario) regulations (the "Regulations") and the Occupational Health and Safety Act (Ontario) (the "Act")
- Coordinate contractors retained by the Construction Manager and by others and ensuring the protection of the general public on or near the site
- Provide labour and materials for pre-approved Division 1 Work
- Sub-contract all other construction Work using competitive bidding processes and negotiation
- Pre-purchase key materials as needed and directed by PWGSC
- Procure all necessary materials and services for the project

### 1.3 Important Notice to Bidders

(a) **Prompt Payment Principles:** PWGSC advocates that construction-related payments should follow these three principles:

- **Promptness:** The department will review and process invoices promptly. If disputes arise, PWGSC will pay for items not in dispute, while working to resolve the disputed amount quickly and fairly
- **Transparency:** The department will make construction payment information such as payment dates, company names, contract and project numbers, publicly available; likewise, contractors are expected to share this information with their lower tiers
- **Shared responsibility:** Payers and payees are responsible for fulfilling their contract terms including their obligations to make and receive payment, and to adhere to industry best practices

For more information: <http://www.tpsgc-pwgsc.gc.ca/biens-property/divulgence-disclosure/psdic-ppci-eng.html>

(b) **There are industrial security requirements associated with this requirement.** For additional information, consult Part 5 Security, Part 6 Resulting Contract Clauses and Annex D- Security Requirements Check List. For more information on personnel and organization security screening or security clauses, Bidders should refer to the Industrial Security Program (ISP) of Public Works and Government Services Canada (<http://ssi-iss.tpsgc-pwgsc.gc.ca/index-eng.html>) website.

(c) **Two- Envelope Bid:** This bid must be submitted following a "two-envelope" procedure. Refer to Part 2: Bidder Instructions.

(d) **Integrity Provisions- Bid:** Changes have been made to the Integrity Provisions - Bid as of 2016-04-04. See GI01, Integrity Provision-Bid of R2710T of the General Instructions for more information.

(e) **Insurance Terms:** Insurance terms included in this tender are modified. Refer to Part 6 and Annex E- Certificate of Insurance.

(f) **PWGSC Update on Asbestos Use:** Effective April 1, 2016, all Public Works and Government Services Canada (PWGSC) contracts for new construction and major rehabilitation will prohibit the use of asbestos-containing materials. Further information can be found at <http://www.tpsgc-pwgsc.gc.ca/comm/vedette-features/2016-04-19-00-eng.html>.

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

---

## **1.4 Debriefings**

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

## **PART 2 - BIDDER INSTRUCTIONS**

### **2.1 Standard Instructions, Clauses and Conditions**

- (a) All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.
- (b) Under the Department of Public Works and Government Services Act (S.C. 1996, c.16), the instructions, clauses and conditions identified in the bid solicitation and resulting contract by number, date, and title are incorporated by reference into and form part of the bid solicitation and resulting contract as though expressly set out in the bid solicitation and resulting contract.
- (c) The R2710T (2018-06-21) General Instructions - Construction Services - Bid Security Requirements are incorporated by reference into and form part of the bid solicitation. If there is a conflict between the provisions of R2710T and this document, this document prevails.
- (d) R2710- General Instructions - Construction Services - Bid Security Requirements, delete:

GI09 Submission of Bids and GI02 Completion of Bids in their entirety and replace with 2.13 Submission and Completion of Bids herein.

### **2.2 Definition of Bidder**

"Bidder" means the person or entity (or in the case of a joint venture, the persons or entities) submitting a bid to perform a contract for goods, services or both. It does not include the parent, subsidiaries or other affiliates of the Bidder, or its subcontractors.

### **2.3 Bid Documents**

The following are the bid documents:

- (a) Request for Proposal (RFP);
- (b) Annex A- Basis of Payment;
- (c) Annex B- Pricing Tables;
- (d) Annex C- Terms of Reference (TOR);
- (e) Annex D- Security Requirements Check List (SRCL) ;
- (f) Annex E- Certificate of Insurance;
- (g) Form 1- Bid Submission Form;
- (h) Form 2-Client Reference Form for Representative Project- M1a Construction Management Project
- (i) Form 3-Client Reference Form for Representative Project- M1b Construction Management Project
- (j) Form 4-Client Reference Form for Representative Project- R1.1- Project #1
- (k) Form 5-Client Reference Form for Representative Project- R1.1- Project #2
- (l) Form 6-Client Reference Form for Representative Project- R1.1- Project #3
- (m) Form 7- Integrity Provisions- List of Names Form; and
- (n) Any amendment issued before solicitation closing.

### **2.4 Enquiries - Bid Solicitation**

- (a) Enquiries regarding this bid must be submitted in writing to the Contracting Authority named on the Request for Proposal (RFP) - Page 1 as early as possible within the solicitation period. Enquiries must be received no later than five (5) working days before the date set for solicitation closing to allow sufficient time to provide a response. Enquiries received after that time may not result in an answer being provided.

- (b) To ensure consistency and quality of the information provided to Bidders, the Contracting Authority will examine the content of the enquiry and will decide whether or not to issue an amendment.
- (c) All enquiries and other communications related to this bid sent throughout the solicitation period are to be directed only to the Contracting Authority named on the Request for Proposal - Page1. Failure to comply with this requirement may result in the bid being declared non-compliant.

## 2.5 Optional Site Visit

- (a) **Location:** There will be a site visit on August 7 at 9:30 am where Bidders will have the opportunity to visit 3 buildings Sir Charles Tupper, 1500 Bronson & 875 Heron which includes the previously converted Pilot Project. Interested Bidders are to meet at the Commissionaires Desk at the Sir Charles Tupper Building at 2720 Riverside Drive at the date and time indicated.
- (b) **Names of participants to the Site Visit:** Each bidders is allowed a maximum of two individuals on the site visit and the names of the individuals **must be submitted** to the Contract Authority [Nabil.Boujenoui@tpsgc-pwgsc.gc.ca] **by July 31, 2019** to ensure that security at each building is aware of the individuals coming on site. Names submitted after this date, cannot be guaranteed to have access to the buildings.

Note: PSPC does not control access to any of the buildings therefore cannot make last minute additions/changes.

- (c) **Parking Instructions:** There is limited public parking at the Sir Charles Tupper Building.
- (d) **Personal Protection Requirements:** In order to be guaranteed access to the site visit all persons must have the proper personal protection equipment (safety glasses, footwear, and hard hats etc.). Contractor's personnel/individuals who do not have the proper safety attire may be denied access to the site.

## 2.6 Bid Validity Period

- (a) The Bid must not be withdrawn **for a period of 120 days** following the date of solicitation closing.
- (b) Canada reserves the right to seek an extension to the bid validity period prescribed in paragraph (a) above. On notification in writing from Canada, Bidders will have the option to either accept or reject the proposed extension.
- (c) If the extension is accepted, in writing, by all those who submitted bids, then Canada will continue immediately with the evaluation of the bids and its approvals processes.
- (d) If the extension is not accepted in writing by all those who submitted bids then Canada will, at its sole discretion, either
  - i. continue to evaluate the bids of those who have accepted the proposed extension; or
  - ii. cancel the request for proposal.
- (e) The provisions expressed herein do not in any manner limit Canada's rights in law or under GI11-Rejection of Bid (R2710T).

## 2.7 Rights of Canada

- (a) Canada reserves the right to:



- i. Reject any or all bids received in response to the bid solicitation;
- ii. Enter into negotiations with Bidders on any or all aspects of their bids;
- iii. Accept any bid in whole or in part without negotiations;
- iv. Cancel the bid solicitation at any time;
- v. Reissue the bid solicitation;
- vi. If no compliant bids are received and the requirement is not substantially modified, reissue the bid solicitation by inviting only the Bidders who bid to resubmit bids within a period designated by Canada; and
- vii. Negotiate with the sole compliant Bidder to ensure best value to Canada.

## **2.8 Communications Notification**

The Government of Canada requires the successful Bidder to notify the Contracting Authority named on the Request for Proposal - Page 1 in advance of their intention to make public an announcement related to the award of a contract.

## **2.9 Entire Requirement**

The bid solicitation documents contain all the requirements relating to the bid solicitation issued on the Government of Canada Electronic Tendering System (GETS), buyandsell.gc.ca. Any other information or documentation provided to or obtained by a Bidder from any source are not relevant. Bidders should not assume that practices used under previous contracts will continue, unless they are described in the bid solicitation. Bidders should also not assume that their existing capabilities meet the requirements of the bid solicitation simply because they have met previous requirements.

## **2.10 Joint Venture**

- (a) A joint venture is an association of two or more parties who combine their money, property, knowledge, expertise or other resources in a single joint business enterprise, sometimes referred to as a consortium, in order to submit together a response to the Request for Proposal. Bidders who submit a response to the Request for Proposal, as a joint venture must indicate clearly that it is a joint venture and provide the following information:
  - i. the name of each member of the joint venture;
  - ii. the name of the representative of the joint venture, i.e. the member chosen by the other members to act on their behalf, if applicable;
  - iii. the name of the joint venture, if applicable.
- (b) If the information is not clearly provided in the bid, the Bidder must provide the information on request from the Contracting Authority.
- (c) The bid must be signed by all the members of the joint venture unless one member has been appointed to act on behalf of all members of the joint venture. The Contracting Authority may, at any time, require each member of the joint venture to confirm that the representative has been appointed with full authority to act as its representative for the purposes of the bid solicitation and any resulting contract.
- (d) All of the members of the joint venture are jointly and severally responsible for the obligations entered into by the Bidder in accordance with the Contract Documents.

## 2.11 Web Sites

The connection to some of the Web sites in the solicitation documents is established by the use of hyperlinks. The following is a list of the addresses of the Web sites:

- Treasury Board Appendix L, Acceptable Bonding Companies  
<http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=14494&section=text#appl>
- Buy and Sell <https://www.achatsetventes-buyandsell.gc.ca>
- Canadian economic sanctions <http://www.international.gc.ca/sanctions/index.aspx?lang=eng>
- Contractor Performance Evaluation Report (Form PWGSC-TPSGC 2913) <http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/2913.pdf>
- Bid Bond (form PWGSC-TPSGC 504) <http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/504.pdf>
- Performance Bond (form PWGSC-TPSGC 505) <http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/505.pdf>
- Labour and Material Payment Bond (form PWGSC-TPSGC 506)  
<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/506.pdf>
- Standard Acquisition Clauses and Conditions (SACC) Manual  
<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/5/R>
- PWGSC, Industrial Security Services <http://ssi-iss.tpsgc-pwgsc.gc.ca/index-eng.html>
- PWGSC, Code of Conduct and Certifications  
<http://www.tpsgc-pwgsc.gc.ca/app-acq/cndt-cndct/contexte-context-eng.html>
- Construction and Consultant Services Contract Administration Forms Real Property Contracting  
<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/formulaires-forms-eng.html>
- Declaration Form  
<http://www.tpsgc-pwgsc.gc.ca/ci-if/formulaire-form-eng.html>
- Contract Cost Principles  
<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/3/1031-2/6>

## 2.12 Submission and Completion of Bids

- (a) Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.
- (b) Facsimile copies of bids will not be accepted.

- (c) The bid must be submitted following a "two-envelope" procedure in which the Bidder provides Envelope 1- Technical Bid and Envelope 2- Financial Bid.
- (d) Both the Technical and Financial Bid envelopes must be enclosed and sealed together in a third envelope, the bid envelope. All envelopes must be provided by the Bidder.
- (e) The bid must be in Canadian currency. The requirement does not offer exchange rate fluctuation risk mitigation. Requests for exchange rate fluctuation risk mitigation will not be considered. All bids including such provision will render the bid non-compliant.
- (f) The bid must be received on or before the date and time set for solicitation closing. Before submitting the bid, the Bidder must ensure that the following information is clearly printed or typed on the face of the bid envelope:
  - i. Solicitation Number;
  - ii. Name of Bidder;
  - iii. Return address; and
  - iv. Closing Date and Time.
- (g) The Bidder must:
  - i. Submit a bid, duly completed and signed by an authorized representative of the Bidder, in the format requested, on or before the closing date and time set;
  - ii. Obtain clarification of the requirements contained in the RFP, if necessary, before submitting a proposal;
  - iii. Provide a comprehensive and sufficiently detailed bid that will permit a complete evaluation in accordance with the criteria set out in this RFP.
- (h) Canada will make available Notices of Proposed Procurement (NPP), bid solicitations and related documents for download through the GETS. Canada is not responsible and will not assume any liabilities whatsoever for the information found on websites of third parties. In the event an NPP, bid solicitation or related documentation would be amended, Canada will not be sending notifications. Canada will post all amendments, including significant enquiries received and their replies, using GETS. It is the sole responsibility of the Bidder to regularly consult GETS for the most up-to-date information. Canada will not be liable for any oversight on the Bidder's part nor for notification services offered by a third party.
- (i) Timely and correct delivery of bids is the sole responsibility of the Bidder. PWGSC will not assume or have transferred to it those responsibilities. All risks and consequences of incorrect delivery of bids are the responsibility of the Bidder.
- (j) **Canada's Policy on Green Procurement:** In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process. To assist Canada in reaching its objectives, Bidders must:
  - (a) use paper containing fibre certified as originating from a sustainably-managed forest and/or containing a minimum of 30% recycled content; and
  - (b) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, and using staples or clips instead of cerlox, duotangs or binders.

## **2.13 Envelope 1- Technical Bid:**

(a) The Technical Bid must be enclosed and sealed in an envelope with the following information clearly printed or typed on the face of the envelope:

- i. ENVELOPE 1 – Technical Bid;
- ii. Solicitation Number; and
- iii. Name of Bidder.

(b) The following bid format information must be implemented when preparing the Technical bid:

- Paper size must be: 216mm x 279mm (8.5" x 11")
- Smallest font size must be 11 point Times or equal
- Margins must be 12 mm left, right, top, and bottom
- Double-sided submissions are preferred
- One (1) 'page' means one side of a 216mm x 279mm (8.5" x 11") sheet of paper; 279mm x 432 mm (11" x 17") fold-out sheets for spreadsheets, organization charts etc. will be counted as two pages.

(c) The order of the technical bid must follow the order established in article 3.2 Technical Bid Evaluation-Mandatory Technical Criteria and Point-Rated Technical Criteria section of the RFP. The maximum number of pages (including text and graphics) to be submitted is 40. The following are not part of this page limitation:

- Covering Letter;
- Front Page of the Proposal;
- Table of contents for the Technical bid (optional)
- Financial Bid, including:
  - o Completed Pricing Tables- Annex B; and
  - o Bid Security as per GI08- Bid Security Requirements of R2710T);
- Bid Submission Form 1;
- A completed Declaration Form as per the Integrity Provisions- Declaration of Convicted Offences, if applicable;
- Client Reference Forms 2-6;
- Integrity Provisions- List of Names Form 7;
- Copies of certifications, diplomas and degrees (Article 2.14 (g.iii.c); and
- Four (4) copies of the Technical Bid.

The consequence of exceeding the maximum 40 page limitation is that all pages that extend beyond the 40 page limitation will be removed from the technical proposal submission and will not be forwarded to the PWGSC Evaluation Committee for evaluation.

(d) The Bidder must submit:

- i. One (1) signed original and four (4) copies of the Technical Bid;
- ii. A completed Declaration Form as per the Integrity Provisions- Declaration of Convicted Offences, if applicable;

(e) In their Technical bid, Bidders must demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders must demonstrate their capability in a thorough, concise and clear manner for carrying out the work.

(f) The Technical bid must address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada requests that Bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, Bidders may refer to different sections of their bids by identifying the specific paragraph and page number where the subject topic has already been addressed.

(g) The Technical bid consists of the following:

- i. **Bid Submission Form:** Bidders must include the Bid Submission Form – Form 1 with their bids. It provides a common form in which Bidders can provide information required for evaluation and contract award, such as a contact name and the Bidder's Procurement Business Number, etc. Using the form to provide this information is not mandatory, but it is recommended. Canada may waive informalities and minor irregularities in the Bid Submission Form received if Canada determines that the variation of the information provided from the exact requirements set out in the Bid Submission Form can be corrected or waived without being prejudicial to other Bidders.
- ii. **Substantiation of Technical Compliance:** The Technical bid must substantiate the compliance of the Bidder with the specific requirements identified at Article 3.2 Technical Bid Evaluation- Mandatory Technical Criteria and Point-Rated Technical Criteria. The substantiation must not simply be a repetition of the requirement(s), but must explain and demonstrate how the Bidder will meet the requirements and carry out the required Work. Simply stating that the Bidder complies is not sufficient. Where Canada determines that the substantiation is not complete, the Bidder will be declared non-compliant and disqualified.
- iii. **Proposed Resources:** The same individual must not be proposed for more than one resource category. The Technical bid should demonstrate that each proposed individual meets the qualification requirements described (including any educational requirements, work experience requirements, and professional designation or membership requirements). With respect to résumés and resources:
  - A. Proposed resources may be employees of the Bidder or employees of a subcontractor, or these individuals may be independent contractors to whom the Bidder would subcontract a portion of the Work
  - B. For educational requirements for a particular degree, designation or certificate, PWGSC will only consider educational programmes that were successfully completed by the resource by the time of bid closing.
  - C. For requirements relating to professional designation or membership, the resource must have the required designation or membership by the time of bid closing and must continue, where applicable, to be a member in good standing of the profession or membership throughout the evaluation period and Contract Period. Where the designation or membership should be demonstrated by providing a copy of the certification, diploma or degree, such document must be current, valid and issued by the entity specified in this solicitation. If a Bidder claims to have a certain professional designation or membership but does not provide a copy of the designation or membership as evidence, Canada may provide a timeframe by which it must be provided. Failure to provide the requested information within the requested time frame will result in no evaluation of the proposed personnel and be disregarded. If the entity is not specified, the issuer must have been an accredited or otherwise recognized body, institution or entity at the time the document was issued.

D. For work experience, PWGSC will not consider experience gained as part of an educational programme, except for experience gained through a formal co-operative program at a post-secondary institution or apprenticeship.

E. For any requirements that specify a particular time period (e.g., 2 years) of work experience, PWGSC will disregard any information about experience if the Technical bid does not include the relevant dates (month and year) for the experience claimed (i.e., the start date and end date). PWGSC will evaluate only the duration that the resource actually worked on a project or projects (from his or her start date to end date), instead of the overall start and end date of a project or a combination of projects in which a resource has participated.

F. For work experience to be considered by PWGSC, the Technical bid should not simply indicate the title of the individual's position, but should demonstrate that the resource has the required work experience by explaining the responsibilities and work performed by the individual while in that position. In situations in which a proposed resource worked at the same time on more than one project, the duration of any overlapping time period will be counted only once toward any requirements that relate to the individual's length of experience.

- iv. **Client Reference Contact Information:** The Bidder must obtain client references in accordance with the mandatory technical criteria and point-rated criteria identified at Article 3.2. The client references must each confirm the facts identified in the Bidder's bid, as required by the Client Reference Form- Form 2, 3, 4, 5 and 6. If any of the information requested is not provided in the Bidders submitted Client Reference Form Canada will provide a timeframe by which it must be provided. Failure to provide the requested information within the requested time frame will render the Bidder non-compliant. Wherever information provided by a reference differs from the information supplied by a Bidder, the information supplied by the reference will be evaluated.

## 2.14 Envelope 2- Financial Bid:

- (a) The Financial Bid must be enclosed and sealed in an envelope with the following information clearly printed or typed on the face of the envelope:
- i. ENVELOPE 2 – Financial Bid;
  - ii. Solicitation Number; and
  - iii. Name of Bidder.
- (b) The Bidder must submit:
- i. One (1) completed original of the Pricing Tables- Annex B
  - ii. Bid Security as per GI08- Bid Security Requirements of R2710T General Instructions - Construction Services - Bid Security Requirements.; and
  - iii. Any required associated documents as applicable.
- (c) Bidders must complete the Pricing Tables- Annex B, as per the following:
- i. Bidders must provide all of the pricing information requested in Tables 2, 3, 4, 6 and 7 inclusively.
  - ii. Bidders must provide pricing in the un-shaded areas of the tables. Bidders must not make changes to the shaded areas of the tables.
  - iii. Failure to provide all of the required pricing information will result in the Bidder's Proposal being declared non-responsive.

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

---

- iv. The Bidder must not make any assumptions which have not been validated by the Contracting Authority prior to the Bid Closing Date.
- v. The financial evaluation will be conducted using the last row of each table Tables 2, 3, 4, 6 and 7.
- vi. Canada may reject the bid if any of the prices submitted do not reasonably reflect the cost of performing the part of the work to which that price applies.

(d) Prices must only appear in the Financial Bid. Prices in any other section of the bid will not be considered.

## PART 3 - EVALUATION PROCEDURES AND BASIS OF SELECTION

### 3.1 Opening of Bids and Overview of Evaluation Procedures

- (a) There will be no public opening at bid closing time.
- (b) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria. There are several steps in the evaluation process, which are described below. Even though the evaluation and selection will be conducted in steps, the fact that Canada has proceeded to a later step does not mean that Canada has conclusively determined that the Bidder has successfully passed all the previous steps. Canada may conduct steps of the evaluation in parallel.
- (c) An evaluation team composed of representatives of Canada will evaluate the bids. Not all members of the evaluation team will necessarily participate in all aspects of the evaluation.

### 3.2 Technical Evaluation- Mandatory Technical Criteria and Point-Rated Technical Criteria

#### (a) **Mandatory Technical Criteria:**

- (a) Each bid will be reviewed for compliance with the mandatory requirements of the bid solicitation. Any element of the bid solicitation that is identified specifically with the words "must" or "mandatory" is a mandatory requirement. **Bids that do not comply with each and every mandatory requirement will be declared non-responsive and be disqualified.**
- (b) The mandatory technical criteria are as follows:

#### **M1 Construction Management Project**

The Bidder must identify two (2) Building Construction Projects (M1a and M1b) which the Bidder delivered either as a Construction Manager or Design-Builder or Public Private Partnership delivery method for the entire period of the project. Each project must include the following elements:

- (a) The Bidder must provide the Building Construction Project name.
- (b) The Bidder must provide the Building Construction Project location.
- (c) The Bidder must provide a description of the Building Construction Project.
- (d) The Bidder must provide a description of their role and level of responsibility (ie control) of the Building Construction Project. Note: Simply stating "Provided CM Services" is insufficient to satisfy this requirement.
- (e) The Bidder must have Completed the Building Construction Project after June 1, 2009 or the Building Construction Project must be Underway and 80% complete (ie: 80% of construction costs must have been incurred).
- (f) The Bidder must provide the Construction Value of the Building Construction Project, and the Construction Value must be at least \$15 million CAD, applicable taxes excluded.
- (g) The Bidder must obtain, complete and submit Form 2 and 3 - Client Reference Form for Representative Project.

Should interested Bidders submit more than two (2) projects, only the first two (2) projects will be evaluated.



(b) **Point-Rated Technical Criteria:**

- i. Each bid will be rated by assigning a score to the rated requirements, which are identified in the bid solicitation by the word "rated," "R" or by reference to a score. Bidders who fail to submit complete bids with all the information requested by this bid solicitation will be rated accordingly.
- ii. The point-rated technical criteria are as follows:

**R1 Experience of the Bidder (Maximum Points: 300)**

The Bidder should provide a description of three (3) representative industrial-type projects with a significant mechanical, electrical and civil components. Industrial-type project means a project:

- a) With new or modified power piping, or feed water (fluid) distribution, or welded gas piping;
- b) Which is for infrastructure such as a heating or cooling plant with boilers or chillers, or water treatment plant, or oil and gas processing plant, or nuclear facility, or similar industrial processing application;
- c) That is delivered either in a Construction Management, or Design-Build; or Public-Private-Partnership delivery methodology.
- d) Completed after June 1, 2009 or should be Underway and 80% (i.e.: 80% of construction costs should have been incurred) by the bid closing date of this RFP; and
- e) Having a minimum construction cost of \$15M (excluding taxes).

Should the Bidder submit more than three (3) representative projects, only the first three representative projects will be evaluated.

**R1.1** The following criteria will be evaluated for each of the three (3) representative industrial-type projects:

- a. The degree to which the Bidder's representative industrial-type project meets the characteristics set out in R1 (a) to (e) above, and the degree to which the representative project is similar to the scope of work outlined in ANNEX C – Terms of Reference of this RFP;
- b. The Bidder should describe its experience in the following specific roles and responsibilities:
  1. Project or Program management;
  2. Site and construction operations management;
  3. Design advice and review management;
  4. Cost management;
  5. Schedule management;
  6. Risk management;
  7. Procurement management; and
  8. Quality management;
- c. The Bidder should provide a high-level overview of the original project schedule, including at a minimum, the original date of completion, and the actual completion date. The Bidder must provide a detailed explanation of any variances in the schedule and any mitigation strategies employed. In the case of a project underway and at least 80% complete, provide the original project schedule, the current-status and forecasted completion date as detailed during the last

reporting period and an explanation of any variances and any mitigation strategies employed with a narrative on the level of success of the mitigation strategies for all projects;

- d. The Bidder should provide the initial construction cost estimate and the final construction cost, with a detailed explanation of any variances and any mitigation strategies employed. In the case of project underway and at least 80% complete, initial construction estimate, current expenditures to date, and forecast at completion as detailed during the last reporting period and any mitigation strategies employed with a narrative on the level of success of the mitigation strategies; and
- e. The Bidder should describe contract and subcontract claims and disputes that occurred within the project and any mitigation strategies, evaluation rationale and conclusions.

Above items will be evaluated in accordance with Scale 1.

**R1.2 Client References (no points for references but references will be checked):**

- a) Bidders must complete and submit Client Reference Form (Form 4, 5 and 6 in this solicitation) for each representative industrial-type project. The Bidder's client reference representative must validate specific information identified about the Bidder's representative project;
- b) Any portion of the representative project that is not validated by the Bidder's client reference representative, or any proposed representative project for which no client reference was provided or for which the Bidder was unable to have its client reference representatives duly complete and submit the reference form will not be evaluated; and
- c) It is incumbent upon the Bidder to ensure that its client reference representative is available and will complete the Client Reference Form.

Scale 1	0%	20%	40%	60%	80%	100%	Available Points
R1.1.a	Does not meet the characteristics of an industrial-type project	Sample project is not related to this requirement	Sample project is generally not related to this requirement	Sample project is generally related to this requirement	Sample project is directly related to this requirement	Sample project exceeds the requirement	15 points per project, 45 points total
R1.1.b	Did not submit information which could be evaluated	Services provided are not relevant to project or construction delivery	Relevant services provided in less than three specific roles and responsibilities.	Relevant services provided in three or four specific roles by the Bidder	Relevant services provided in five or six specific roles and responsibilities. by the Bidder	Relevant services provided in all specific roles and responsibilities. by the Bidder	20 points per project, 60 points total
R1.1.c	Did not submit information which could be evaluated	Extremely poor or insufficient explanation of variances/ mitigation strategies between original and actual dates of completion provided	Explanation of variances/ mitigation strategies between original and actual dates of completion provides poor justification	Explanation of variances/ mitigation strategies between original and actual dates of completion provides adequate justification	Explanation of variances/ mitigation strategies between original and actual dates of completion provides good justification	Explanation of variances/ mitigation strategies between original and actual dates of completion provides very good justification	30 points per project, 90 points total

R1.1.d	Did not submit information which could be evaluated	Extremely poor or insufficient explanation of variances between initial and final/current construction cost provided	Explanation of variances between initial and final/current construction cost provides poor justification	Explanation of variances between initial and final/current construction cost provides adequate justification	Explanation of variances between initial and final/current construction cost provides good justification	Explanation of variances between initial and final/current construction cost provides very good justification	25 points per project, 75 points total
R1.1.e	Did not submit information which could be evaluated	Extremely poor or no claim/dispute management services provided, insufficient to meet performance requirement	Poor claim/dispute management services provided, limited capability to meet performance requirement	Acceptable claim/dispute management services provided, should ensure adequate results	Very good claim/dispute management services provided, should ensure effective results	Exceptional claim/dispute management services provided, should ensure very effective results	10 points per project, 30 points total

## R2 Experience and Expertise of the Bidder's Key Individuals (Maximum points: 460)

Canada will evaluate the Key Individuals identified by the Bidder by name, title, and the information as it pertains to each criterion listed in this section;

The Bidder should substantiate the experience and expertise of each Key Individual listed below and to be assigned to the resulting contract:

### Senior Project Manager:

The Bidder should identify a single individual responsible for the overall control and accountability for all construction management services for the UBCP program and for each sub-project. He or she must have a minimum of 15 years of experience in a similar position. The individual must have a thorough understanding of Federal Government real property project planning and delivery. Beyond the responsibilities typically assumed by a senior manager, the Senior Project Manager will personally spearhead on a hands-on basis, the active management of the entire construction management team;

### Senior Superintendent:

The Bidder should identify a single individual responsible for the overall planning and definition, sequencing and prioritization, management, and overall control of the construction operations of each project. He or she must have a minimum of 15 years of experience in a similar position;

### Mechanical and Electrical (M&E) Design Coordinator:

The Bidder should identify a single individual responsible for providing overall, coordinated, cross discipline input from a contractor's perspective, to prioritize, orient and influence the proposed design solutions from a constructability and execution standpoint, within the cost, schedule, quality, and risk parameters approved for each project. He or she must have a minimum of 7 years of experience in a similar position;

#### Time Manager:

The Bidder should identify a single individual responsible for analyzing and integrating all activities related to time planning and scheduling into comprehensive network diagrams and bar charts, and for the ongoing time management monitoring and reporting of the entire construction program including those aspects that influence the design, and the ongoing coordination with the construction management cost and risk management services. He or she must have a minimum of 7 years of experience in a similar position; and

#### Cost Manager:

The Bidder should identify a single individual responsible for analyzing and managing all activities related to cost planning, estimating, monitoring and control for the entire construction program of work including those aspects that influence the design, and the ongoing coordination with the construction management time and risk management services. He or she must have a minimum of 10 years of experience in a similar position;

No person may be proposed for more than one Key Individual role.

#### **R2.1** The following criteria will be evaluated for each Key Individual identified by the Bidder:

The Bidder's Key Individual must possess qualifications and experience relevant to their proposed role, including current relevant professional accreditation(s) (indicate province, year, status) where generally applicable or considered beneficial to role;

The Bidder's Key Individual must have worked on a project similar to an industrial-type project, as defined in section R1 above, and the scope of work outlined in ANNEX C – Terms of Reference.

#### **R2.2** The Bidder's Key Individual must have recent experience working on the project described in R1.1 above:

Above items will be evaluated in accordance with Scale 2.

Scale 2	0%	20%	40%	60%	80%	100%	Available Points
R2.1	Did not submit information which could be evaluated	Key individual does not possess the qualifications and experience	Key individual lacks qualifications and experience	Key individual possesses a fair level of qualifications and experience	Key individual possesses a good level of qualifications and experience	Key individual is highly qualified and experienced	30 points per key individual. Total available points : 150 points
R2.2	Did not submit information which could be evaluated	Key individual's project sample not related to this requirement	Key individual's project sample generally not related to this requirement	Key individual's project sample generally related to this requirement	Key individual's project sample directly related to this requirement	Key individual leads in project directly related to this requirement	Senior Project Manager & Senior Superintendent (80 points each),  M&E Design Coordinator, Time & Cost Managers (50 points each): Total: 310

**R3 Internal Governance of the Bidder (Maximum points: 105)**

The Bidder should present its business strategy for the ongoing contract management and delivery of Work under a contract resulting from this RFP, by providing the information as it pertains to each criterion listed below.

**R3.1** The following criteria will be evaluated:

- a. The Bidder should provide a business plan that includes internal team structure, organization chart and responsibilities, and reporting relationships;
- b. The Bidder should provide a chart of its governance structure for a contract resulting from this RFP, including position titles;
- c. The Bidder should describe its decision-making process for project delivery and management, including the following elements:
  - i. Description of process;
  - ii. Efficiencies associated with the described process; and
  - iii. The individual or group responsible for taking a final decision on behalf of the Bidder.

The above criteria will be evaluated in accordance with Scale 3 below:

Scale 3	0%	20%	40%	60%	80%	100%	POINTS AVAILABLE
R3.1.a	Did not submit information which could be evaluated	Extremely poor business plan; lack complete or almost complete understanding of the requirements	Poor business plan; has some understanding of the requirements but lacks adequate understandings in some areas of the requirements	Adequate business plan; demonstrate a good understanding of the requirements	Very good business plan; demonstrate a very good understanding of the requirements	Superior business plan; demonstrate an excellent understanding of the requirements	R3.1.a - 30 points  Total available points: 30 points
R3.1.b	Did not submit information which could be evaluated	Extremely poor governance structure; lack complete or almost complete understanding of the requirements	Poor governance structure; has some understanding of the requirements but lacks adequate understandings in some areas of the requirements	Adequate governance structure; demonstrate a good understanding of the requirements	Very good governance structure; demonstrate a very good understanding of the requirements	Superior governance structure; demonstrate an excellent understanding of the requirements	R3.1.b - 30 points  Total available points: 30 points
R3.1.c	Did not submit information which could be evaluated	Extremely poor, insufficient decision processes; lack complete or almost complete understanding of the requirements	Poor decision processes; has some understanding of the requirements but lacks adequate understandings in some areas of the requirements	Adequate decision processes; demonstrate a good understanding of the requirements	Very good decision processes; demonstrate a very good understanding of the requirements	Superior decision processes; demonstrate an excellent understanding of the requirements	R3.1.c - 45 points  Total available points : 45 points

#### R4 Approach and Methodology of the Bidder (Maximum points: 670)

In relation to the subject project outlined in ANNEX C – Terms of Reference, the Bidder must:

- Elaborate on how they would foster an integrated and seamless implementation strategy for the project;
- Describe the understanding, processes and methodologies it would apply to the project; and
- Describe how the project would be successfully delivered in a construction management delivery model, where the design is prioritized and the construction activities occur simultaneously.

##### R4.1 The following criteria will be evaluated:

- The Bidder's team Integration;
- The Bidder's team integration with other stakeholders;
- The Bidder's approach to design package management and coordination;
- The Bidder's approach to time management;
- The Bidder's approach to cost management;
- The Bidder's approach to quality management;
- The Bidder's approach to risk management;
- The Bidder's information management plan;
- The Bidder's communication management plan with PWGSC and Stakeholders;
- The Bidder's Health and Safety management plan, and
- The Bidder's approach to environmental management.

The above criteria will be evaluated in accordance with Scale 4 below:

Scale 4	0%	20%	40%	60%	80%	100%	POINTS AVAILABLE
R4.1a R4.1.b	Did not submit information which could be evaluated	Extremely poor process and methodology (assigning roles/ responsibilities, service delivery, integration stakeholders) ; lack complete or almost complete understanding of the requirements	Poor process and methodology (assigning roles/ responsibilities, service delivery, integration stakeholders); has some understanding of the requirements but lacks adequate understandings in some areas of the requirements	Adequate process and methodology (assigning roles/ responsibilities, service delivery, integration stakeholders); demonstrate a good understanding of the requirements	Very good process and methodology (reassigning roles/ responsibilities, service delivery, integration stakeholders); demonstrate a very good understanding of the requirements	Superior process and methodology (assigning roles/ responsibilities, service delivery, integration stakeholders); demonstrate an excellent understanding of the requirements	R4.1a – 40 points R4.1.b – 40 points  Total available points : 80 points

R4.1.c	Did not submit information which could be evaluated	Extremely poor process and methodology for design prioritization, constructability analysis; lacks complete or almost complete understanding of the requirements	Poor process and methodology for design prioritization, constructability analysis; has some understanding of the requirements but lacks adequate understandings in some areas of the requirements	Adequate process and methodology for design prioritization, constructability analysis; demonstrate a good understanding of the requirements	Very good process and methodology for design prioritization, constructability analysis; demonstrate a very good understanding of the requirements	Superior process and methodology for design prioritization, constructability analysis; demonstrate an excellent understanding of the requirements	100 points
R4.1.d R4.1.e R4.1.f R4.1.g	Did not submit information which could be evaluated	Extremely poor strategy for integration of Bidder's team responsibilities and processes with other stakeholders regarding time, cost, quality, and risk management; lacks complete or almost complete understanding of the requirements	Poor strategy for integration of Bidder's team responsibilities and processes with other stakeholders regarding time, cost, quality, and risk management; has some understanding of the requirements but lacks adequate understandings in some areas of the requirements	Adequate strategy for integration of Bidder's responsibilities and processes with other stakeholders regarding time, cost, quality, and risk management; demonstrate a good understanding of the requirements	Very good strategy for integration of Bidder's team responsibilities and processes with other stakeholders regarding time, cost, quality, and risk management; demonstrate a very good understanding of the requirements	Superior strategy for integration of Bidder's team responsibilities and processes with other stakeholders regarding time, cost, quality, and risk management; demonstrate an excellent understanding of the requirements	R4.1.d – 40 points R4.1.e – 40 points R4.1.f – 40 points R4.1.g – 40 points Total available points 160 points
R4.1.h	Did not submit information which could be evaluated	Extremely poor, insufficient information management and lack complete or almost complete understanding of the requirements	Limited information management plan; has some understanding of the requirements but lacks adequate understandings in some areas of the requirements	Adequate information management plan; demonstrate a good understanding of the requirements	Very good information management plan; demonstrate a very good understanding of the requirements	Superior information management plan; demonstrate an excellent understanding of the requirements	75 points
R4.1.i	Did not submit information which could be evaluated	Extremely poor, insufficient communication management and lack complete or almost complete understanding of the requirements	Limited communication management plan; has some understanding of the requirements but lacks adequate understandings in some areas of the requirements	Adequate communication management plan; demonstrate a good understanding of the requirements	Very good communication management plan; demonstrate a very good understanding of the requirements	Superior communication management plan; demonstrate an excellent understanding of the requirements	85 points

R4.1.j	Did not submit information which could be evaluated	Extremely poor, insufficient H&S management and lack complete or almost complete understanding of the requirements	Limited H&S management plan; has some understanding of the requirements but lacks adequate understandings in some areas of the requirements	Adequate H&S management plan; demonstrate a good understanding of the requirements	Very good H&S management plan; demonstrate a very good understanding of the requirements	Superior H&S management plan; demonstrate an excellent understanding of the requirements	85 points
R4.1.k	Did not submit information which could be evaluated	Extremely poor, insufficient environmental management and lack complete or almost complete understanding of the requirements	Limited environmental management plan; has some understanding of the requirements but lacks adequate understandings in some areas of the requirements	Adequate environmental management plan; demonstrate a good understanding of the requirements	Very good environmental management plan; demonstrate a very good understanding of the requirements	Superior environmental management plan; demonstrate an excellent understanding of the requirements	85 points

### Summary of Point-Rated Technical Requirements

Point-Rated Technical Criterion	Evaluation Scale	Available Points
<b>R1</b>	Experience of the Bidder	300
<b>R2</b>	Experience and Expertise of the Bidder's Key Individuals	460
<b>R3</b>	Internal Governance of the Bidder	105
<b>R4</b>	Approach and Methodology of the Bidder	670
	<b>Total Available Technical Criterion Points</b>	<b>1535</b>

The Bidder must obtain a minimum Point-Rated Technical Criterion score of 1,075 points out of a possible 1,535 points (70%) to be considered responsive.

### 3.3 Financial Evaluation

- The Total Bid Amount and Bid Security in accordance with GI08 Bid Security Requirements of R2710T must be submitted in a second sealed envelope (separate from the Technical Bid.) The price envelopes of all compliant Bids will be opened on completion of the technical submission evaluation.
- As per the **Pricing Tables- Annex B**, the Total Bid Amount identified in **Table 7** will be used to establish the Bidder's Bid Price.
- Each Financial bid will be reviewed to determine whether it meets the mandatory requirements of the bid solicitation. Any element of the bid solicitation identified with the words "must" or "mandatory" is a



mandatory requirement. Financial Bids that do not comply with each and every mandatory requirement will be declared non-compliant and be disqualified

### 3.4 Basis of Selection

(a) To be declared responsive, a bid must:

- i. Comply with all the requirements of the bid solicitation; and
- ii. Obtain the required minimum points (1075 out of 1535 points) for the total of the technical bid evaluation criteria which are subject to point rating; and
- iii. The price bid must consist of the Pricing Tables duly completed and accompanied by the required bid security.

(b) Bids not meeting (i), (ii) and (iii) above will be declared non-compliant

(c) The selection will be based on the highest responsive combined rating of technical merit and price. The ratio will be 50% for the technical merit and 50% for the price.

(d) The overall technical merit score for each responsive bid will be determined as follows:

The sum of the Bidder's point rated technical criterion scores for R1, R2, R3 and R4, divided by 1535 available technical criterion points, multiplied by the ratio of 50%.

(e) To establish the pricing score, the responsive bid with the lowest Bid Price is given a pricing score of 50, while other responsive bids receive a prorated pricing score based on the ratio of the lowest responsive Bid Price to their Bid Price multiplied by the ratio of 50%.

(f) For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating of technical merit and price, as follows:

Overall Technical Merit Score + Pricing Score = Combined Rating

(g) Neither the responsive bid that receives the highest number of points nor the one that proposed the lowest price will necessarily be accepted. The responsible bid with the highest combined rating of technical merit and price will be recommended for contract award.

Example:

The following table illustrates an example where all three bids are responsive and the selection of the recipient is determined by a 50/50 ratio of technical merit and price, respectively. The total available points equal 1535 and the lowest evaluated price is \$ 4,300,000.

Basis of Selection - Highest Combined Rating Technical Merit (50%) and Price (50%)

	Bidder 1	Bidder 2	Bidder 3
<b>Overall Technical Score (out of 1575)</b>	1100	1350	1275
<b>Bid Price</b>	\$4,300,000	\$5,100,000	\$5,300,000

<b>Calculations</b>	<b>Technical Merit Score</b>	$1100/1535 \times 50 = 35.8$	$1350/1535 \times 50 = 44.0$	$1275/1535 \times 50 = 41.5$
	<b>Pricing Score</b>	$4.3/4.3 \times 50 = 50$	$4.3/5.1 \times 50 = 42.2$	$4.3/5.3 \times 50 = 40.6$
	<b>Combined Rating</b>	85.8	86.2	82.1
<b>Overall Rating</b>		2 <sup>nd</sup>	1 <sup>st</sup>	3 <sup>rd</sup>

### 3.5 Conduct of Evaluation

- (a) In conducting its evaluation of the proposals, Canada may, but will have no obligation, to do the following:
- seek clarification or verification from Bidders regarding any or all information provided by them with respect to the RFP;
  - contact any or all references supplied by Bidders to verify and validate any information submitted by them;
  - request, before award of any contract, specific information with respect to Bidders' legal status;
  - conduct a survey of Bidders' facilities and/or examine their technical, managerial and financial capabilities to determine if they are adequate to meet the requirements of the RFP;
  - correct any error in the total bid amount by using unit pricing and any error in quantities in bids to reflect the quantities stated in the bid solicitation; in case of error in the estimated amount of prices, the unit price will govern;
  - verify any information provided by Bidders through independent research, use of any government sources or by contacting third parties; and
  - interview, at the sole costs of Bidders, any Bidder and/or any or all of the resources proposed by Bidders to fulfill the requirement of the RFP.
- (b) Bidders will have the number of days specified in the request by the Contracting Authority to comply with any request related to any of the above items. Failure to comply with the request may result in the bid being declared non-compliant.

## **PART 4 - CERTIFICATIONS, SECURITY AND ADDITIONAL INFORMATION**

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

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

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

### **4.1 Certifications/Information Required with the Technical Bid**

a) Bidders must submit the following as a part of their Technical Bid:

i. Integrity Provisions- Declaration of Convicted Offences

As applicable, under R2710T, GI01 of the Declaration of Convicted Offences, paragraph 10 (copied below) of the General Instructions, the Bidder must provide with its bid, a completed Declaration Form, to be given further consideration in the procurement process.

#### Declaration of Convicted Offences

*Where a Bidder or its Affiliate is unable to certify that it has not been convicted of any of the offences referenced under the Canadian Offences Resulting in Legal Incapacity, the Canadian Offences and the Foreign Offences subsections, the Bidder must provide with its bid the completed Declaration Form, to be given further consideration in the procurement process.*

*Note: A copy of the Declaration form can be obtained by going to R2710T online and clicking on the 'Declaration Form' hyperlink found under GI01.*

ii. Bid Submission Form- **Form 1**

iii. Client Reference Form for Representative Project- **Form 2, 3, 4, 5 and 6**

### **4.2 Certifications/Information Required with Financial Bid**

(a) Bidders must submit the following as part of their Financial Bid:

i. Pricing Tables- **Annex B**

ii. Bid Security as per GI08- Bid Security Requirements of R2710T

### **4.3 Additional Certifications Precedent to Contract Award**

(a) Bidders must submit the following before award of a contract:

i. Complete List of each Individual currently Directors of the Bidder- **Form 7**

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

---

- A. Bidders who are incorporated, including those bidding as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Bidder.
- B. Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, must provide the name of the owner(s).
- C. Bidders bidding as societies, firms or partnerships do not need to provide lists of names.

#### **4.4 Additional Certifications required after Contract Award**

The Contractor must submit the following after Contract award:

- i. Certificate of Insurance- Annex E
- ii. Contract Security as per General Condition (GC) 9 - Contract Security of R2890D
- iii. WSIB Certification

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

---

## PART 5 - SECURITY

### 5.1 Industrial Security Requirement

- i. **At bid closing**, the Bidder must hold a valid Security Clearance as indicated at Part 6- Resulting Contract Documents. Failure to comply with this requirement will render the Bid non-compliant and no further consideration will be given to the Bid.
- ii. The Successful Bidder's personnel, as well as any subcontractor and its personnel, who are required to perform any part of the work under the subsequent Contract must meet the mandatory security requirement as indicated in Part 6- Resulting Contract Clauses. Individuals who do not have the required level of security will not be allowed on site. It is the responsibility of the successful Bidder to ensure that the security requirements are met throughout the performance of the Contract. Canada will not be held liable or accountable for any delays or additional costs associated with the successful Bidder's non-compliance with the mandatory security requirement.
- iii. For additional information on security requirements, Bidders must consult the "Security Requirements for PWGSC Bid Solicitations on the Industrial Security Program Web site: <http://ssi-iss.tpsgc-pwgsc.gc.ca/index-eng.html>

## PART 6 - RESULTING CONTRACT CLAUSES

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

### 6.1 Requirement

- (a) The Contractor agrees to provide to the Client the Construction Management Services described in the Contract, including the Terms of Reference in accordance with, and at the prices set out in, the Contract.
- (b) Under the Contract, the "Client" is: Public Works and Government Services Canada.

### 6.2 Construction Time

- (a) **Construction Management Services Time:** The Contractor must perform the services and achieve Substantial Performance of the Work by no later than **October 30, 2021**.

### 6.3 Contract Documents

- (a) The following are the contract documents:

- i. Contract Page when signed by Canada;
- ii. Duly completed Pricing Tables and any Appendices attached thereto;
- iii. Request for Proposal, all Annexes, Appendices and Amendments thereto;
- iv. Terms of Reference;
- v. Basis of Payment;
- vi. General Conditions and clauses
  - GC1 General Provisions – Construction Services R2810D (2017-11-28);
  - GC2 Administration of the Contract- Construction Services R2820D (2016-01-28);
  - GC3 Execution and Control of the Work R2830D (2015-11-28);
  - GC4 Protective Measures R2840D (2008-05-12);
  - GC5 Terms of Payment R2850D (2016-01-28);
  - GC6 Delays and Changes in the Work R2860D (2016-01-28);
  - GC7 Default, Suspension or Termination of Contract R2870D (2008-05-12);
  - GC8 Dispute Resolution R2882D (2016-01-28);
  - GC9 Contract Security R2890D (2014-06-26);
  - GC10 Insurance R2900D (2008-05-12);
- vii. Any amendment issued or any allowable bid revision received before the date and time set for solicitation closing;
- viii. Any amendment incorporated by mutual agreement between Canada and the Contractor before acceptance of the bid; and acceptance of the bid; and
- ix. Any amendment or variation of the contract documents that is made in accordance with the General Conditions; and
- x. The Contractor's bid, not including any terms and conditions that may be included in the bid or terms and conditions included by way of reference in the bid.

- (b) The documents identified by title, number and date above are incorporated by reference and are set out in the Standard Acquisition Clauses and Conditions (SACC) Manual, issued by Public Works and Government Services Canada (PWGSC). The SACC Manual is available on the PWGSC Web site: <https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>

- (c) The language of the contract documents is the language of the bid submitted.

## 6.4 Changes to General Conditions

### (a) R2810D - General Condition (GC) 1 - General Provisions - Construction Services:

#### i. In GC1.1.2 Terminology, delete:

##### "Contractor"

means the person contracting with Canada 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 Canada.

#### In GC1.1.2 Terminology, add:

##### "Contractor" and "Construction Manager"

means the person contracting with Canada to provide or furnish all labour, Material and Plant and construction management services for the execution of the Work under the Contract, and includes the Contractor's superintendent as designated in writing to Canada.

### (b) General Condition (GC) 2 - Administration of the Contract - Construction Services GC2.8:

#### i. Accounts and Audit is deleted in its entirety and replaced with the following:

##### GC2.8 Accounts and Audit

1. The Contractor must keep proper accounts and records of the cost of performing the Work and of all expenditures or commitments made by the Contractor in connection with the Work, including all invoices, receipts and vouchers. The Contractor must retain records, including bills of lading and other evidence of transportation or delivery, for all deliveries made under the Contract.
2. If the Contract includes payment for time spent by the Contractor, its employees, representatives, agents or subcontractors performing the Work, the Contractor must keep a record of the actual time spent each day by each individual performing any part of the Work.
3. Unless Canada has consented in writing to its disposal, the Contractor must retain all the information described in this section for six (6) years after it receives the final payment under the Contract, or until the settlement of all outstanding claims and disputes, whichever is later. During this time, the Contractor must make this information available for audit, inspection and examination by the representatives of Canada, to make copies and take extracts. The Contractor must provide all reasonably required facilities for any audit and inspection and must furnish all the information as the representatives of Canada may from time to time require to perform a complete audit of the Contract.
4. The amount claimed under the Contract, calculated in accordance with the Basis of Payment provision in the Contract, is subject to government audit both before and after payment is made. If an audit is performed after payment, the Contractor agrees to repay any overpayment immediately on demand by Canada. Canada may hold back, deduct and set off any credits owing and unpaid under this section from any money that Canada owes to the Contractor at any time (including under other contracts). If Canada does not choose to exercise this right at any given time, Canada does not lose this right.

(c) R2830D- General Condition (GC) 3 – Execution and control of the work

- i. Delete GC3.7 Construction by Other Contractors or workers in its entirety and replace with the following:

GC3.7 - Separate Contracts with other Contractors

1. Canada reserves the right to award separate contracts for work. Where in the opinion of Canada, it is necessary for Canada to award separate contracts to other contractors, the Contractor must:
  - a. coordinate and cooperate with the work of other contractors;
  - b. coordinate and schedule the Work with the work of other contractors and connect as specified or shown in the Contract Documents;
  - c. participate with other contractors and the DR in reviewing their construction schedules when directed to do so;
  - d. coordinate and perform the Work with care and diligence so as to ensure that Canada and other contractors will be in a position to proceed according to schedule with the delivery, installation and testing of their work; and
  - e. allow other contractors or workers, together with their plant, equipment and Material, access to the Site and the opportunity to use their plant and equipment.
2. When separate contracts are awarded for other parts of the project, Canada will:
  - a. Ensure that insurance coverage is provided to the same requirements as are called for to the greatest extent applicable. Such insurance will be coordinated with the insurance coverage of the Contractor as it affects the Work; and
  - b. take all precautions reasonably possible to avoid labour or other disputes.
  - c. Ensure the separate contractors are required to adhere to the Contractor's Health & Safety policies and procedures when performing work at the location of the project under the Contractor's control as Constructor on the project.
3. The Contractor must give the Departmental Representative (DR) prompt written notice of any defect in, or any conflict occasioned by, the work of other contractors and before proceeding with any Work that is affected by or depends on for its proper execution such work of other contractors. In the absence of such written report, the Contractor will have no claim against Canada by reason of the conflict or defective work of the other contractors.
4. Despite the foregoing, it is understood and agreed that the Contractor will be the "Constructor" for the Project within the meaning of the applicable Health and Safety legislation, and must perform or have performed, in addition to any other obligations it may have under the application of legislation, all of the obligations of a "constructor" set out in the legislation for the Work. It is further understood and agreed that Canada appoints and the Contractor agrees to be appointed as the "constructor" to fully control, coordinate, oversee and be responsible for all other contractors.
5. If the Contractor has caused damage, delay, impact, or interference to the work of other contractors, the Contractor agrees on due notice to settle with the other contractors in accordance with GC5.8 (6). If one or more of the other contractors makes a claim against Canada on account of damage, delay, impact, or interference alleged to have been so sustained, Canada will notify the Contractor and may require the Contractor to defend the



action at the Contractor's expense and not as a Cost of the Work and without an adjustment in the Contract Fee. The Contractor must satisfy a final order or judgment against Canada and pay the costs incurred by Canada arising from such action and not as a Cost of the Work and without an adjustment in the Contract Fee.

(d) R2850D - General Condition (GC) 5 - Terms of Payment >100K - Construction Services:

i. The following paragraph is added to GC5.4 Progress Payment:

(6) The portion of the Work done under the Fixed Monthly Fee must be separately invoiced or documented as a separate line item from the progress draw, in fixed monthly installments over the duration of the Contract.

(7) Additional Resource Categories

(a) Should additional resource categories be required during the execution of the Contract beyond what is included in Annex B- Table 6 the Contractor must provide a proposal for the additional hourly rate which must include:

- i. A full justification with documented evidence substantiating any and all applicable elements listed in Article 6.10.c.ii Hourly Labour Rates
- ii. A full justification with documented evidence substantiating any other element of cost used to calculate the proposed hourly rate
- iii. A detailed calculation of the appointment of the aforementioned elements to the hourly rate being proposed

(b) Additional Resource Categories are subject to the approval of Canada.

ii. The following paragraph is added to GC5.5 Substantial Performance of the Work:

(5) If, at any time before the issuance of a Certificate of Completion, Canada determines that a Work Package has reached Substantial Performance as described in subparagraph 1) (b) of GC 1.1.4, "Substantial Performance", paragraphs 1) through 4) of GC 5.5 may be applied with respect to the specific Work Package.

(e) R2860D - General Condition (GC) 6 - Delays and Changes in the Work – Construction Services General:

GC6.4 is replaced in its entirety with the following:

GC6.4 Determination of Price

1. Any adjustment to the estimated construction costs resulting from a change in the Work pursuant to GC6.1 will represent all reasonable and proper costs including any costs associated with any delay incurred by or savings accruing to the Contractor in respect of the labour, Plant and Material that are payable as Construction Costs.
2. If the final cost of the Construction Work, excluding the Contractor' fees, is not within 75 and 125 percent of the total estimated construction cost either party to the Contract may request to negotiate a change in the Contractor' Percentage Fee for the Work outside of these thresholds if:

- a. there is a demonstrable difference between the cost to the Contractor of performing the Work for the estimated construction cost and the cost to the Contractor of performing the Work for the actual Construction Cost;
3. For the purposes of the negotiation referred to in paragraph 2.
  - a. The onus of establishing, justifying and quantifying a proposed change lies with the party making the request for negotiation.
  - b. If the actual Construction Cost is less than 75 percent of the estimated construction, in no event will the total amount paid as the Contractor' Percentage Fee, amended as a result of a reduction in the cost of the Work, exceed the amount that would have been payable to the Contractor had the price of the Work actually accounted for 75 percent of the estimated construction cost.
4. The amount of the Contract will be the final sum of the Fixed Monthly Fees, the actual Construction Cost, the Percentage Fee and any adjustments that are made in accordance with the Contract.

## **6.5 Order of Precedence**

- (a) 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:
- i. Any amendment or variation of the Resulting Contract Documents that is made in accordance with the General Conditions;
  - ii. Any amendment issued prior to tender closing;
  - iii. These resulting contract clauses;
  - iv. Changes to the General Conditions;
  - v. General Conditions;
  - vi. Annex A-Basis of Payment;
  - vii. Annex B- Pricing Tables;
  - viii. Annex D- Security Requirements Check List (SRCL)
  - ix. Annex E-Certificate of Insurance;
  - x. Annex C- Terms of Reference;
  - xi. The Contractor's bid not including any additional terms and conditions that may be included in the bid or by reference.

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

## **6.6 Authorities**

### **(a) PWGSC Contracting Authority**

The Contracting Authority for the Contract is:

Name: Nabil Boujenoui

Title: Supply Specialist

Public Works and Government Services Canada  
Acquisitions Branch, CAAMS, RPCD  
140 O'Connor Street  
Ottawa, ON

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

---

K1A0S5

Telephone: 613-295-9356  
E-mail address: nabil.boujenoui@tpsgc-pwgsc.gc.ca

The Contracting Authority shall be recognized as the authority delegated by the Minister of PWGSC to enter into contracts, amend the contracts and is responsible for all matters concerning and interpretation of the terms and conditions of the Contract.

The contracting authority is responsible for the management of the Contract and any changes to the Contract terms and conditions must be authorized in writing by the Contracting Authority.

**(b) Client Technical Authority**

The Client Technical Authority for the Contract is:

*[to be completed before contract award]*

Name:  
Title:  
Organization:  
Address:  
Telephone:  
Facsimile:  
E-mail address:

The Technical Authority shall be recognized as the Departmental representative at time of award of contract and shall perform the following:

- a. is responsible for all matters concerning the technical content of the work under the contract;
- b. authorized to issue notices, instructions, and changes within the scope of the Work, relevant to the contract.
- c. accept on behalf of Canada any notice, order or other communication from the contractor relating to the Work
- d. within a reasonable time, review and respond to submissions made by the Contractor in accordance with the requirements of the Contract

The technical authority has no authority to authorize changes to the Contract terms and conditions of the Contract.

**(c) Contractor's Representative**

The Contractor's Representative is:

*[to be completed before contract award]*

Name:  
Title:  
Telephone:  
Facsimile:  
E-mail address:

## 6.7 Industrial Security Requirements

The following security requirement (SRCL and related clauses) applies and form part of the Contract:

1. The Contractor must, at all times during the performance of the Contract, hold a valid Designated Organization Screening (**DOS**), issued by the Canadian Industrial Security Directorate (CISD), Public Works and Government Services Canada (PWGSC).
2. The Contractor personnel requiring access to sensitive work site(s) must EACH hold a valid **RELIABILITY STATUS**, granted or approved by CISD/PWGSC.
3. Subcontracts which contain security requirements are NOT to be awarded without the prior written permission of CISD/PWGSC.
4. The Contractor must comply with the provisions of the:
  - a) Security Requirements Check List and security guide (if applicable), attached at Annex D;
  - b) *Industrial Security Manual* (Latest Edition).

## 6.8 Insurance Terms

In addition to the Insurance terms indicated below, see Annex E.

### (a) Insurance Contracts

- i. The Contractor must, at the Contractor's expense, obtain and maintain insurance contracts in accordance with the requirements of the Certificate of Insurance. Coverage must be placed with an Insurer licensed to carry out business in Canada.
- ii. Compliance with the insurance requirements does not release the Contractor from or reduce its liability under the Contract. The Contractor is responsible for deciding if additional insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any additional insurance coverage is at the Contractor's expense, and for its own benefit and protection.

### (b) Period of Insurance

- i. The policies required in the Certificate of Insurance must be in force from the date of contract award and be maintained throughout the duration of the Contract.
- ii. The Contractor must be responsible to provide and maintain coverage for Products/Completed Operations hazards on its Commercial General Liability insurance policy, for a period of six (6) years beyond the date of the Certificate of Substantial Performance.

### (c) Proof of Insurance

- i. Before start of the Work, and no later than thirty (30) days after acceptance of its bid, the Contractor must deposit with Canada a Certificate of Insurance on the form attached herein.

- ii. On request by Canada, the Contractor must provide originals or certified true copies of all contracts of insurance maintained by the Contractor under the Certificate of Insurance.
- iii. The insurance policies must be endorsed to provide Canada and any additional insured with not less than thirty (30) days' notice in writing in advance of a cancellation of insurance or any reduction in coverage.

(d) Insurance Proceeds

In the event of a claim, the Contractor must, without delay, do such things and execute such documents as are necessary to effect payment of the proceeds.

(e) Deductible

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

## 6.9 Determination of Construction Cost

- (a) The Construction Cost, as defined in Annex A- Basis of Payment initially will be determined based on the estimated Construction Cost specified in the Request for Proposal. The estimated Construction Cost will be adjusted periodically throughout the term of the contract to reflect the actual Construction Cost.
- (b) Any adjustment to the amount of a subcontract will require Canada's approval in writing. The Contractor will not be entitled to any additional fees other than the Percentage Fee.
- (c) Any request for adjusting the amount of a subcontract must be substantiated with a cost estimate breakdown itemizing all labour, Material, and Plant costs, and the amount of any allowance for the subcontractor's overhead, administration and profit. The Contractor must ensure that all prices included in the breakdown are fair and reasonable and in conformance with the following:
  - i. Labour rates must be established in accordance with applicable trade union agreements. Non-union labour rates must be established in accordance with local industry standards. All labour rates will require approval by Canada in writing.
  - ii. The costs of all Material and Plant must represent the actual amount paid to suppliers and said costs are to include all applicable discounts.
  - iii. Allowances for the subcontractor's overhead, administration and profit must be negotiated by the Contractor for each change, and must represent a reasonable amount for the nature and complexity of each change. However, in no circumstance will the subcontractor's allowance exceed 15%.
- (d) The price of any portion of the Work that is not subcontracted or paid for as a Fixed Fee will be equal to the actual cost of that portion of the Work plus the applicable Contractor's Percentage Fee.

## 6.10 Determination of Price for Subcontract Changes

- (a) This clause applies to the determination of price for any changes to subcontracts only.
- (b) Price Determination Before Undertaking Changes
  - i. If a Lump Sum Arrangement applies to the Contract or a part thereof, the price of any change will be the aggregate estimated cost of labour, Plant and Material that is required for the

change as agreed on 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 must be in accordance with 6.9(c.iii).

- ii. 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.
- iii. A price per unit referred to in paragraph (ii) will be determined on the basis of the aggregate estimated cost of labour, Plant and Material that is required for the additional item as agreed on by the Contractor and Canada, plus an allowance determined in accordance with 6.9(c.iii).
- iv. To facilitate approval of the price of the change or the additional price per unit as applicable, the Contractor must 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.
- v. If no agreement is reached as contemplated in paragraph (i) the price must be determined in accordance with (c) Price Determination Following Completion of Changes. .

(c) Allowable Costs under (a) Price Determination Prior to Undertaking Changes

- i. General
  - A. The Contractor must submit a cost estimate breakdown for each contemplated change, in accordance with (b) Price Determination Prior to Undertaking Changes. The breakdown must itemize all labour, Material, Plant and equipment costs estimated by the Contractor and subcontractors, and the amount of each allowance;
  - B. It is the responsibility of the Contractor to ensure that all prices included in the Contractor's breakdown to Canada, including those of subcontractors, are fair and reasonable in view of the terms expressed herein;
  - C. The labour hours required for the contemplated change must be based on the estimated number of hours to perform the work;
  - D. 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 Canada;
  - E. 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;
  - F. Allowances referred to in paragraph (iv)- *Allowance to the Subcontractor* below are not to be included in the hourly labour rates;
  - G. Credit for work deleted will only be for the work directly associated with the change;
  - H. When a change deletes work which has not yet been performed, Canada is entitled to an adjustment in the Contract Amount equal to the cost the Contractor would have incurred had the work not been deleted;
  - I. Allowances referred to in paragraph (iv)- *Allowance to the Subcontractor* below must not be applied to any credit amounts for deleted work;

- J. In those cases where the change involves additions and deletions to the work, the allowances referred to in paragraph (iv) - Allowance to the Subcontractor below must 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 must only be applied to that portion of the costs of the additions that is in excess of the cost of the deletions;
- K. If the contemplated change in the work necessitates a change in the contract completion date, or has an impact on the work, the Contractor must identify and include the resulting cost in the breakdown.
- ii. Hourly Labour Rates
  - A. The hourly labour rates listed in the Contractor's breakdown must be determined in accordance with the collective agreements that are applicable at the site of the work and must 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 Quebec Pension Plan contributions;
      - iii. 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.
  - B. In the case of non-union labour, all rates claimed must 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.
- iii. Material, Plant and Equipment Costs
  - A. 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.
- iv. Allowance to the Subcontractor
  - B. The allowances provided will be considered as full compensation for:
    - a. supervision, coordination, administration, overhead, margin and the risk of undertaking the work within the stipulated amount; and
    - 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.

(c) Price Determination Following Completion of Changes

- A. If it is not possible to predetermine, or if there is failure to agree on the price of a change in the Work, the price of the change must be equal to the aggregate of:
  - a. all reasonable and proper amounts actually expended or legally payable by the Contractor in for labour, Plant and Material that fall within one of the classes of expenditure described in paragraph B 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 determined in accordance with 6.9(c.iii);and
  - c. interest on the amounts determined under subparagraphs (A.a) and (A.b) of paragraph (c)calculated in accordance with GC6.12, "Interest on Settled Claims";
- B. The cost of labour, Plant and Material referred to in subparagraph (A.a) and (A.b) of paragraph (c) must 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 Applicable Taxes 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.

(d) Price Determination - Variations in Tendered Quantities

- A. Except as provided in paragraphs (B), (C), (D) and (E) if it appears that the final quantity of labour, Plant and Material under a price per unit item will exceed or be less than the estimated tendered quantity, the Contractor must perform the Work or supply the Plant and Material



required to complete the item and payment must be made for the actual Work performed or Plant and Material supplied at the price per unit set out in the Contract.

- B. If the final quantity of the price per unit item exceeds the estimated tendered quantity by more than 15 percent, either party to the Contract may make a written request to the other party to negotiate an amended price per unit for that portion of the item which exceeds 115 percent of the estimated tendered quantity, and to facilitate approval of any amended price per unit, the Contractor must, on request, provide Canada with:
- i. 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
  - ii. the estimated unit cost of labour, Plant and Material required for the portion of the item that is in excess of 115 percent of the tendered quantity.
- C. If agreement is not reached as contemplated in subparagraph (B), the price per unit must be determined in accordance with paragraph (c) Price Determination Following Completion of Changes.
- D. If it appears that the final quantity of labour, Plant and Material under a price per unit item must be less than 85 percent 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:
- i. 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
  - ii. the difference in unit cost is due solely to the decrease in quantity and not to any other cause.
- E. For the purposes of the negotiation referred to in subparagraph (D):
- i. the onus of establishing, justifying and quantifying a proposed change lies with the party making the request for negotiation; and
  - ii. in no event will the total price for an item that has been amended as a result of a reduction in quantity under paragraph (D) exceed the amount that would have been payable to the Contractor had 85 percent of the tendered quantity actually been performed or supplied.

## **6.11 Replacement of Specific Individuals**

- (a) If specific individuals are identified in the Contract to perform the Work, the Contractor must provide the services of those individuals unless the Contractor is unable to do so for reasons beyond its control.
- (b) If the Contractor is unable to provide the services of any specific individual identified in the Contract, it must provide a replacement with the same level of qualifications and experience as the individual who is being replaced. The replacement must meet the criteria used in the selection of the Contractor and be acceptable to Canada. The Contractor must, as soon as possible, give notice to the Contracting Authority of the reason for replacing the individual and provide:
- i. the name, qualifications and experience of the proposed replacement; and

- ii. proof that the proposed replacement has the required security clearance granted by Canada, if applicable.
- (c) The Contractor must not, in any event, allow performance of the Work by unauthorized replacement persons. The Departmental Representative (DR) may order that a replacement stop performing the Work. In such a case, the Contractor must immediately comply with the order and secure a further replacement in accordance with subsection 2. The fact that the DR does not order that a replacement stop performing the Work does not relieve the Contractor from its responsibility to meet the requirements of the Contract.

#### 6.12 Price Escalation Based on Consumer Price Index (CPI)

- (a) The firm hourly rates identified in Annex B- Pricing Tables (inclusive of overhead and profit) will be adjusted annually on the start date of each new Contract year (starting with Contract year 2) based on the annual average percentage increase (decrease) in the monthly index of the Consumer Price Index for Canada, All-Items (Not Seasonally Adjusted), published in Statistics Canada Catalogue no.62-001-X, Table 5, for the 12-month period ending 3 months prior to the new Contract year start date.

For clarity, if the contract start date was April 10, 2019 then at the start of Contract year 2 (i.e. April 10, 2020), the Contract year 1 rates would be increased by 1.3% based on the following assumptions:

	% Change in Monthly CPI
February 2019	1.1%
March 2019	1.2%
April 2019	0.9%
May 2019	0.9%
June 2019	1.1%
July 2019	1.0%
August 2019	1.4%
September 2019	1.6%
October 2019	1.6%
November 2019	1.7%
December 2019	1.5%
January 2020	1.7%

$$15.7\% / 12 = 1.3\%$$

Moreover, to determine the Contract year 3 rates, the Contract year 2 rates calculated above would be adjusted using the same Statistics Canada data and formula for the February 2020 - January 2021 twelve month period.

- (b) To gain access to the CPI adjustment, the Contractor is required to submit a request in writing to the Contracting Authority, no later than 1 month prior to the anniversary date of the contract in each calendar year. Authorization of the rate adjustments is subject to the approval of the Contracting Authority. If the contractor fails to request a CPI adjustment by the anniversary date of the contract, it should be noted that any adjustment requested at a later date is not retroactive.

## **ANNEX A**

### **BASIS OF PAYMENT**

#### **THE BASIS OF PAYMENT OF THE CONTRACT IS COMPRISED OF THE FOLLOWING**

##### **1. Contractor's Fee**

- Fixed Monthly Fee
- Percent Construction Fee
- Additional Personnel

##### **2. Construction Costs**

##### **3. Allowable Disbursements**

---

##### **1. Contractor's Fee**

The Contractor's Fee will be paid monthly in arrears for the term of the contract. The Contractor's Fee is based on the aggregate of the following:

###### **(a) Fixed Monthly Fee**

The Fixed Monthly Fee will be paid in equal monthly installments in arrears over the Term of the Contract. The Fixed Monthly Fee will constitute reimbursement for Services provided by the Contractor as specified in detail in the Terms of Reference. All services specified in the Terms of Reference are to be included in the Fixed Monthly Fee portion of the contract.

The Fixed Monthly Fee will include, without limitation:

- i. All overhead, administration, mark-up and profit for the Contractor's operations, including, but not limited to standard office expenses such as any photocopying, computer and software costs, Internet, all telephone and fax, cellular telephones, depreciation, rent and maintenance of office facilities, furniture, office equipment and supplies, taxi charges, parking.
- ii. The actual cost of all personnel, including field personnel, employed or contracted by the Contractor to deliver the services specified in the Terms of Reference and includes all payroll costs such as salary, statutory holidays, vacations with pay, unemployment insurance premiums and worker's compensation contributions where applicable, pension plan contributions, sick time allowance, medical/dental insurance premiums and any other benefits, including vehicle and vehicle expenses. Do not include contracted personnel of sub-trades that will perform the construction;
- iii. The salaries, benefits or other compensation for the Contractor's officers, directors, principals and support staff;
- iv. Travel and accommodation costs related to the Work for the duration of the Contract;
- v. All other costs which may be considered disbursements unless specifically listed in Article 3 Allowable Disbursements;
- vi. Any part of the Contractor's capital expenses, including interest on the Contractor's capital employed for the Work;

(b) Percent Construction Fee

The Percent Construction Fee includes:

- i. The Contractor's percentage mark-up for overhead, profit and general administration costs on the Construction Cost.
- ii. All costs that have not been identified for reimbursement under the Basis of Payment – (1.a) Fixed Monthly Fee, (1.c) Additional Personnel, (2) Construction Costs and (3) Allowable Disbursements.
- iii. The Percent Construction Fee will be paid in arrears for each progress claim submitted in accordance with GC5 - Terms of Payment, during the Term of the Contract. The value of the Percent Construction Fee for the payment period will be based on the construction cost of the work actually incurred during that period.

(c) Additional Personnel

- i. The Contractor will include in the Fixed Monthly Fees sufficient personnel to complete the Work within the time frame stipulated at Article 6.2.
- ii. However, should Canada determine that, for the purposes of schedule acceleration, additional personnel is required, Canada will have the right to request that the Contractor provide such additional personnel for the performance of the Work or any part or parts thereof.
- iii. For additional personnel requested by Canada, the Contractor will be reimbursed in accordance with the firm hourly rates quoted in Table 6 from Annex B Pricing Tables for the identified categories of personnel or in accordance with rates which have been negotiated and mutually agreed to between Canada and the Contractor for personnel that were not pre-identified in Table 11 from Annex B Pricing Tables. Such costs will be payable monthly in arrears.
- iv. Should additional resource categories be required during the execution of the Contract beyond what is identified in Annex B- Table 6 the Contractor costs will be established in accordance with GC5 Terms of Payment > 100K- Construction Services.

**2. Construction Costs**

- (a) Determination of Construction Cost will be in accordance with Article 6.9. Construction Costs will be reimbursed in accordance with GC5 - Terms of Payment.

(b) Construction Costs will include, without limitation:

- i. The actual, reasonable and direct costs of subcontracts;
- ii. The actual, reasonable and direct costs incurred by the Contractor, as previously agreed to by Canada in performing the Work, as follows:
  - a. Materials incorporated into the Work, including costs of transportation;
  - b. Materials, products, supplies, equipment, temporary services and facilities, including transportation and maintenance thereof, which are consumed in the performance of the Work, and cost less salvage value on such items used, but not consumed, which remain the property of the Contractor;
  - c. Tools, machinery and equipment, exclusive of hand tools, used in the performance of the Work, whether rented by the Contractor or others, including installation, minor repairs and replacements, dismantling, removal, transportation and delivery costs thereof;

- d. Site engineering, as-built drawings, maintenance manuals and all other documents required to be provided prior to certification of Substantial Performance, as well as commissioning activities;
- e. Independent inspection and testing services other than those described in the construction documents;
- f. Temporary services, O & M Manuals, as-builts, engineering drawings and rental costs of site trailers;
- g. Site washrooms other than those furnished by Canada;
- h. Health and Safety sundries for visitors (hard hats, boots, gloves, goggles, masks, etc.);
- i. Bilingual Site signage;
- j. Utility costs, as applicable;
- k. The cost of safety measures and requirements;
- l. Cleaning materials supplies, hand tools and consumables;
- m. Site photos;
- n. Printing of construction documents;
- o. Removal and disposal of waste products and debris.
- p. Site security provisions including security personnel, protection of materials and equipment, the procurement of private security services and construction related security
- q. The construction, maintenance and operation of a site field office at the Confederation Campus. One main site office may be sufficient for all the projects. The offices must include, but not limited to standard office expenses such as any photocopying, computer costs, Internet, all telephone and fax, cellular telephones, depreciation, rent and maintenance of office facilities, furniture, office equipment and supplies, taxi charges, parking, communication equipment, advertising and publications, long distance phone, bottled water, courier, stamps, software, office supplies and petty cash items. The site office must also have a space for the Design Consultant to work from when required.

(c) Site Labour Costs

- i. The Contractor will not use its own forces or the forces of a non-arm's length entity to provide trade work unless the Contractor has been specifically authorized to do so by Canada.
- ii. However, the Contractor will be reimbursed for the labour expended by the Contractor's carpenters and general site labourers for any physical construction work related to Division 1 which received prior written approval from the Departmental Representative. Site labour costs that have been authorized by the Departmental Representative in writing will be paid monthly in arrears.
- iii. Notwithstanding the above, Canada may require that the Contractor competitively procure any or all of the site labour work, including work that may be completed by the Contractor's own labourers.
- iv. Any costs incurred by the Contractor due to failure on the part of the Contractor to exercise reasonable care and diligence in the Contractor's attention to the Work will be borne by the Contractor.

**3. Allowable Disbursements**

In addition to the Contractor's Fee, Canada will reimburse at actual cost, without any administrative cost or mark-up for overhead or profit, the following disbursements supported by invoices/receipts:

- i. The cost of the Contractor's insurance and bonding;
- ii. Fees, levies, permits, costs and charges levied by authorities having jurisdiction at the Site;

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

---

- iii. Travel, if requested in writing by Canada, will be reimbursed in accordance with the National Joint Council Travel Directives without any administrative cost or mark-up for overhead or profit.

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

## ANNEX B

### PRICING TABLES

#### List of Deliverables and Total Bid Amount (TBA) Calculation:

TABLE 1 ESTIMATED CONSTRUCTION COST FOR EVALUATION PURPOSES		
COLUMN (A)	COLUMN (B)	COLUMN (C)
ITEM	DESCRIPTION OF REQUIREMENT	FIRM TOTAL
1	Total Estimated Construction Cost	\$13,227,300
Total Sum of Item 1, excluding taxes:		<b>\$13,227,300</b>
<b>Note to Bidders:</b>		
<i>Note 1. The sum of the Firm Price Total under column (C) is for information purposes only and will not be used to calculate the Total Bid Price, but will be included in the total contract award value.</i>		

TABLE 2 CONSTRUCTION MANAGER'S FIXED MONTHLY FEE (ARTICLE 1.A OF ANNEX A- BASIS OF PAYMENT)				
COLUMN (A)	COLUMN (B)	COLUMN (C)	COLUMN (D)	COLUMN (E)
ITEM	DESCRIPTION OF REQUIREMENT	FIXED MONTHLY FEE	NUMBER OF MONTHS	EXTENDED TOTAL (C X D)
Radiation Protection Building				
1	Pre-Construction		7	\$
2	Construction		18	\$
3	Post-Construction		2	\$
4	Total Sum of (Item 1 + Item 2 + Item 3):			\$
Sir Leonard Tilley Building				
5	Pre-Construction		7	\$
6	Construction		18	\$
7	Post-Construction		2	\$
8	Total Sum of (Item 5 + Item 6 + Item 7):			\$
Sir Charles Tupper Building				
9	Pre-Construction		7	\$
10	Construction		18	\$
11	Post-Construction		2	\$
12	Total Sum of (Item 9 + Item 10 + Item 11):			\$
1500 Bronson Building				
13	Pre-Construction		7	\$
14	Construction		18	\$
15	Post-Construction		2	\$
16	Total Sum of (Item 13 + Item 14 + Item 15):			\$



Annex C Building				
17	Pre-Construction		7	\$
18	Construction		18	\$
19	Post-Construction		2	\$
20	Total Sum of (Item 17 + Item 18 + Item 19):			\$
Cafeteria Building				\$
21	Pre-Construction		7	\$
22	Construction		18	\$
23	Post-Construction		2	\$
24	Total Sum of (Item 21 + Item 22 + Item 23):			\$
Total Sum of (4+8+12+16+20+24), excluding taxes:				\$
Note to Bidders: The sum of the Extended Totals under Column (E) for Item 4 + Item 8 + Item 12 + Item 16 + Item 20 + Item 24 will be used to calculate the Total Bid Amount (TBA) for Evaluation Purposes for Table 2.				

TABLE 3 CONSTRUCTION MANAGER'S PERCENT (%) CONSTRUCTION FEE (ARTICLE 1.B OF ANNEX A- BASIS OF PAYMENT)				
COLUMN (A)	COLUMN (B)	COLUMN (C)	COLUMN (D)	COLUMN (E)
ITEM	DESCRIPTION OF REQUIREMENT	PERCENT (%)	ESTIMATED CONSTRUCTION COST	EXTENDED TOTAL (C X D)
1	Percent Construction Fee	%	\$13,227,300	\$
Total Sum of Item 1, excluding taxes:				\$
<b>Note to Bidders:</b> <i>The sum of the Extended Totals under Column (E) for Item 1 will be used to calculate the Total Bid Amount (TBA) for Evaluation Purposes for Table 3.</i>				

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

TABLE 4 CONSTRUCTION MANAGER'S BONDING AND INSURANCE (ARTICLE 3(i) OF ANNEX A- BASIS OF PAYMENT)		
COLUMN (A)	COLUMN (B)	COLUMN (C)
ITEM	DESCRIPTION OF REQUIREMENT	TOTAL
1	Bonding and Insurance	\$
Total Sum of Item 1, excluding taxes:		\$
<b>Note to Bidders:</b> <i>The sum of the Price Total under Column (C) for Item 1 will be used to calculate the Total Bid Amount (TBA) for Evaluation Purposes for Table 4.</i>		

TABLE 5 CONSTRUCTION MANAGER'S CASH ALLOWANCE FOR PERMITS (ARTICLE 3(ii) OF ANNEX A- BASIS OF PAYMENT)		
COLUMN (A)	COLUMN (B)	COLUMN (C)
ITEM	DESCRIPTION OF REQUIREMENT	FIRM TOTAL
1	Cash Allowance for Permits	\$150,000
Total Sum of Item 1, excluding taxes:		\$150,000
<b>Note to Bidders:</b> <i>The sum of the Firm Price Total under column (C) is for information purposes only and will not be used to calculate the Total Bid Price.</i>		

<b>TABLE 6</b> <b>CONSTRUCTION MANAGER'S ADDITIONAL PERSONNEL</b> <b>(ARTICLE 1.C OF ANNEX A- BASIS OF PAYMENT)</b>				
<b>COLUMN (A)</b>	<b>COLUMN (B)</b>	<b>COLUMN (C)</b>	<b>COLUMN (D)</b>	<b>COLUMN (E)</b>
<b>ITEM</b>	<b>CATEGORY OF PERSONNEL</b>	<b>FIRM HOURLY RATE</b>	<b>ESTIMATED QUANTITY (HOURS)</b>	<b>EXTENDED TOTAL (C X D)</b>
<b>1</b>	Project Manager	\$	4000	\$
<b>2</b>	Intermediate Project Manager	\$	4000	\$
<b>3</b>	Senior Superintendent	\$	4000	\$
<b>4</b>	Assistant Superintendent		4000	\$
<b>5</b>	Scheduler	\$	4000	\$
<b>6</b>	Cost Estimator	\$	4000	\$
<b>7</b>	Quality Assurance and Control Manager	\$	4000	\$
<b>8</b>	Health and Safety Officer	\$	4000	\$
<b>9</b>	Procurement Coordinator	\$	4000	\$
<b>10</b>	Mechanical & Electrical Interference Coordinator	\$	4000	
<b>11</b>	Administrative Support	\$	4000	\$
<b>Total Sum of E1:E11, excluding taxes:</b>				<b>\$</b>
<b>Notes to Bidders:</b> <i>The sum of the Extended Total under Column (E) for Item 1 + Item 2 + Item 3 + Item 4 + Item 5 + Item 6 + Item 7 + Item 8 + Item 9 + Item 10 + Item 11 will be used to calculate the Total Bid Amount (TBA) for Evaluation Purposes for Table 6.</i>				
<b>Note 1.</b> Hourly Rates must include the Bidder's hourly rate for the Bidder's Personnel, (inclusive of payroll costs, overhead and profit) for Additional Personnel (Item 1C) of Annex A. Payment for any additional services or personnel will be based on the hourly rate and paid on the basis of actual hours worked.				
<b>Note 3.</b> Canada may accept or reject any of the above hourly rates. Canada reserves the right to negotiate these hourly rates.				
<b>Note 4.</b> Any errors in the addition or multiplication of the amounts in C) and D) above will be corrected by Canada to obtain the Total Bid Amount. In the case of error in the extension or addition of unitprices, the unit price will govern.				
<b>Note 5.</b> In order to ensure that fair and competitive hourly rates are received for each of the category of personnel the following requirements must be adhered to:				
a. The Bidder must provide an hourly rate for each category of personnel; b. The hourly rates must reflect the level of experience for each of the listed category of personnel. For example, if an hourly rate for personnel at the intermediate level exceeds the hourly rate for personnel at the senior level in the same category both hourly rates may be deemed not to reflect the appropriate level of experience; c. The hourly rate for any given listed category of personnel cannot be \$0.00 or nil value. d. Failure to comply with a or b. above will render the bid non-responsive.				
<b>Note 6.</b> Hourly rates are included in the Total Bid Amount but are not included in the total contract award value; they are for evaluation purposes only.				

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

<b>TABLE 7</b>			
<b>TOTAL BID AMOUNT FOR EVALUATION PURPOSES</b>			
The Total Bid Amount (TBA) will be evaluated with the figures from Table 2, Table 3, Table 4 and Table 6.			
<b>ITEM NO.</b>	<b>DESCRIPTION</b>	<b>PRICE</b>	
1	TABLE 2- CONSTRUCTION MANAGER'S FIXED MONTHLY FEE	Total Firm Price from Table 2	\$
2	TABLE 3- CONSTRUCTION MANAGER'S PERCENTAGE (%) FEE	Total Firm Price from Table 3	\$
3	TABLE 4- BONDING AND INSURANCE	Total Price from Table 4	\$
4	TABLE 6- CONSTRUCTION MANAGER'S ADDITIONAL PERSONNEL	Total Firm Price from Table 6	\$
<b>TOTAL BID AMOUNT (TBA) FOR EVALUATION PURPOSES, ALL EXCLUDING APPLICABLE TAXES:</b> (Item 1 + Item 2+ Item 3 + Item 4)			\$

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

---

## ANNEX C

### TERMS OF REFERENCE

## Table of Contents

1	DESCRIPTION OF PROJECT .....	5
1.1	INTENT OF CONTRACT .....	5
1.2	TERMINOLOGY AND ACRONYMS .....	5
1.3	BACKGROUND INFORMATION .....	5
1.3.1	Energy Service Acquisition Program.....	5
1.3.2	User Building Conversion Plan.....	6
1.3.3	Confederation Heights Building Conversion Approach .....	7
1.3.4	Building Information.....	7
1.3.5	Design Consultants .....	14
1.3.6	Commissioning Agent.....	14
1.4	ESTIMATED CONSTRUCTION COST .....	14
1.5	PROJECT SCHEDULE.....	15
2	PROJECT IMPLEMENTATION .....	16
2.1	PROJECT DELIVERY MODEL .....	16
2.2	DESIGN COORDINATION .....	16
2.3	DESIGN PACKAGE/TENDER STRATEGY .....	16
2.4	GENERAL DELIVERABLES .....	17
2.4.1	Acceptable Electronic Format.....	17
2.4.2	Writing Style .....	18
2.4.3	Report Content .....	18
2.5	APPROVALS .....	18
2.5.1	Authorities Having Jurisdiction - Federal.....	18
2.5.2	Authorities Having Jurisdiction - Other.....	19
2.5.3	Federal and Provincial Authorities.....	19
2.5.4	Municipal Authorities .....	20
2.6	SECURITY OF INFORMATION .....	20
2.7	LOCAL OFFICE .....	20
3	OBJECTIVES .....	21

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

---

3.1	COLLABORATIVE PROJECT DELIVERY .....	21
3.2	PROJECT CONTROL.....	21
3.3	QUALITY.....	21
3.4	HEALTH AND SAFETY .....	21
3.5	PROTECTING HERITAGE VALUE .....	21
3.6	SUSTAINABLE DEVELOPMENT.....	21
4	SCOPE .....	22
4.1	INVESTIGATION WORK .....	22
4.2	ABATEMENT, DEMOLITION AND BUILDING PROTECTION WORK.....	22
4.3	TEMPORARY WORK.....	23
4.4	BUILDING CONVERSION WORK .....	23
4.4.1	Sir Leonard Tilly Building .....	23
4.4.2	Sir Charles Tupper Building .....	23
4.4.3	Radiation Protection Bureau .....	24
4.4.4	Cafeteria Building .....	24
4.4.5	Sir Andrew Campbell Annex C .....	25
4.4.6	1500 Bronson and Annex.....	25
4.4.7	General .....	25
5	CHALLENGES AND CONSTRAINTS .....	26
5.1	PROJECT MANAGEMENT CHALLENGES.....	26
5.2	BUILDING AND SITE CONSTRAINTS.....	26
5.3	PROJECT TEAM ORGANIZATION .....	26
5.3.1	General .....	26
5.4	LESSONS LEARNED FROM PILOT PROJECTS .....	28
5.5	DESIGN CONSULTANT .....	31
5.6	ENVIRONMENTAL CONSULTANT .....	31
5.7	CONSTRUCTION MANAGER .....	31
6	REQUIRED SERVICES .....	33
6.1	GENERAL REQUIREMENTS .....	33
6.2	MANAGEMENT AND ADMINISTRATION .....	33
6.2.1	Meetings and Workshops.....	33

---

6.2.2 Project Response Time.....	36
6.2.3 Reporting and Site Documents.....	36
6.2.4 Submittals.....	37
6.2.5 Record Drawings.....	38
6.2.6 Official Languages.....	38
6.2.7 Security Clearances.....	38
6.2.8 Site Security .....	39
6.2.9 Coordination of Contractors Hired Directly by PWGSC or Building Representatives ..	40
6.2.10 Anticipated and Unanticipated Site Shut Downs .....	40
6.2.11 Noise, Vibration Odours and Deliveries .....	40
6.2.12 Record Drawings .....	40
6.3 PRE-CONSTRUCTION SERVICES .....	40
6.3.1 Scope Management .....	40
6.3.2 Design Package Management General.....	41
6.3.3 Review of Design Submissions and Design Packages.....	42
6.3.4 Quality Management.....	43
6.3.5 Cost Estimating, Monitoring and Control.....	43
6.3.6 Time Scheduling, Monitoring and Control .....	47
6.3.7 Risk Management .....	51
6.3.8 Human Resource Management .....	52
6.3.9 Health and Safety Management .....	53
6.3.10 Work Restrictions Plan.....	55
6.3.11 Procurement.....	56
6.3.12 Waste Management .....	59
6.3.13 Sustainability and Environmental.....	60
6.4 CONSTRUCTION SERVICES .....	60
6.4.1 Project Site Office .....	61
6.4.2 Construction .....	61
6.4.3 Commissioning .....	62
6.4.4 Cleaning .....	63
6.5 POST-CONSTRUCTION SERVICES.....	63

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

---

ToR APPENDIX A - TERMS .....	65
ToR APPENDIX B – ACRONYMS and ABBREVIATIONS.....	66
ToR APPENDIX C – PROCESS MAPS .....	68
ToR APPENDIX D – REFERENCE INFORMATION .....	75



# 1 DESCRIPTION OF PROJECT

## 1.1 INTENT OF CONTRACT

Public Works and Government Services Canada (PWGSC) will be undertaking the conversion of heating and cooling systems at buildings in the Confederation Heights Campus. Heating and cooling system conversions are part of the User Building Conversion Plan (UBCP). UBCP is part of a larger PWGSC initiative, the Energy Services Acquisition Program (ESAP), which aims to modernize the systems heating and cooling of federal and non-federal buildings in the National Capital Area. ESAP was developed in response to Budget 2016 which aims to accelerate federal infrastructure investment and reduce the carbon footprint of federal buildings.

The scope of these Terms of Reference (ToR) is focused only on the UBCP at the Confederation Heights Campus, located in south Ottawa. The campus is bounded on the east by Data Centre Road, on the north and west by the Rideau River and on the south by Brookfield Road. PWGSC is converting the Confederation Heights District Energy System (DES) from a High Temperature Hot Water (HTHW) distribution system to a Low Temperature Hot Water (LTHW) system.

The services of a Construction Manager (CM) will be engaged to assist and support PWGSC's Departmental Representative (DR) in the planning and delivery of building heating and cooling conversions within the Confederation Heights Campus. The CM's delivery of its Construction Management and Construction Services will be ongoing through the pre-construction phase, the construction phase, and the post-construction phases of the Project. Aspects of the pre-construction phase and the CM's services will span over the life of the Project.

## 1.2 TERMINOLOGY AND ACRONYMS

Defined terms, acronyms and abbreviations used in these ToR are capitalized and defined in the Contract or ToR Appendix A and B. Words that are not uppercase or italicized have standard definitions.

## 1.3 BACKGROUND INFORMATION

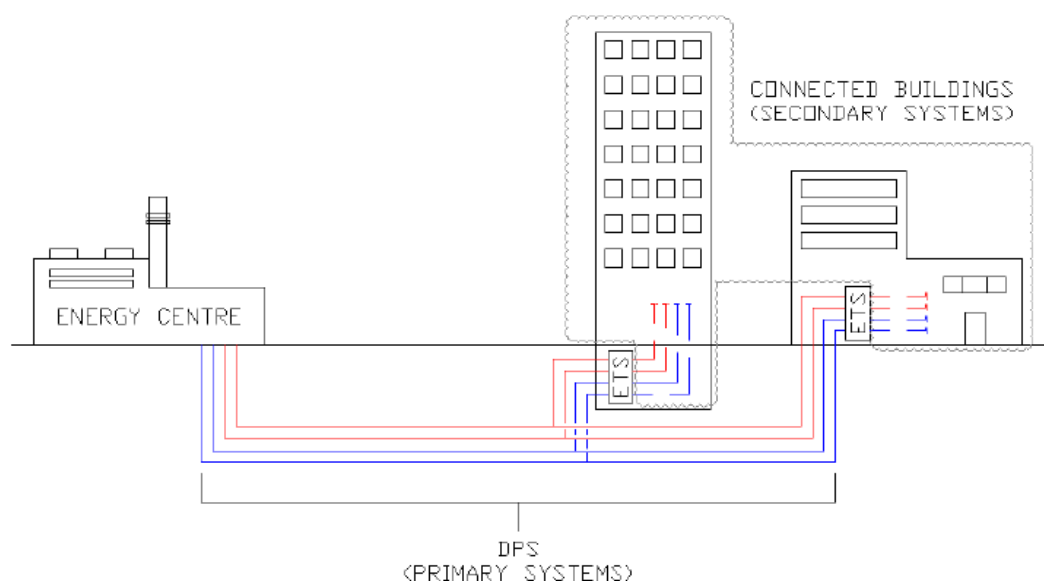
### 1.3.1 Energy Service Acquisition Program

The ESAP is a Government of Canada initiative to modernize heating and cooling within the NCA (National Capital Area). The current system was built between 50 and 100 years ago and uses outdated technologies, with many of its components at, or nearing, the end of their serviceable lives. The modernization of DESs will reduce greenhouse gas emissions, save money, and improve safety and reliability.

As illustrated in Figure 1, the main components of a DES are the Central Heating and Cooling Plant (CHCP) ('Energy Centre'), the Distribution Piping System (DPS), and the Energy Transfer Stations (ETS) at each connected building. The CHCP contains the boiler and chiller systems, which produce steam/hot water, and chilled water, respectively. Energy is delivered to the buildings via separate, closed piping loops (supply

and return) for heating and cooling; together, these pipes make up the DPS. The point of heat transfer between the DES and the building's own internal heating system is the ETS. The ETS is physically located in or adjacent to each building and replaces the need for boilers, chillers, and cooling towers. The ETS acts as a boundary between the district's heating and cooling systems (primary), and the building's heating and cooling systems (secondary), as shown in Figure 1.

ESAP will upgrade the heating and cooling plants (CHCPs), distribution networks (DPSs), and the heating and cooling systems of approximately 80 buildings in the NCA network through a Public-Private Partnership (P3). Stage I of ESAP includes the UBCP and focuses on DES modernization. Stage II will explore 'Deeper Greening of the infrastructure' and is outside of the scope of this Contract.



**Figure 1 – Schematic Drawing of District Energy System**

### 1.3.2 User Building Conversion Plan

The UBCP encompasses the conversion of individual building heating systems from steam or HTHW to LTHW, and cooling system conversion from direct to indirect configurations under Stage 1 of the ESAP.

The main objective of UBCP is to have all connected buildings converted and ready to accept the planned LTHW solution in advance of the completion of the CHCP and DPS conversions, which will be undertaken under a separate P3 Energy Service Delivery (ESD) contract. The planned completion dates for the conversions vary by DES, with the intent being to have all buildings converted in advance of the P3 conversion of the CHCP. The Confederation Height Project buildings have the following completion dates:

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

Building Name	Construction Completion (including commissioning)
Cafeteria	October 2021
1500 Bronson	July 2021
Radiation Protection	October 2021
Sir Leonard Tilley	June 2021
Sir Charles Tupper	July 2021
Sir A. Campbell Annex C	October 2021

### 1.3.3 Confederation Heights Building Conversion Approach

Heating - The general UBCP approach for the conversion of heating systems is to eliminate the need for primary steam or HTHW within the buildings so that there is, in the interim, a single interface where steam or HTHW is converted to hot water or other hydronic medium. The Confederation Heights DES currently operates with HTHW and the installation of the ETS as part of this Project will be permanent.

Cooling - The required cooling system upgrades will see a conversion of direct cooling connections to indirect cooling connections, via the installation of a heat exchanger on the district cooling chilled water piping. Modifications shall be made to the buildings' Secondary cooling systems in order to meet the temperature differential requirements of the distribution systems, while adjustments to the Primary supply temperatures from the CHCP will have to be made to account for heat exchanger installations.

### 1.3.4 Building Information

Locations of the Project:

Building Name	Address	Building Owner	Custodian	Heritage Status
Cafeteria	2755 Riverside Dr.	Canada Post	Canada Post	N/A
1500 Bronson	1500 Bronson Ave.	PWGSC	PWGSC	Classified
Radiation Protection	755 Brookfield Rd.	Health Canada	Health Canada	N/A
Sir Leonard Tilley	719 Heron Rd.	PWGSC	PWGSC	Recognized
Sir Charles Tupper	2720 Riverside Rd.	PWGSC	PWGSC	Recognized
Sir A. Campbell Annex C	855 Brookfield Rd.	Canada Post	Canada Post	N/A

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

---

a) **SIR LEONARD TILLEY**

The Sir Leonard Tilley Complex consists of three (3) major wings (A, B, and C) and one (1) minor Wing (D), as indicated in Figure 2. The A and B Wings were built in the late 1950s and are 5-stories tall. C Wing was built in the 1980s and is also 5-stories tall. D Wing is a smaller section constructed in 1985. The complex has an estimated total floor area of 25,316 m<sup>2</sup> (272,400 ft<sup>2</sup>). The buildings are currently vacant.



**Figure 2 – Sir Leonard Tilley**

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

---

b) **SIR CHARLES TUPPER**

The Sir Charles Tupper Building was constructed in 1960 and consists of five thin interconnecting rectangular blocks (Wings A through E), each with 5 to 7 floors. Wings A, C and E run east-west while wings B and D run north-south. The building has a useable floor area of approximately 36,580 m<sup>2</sup> (393,600 ft<sup>2</sup>) and is currently occupied by an estimated 1,200 occupants (**Figure 3**).



**Figure 3 – Sir Charles Tupper**

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

---

### c) RADIATION PROTECTION

The Radiation Protection Bureau (RPB) consists of two (2) wings (old and new) with an estimated total floor area of 9,710 m<sup>2</sup> (104,520 ft<sup>2</sup>). The building is currently occupied by Health Canada and its primary use is for nuclear radiation research. The old wing is a 2-story building that was constructed in the late 1950s and the new three (3) story wing was added in 1992 (**Figure 4**).



Figure 4 – Radiation Protection Buildings

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

---

d) **CAFETERIA BUILDING**

The Canada Post Corporation Cafeteria has an estimated total floor area of 2,700 m<sup>2</sup> (25,800 ft<sup>2</sup>). The building has a single floor above ground plus a basement. Canada Post's operation personnel reported that the building has a maximum occupancy of approximately 150 occupants, 100 in the cafeteria and 50 in the gymnasium (**Figure 5**).



**Figure 5 – Cafeteria Building**



Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

---

e) **CANADA POST CORPORATION ANNEX C BUILDING**

The Canada Post Corporation Annex C has two floors above ground plus a basement. The building has an estimated total floor area of 10,000 m<sup>2</sup> (108,000 ft<sup>2</sup>). A commercial/light industrial tenant partially currently occupies the building (**Figure 6**).



**Figure 6 – Sir Campbell Annex C**



Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

---

f) **1500 BRONSON BUILDING AND ANNEX**

The 1500 Bronson building is a six story building plus a basement that was constructed in 1964. It has an estimated total floor area of 11,580 m<sup>2</sup> (124,600 ft<sup>2</sup>). The building is now vacant and is a classified heritage building (**Figure 7**).



**Figure 7 – 1500 Bronson**

The building, which is now vacant, is a heritage building designated as "classified". An independent building is adjacent to this building, known as an "annex".

### 1.3.5 Design Consultants

PWGSC has retained a consultant to provide Architectural and Engineering Services for the Project. The Design Consultant (DC) has prepared feasibility reports and conversion concepts for each of the Confederation Heights buildings that are part of this Project. Detailed design (construction documents) for some buildings has partially advanced, yet site and building investigations still need to be undertaken to confirm scope and finalize the design.

PWGSC is also in the process of retaining the services of an Environmental Consultant (EC) to assess and document designated substances within the campus site and its buildings.

The DC and EC, together, are referred to as the Design Team in these ToR.

### 1.3.6 Commissioning Agent

As not all Confederation Heights Campus buildings are owned and operated by PWGSC, and because the building managers and operators have varying understanding of project delivery and the impact of this Project on their building and operation, PWGSC has opted to retain an independent commissioning agent for the Project. The 3rd party commissioning agent will verify and document the completion and operation of Project Work, as per the design intent, validating to building managers and the DR the intended systems performance and training of operational personnel.

## 1.4 ESTIMATED CONSTRUCTION COST

The indicative Construction Cost Estimate for the Project is \$13,300,000.

The Construction Cost Estimate includes design, construction and escalation contingencies, general requirements and sub-trade overhead and profit, but excludes Design Team and CM fees.

ELEMENT	CONFEDERATION HEIGHTS DES	RADIATION PROTECTION	SIR LEONARD TILLEY	SIR CHARLES TUPPER	1500 BRONSON	SIR CAMPBELL ANNEX C	CAFETERIA OTTAWA
NET BUILDING COST	\$9,044,300	\$2,522,900	\$1,844,500	\$1,334,800	\$1,020,300	\$876,000	\$1,445,800
GENERAL REQUIREMENTS & PERMIT FEES (20% and 5%)	\$2,261,100	\$630,700	\$461,100	\$333,700	\$255,100	\$219,000	\$361,500
CONTINGENCIES & ESCALATION (15% and 2%)	\$1,921,900	\$536,100	\$391,900	\$283,700	\$216,800	\$186,200	\$307,200
<b>TOTAL CONSTRUCTION COST:</b>	<b>\$13,227,300</b>	<b>\$3,689,700</b>	<b>\$2,697,500</b>	<b>\$1,952,200</b>	<b>\$1,492,200</b>	<b>\$1,281,200</b>	<b>\$2,114,500</b>

## 1.5 PROJECT SCHEDULE

The Confederation Height Project buildings have the following completion dates:

Building Name	Construction Completion (including commissioning)
Cafeteria	October 2021
1500 Bronson	July 2021
Radiation Protection	October 2021
Sir Leonard Tilley	June 2021
Sir Charles Tupper	July 2021
Sir A. Campbell Annex C	October 2021

Note 1: These completion dates are the completion dates provided to the larger Public Private Partnership of ESAP and the conversion must be completed within these timeframes or Canada may be subject to penalties.

The CM is required to work closely with the DR and Design Team to develop a logical and efficient building conversion Work flow that allows for Project constraints, such as DES operations, seasonal switchover and operations, building occupant requirements, etc. Accordingly, the CM and its Subcontractors are required to be able to adjust their level of effort over the progression of the Project to overcome constraints and maximize opportunities.

Project Milestones	Cafeteria	1500 Bronson	Radiation	Tilley	Tupper	Annex C
<i>Design Completion</i>						
<i>CM Contract Award</i>	September 2019					
<i>Construction Start</i>						
<i>Construction End</i>	Oct 2021	July 2021	Oct 2021	June 2021	July 2021	Oct 2021

---

## 2 PROJECT IMPLEMENTATION

With the support of the CM, the Project implementation strategy is to optimize critical decision making to prioritize the design and interim approvals, allowing construction to start early and in a streamlined sequence.

### 2.1 PROJECT DELIVERY MODEL

This Project will use a construction management delivery model to implement the Work. The Design Team will develop the design and Design Packages (DPs) for tendering by the CM. The CM is required to define the scope and sequencing of DPs to the DR and Design Team, for the Design Team to plan their tasks and activities accordingly. The CM is required to, when requested by the DR, carry out fast track project delivery, using multiple, simultaneous Design Packages. The CM is required to consider overall Project requirements, ranking and prioritizing the Work to maximize off-season heating or cooling shutdowns and minimize impacts to building occupants.

The CM must implement the Work of the Project through a holistic, prioritized, integrated, coordinated, and managed design process, and the sequential tendering and construction of multiple DPs. The CM may have to tender DPs based on partially complete information of a holistic design that appropriately balances quality, cost, time and risk management challenges. Design decisions will require substantiated assessment of the viability of the design proposal and cost and schedule benefit established by the CM. The CM, as and when requested by the DR, must provide design assist services through participation in Project meetings and workshops, provide bid-ability and constructability advice, define, and manage Work and design phasing and sequencing in accordance with the Project milestones and construction budget approved by the DR.

The CM is to provide an experienced, on-site team for the duration of the Project. The CM and the Design Team's on-site personnel are to have the authority, ability and capacity to respond to evolving situations, daily if necessary, in order to coordinate and integrate ongoing construction operations with the design production.

### 2.2 DESIGN COORDINATION

Successful design prioritization, coordination and integration with construction operations, which are planned around building use, are overarching requirements for the Project. The Design Team will coordinate and integrate all functional, technical, and operational requirements into the design of the Project.

The CM's definition of operational, building and site constraints and input of said constraints to the DR and Design Team are essential to obtain Design Packages that allow sub-trades to bid Work confidently and competently.

The CM is required to collaborate with the Design Team throughout the design process, providing suggestions and recommendations for alternative materials, construction sequencing, physical constructability and tenderability of the Projects' scope. These collaboration and integration processes require an ongoing synergy of Project Team skills to manage Project costs, always remaining within the approvals prescribed.

### 2.3 DESIGN PACKAGE/TENDER STRATEGY

After PWGSC's approval of the CM's procurement plan, the CM is required to pre-qualify Subcontractors and suppliers who are competent and capable of carrying out the Work. This prequalification process is to occur concurrently with the submission of substantively advanced DPs. The CM must create a pre-qualified pool of Subcontractors and suppliers.

Tendering by the CM of all Subcontracts is to coincide with the completion of each DP. The CM must prequalify Subcontractors and suppliers for the purposes of implementing Work and providing design assist services where permitted under 6.2.11.2 Solicitation Requirements.

Below is a preliminary list of Work categories that the CM will have to expand or further subdivide as appropriate to the Project scope. The preliminary Work categories include:

- a) Structural, including seismic upgrading, if required;
- b) Abatement and demolition;
- c) Power and no-power piping, HVAC, and Controls;
- d) Electrical;
- e) Interior finishes, if required;
- f) Food equipment (for Cafeteria building); and
- g) Security.

The CM is required to split DPs into tender packages as required in order to optimize the Project schedule.

The CM is required to take a lead role to identify all submissions and their timing in order for the Design Team to prioritize their efforts.

## 2.4 GENERAL DELIVERABLES

Where submissions include summaries, reports, Drawings, Specifications, presentations and schedules, the CM is required to provide four hard copies along with an electronic copy in editable native format and Portable Document Format (PDF), unless otherwise specified.

### 2.4.1 Acceptable Electronic Format

Electronic format will mean:

Deliverable	Acceptable Format
Written reports and studies	MS Word
Spreadsheets and budgets	MS Excel
Presentations	MS PowerPoint and/or MS Visio
Drawings	DWG (such as Autodesk Auto CAD 2015) and PDF
Schedules	Microsoft Project or Primavera P6 or newer
Change management and daily logs	MS Word
Organizational Charts	Adobe Illustrator or MS Visio
National Master Specifications (NMS)	MS Word

#### 2.4.2 Writing Style

The CM is required to use a writing style that presents information in a logical, objective, clear and concise manner. CM is required to write reports so that the reviewer can easily locate references and respond to related information contained in the report. Reports must include the following sections:

- a) A cover page indicating the project title, nature of the report, CM's Contract number and author name, PWGSC Contract name and reference number, and a date in a non-ambiguous format, i.e. October 9, 2017 or 2017-10-09;
- b) A table of contents;
- c) An executive summary;
- d) An introduction;
- e) A methodology section explaining the methods and tools used, such as weightings, comparative analysis;
- f) A conclusion or synopsis; and
- g) Appendices containing supporting material referenced in the report, supplementary and supporting information.

#### 2.4.3 Report Content

The CM is required to:

- a) Ensure that the executive summary is an accurate and complete summary of the report following an identical structure, including only key points, results and recommendations;
- b) Use an organizing system, such as MS Word Document Map, for ease of reference and cross-referencing;
- c) Use correct grammar including complete sentences to avoid ambiguity and facilitate translation when required. The use of technical terms, industry jargon and cryptic phrasing must be avoided;
- d) Be efficiently written with only essential information included in the body of the report and supporting information in an appendix, if required; and
- e) Analyze and ensure all relevant correspondence against accepted goals, objectives and the requirements identified in these terms of reference.

### 2.5 APPROVALS

#### 2.5.1 Authorities Having Jurisdiction - Federal

A list of authorities and their federal jurisdiction is included below. Note that FHBRO provides recommendations, not approvals.

<b>Federal Authority</b>	<b>Jurisdiction</b>
Public Works and Government Services Canada	Project expenditure authority and Contract approvals; Code compliance for fire prevention and life safety
Federal Heritage Building Review Office (FHBRO)	Recommendations for heritage element protection and intervention
Environment and Climate Change Canada (ECCC)	Environmental Compliance Management Program (ECMP)

### 2.5.2 Authorities Having Jurisdiction - Other

A list of other authorities and their jurisdiction is included below. This Project will have to comply with the jurisdictional requirements of other authorities. The CM is required to observe codes, regulations, by-laws, and decisions of all authorities having jurisdiction. In the case of overlap, the CM is required to apply the most stringent requirement. All Work must comply with the applicable Ontario construction health and safety Acts and Regulations, in addition to the related Canada Occupational Safety and Health Regulations.

<b>Ontario Provincial Authority</b>	<b>Jurisdiction</b>
Ministry of Labour (MOL)	Employment Standards; Construction Safety; Designated Substance Management; Workers Compensation; and Ontario Construction Health and Safety Acts and Regulations.
Ministry of the Environment (MOE)	Environmental Protection Act: 3R Regulations; Building discharges into the air, water and ground; and Disposal of designated substances, including asbestos, lead, etc.
Ministry of Consumer and Commercial Relations Technical Standards and Safety Authority (TSSA)	Construction hoists, elevators, escalators, dumbwaiters, pressure vessels, etc.

<b>Municipal Authority</b>	<b>Jurisdiction</b>
City of Ottawa	Planning and Design Submissions for Information; Building, Demolition and Plumbing Permits and Inspections; Fire safety, equipment, and access for fire-fighting equipment; Ottawa Built Heritage Sub-Committee, Planning Committee, and City Council; and Occupancy Permits.

### 2.5.3 Federal and Provincial Authorities

As defined in the Canadian Environmental Assessment Act 2012, PWGSC is a Responsible Authority. PWGSC will fulfill its obligations as a Responsible Authority to safeguard the environment through dutiful public consultation and Project designs, construction, and operations.

---

In support of PWGSC, and to meet PWGSC's Responsible Authority obligations, the:

- a) DC and EC will facilitate and participate in any discussion or negotiation required to obtain project approvals with federal and provincial authorities and ensure that the technical and legal compliance of project designs follow the said approvals and conditions; and
- b) The CM is required to ensure that all Work and construction operations comply with said approvals and conditions.

All communication with federal and provincial authorities must be through the DR. The DR will deal with federal and provincial approval fees on a case-by-case basis and may request the CM to pay such fees as a disbursement to the Contract.

#### **2.5.4 Municipal Authorities**

On behalf of PWGSC, the DC and EC will prepare and provide to the CM all documentation for building and other permits necessary for approval by municipal authorities. The CM is required to manage the building permit application process itself. All communication with the municipal authority related to permits and permit payment must be through the CM. The CM is required to engage the DC and EC and together participate in any discussion or negotiation necessary to obtain permits and assist in resolving issues before the tender of each Design Package. Submissions by the CM will begin with design when site plan approval is required or well advance Design Packages for building permits, with subsequent filings as required by the municipal authority and for design revisions in response to reviews.

The CM is required to apply for interim and final occupancy permits and resolve all outstanding issues relating to permit approval. The CM is required to provide municipal authorities access to the site as and when they require access and obtain reports of their findings, which are to be given to the DR for review and handling as necessary. The DC and EC will address and respond to all issues by municipal officers through the CM including:

- a) Purpose of review and approval: to obtain site plan and building code compliance (permits);
- b) Submission format: Drawings, Specifications, oral presentations for site plan applications, advanced Design Package submissions;
- c) Submission schedule: Site plan approval; advanced Design Packages for building permit approval; and
- d) Expected turnaround time: from four weeks to three months.

### **2.6 SECURITY OF INFORMATION**

The CM and any entity or person contracted by or employed by the CM must not discuss issues pertaining to the Project including, but not limited to, the Project's layout, design, content and security provisions, except as they relate to the direct provisions of services under this Contract. CM personnel and Subcontractors must not publish pictures or videos of any portion of the Work in progress without written permission from the DR.

### **2.7 LOCAL OFFICE**

The CM must use a local office as a base of operation to provide all administrative management services required in this Contract. The local office must be fully operational for the start of the Contract and remain as such throughout the duration of the Contract. The local office location is to allow the Contractor to satisfy all of the operational requirements of the Contract.



### 3 OBJECTIVES

The CM is required to consider the following objectives in the design and implementation of Project.

#### 3.1 COLLABORATIVE PROJECT DELIVERY

Develop a common vision for the Project through collaborative delivery approach. Deliver the Project with integrated design and construction solutions to a high standard of design. Provide balanced solutions to all Project elements and challenges.

#### 3.2 PROJECT CONTROL

Deliver the Project within the limits of its authorized funding. Organize, prioritize and deliver the Project within the established time limits, permitting the full use and function as intended, proactively prioritizing Work and managing its resources to achieve the prescribed milestones. Maximize opportunities and minimize risk while substantiating the viability and cost and time benefits of design and construction choices.

#### 3.3 QUALITY

Deliver the Project to meet the quality standards required for the ongoing operation of building services. Ensure the technical performance of all components and systems must be tested against the intended design performance and the design life-cycle analyses. Observe codes, regulations, by-laws, and decisions of authorities having jurisdiction. Observe national model Codes, Acts, and Standards. Identify other jurisdictions appropriate to each project and include those jurisdictional requirements into the project.

#### 3.4 HEALTH AND SAFETY

Deliver the Project and the related Work processes in order to prove the full protection of occupational health and safety regulations, and to ensure the health and safety of all persons, federal employees and private sector workers. Responsibly deliver and adhere to the provisions identified in the Canada Labour Code, provincial Acts and Regulations, and provide such provisions to all persons both working within and/or visiting a public building or site.

#### 3.5 PROTECTING HERITAGE VALUE

Protect and preserve heritage building fabric based upon recognized, internationally accepted principles and practices for the conservation of heritage buildings such as developing and implementing a protection and conservation approach specific for each heritage building in accordance with the *Standards and Guidelines for the Conservation of Historic Places in PWGSC (2nd edition)*.

#### 3.6 SUSTAINABLE DEVELOPMENT

Deliver the Project using integrated design principles addressing sustainable development. Employ strategies to address the environmental, economic and societal social values and their impact on every Project decision. Deliver an enhanced, healthy, livable work environment; minimizing the impact of Project Work on building occupants and the Confederation Heights Campus.

## 4 SCOPE

Working in collaboration with the DR and Design Team, the CM is required to support the scope definition for the Projects using value for money principles, balancing the need for capital investment while maintaining asset life cycle, always considering the perspective of Canadians at large.

The following sections outline of the CM's Work for the Project.

### 4.1 INVESTIGATION WORK

The CM along with the DR and Design Team must establish a building-specific strategy and program of necessary investigations required for the Project. The purpose of investigation Work is to gather all information required by the DC to advance the design, reduce Project risk, and to:

- a) Confirm building information, its structure, materials, mechanical, electrical and control systems, and surrounding site conditions;
- b) Test and determine the content, type, location, and approximate quantity of designated substances located in the building's interior, exterior and subsurface, validating the existing designated substances survey;
- c) Confirm site and building access requirements and protocols, and use restrictions and constraints, and
- d) Undertake other investigations as necessary.

Investigation Work will typically be ongoing concurrent with the development of the design and Design Packages. The Design Team will prepare an inspection plan in coordination with the DR and CM. Investigation Work affecting the heritage character or heritage elements of assets requires Federal Heritage Building Review Office (FHBRO) review, which is a responsibility of the Design Team. The CM is required to apply all FHBRO conditions.

### 4.2 ABATEMENT, DEMOLITION AND BUILDING PROTECTION WORK

Comprehensive site investigation by the Design Team is required to validate the content, type, location and quantity of designated substances located in each building's interior, exterior and the site.

The resulting gap analysis and report from these investigations, along with the seismic, structural, masonry, physical security and functional programming requirements will dictate the degree and scope of abatement and demolition. Hazardous materials are required to be abated typically during off-hours, including when invasive investigation Work is required.

The CM is required to provide protection, monitoring and temporary systems for building elements that will remain in situ during construction. Removal or demolition of character defining elements, which include materials, assemblies and spaces, will require planning, approval and documentation.

#### Heritage Conservation

Heritage Assets that are part of the authentic and original design and fit up of the Confederation Heights Buildings must be reinstated to their original or agreed appropriate locations within the Confederation Heights Buildings in a manner that supports the heritage conservation strategy. Reinstatement may include the replacement of missing elements or new elements that are compatible with the heritage character and not detracting from it. The DR will confirm the requirements for re-use or replacement pieces before commencing the design of any replacement.

### 4.3 TEMPORARY WORK

Temporary Work requirements are to be included in DP documentation. These requirements include interim measures (activities) to modify the temporary Work in the transitional periods between DPs or as necessary to ensure the safety and security of the Work and the Project site(s). Elements of temporary Work include, but are not limited to:

- a. Temporary protection installation, continually monitoring, adjustments and removals as they apply to each building component and system;
- b. Heat, ventilation and humidity with controls;
- c. Heritage protection measures in phased sequence that prioritizes activities to meet the sequence of the Work as determined by the CM;
- d. Fire protection to support construction operations;
- e. Maintaining operational capacity for required civil/municipal, mechanical, electrical and life safety systems; including lighting, security, emergency power for heating, lighting, ventilation, fire protection, lightning protection, life safety systems, and exterior services;
- f. Architectural separation (physical and dust) and structural bracing, underpinning, and supports, including implementation sequence instructions; and
- g. In collaboration with the DR, security measures including compartmentalizing classified information for the segregation of personnel from classified information, if required.

The CM is required to design, install and maintain all scaffolding necessary for the Project.

### 4.4 BUILDING CONVERSION WORK

#### 4.4.1 Sir Leonard Tilly Building

To align with the ESAP requirements for Building Heating and Cooling Systems connected to PSPC DES, new heating and cooling ETSs are required. New heating and cooling ETSs are to be installed to align with the ESAP requirements. The new ETSs are to be installed inside of the building.

Some construction work may be required to be completed seasonally to minimize impacts to the building.

The anticipated scope of the building conversion includes, but is not limited to:

- a) One new hot water ETS located inside the building;
- b) One new chilled water ETS located inside the building;
- c) One new domestic hot water heat exchanger located inside the building;
- d) One new glycol heat exchanger located within the existing mechanical room;
- e) Each ETS will have new duty-standby pump sets to circulate the heating/chilled water throughout the building. Pumps will be installed within the B-wing building basement mechanical room and C-wing mechanical rooms; and
- f) Minor controls upgrades

#### 4.4.2 Sir Charles Tupper Building

To align with the ESAP requirements for Building Heating and Cooling Systems connected to PSPC DES, new heating and cooling ETSs are required. New heating and cooling ETSs are to be installed to align with the ESAP requirements. The new ETSs are to be installed inside of the building.

Some construction work may be required to be completed seasonally to minimize impacts to the building.

The anticipated scope of the building conversion includes, but is not limited to:

- 
- a) One new hot water ETS located inside the building;
  - b) One new chilled water ETS located inside the building;
  - c) One new domestic hot water heat exchanger located inside the building;
  - d) New duty-standby pump sets to circulate the heating/chilled water throughout the building. The pumps would then be installed within the building basement mechanical room; and
  - e) Control system upgrades

#### 4.4.3 Radiation Protection Bureau

To align with the ESAP requirements for Building Heating and Cooling Systems connected to PSPC DES, new heating and cooling ETSs are required. New heating and cooling ETSs are to be installed to align with the ESAP requirements. The new ETSs are to be installed inside the building. Some construction work may be required to be completed seasonally to minimize impacts to the building.

The anticipated scope of the building conversion includes, but is not limited to:

- a) One new hot water ETS with located inside the building;
- b) One new chilled water ETS located inside the building;
- c) One new domestic hot water heat exchanger located inside the building;
- d) Two new glycol-to-hot water heat exchangers;
- e) Each ETS will have new duty-standby pump sets to circulate the heating and chilled water throughout the building. The new ETSs are to be located within the building. The new circulating pumps will be located in the old and new wing mechanical rooms;
- f) Addition of new control valves on the cooling coils serving the air handling units; and
- g) Control system upgrades

#### 4.4.4 Cafeteria Building

To align with the ESAP requirements for Building Heating and Cooling Systems connected to PSPC DES, new heating and cooling ETSs are required. New heating and cooling ETSs are required to align with the ESAP requirements. The new ETSs are to be installed inside the building. Some construction work may be required to be completed seasonally to minimize impacts to the building.

It is also recommended that a majority of the existing secondary systems must be replaced due to their current condition and limitations with operating at the new ESAP temperature requirements.

The anticipated scope of the building conversion includes, but is not limited to:

- a) One new hot water ETS located inside the building;
- b) One new chilled water ETS located inside the building;
- c) One new domestic hot water heat exchanger located inside the building;
- d) One new glycol to hot water heat exchanger within the building basement mechanical room;
- e) New duty-standby pump sets to circulate the heating/chilled water throughout the building. The pumps would then be installed within the building basement mechanical room;
- f) New electric humidifiers; and
- g) Control system upgrades to digital

#### 4.4.5 **Sir Andrew Campbell Annex C**

To align with the ESAP requirements for Building Heating and Cooling Systems connected to PSPC DES, new heating and cooling ETSs are required. New heating and cooling ETSs are to be installed within the existing basement mechanical room inside the building to align with the ESAP requirements. Some construction work may be required to be completed seasonally to minimize impacts to the building.

The anticipated scope of the building conversion includes, but is not limited to:

- a) One new hot water ETS located within the existing mechanical room;
- b) One new chilled water ETS located within the existing mechanical room;
- c) One new domestic hot water ETS located within the existing mechanical room;
- d) Each ETS will have new duty-standby pump sets to circulate the heating/chilled water throughout the building. It is proposed that these new ETS's and their associated pump sets will be located in the existing basement mechanical room; and
- e) Minor controls upgrades.

#### 4.4.6 **1500 Bronson and Annex**

To align with the ESAP requirements for Building Heating and Cooling Systems connected to PSPC DES, new heating and cooling ETSs are required. New heating and cooling ETSs are to be installed to align with the ESAP requirements. The new ETSs are to be installed inside the building. Some construction work may be required to be completed seasonally however most work must be completed during regular business hours since the building is currently unoccupied.

The anticipated scope of the building conversion includes, but is not limited to:

- a) One new hot water ETS located inside the building;
- b) One new chilled water ETS located inside the building;
- c) One new domestic hot water ETS located inside the building;
- d) Each ETS must have new duty-standby pump sets to circulate the heating/chilled water throughout the building. It is proposed that these new ETSs must be located within the building. Pumps must be installed within the building basement mechanical room; and
- e) Minor controls upgrades

There is a standalone building adjacent to the 1500 Bronson Building known as the "Annex". This building uses electric heating and cooling systems, and is not connected to the DES or any mechanical systems within the 1500 Bronson building. The "Annex" is not part of the scope of this project.

#### 4.4.7 **General**

The following general scope applies to the Work:

- a) Baseline water quality for each system is required before the start of construction;
- b) Energy and flow meters are to be installed on the supply side of pumps, rather than the suction/return side so that the meter is not subject to low pressures; and
- c) On a case by case basis, flush of building heating, cooling and domestic water systems may be required, as determined by the DR and DC.

## 5 CHALLENGES AND CONSTRAINTS

The CM is to consider and proactively work with Project Team members to resolve Project management challenges and implementation constraints. Other challenges and constraints will inevitably arise throughout the Contract. All types of project challenges and constraints require the active and ongoing management by the CM and those implicated in the Project Team.

### 5.1 PROJECT MANAGEMENT CHALLENGES

- a) Aggressive Schedule: Implementation of the Project will require an aggressive design and construction schedule, with concurrent design streams and construction;
- b) Design Decisions: Key design decisions are required to allow construction to proceed in order to meet the schedule;
- c) Level of Effort: Ongoing project management of all the CM's resources, Subcontractors and suppliers is required to achieve the Project's objectives;
- d) Collaboration and constant communication between the DR, Building Representatives, CHCP management, Design Team and CM are essential to realize efficiencies, minimize disruption, and overcome resistance to change.
- e) Understanding: Confederation Heights building representatives, key Project stakeholders, have varying levels of experience with construction and the potential impact on their occupancy.

### 5.2 BUILDING AND SITE CONSTRAINTS

- a) Building Access: Each Confederation Heights building has different security and access protocols, which will require the CM to
  - i. Liaise with each building management, building operations, and building security team to understand, document, and obtain written approval of individual building access requirements (i.e. advance notification period, personnel and vehicular submission forms; timing and space restrictions for loading dock use; building access document routing, etc);
  - ii. Integrate approved building access requirements in the Work Restrictions Plan detailed in the ToR section 6.2.10;
  - iii. Ensure Subcontractors and suppliers understand building access requirements; and
  - iv. Obtain building access permits in advance of carrying out the preplanned Work;
- b) Construction Staging: Interior and exterior staging areas need to be preplanned, well documented, and approved by the DR and building managers.

### 5.3 PROJECT TEAM ORGANIZATION

The Project Team (the DR, Building Representatives, CM, Design Team, PMSS-Project Management Support Services and Commissioning Agent) will manage and implement the Project in a collaborative manner. All members of the Project Team are required to work cooperatively at every phase of the design and construction process to ensure a successful result.

All team members are responsible for establishing and maintaining a professional and cordial relationship.

#### 5.3.1 General

This Project is to be managed and implemented in a collaborative manner. All members of the Project Team are required to work cooperatively at every phase of the design and construction process. Under the leadership of the DR, all team members are responsible for establishing and maintaining a professional and cordial relationship.

The Project Team refers to the key representatives, involved in coordinating and delivering this Project. The DR leads the Project Team, with membership representing those responsible for Project implementation.

The following chart identifies the organizational relationships. Authorities Having Jurisdiction are not indicated. Solid lines indicate functional reporting relationships.

This project is to be managed and implemented in a collaborative manner with a Project Team approach. The Project Team refers to the key representatives involved in coordinating and delivering this Project. The key representatives include:

- i) PWGSC (including the DR).
- ii) The CM.
- iii) Various DCs.

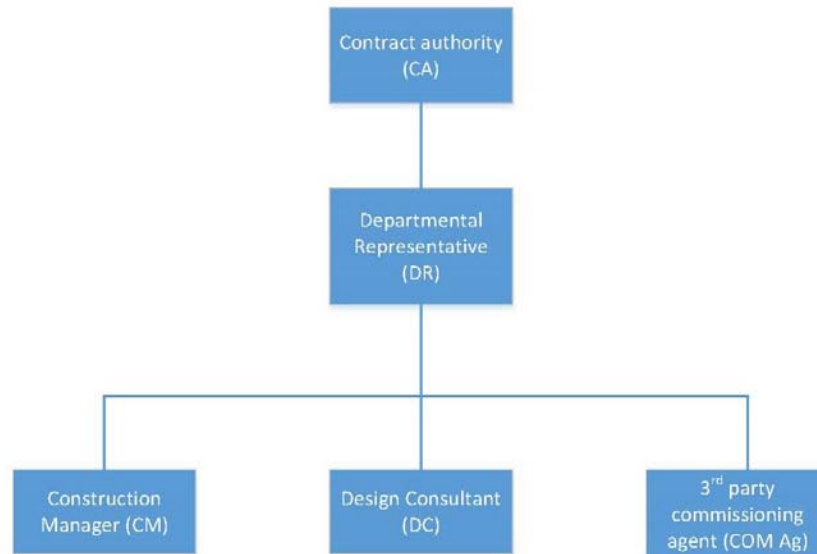


Figure 8 – Project Team

## PWGSC AND BUILDING REPRESENTATIVES

### Directors

The ESAP Senior Director is accountable for the expenditure of public funds and the delivery of the UBCP program of work and this Project. UBCP Directors are responsible for technical aspects of the Project design and construction.

### Building Representatives

The Building Representatives (stakeholders) of the Project are the Confederation Heights building managers and operators who represent the interests of Health Canada, Canada Post and PWGSC, including the Confederation Heights DES. The Building Representatives will participate in Project decision-making throughout all phases of the Project. These representative are responsible to design



---

their programming requirements, operational constraints and will assist with coordination and scheduling of Work activities which affect them.

### **Departmental Representative**

The UBCP Senior Project Manager is the DR for the Project and the CM's Contract. The Senior Project Manager is accountable to the UBCP Project Director for the management of the Project implementation.

### **Project Management Support Services**

PWGSC has engaged a 3<sup>rd</sup> party PMSS firm to support the DR. Support includes providing day-to-day project management, advice, administration support to the DR for the design and construction of the Project.

### **Technical Services Team**

PWGSC's Technical Services (TS) Team will provide strategic technical advice and quality assurance to the DR for key design disciplines. The TS Team will review the Design Team deliverables and confirm compliance with Project requirements. The TS Team will participate regularly in all phases of the Project. During construction, the TS Team may attend construction meetings and field reviews on an ad-hoc basis.

### **Commissioning Agent**

The DR will retain a 3<sup>rd</sup> party commissioning agent to provide commissioning services for the new and modified UBCP heating, cooling, and control components and systems. The 3<sup>rd</sup> party commissioning agent must provide the DR and building managers documentation that building systems impacted by the Project are complete and functioning properly, according to the design intent, prior to Substantial Performance and that facility staff have adequate system / assembly documentation and training.

## **5.4 LESSONS LEARNED FROM PILOT PROJECTS**

The following challenges and constraints are based on lessons learned from 3 pilot projects that underwent building conversions under the User Building Conversion Project.

The site work carried out with these building conversion projects must consider various user constraints and challenges.

The CM must address the following items prior to construction (and preferably prior to issue of contract(s) to subcontractors and suppliers) and be documented in the form of an agreement for construction.

1. Access to each of the six buildings will require security clearance through each buildings central Security Office. Security protocols are different for each building and building occupant, and are generally administered by the primary tenant. It is the CM's responsibility to obtain any security permits required for accessing the building. The CM must meet with building security to define the reporting structure, type of Security Services contract used, and any existing security protocols. In addition, Building Management must also be consulted as part of the process. All meetings and records of decision with security must be minuted/documented as security processes may change over the course of construction;
2. Additional permits (i.e. time/space or materials handling) may be required to enter the building and therefore it is the responsibility of the CM to gain a clear understanding of building operator (or other authority) permit and notification processes during the planning & design phase. This process may vary between building/tenant/operator. It is the CM's responsibility to obtain any required permits.



3. Asbestos abatement work must generally be done “6pm to 5am” and under a state of controlled ventilation for occupied buildings. For unoccupied buildings it may be permissible to undertake abatement work during the day.
4. A baseline of existing systems water quality must be obtained prior to start of construction. This information must be used to support the integration of new and existing systems during project commissioning.
5. On a case by case basis, a building flush of the existing system may be required. In the event that a system flush is required, this procedure is the responsibility of the CM.
6. Given the installation of new glycol heat exchangers in the majority of buildings, said glycol must be provided by the CM and will be paid through the pass-through with the percentage quoted for CM.
7. Energy /flow meters must be installed on the supply side of pumps, rather than the suction/return side (so that the meter is not subject to low pressures). This must be reflected on the Piping and instrumentation drawings
8. The impact on existing area lighting (overhead lighting, etc.) by addition/removal of piping and equipment (or other civil modifications) as part of the project must be considered.
9. The impact on existing area fire safety systems by addition/removal of piping and equipment (or other civil modifications) as part of the project must be considered.
10. Interior and exterior planned staging areas for construction must be defined ahead of time and indicated precisely on the drawings as General Location of Staging Area (Xm x Ym) – not to exceed specified area, unless in consultation with DR. The CM must obtain approval of the building owners.
11. A Designated Substance Report (DSR) will be completed, under a separate contract, to identify hazardous materials quantities and location within the project scope; however, additional designated substance services that may be required during construction is the responsibility of the Construction Manager. This may include (but not be limited to) preparation of additional documents, support with communications, additional testing, or emergency response to unspecified or unknown materials uncovered during construction. All DSR work during construction must be coordinated with the building operators.
12. Develop a stand-alone asbestos abatement plan (enclosure sizes, method of abatement, number of shifts, number of workers and if the work takes place during regular/after-hours) which would then be reviewed by the DR and a DSR specialist/consultant. This plan could also be supplied to the building operators, upon request or as a courtesy.
13. Following Contract Award, a walkthrough of the specific project areas must be organized to review the asbestos abatement scope and planning. This must include (as a minimum) representatives from building operations, CM, DSR consultant – if present, and PSPC.
14. A robust communications plan is required that includes information distribution to all stakeholders. The communications protocols are up to the CM to develop and maintain, with periodic support from the DR, as required. The stakeholders include Canada Post, PWGSC and Health Canada.
15. Work restrictions (time, location) related to specific work activities must be determined in consultation with stakeholders prior to construction. These work restrictions need to take into account the operational requirements of all operators and tenants. Specific emphasis is required for

---

hot work activities and whether the Contractors are allowed to perform this work during conventional work hours.

16. If possible, construction activities must be coordinated to take place during more convenient periods to minimize tenant disruption. This may include undertaking intrusive work during summer months (June-August) when the building population drops naturally, or during holiday periods (Christmas, long weekends). In particular, shutdowns that may cause disruption to tenant building usage must be scheduled only during off-peak times (weekends, holidays) and in conjunction with building maintenance and operations staff.
17. Due to the occupied and operational status of the buildings, specific emphasis must be placed on the maintenance of not only an overall project schedule, but also detailed work "look ahead" documents as a communications tools for stakeholders. The frequency and level of detail related to these required schedule "look ahead" may be more onerous than a standard construction project.
18. The CM is responsible for all health and safety protocols and procedures which must include consultation and reconciliation with building operators and other stakeholders. Specific procedures (for example Lock-Out Tag-Out requirements) must be coordinated prior to start of construction.
19. The CM is responsible for informing and coordinating with the heating and cooling plant management regarding project activities that may affect CHCP operations.
20. As part of the project, Air Quality testing may be required during various stages of the construction. The project specifications must define air quality and testing requirements, although the CM is responsible to verify with the building operators and tenants that any additional special requirements based on the location and type of work being performed are satisfied.

---

## 5.5 DESIGN CONSULTANT

The Design Consultant is under contract with PWGSC and formally reports to the DR and will, among other things:

- a) Provide the required Architectural and Engineering Services for the Project, develop and complete the Project design, and coordinate and direct the services of its sub-consultants and specialists related to design;
- b) Provide input to the CM on prequalification criteria for Subcontractors;
- c) Work with the CM to define the format, scope and timing of each Design Package;
- d) Prepare and assemble the Design Packages for tendering by the CM;
- e) Provide Input to CM's cost plan and cost estimates of the Work;
- f) Perform active cost, time and quality management of the DC team;
- g) Develop and update a risk register for the Project from their perspective;
- h) Provide on-site construction administration services to monitor the progression of the Work, validate Work quality control, respond to site conditions, prepare of construction contract changes, verify the CM's Work progress and completeness of progress payments applications, and recommend to the DR of acceptance of the Work;
- i) Cooperate with the DR, CM, and the Building Representatives;
- j) Coordinate the services and work product of the Environmental Consultant with its own services and work product;
- k) Verify operating manuals, and ensure that record drawings are accurate;
- l) Provide design-related training for all client and operations staff;
- m) Participate in design and construction meetings and Project workshops;
- n) Provide post construction services; and
- o) Complete and coordinate the sustainability strategy throughout the Project, confirm for the DR's approval, the strategies chosen, related deliverables and submissions, changes implemented, follow-up required, and final performance achieved. The DC will be responsible for all related tasks including confirmation of supporting documentation required for verification and sign-off.

## 5.6 ENVIRONMENTAL CONSULTANT

The Environmental Consultant is under contract with PWGSC and formally reports to the DR and will, among other things, provide environmental consulting services for the Project. The EC will identify and document hazardous materials, provide direction to the CM for their handling or abatement, and monitor hazardous material removal Work, in coordination with the DC and DR.

## 5.7 CONSTRUCTION MANAGER

The CM must perform the Required Services at the direction of the DR and must communicate openly with the DR on all Project-related matter. The CM is required to participate in meetings and workshops, provide constructability advice and provide recommendations for construction phasing and Design Package content and sequencing.

The CM is required to:

- a) Provide local representation and keep an office within the National Capital Region to accommodate and support personnel required for the Project;
- b) Provide the Construction Services and Work for the Project in accordance with the terms and

---

conditions of the Contract;

- c) Lead the construction team that is composed of its own forces and all Sub-Contractors and suppliers retained by the CM;
- d) Act as Constructor in charge of the construction site(s) within the Confederation Heights Campus;
- e) Establish and enforce site-specific health and safety rules for all individuals working on the site(s), including members of the Project Team;
- f) Provide all necessary personnel to perform the services and duties for the Project, either by assignment of CM qualified staff or by engagement of services Subcontracted by the CM;
- g) Ensure continuity of Key Personnel and maintain a dedicated working team in accordance with their bid for the duration of the Contract;
- h) Receive and review all Project related documentation provided by the DR and Design Team;
- i) Have an in-depth understanding of the Project requirements, including scope, budget, and schedule objectives, requirements, and all CM obligations as described in the Contract;
- j) Work constructively to ensure a collaborative and cooperative team approach with knowledgeable and timely input and contribution by all Project Team members;
- k) In cooperation with the Design Team and DR, ensure at all times the design solution and construction are maintained within the approved construction estimate for the Project;
- l) In cooperation with the Design Team and the DR, ensure at all times that the design solution and construction shall be undertaken within the approved schedule of the Project;
- m) Organize ongoing coordination meetings with the Project Team;
- n) Develop and continuously update a risk register for the Project from their perspective; and
- o) In coordination with the DC, assemble the required information and any applicable submittals/documentation from all Subcontractors and suppliers in support of and confirming the sustainability design strategies and industry performance standard level to be achieved.

## 6 REQUIRED SERVICES

### 6.1 GENERAL REQUIREMENTS

The CM must take into consideration the Project Description, Project Implementation, Objectives, Scope, Challenges and Constraints, and Project Team Organization, all as described in the previous sections of the ToR, in planning and implementing the Work of the Project.

The CM must, for the duration of the Contract, provide the professional Construction Management services and Construction Services referred to in this ToR section 6, and as provided for in the ToR Appendices, and as prescribed in the Contract.

The CM, as an expert in matters of construction planning and implementation, must:

- a) Provide comprehensive and ongoing construction planning, analysis, management of the Project, and implementation services and Work;
- b) Provide CM services and Work that include warranty related call-backs and repairs until the expiry of the warranty period. The warranty period shall be 12 months from substantial completion for each respective ETS;
- c) Perform the duties of a Constructor, administering, coordinating, and controlling Subcontractor and Supplier contracts, including other suppliers PWGSC or the building managers/operators may require to perform services or work on the Project site(s);
- d) Actively participate with the Design Team and DR to create and maintain a cohesive Project Team with a positive and collaborative working relationship; and
- e) Immediately notify the DR and Design Team in writing of any potential increases or decreases in the scope of Work that could affect the ability to meet Project objectives, exceed the approved Project cost, or extend the approved Project duration.

**The CM monthly fees, additional resource and site labour fees, Plant, Material and equipment expenses, and Subcontract expenses will not be due and payable until the CM submits the completed monthly reports to the DR.**

### 6.2 MANAGEMENT AND ADMINISTRATION

#### 6.2.1 Meetings and Workshops

Regular meetings and workshops will take place throughout the Contract. The CM must attend the meetings and workshops as outlined below.

##### 6.2.1.1 Design Meetings

The DC will co-chair the Design Meetings with the DR to coordinate and review the activities of the Project Team. These meetings will occur at PWGSC offices located in the National Capital Area, or on the Project site. Meetings may be held on a weekly basis until all Design Packages are awarded.

The DC will prepare and deliver the agenda, notice to invitees and minutes. The DC will issue the final meeting minutes within two (2) working days of the meeting.

The DC will create and maintain a database of action items and issues that is directly linked to the risk management services of the DC. The top ten risks from this database must accompany the final minutes of the meeting.

---

Attendance at these meetings will vary in accordance with the phase of Project design and will include: the DR, the Design Team, CM, other Project Team members, sub-consultants (as identified by the DC and according to the work in question), the CM and Building Representatives.

The purpose of these meetings is to:

- a) Monitor the progress of the design against Project objectives, scope, cost and schedule;
- b) Ensure clear communication between all participants;
- c) Ensure effective design and DP prioritization and coordination;
- d) Identify opportunities or issues, assigning responsible individuals and dates for resolution;
- e) Identify opportunities or problem issues, assigning responsible individuals and dates for resolution; and
- f) Ensure effective quality management, including integration of approval body requirements and coordination.

#### **6.2.1.2 Construction Meetings**

The CM must chair Project construction meetings during the construction and commissioning stages of the Project, held either on the Project site or at the PWGSC Offices, as agreed to by the DR.

The CM must prepare and deliver the agenda, notice to invitees and minutes. The CM must issue the final meeting minutes within two (2) working days of the meeting.

The CM must create and maintain a database of action items and issues that is directly linked to the risk management services of the CM. The top ten risks from this database must accompany the final minutes of the meeting.

Attendance at these meetings will vary in accordance with the stage of construction or commissioning and usually include the Design Team, DR, CM, other Project Team members as required, or any entity or person contracted or employed by the Design Team or CM for the specific matter in question.

The purpose of these meetings is to:

- a) Monitor the progress and administration of the prioritized construction against the approved scope and construction cost estimate, and the construction schedule;
- b) Ensure efficient communication between all participants;
- c) Ensure effective construction coordination with site and building operations;
- d) Ensure effective and efficient site coordination of all Design Team disciplines and the CM's Subcontractors and suppliers;
- e) Identify opportunities or problem issues, assigning responsible individuals and dates for resolution; and
- f) Ensure effective quality management.

#### **6.2.1.3 Workshops**

Various workshops will occur throughout the Project. Workshops will be pre-planned or tailored to the stage of Project development. Project control and risk management workshops will occur routinely throughout the Contract.

The CM must attend these workshops and be able to discuss in an open manner Project matters that affect the CM or delivery of the Project. Workshops include, but are not limited to:

- a) Subject Matter Workshops: These workshops are for technical design matters, Project implementation strategies, and/or Project challenges. The DC will chair these workshops and issue final workshop minutes within two (2) days of the workshop, update the database containing action items and issues, and append the top five risks identified at the workshop to the final

---

workshop minutes. Individual subject matter workshops may include:

Sustainability strategy/targets and options development;

Sustainability design matrix and credits;

Landscape architecture;

Mechanical and control systems;

Electrical systems;

Physical security;

Building access and Work coordination; and

Other workshops as agreed by the DR.

- b) Constructability Workshops: These workshops are for construction related matters as they relate to the design progress or site conditions. Workshop discussion points could include Materials selection, Work sequencing, design prioritization, design completion status, design coordination, tender-ability, tender sequencing, or other matters that could influence the ability to build the Work. The CM must chair and take a leading role in conducting these workshops, which forms part of the CM's design management services. The CM must prepare and deliver the workshop agenda, notice to invites and minutes. The CM must issue final workshop minutes within two (2) days of workshop, update the database containing action items and issues, and append the top five risks identified at the workshop to the final workshop minutes.

Attendance at these workshops, as determined by the CM and DR, may include the Design Team specialists and disciplines relevant to the discussion topics, and the CM's Superintendent, cost and time management resources. The DR will attend all workshops. Workshops will typically be a half-day but will depend on the complexity of the discussion topics;

- c) Project Control Workshops: These workshops are to address Project control matters, cost, time and risk. The primary workshop objectives are to promote open discussion of Project control issues between the Design Team and the CM, and to ensure the Design Team and CM have the same basis on understanding for Project cost elements (inclusions, exclusions, assumptions, and basis of costing), schedule activities (design and construction), and activity durations.

The CM must chair and take a leading role in conducting these workshops, which forms part of the CM's cost and time management services. The CM must prepare and deliver the workshop agenda, notice to invites and minutes. The CM must issue final workshop minutes within two (2) days of workshop, update the database containing action items and issues, and append the top five risks identified at the workshop to the final workshop minutes.

- d) Risk Management and Lessons Learned Workshops: These workshops are to address Project related risks and provide a form for ongoing learning and improvement of PWGSC project delivery processes. The DR will chair and organize these workshops, prepare and deliver the workshop agenda, notice to invites and minutes. Workshops will typically be either a half-day or an entire day. Workshop discussion topics may include topics such as short, mid and long-term opportunities and risks, the cumulative effect of opportunities and risk, lessons learned at different project stages, and ways to reduce or eliminate workflow processes; and

- e) Value Engineering Workshops: These workshops are to address complex matters related to excessive Project cost or time. The goal of these workshops is to find alternative ways or means of obtaining value for money, while respecting the general intent of the Project scope. The DR will chair and organize these workshops, prepare and deliver the workshop agenda, notice to invites and minutes. The Design Team and CM must actively participate at these workshops. The length of these workshops will be determined on a case-by-case basis, but are usually one (1) to three (3) days per workshop.



**6.2.1.4 Frequency of Meetings, Workshops and Presentations**

	Design Development Stage	DP Stage	Construction and commissioning stages
Meetings			
Design	Weekly		Weekly until all DPs are awarded
Construction*	Every two weeks until Project completion		
Workshops			
Subject Matter	As required		
Constructability	Monthly	Every DP submission	As required
Project Control Workshops	Monthly		
Lessons Learned/ Risk Management	Every 6 months		
Value Engineering (VE)	To be determined		None

\* Commence with investigations planning.

**6.2.2 Project Response Time**

The CM's Key Individuals and those of its Subcontractors and suppliers must be available to attend meetings or respond to inquiries within one-half Working Day, when practical.

**6.2.3 Reporting and Site Documents****6.2.3.1 Monthly Report**

The CM must prepare and submit for review by the DR, within 30 working days of Contract award, a sample of the CM's report structure. If requested by the DR, the CM must revise the reporting structure within five (5) working days of receipt of the DR's comments until the DR approves the reporting structure. The CM must use the reporting structure approved by the DR for monthly reporting to the DR. As the Project progresses, the CM must revise the reporting structure if requested by and to the approval of the DR. The CM's monthly reports must thoroughly document the Project status and progress over the review period and challenges foreseen in the upcoming reporting period.

In addition, the CM must:

- a) Provide a monthly invoicing summary, which includes:
  - i. A detailed breakdown of the billing section by solicitation package and then itemized by Subcontractor and Supplier; and
  - ii. A comparison of all expenditures to date by solicitation package including all change orders to the original submission for each Subcontractor or Supplier with an estimated cost to complete each solicitation, including contingencies, escalation, and other allowances/disbursements;
- b) Provide to the DR, a certified true copy (paper or electronic version) of the Superintendent's daily logbook that documents all Work performed and includes associated photographs, and a record of the following:



- 
- i. Weather conditions, particularly unusual weather relative to Work in progress;
  - ii. Records of major materials and equipment deliveries;
  - iii. Summary of progress of the Work;
  - iv. Summary of major inspection and testing performed;
  - v. Unusual site conditions experienced;
  - vi. Incidents of damage or loss; and
  - vii. Subcontractor and Supplier manpower reports generated from access control system or manual count as applicable to the site.

The CM must compile and submit the reports monthly at fixed submission dates as agreed between the CM and the DR. The CM must also concurrently submit cost and time management reports and cover the same reporting period.

The delivery of a compliant monthly report is a pre-requisite for the CM monthly fees, labour costs, Plant, Material and equipment costs, disbursement costs, and Subcontract costs to be due and payable as per the progress payment section of the Contract.

#### **6.2.3.2 Decision Log**

The CM must maintain a separate decision log indexed for pre-construction, construction and post-construction, for the duration of the Contract, recording participants, date and place of all decisions affecting scope, schedule, cost, and quality. These records must be made available to DR at all times.

#### **6.2.3.3 Site Documents**

The CM must always keep at the Project site office records of all Subcontracts, samples, purchases, Materials, equipment, drawings, specifications, maintenance and operating manuals and instructions, and other Work-related documents, including revisions. The CM must make site documents available to the DR at any time.

#### **6.2.4 Submittals**

The CM must ensure all solicitation packages mandate Subcontractors and suppliers to provide the type and quality of submittal information required for the CM's review and certification, before submitting to the Design Team.

The CM must:

- a) Prioritize the preparation and submission of submittals to ensure critical path of the Project schedule is maintained;
- b) Receive submittals from Subcontractors and suppliers, establish and maintain tracking logs, verify all submittals for compliance, stamp them as such and, when non-compliant, require re-submission of said submittal;
- c) Submit CM verified and stamped submittals to the DC or EC, as applicable, and the DR for their review;
- d) Review, discuss, record submittal problems as identified by the DR or DC or EC, resolve the problem with the Subcontractor or Supplier, and resubmit;
- e) Monitor and record the progress of submittals review and notify parties designated for action and follow up;
- f) Ensure Subcontractors and suppliers do not commence manufacture or order materials

---

before the DC or EC reviews and approves submittals;

- g) At Substantial Performance, forward reviewed/as-commissioned submittals to the DR; and
- h) Verify that submittals include the Project number and are recorded in sequence.

#### 6.2.5 Record Drawings

The Design Team will indicate the requirement for record drawings and specifications within DP. The CM must, when applicable:

- a) Ensure that Subcontractors and Supplier are compliant with record drawings and specifications, as stipulated, and that the information within are accurate;
- b) Collect and hand over to the DR at the end of each completed DP, a marked-up set of drawings and specifications; and
- c) Participate in the review process with the DR and Design Team to optimize lessons learned feedback and suggest revisions to this process.

#### 6.2.6 Official Languages

The CM is required to ensure site signage is provided in both official languages. The CM must assume responsibility for the accuracy, completeness and consistency of translation.

#### 6.2.7 Security Clearances

The CM must continuously plan and actively manage all security screening processes for the CM and for all the CM's Subcontractors and suppliers.

The CM must employ a Corporate Security Officer (CSO) responsible for screening all CM personnel including any sub-trades. This person or designate must keep track of all applications, the status of each personnel, and follow up as required with PWGSC.

If an applicant has a current reliability clearance with PWGSC, the CSO or designate must provide PWGSC with the applicant's complete name and date of birth.

If an applicant does not already have a valid security clearance, the applicant must complete and submit, through the CSO or designate, the following forms to PWGSC:

- a) TBS/SCT 330-23 Personal Security Screening Form  
<http://www.tbs-sct.gc.ca/tbsf-fsct/330-23-eng.asp> ; and
- b) TBS/SCT 330-60 Security Clearance Form  
<http://www.tbs-sct.gc.ca/tbsf-fsct/330-60-eng.asp>.

Forms must be sent to PWGSC in original format. After a thorough preliminary verification of the completed forms, PWGSC will request a security screening be submitted to Personnel Security Screening Division (PSSD) of the Canadian Industrial Security Directorate (CISD) for processing. If forms are not complete, PWGSC will notify the CM's CSO or designate in writing.

The CM must ensure that they provide sufficient information to permit government authorities to conduct a background inquiry.

##### 6.2.7.1 Fingerprinting

Fingerprinting must be completed for all new applications.

For application renewals, fingerprinting is required on a random basis as determined by PWGSC or the RCMP.

##### 6.2.7.2 Processing Time

The processing time to obtain a security clearance for reliability is estimated at eight (8) weeks from

the time the application (complete with no errors and/or omissions) is received by the CISD. If applicable, for those who are required to hold a Secret level, this may take approximately three to six months. These timeframes are for domestically based applicants who have not travelled outside of Canada for an extended period. Timeframes for clearances could be considerably longer for non-domestic applicants or for domestic applicants having travelled abroad.

The CM must be aware that processing time for applicants with criminal convictions may take longer and could extend to six (6) months or longer depending on the nature of the conviction. An interview with such applicant may be required as part of the security clearance process.

Replacement or substitute personnel must undergo the process identified above.

#### **6.2.7.3 Access to the Construction Site**

- a) The CM must issue a building security card for those who will access the construction site(s) with instructions to wear this security card on their person at all times;
- b) The CM must ensure that only those who have a CM building security card can access the site(s);
- c) The CM must check all personnel daily to ensure personnel are wearing the photo ID passes at all times; and
- d) The CM must conduct security clearance spot checks, record the results of spot checks (when, how many people checked, degree of non-compliance, if any), take corrective action with any person on the construction site found in breach of security, and provide written reports to the DR of each spot check. The frequency of spot check must occur at least monthly, at irregular intervals, or more frequently if directed by the DR. If a breach of security is identified, the facility security clearance of the employer of the entity in breach may be revoked. The CM must remove personnel without security clearance from site(s).

#### **6.2.8 Site Security**

The CM must maintain security of the entire site until the facility is ready for its intended use. The CM must develop and submit to the DR for review and approval a site security plan(s) within 30 working days of Contract award. The CM must update the plan to meet new and changing requirements as Work progresses. The CM's site security plan must include but is not limited to:

- a) A description of the processes for coordination of the Work and building and DES operations;
- b) A description of the procedures for access to the site including sign-in procedures and security clearance verification;
- c) A description of daytime, evening and weekend security procedures for escorts to lockup, conduct surveillance, provide fire watches, and emergency procedures and responses;
- d) A description of all safety issues related to the Work or its site as required by federal, provincial or municipal regulations;
- e) A description of the process for safeguarding of components for reuse, recycling or disposal;
- f) A description of the process for protection of Materials, equipment, workmanship and, throughout the implementation of the Project, any PWGSC installed before the Work is ready for use;
- g) A description of the site protocol the CM must develop and enforce, including provisions for but not limited to:
  - i. No CDs, radios or tape machines;
  - ii. Noise control;
  - iii. No parking on site;
  - iv. Due regard for the general public's expectations with respect to behavior, language and

---

dress including public places (all spaces exterior of the site are deemed to be public); and

h) Engaging private sector security services, as required.

The CM must provide emergency response coordination and responses to site problems during working and nonworking hours. In consultation with the DR, the CM must establish a list of contacts for responses and communication. In the event of any problems, the CM must contact the DR immediately. In case of an emergency where the safety of persons or property is concerned, or Work is endangered by the actions of the subcontractors or other persons, the CM must take immediate action. The CM must stop Work. In all situations, the CM must notify the DR. The CM must additionally give immediate written notice to the subcontractor or other person of the hazard.

#### **6.2.9 Coordination of Contractors Hired Directly by PWGSC or Building Representatives**

PWGSC or the building managers will from time to time require that activities and projects be undertaken by PWGSC's or the building manager's own forces or contractors, within the CM's construction site. These activities will be subject to the coordination and safety overview of the CM, as the Constructor. The CM must grant free access to these areas by PWGSC, building managers/operators, or their contractors, and ensure they understand the CM's safety and security protocols are followed.

#### **6.2.10 Anticipated and Unanticipated Site Shut Downs**

In addition to the usual statutory holidays (Ontario), the CM must allow for five (5) working days per year of site shut down for unanticipated special events to take place in an unencumbered manner. The CM must also include 300 hours of stop Work per year for unforeseen Project shut downs.

#### **6.2.11 Noise, Vibration Odours and Deliveries**

The CM must carefully plan and schedule all noise generating Work, deliveries, and waste removal to minimize the impact to building occupants, the Confederation Heights Campus site, and the interruption to surrounding vehicular and pedestrian traffic. The CM must take the necessary actions to minimize noise, vibration and odours having an effect on nearby buildings (interior and exterior) and neighboring or adjacent site use, including roadways, parking lots, parks and recreational areas. The DR's decision will be final on whether the Work is causing excessive noise, vibration or odour.

#### **6.2.12 Record Drawings**

The Consultant will indicate record drawing or as-built Modeling requirements with each Construction Tender Package. The CM must, when applicable:

1. Ensure that subcontractors, supplier and conservation specialists are compliant with record drawings and as-built Modeling, as stipulated, and that the information is accurate;
2. Collect and hand over to the DR at the end of each completed tender packages, a marked-up set of drawings and specifications and record Modeling; and
3. Participate in the review process with the DR and Consultant to optimize feedback into the Model and suggest revisions to this process.

### **6.3 PRE-CONSTRUCTION SERVICES**

#### **6.3.1 Scope Management**

When a change to the Project is identified, the Design Team will prepare and issue a Supplemental Instruction (SI), which may or may not attract cost, or Contemplated Change Notice (CCN). The CM must prepare an indicative cost estimate breakdown that itemizes all labour costs, Plant, Material

---

and equipment costs, and Subcontract costs and submit to the DR and the Design Team for review and approval as described in ToR Appendix D – Process Maps.

The CM must validate and document that all prices included in the cost estimate breakdown, including the Costs, mark-ups and profit of Subcontractors and suppliers, are correctly calculated, fair, and reasonable. The CM must completely vet Subcontractor and Supplier quotations for scope and pricing accuracy before forwarding to the DR and Design Team. If a CCN necessitates a change in the Contract completion date, or has an impact on the Work in whole or part, the CM must identify, estimate, and include the resulting impact Cost in the breakdown at the time of submitting the quotation to the DR and the Design Team.

The Design Team will review the indicative Cost estimate prepared by the CM and provide the DR with a recommendation of its reasonableness, before the DR authorizes the change.

### 6.3.2 Design Package Management General

The CM must provide design package management services to manage the overall design process of the Project, but not coordinate the work product, nor ensure that the design is technically compliant, which remains the role and responsibility of the Design Team. As part of these design package management services, the CM must review and participate in the scope of definitions and deliverables for the Project.

The CM must:

- a) Understand Project reference documentation provided by the DR and their potential implications from a constructability, restrictions and constraints, and cost and time perspective. Review with the DR and Design Team items of concern or potential gaps of information on an ongoing basis;
- b) Review and influence the overall Project scope and prioritization of projects in order to complete the maximum Work as quickly as possible, while respecting seasonal, CHCP, and building constraints;
- c) Analyze changes in PWGSC priorities as and when they occur. Provide recommendations to the DR to ensure optimal flow of Work. Obtain the DR's approval to implement changes to the Work;
- d) Review and influence the design of the Project to eliminate competitive sourcing issues and constructability issues;
- e) Provide cost and scheduling input and supporting Project design concepts throughout the entire design process;
- f) Define the Design Team's project submission format, number of DPs, and the prioritization as to when the DPs are required to achieve the shortest overall construction period and maximum Cost control;
- g) Provide input to the Design Team on what aspects of Project scope must be included in each DP. Inform all members of the Project Team of what and when parts of the overall scope are being competitively sourced and what parts of the scope remain un-designed, and where in the overall construction estimates the parts are allocated;
- h) Maintain Project design process control without limiting creativity, but at the same time challenging design assumptions or scope;
- i) Understand the requirements, implications, and construction issues related to proposed sustainability requirements. Participate in the development process to identify opportunities to achieve sustainability objectives and continue to support Design Team (scope, cost, time, risk analysis) throughout the Project;
- j) Clearly define and make known well in advance to the Design Team and DR the intermediate

---

and final dates for the submission of DPs;

- k) Understand the technical requirements of the scope and ensure that technical reviews, presentations, and submissions take place at key intervention points within the design process;
- l) Provide design package management services, which includes:
  - i. Value engineering and analysis of options;
  - ii. Maintenance and life cycle cost analysis;
  - iii. Design coordination or supplemental design services when requested by the DR;
  - iv. Constructability analysis;
  - v. Development of options to reduce and construction duration;
  - vi. Scope of Work development, Work and commissioning procedures and detailed specifications for all DP's;
  - vii. DP development and competitive sourcing;
  - viii. Input to cost estimates;
  - ix. Input to construction sequencing and construction durations;
  - x. Identify resources and recruitment; and
  - xi. Input to procurement;
- m) Participate in the resolution of the design, planning and coordination issues; and
- n) Comply with the processes described in ToR Appendix D – Process Maps.

### **6.3.3 Review of Design Submissions and Design Packages**

The CM must:

- a) Participate in meetings and workshops. Verify and report on the accuracy of meeting minutes;
- b) Provide advice to the Design Team and the DR on design scheduling, cost control, construction phasing, site security and Site safety. Recommend alternative solutions whenever design details adversely affect construction feasibility or schedules;
- c) Provide suggestions and/or alternatives for cost reductions or acceleration of the Project schedule;
- d) Review all design and DPs submissions and report/advise on:
  - i. Coordination, completeness, and ability to construct the proposed design;
  - ii. Proper cross-referencing of the scope and ability to competitively source;
  - iii. Scope elements (end devices, etc.) not finalized in the design are adequately summarized within DPs to ensure competitive sourcing;
  - iv. Temporary building and municipal components and systems, temporary protection, shoring, bracing, underpinning, construction monitoring (structural, geotechnical, heritage, environmental, and other services) are properly detailed, including the need to adjust, move, maintain and remove as the construction advances or is completed;
  - v. Commissioning, training, and detailed performance verification requirements are reflective of the approved commissioning plan and are completely and correctly detailed;
  - vi. Delivery instructions for facilitation of site access, health and safety, and security;
  - vii. Specific installation plans showing site delivery, path of travel, and final installation locations.



---

Identify issues of site access, paths of travel, times/periods of delivery, and potential overlaps of Work in select areas, which must be accounted for within the installation requirements and coordinated with the construction schedule;

- viii. If construction access restrictions apply, protection or site requirements must be included; and
- ix. All other requirements to implement the construction are properly included;
- e) Refer all questions about interpretation of the documents prepared by the Design Team back to the Design Team lead. In the event of continuing interpretation difficulties, the CM must refer the issue with all required background material to the DR for resolution and the DR's interpretation will be final; and
- f) Participate in value engineering workshops and provide advice and recommendations for the proposed designs as to their ease of installation, cost, availability, suitability, robustness, constructability, etc. and make suggestions for potential alternatives based on life cycle and sustainability objectives.

#### 6.3.4 Quality Management

The CM must:

- a) Arrange for testing services as required, which may include concrete testing, compaction testing, vibration, acoustics, air monitoring, etc.;
- b) Carry out all parts of the Work using only qualified licensed workers in accordance with the requirements prescribed by the Province of Ontario, as applicable to the place of the Work, respecting worker's vocational training and qualification;
- c) Permit employees registered in provincial apprenticeship programs to perform specific tasks only if under direct supervision of qualified licensed workers;
- d) Determine permitted activities by apprentices, based on level of training attended and demonstration of ability to perform specific duties;
- e) Perform detailed site surveys of existing conditions immediate after excavation or demolition Work to capture as-found conditions of the asset and Site elements and accurate dimensioning of elevations, excavations, openings, beam and column sizes and locations, door and window openings, floors and ceilings elevation, etc., to ensure the accuracy of asset and construction information; and
- f) Provide the as-found surveyed information to the DR and Design Team for the Design Team's revision updating of the design, as required for proper construction implementation.

#### 6.3.5 Cost Estimating, Monitoring and Control

##### 6.3.5.1 Overview

- a) The DR will:
  - i. Provide the overall master cost plan of the Project and continual direction to the Design Team and the CM on all matters of Project scope to ensure the Project is maintained with the approved budget;
  - ii. Review all aspects of the CM's estimates, or partial estimates, on an ongoing basis;
- b) The CM must:
  - i. Plan, estimate, monitor and control the costs of the Project Work;
  - ii. Build to the approved Construction Cost Estimate of the Work established or revised by the DR as the Project progresses;

- 
- iii. Control ongoing construction costs;
  - iv. Continually analyze and report to the DR on the Design Team's design ideas and design submissions as well as the construction itself; and
  - v. Prepare and provide to the DR a monthly status report and summary of opportunities to reduce cost and design pressures and risks that may raise the Construction Cost Estimate of the overall Project;
- c) The Design Team will:
- i. Design to the approved Construction Cost Estimate, established or revised by the DR as the Project progresses;
  - ii. Consider the recommendations of the CM with respect to overall cost management;
  - iii. Provide risk analysis;
  - iv. Provide input to and comment on the CM's overall Work cost plan and estimates, life cycle costing (LCC) analysis and Value Engineering throughout the Project;
  - v. Attend meetings and workshops with the CM and DR.

Cost control meetings will occur monthly with the DR, CM and the Design Team to seek the input and comment from the CM and Design Team on all aspects of the Project costs. The CM's proposed construction methodology and implementation are essential discussion topics for each workshop and at all Project meetings. The Design Team will play an active challenge role to test the validity of the CM's Construction Cost Estimate assumptions, inclusions and exclusions, ensuring the Construction Cost Estimate reflects the progression of the design at the time of the workshop and future scope pressures as they become evident through Project meetings and discussions.

#### **6.3.5.2 Details**

The CM must plan, develop, update, and maintain Construction Cost Estimates for the Project for the duration of the Contract. Estimates must be holistic and broken down into major components and numerous sub-elements. The total construction estimate must form the preliminary construction cost Baseline.

The CM must:

- a) Plan, estimate and submit to the DR a detailed request for expenditure authority (EA) for preliminary general expenses (Division 1) immediately after Contract award. These expenses are essential to advance and manage the overall planning and analysis and initial mobilization of the CM;
- b) Prepare preliminary Construction Cost Estimates for the Project in a format agreed to by the DR and:
  - i. Detail all major components of the Project and provide a detailed breakdown of the necessary general expenses to administer the construction, breaking the presentation of these expenses down into short, medium, and longer projections;
  - ii. Include separate design and construction contingencies. Once a sub-total for construction is established, include a construction escalation contingency. Include a detailed listing of all estimate inclusions, exclusions, and assumptions. Provide a detailed basis of cost narrative on the methodology employed in developing the estimate;
  - iii. As a separate volume from the preliminary estimate, provide a detailed summary of the various components of the CM's fees. Delineate the various parts of the fee structure, additional personnel, and site personnel. Sub-total the fee elements and indicate escalation as a separate element, before presenting the total fee breakdown; and
  - iv. Submit the preliminary Construction Cost Estimate, including items (i), (ii), and (iii) to the DR within 20 working days of Contract award;



- 
- c) Following the format established with the preliminary Construction Cost Estimate but with a progressive increased level of detail, prepare formal and detailed whole Work estimate submissions at indicative (+/- 20% class D, or +/- 15% class C) and substantive (+/- 10% class B, or +/- 5% class A) levels based on the status of the design elements, as outlined below, and:
- i. Prepare and submit complete and formal estimates of all the Work to the DR within four weeks, sooner if possible, of receiving each design submission. The first design submission estimate will be the Baseline estimate for the Work of the Project, which all future cost analysis and measurement must be compared against. Subsequent design submission estimates, if any, will be the updated Baseline estimate for the Work of the Project; and
  - ii. As a separate volume from the Construction Cost Estimate, provide a detailed summary of the various components of the CM's fees;
- d) For each DP, develop and submit to the DR within three weeks of receipt of the DP, or sooner if possible, comprehensive construction estimates:
- i. Include separate design and construction contingencies reducing in scale as the design progresses. Once a sub-total for construction is established, include a construction escalation contingency, and include a detailed listing of all estimate inclusions, exclusions, and assumptions. Provide a detailed cost narrative on the methodology employed in developing the estimate;
  - ii. As a separate volume from the construction estimate, provide with the 90% and 100% estimates a detailed summary of the various components of the CM's fees clearly delineate the various parts of the fee structure, additional personnel and Site personnel that are proposed to change because of DP implementation. Sub-total the fee elements then indicate escalation as a separate element, before presenting the total fee breakdown; and
  - iii. Update the overall Work estimate for the Project with the detailed estimate for each successive DP. Ensure the overall design, construction and escalation contingencies are reallocated to reflect their revised values;
- e) On an ongoing basis and throughout the design and construction of the Work, analyze all elements of the design and the potential impact of changes discussed at meetings, contained in approval submissions, that arise from design omissions or development, site conditions, Supplier problems, or any other source of information related to scope development or project implementation. Assess for potential cost pressures and opportunities for cost reduction. In support of this analysis:
- i. The DR will hold cost workshops with the CM and Design Team. On completion of each workshop, the CM must further analyze and assimilate all information discussed and update the Construction Cost Estimate and all inclusions, exclusions, and assumptions. The CM must provide the Design Team and DR, within five (5) working days of the cost workshop or as agreed to by the DR, the updated Construction Cost Estimate, or relevant parts thereof; and
  - ii. CM must provide the DR a preliminary impact analysis within five (5) working days of receipt of notice for any change (i.e. Contemplated Change Notice, Supplemental Instruction or Site Instruction that has a potential cost or time impact);
    1. With the preliminary impact analysis, the DR will confirm to the CM and DC or EC, as applicable, if the proposed change will or will not proceed; and
    2. If the proposed change is to proceed the CM must provide a detailed impact analysis to the DR with ten (10) working days, or within a period agreed to by the DR, that considers all potential cost elements including the cost of time to implement the change and potential cost and time impacts to other Subcontractors and suppliers;
- f) Prepare and maintain accurate cash flow projections for the Project inclusive of all equipment, Materials and Subcontractor and Supplier personnel and submit to the DR monthly. The CM

---

must:

- i. Assess design progress and construction productivity on an ongoing basis;
  - ii. Understand in detail the sequencing and durations of all design and construction and commissioning activities and their degree of completion, as well as their impact to achieving approved project Milestones; and
  - iii. Analyze actual construction expenditures against expected performance to a level of detail acceptable to the DR;
  - iv. Update the cashflow of the Work on an ongoing basis as the design and construction progresses;
  - v. Forecast construction and, as a separate volume CM fees:
    - 1. In detail to the end of PWGSC's fiscal year (March 31), with a forecast accuracy of +/- 5 % by November 30th of each year; and
    - 2. Annually to completion of the Contract; and
  - vi. Provide a detailed narrative explaining the expenditures to date and those forecasted for the upcoming month, quarter, and each remaining year to Work completion, including all assumptions and analysis considered;
- g) Incorporate into cost estimating processes and Construction Cost Estimates a broad range of techniques, including:
- i. Allowances: Include and identify separate design, construction, escalation, and currency exchange risk allowances that are reasonable considering the estimate accuracy;
  - ii. Risk Analysis: Develop a risk register and allowances relating specifically to residual value of identified risks;
  - iii. LCC: Prepare and submit analysis of different life cycle cost options as appropriate for building components and systems. Use all available information in the market place to ensure that the estimated construction cost (on which design and construction decisions must be made) is respected. In advance of performing LCC, seek input of the Design Team and obtain the approval of the DR for the LCC methodology/calculation format, including the type of life cycle Cost information for use, and alternative materials, building components and building systems for consideration; and
  - iv. VE: Provide information on alternative products, construction methods or sequencing and assess these against the proposed design. Assist the Design Team to refine the design, incorporate alternative products and/or construction methods to achieve the best design solution that remains within the overall Construction Cost Estimate;
  - v. Notify the DR if the lowest compliant submission for any DP differs significantly from the CM's class A estimate.

#### **6.3.5.3 Deliverables**

The CM must submit to the DR:

- a) Report cost data in the agreed format on a monthly, quarterly, semi-annual and annual basis, including detailed quantitative and qualitative analysis against the first and updated Baseline of the Construction Cost Estimate with variances that are reflective of the actual construction progress to date and projected Work to Completion. Monthly reports must contain as a minimum:
  - i. An outline description of overall estimate and status;
  - ii. A narrative including inclusions, exclusions. and assumptions;
  - iii. A description of information obtained and used in the preparing the estimate;

- 
- iv. A description for the basis for contingency and escalation calculations;
  - v. An estimate summary in the agreed format;
  - vi. An estimate back-up including details;
  - vii. A commitment summary identifying committed and uncommitted funding;
  - viii. A detailed expenditure analysis and summary;
  - ix. A scope change summary including the nature, reason, and total cost impact of all identified and potential changes affecting the estimated construction cost;
  - x. An identification of cost overruns and under runs including the nature, the reason, and the total cost impact of all identified and potential cost variations;
  - xi. A trend analysis with discussion of impacts influencing future forecasts;
  - xii. A risk analysis of both direct and indirect costs (i.e. escalation, etc.);
  - xiii. An options analysis identifying the nature and potential cost effects of strategies to ensure the Project remains within the estimated construction cost;
  - xiv. Complete indicative or substantive construction estimates reflective of the level of design progress for each design and DP submission, incorporating estimate information into the overall Construction Cost Estimate;
  - xv. Accurate cash flow projections for the Work;
  - xvi. A listing of change notices and change orders for each Subcontract; and
  - xvii. Any other relevant information;
- b) Respond to comments from the DR within two (2) working days of request, sooner if the request is urgent; and
  - c) Differentiate between local, regional, national and international sources of cost information. Identify cost elements not applicable to escalation.

### **6.3.6 Time Scheduling, Monitoring and Control**

#### **6.3.6.1 General**

The CM must:

- a) With the input of the Design Team, plan, schedule, Monitor and control the Work required to complete the Project as approved;
- b) Methodically plan, schedule, Monitor and control project design submissions, as well as solicitation durations and addendum periods. The CM must consider the review periods for design submissions as outlined in ToR Appendix D - Process Maps.

#### **6.3.6.2 Overview**

- a) The DR will:
  - Provide the master schedule of the Project and continual direction to the Design Team and the CM on all matters of time management to ensure the overall Project is maintained within the approved timeline;
- b) The CM must:
  - i. Plan, schedule, Monitor and control the Work of the Project;
  - ii. Plan, schedule and monitor the dates for each of the Design Team's design submissions,

- 
- which will ensure the optimal sequence of Work to achieve the shortest overall construction period and maximum design and construction cost control;
- iii. Include ongoing planning and scheduling analysis of the Design Team's design ideas and design submissions as well as the Work itself;
  - iv. Analyze and report on the Design Team's design progression;
  - v. Plan, schedule, Monitor and control Subcontractor and Supplier pre-qualification solicitations, which must be closed, bids analyzed and short-listed firms ready for competitive sourcing before the completion of each DP;
  - vi. Prepare and provide to the DR a monthly status report and a summary of opportunities to reduce Work sequence durations or reorganize tasks with the objective of managing Project risks. The CM must track and report on opportunities and risks within the Work schedule; and
  - vii. Integrate the Design Team's design schedules into the overall Work schedule, allowing the CM to comprehensively understand schedule, Monitor and control impacts of early or later finishes of design or Work activities;
- c) The Design Team will develop:
- i. A detailed design schedule for the activities associated with the Design Team's services, based on the Work priorities and scope sequence provided by the CM; and
  - ii. A monthly report and a summary of opportunities to reduce design durations or reorganize design activities with the objective of managing Project risks.

#### **6.3.6.3 Planning and Scheduling**

- a) The CM must plan, schedule, Monitor and control the sequencing of the design, as well as plan, Monitor, measure, and control the progress and performance measurement of the Work. For all aspects of the design and Work, the CM must, on an ongoing basis:
- i. Plan, schedule, Monitor and control activities related to the Project;
  - ii. Consult with the DR, Design Team and Building Representatives;
  - iii. Define CM activity performance and productivity requirements, measure and analysis the actual performance and productivity, and implement corrective action if performance or productivity do not meet requirements established by the CM, when required;
  - iv. Load, to the extent possible, Materials, equipment, and workforce requirements in schedules; and
  - v. Prepare customized reporting as required by the DR.
- b) The CM must also plan, schedule, Monitor and control commissioning, seasonal commissioning, and warranty period inspections, testing and repairs.

#### **6.3.6.4 Detailed Activities**

The CM must:

- a) Analyze in detail the initial Project schedule as prepared by the DR and confirm in writing to the DR the CM's understanding of specific activity relationships, durations, interdependencies, and sequencing for:
- i. Investigation Work;
  - ii. DP submission and review processes for each design submission;
  - iii. Dependencies on investigation Work or other linkages with the start of construction; and

- 
- iv. Construction that maintains existing operations and public use of the Confederation Heights Campus buildings and site;
- b) Prepare a comprehensive Baseline network diagram of the Work of the Project, including its relationship and dependencies with the design, schematically displaying the detailed and logical relationships of all activities that must be accomplished to satisfy the objectives of the Project;
- c) Include reasonable time contingencies that reflect the degree of Project complexity and historical weather-related work-stoppages;
- d) Ensure critical activities are no greater than ten (10) working days in duration. A critical activity is one that has less than five (5) working days of Float. Clearly identify all predecessor, successor, and dependent activities. Indicate Float per activity. Do not use relationship lags, but instead, use activities to mark the delay between the completion of one activity and its successor (e.g. indicate curing of concrete as an activity and not as a lag to another activity);
- e) Prepare detailed, summary and master schedules (network logic diagrams and bar charts) for all Work and its related design elements for the overall Project. Indicate the Critical Path for the Project. Advise the DR of activity dependencies or constraints and suggest methods to optimize the delivery of the overall Project;
- f) Establish a productivity and performance measurement requirements and reporting methodology for the approval of the DR, including:
- i. The status of the design and the design progress;
  - ii. The complete status of the Work in all parts of the Confederation Heights Campus;
  - iii. A productivity and performance measurement framework and ensure Subcontractor and Supplier include performance measurement requirements and processes/consequences for non-performance or poor productivity;
  - iv. The management and summary of Subcontractor and Supplier productivity and performance;
  - v. The Monitoring and documentation of positive and negative productivity or performance and quality of the design and Work of the Project. Take immediate action to resolve poor productivity or performance or quality and:
    1. Inform the DR and the Design Team in writing immediately of any productivity or performance issue that places the completion of a Subcontract, or parts of a Subcontract, at risk and where a successor or dependent relationship to other Subcontracts, or parts of Subcontracts, is at risk;
    2. Recommend to the DR and Design Team actions to mitigate the performance or productivity issue to ensure the Work, or applicable part(s) thereof, remains within the estimated construction cost and duration;
    3. Implement the mitigation measures and follow-up to validate and document the mitigation measures have corrected the performance or productivity issue;
    4. If the mitigations measures do not correct the performance or productivity issue, immediately advise the DR and Design Team, recommending alternate mitigation measures;
    5. Implement the alternate mitigation measures and follow-up to validate and document the mitigation measures have corrected the performance or productivity issue;
    6. If the alternate mitigations measures do not correct the performance or productivity issue, immediately advise the DR and Design Team; and
    7. Explore options to remove the Work from the Subcontractor or, Supplier. Document all actions, decisions and advise the DR and Design Team in a Subcontractor productivity report on the progress to obtain a competent substitute Subcontractor or Supplier. Ensure the Project schedule is not compromised;
- g) Structure Subcontractor and Supplier Subcontracts to gather the required human resource, Material,

---

equipment and schedule information for ongoing analysis and compilation by the CM. Work closely with Subcontractors and suppliers to ensure their resource commitments meet the specific sequencing and related schedule requirements of the Project.

- h) Following consultation with the DR and the Design Team, incorporate the sequence and timing of the required key decisions (design, approval, access, etc.) into the detailed schedule of the Project. Include the design durations, interim and final design submissions with their related review and comment processes, pre-qualification processes, bid calls, bid evaluations, Subcontract awards, construction activities, commissioning, etc. in the Work schedule and;
  - i. Inform the Design Team and DR of possible constraints to construction operations and discuss potential alternate Work flows;
  - ii. Revise the sequence of activities to ensure viable Work flows; and
  - iii. Ensure Work sequencing is properly reflected in all solicitation packages;
- i) Monitor, update and maintain the Project schedule. Reassess activity duration and analyze activity sequencing weekly or more frequently as design options are being evaluated. Evaluate the interdependencies of the various Work and design elements and the impact these elements may have on others. Recommend to the DR and Design Team areas of optimization to achieve the shortest overall duration of the Project;
- j) Prepare 6-week look-ahead schedule of all Project activities. Clearly indicate Critical Path activities and required decision-making dates. Update the 6-week look-ahead schedule monthly, or more frequently as requested by the DR;
- k) Develop a preliminary schedule impact analysis within five (5) working days of receipt of notice for each change (i.e. contemplated change order, supplemental instruction, or site instruction that may attract cost or extension of time that has a potential cost impact):
  - i. With the preliminary impact analysis, the DR will confirm to the CM and Design Team if the proposed change will or will not be accepted from a technical basis; and
  - ii. If the proposed change is to proceed, the CM must provide the DR a detailed schedule impact analysis with 10 working days, or within a timeframe agreed to by the DR. The CM's impact analysis must consider all potential Cost elements, including the Cost of time to implement the change and potential Cost and time impacts to other Subcontractors and suppliers;
- l) Provide comprehensive schedule analysis as a part of each value engineering workshop;
- m) Identify items or processes where long lead times are required that could jeopardize the construction delivery. Recommend items to pre-purchase (Material, machinery, equipment, supplies) and implement procurement methodologies to ensure timely delivery to meet the schedule; and
- n) Assess all risks to the schedule including early or late delivery of DPs, Material, equipment, and the Design Team's and CM's services and provide the DR options to mitigate or optimize the schedule.

#### **6.3.6.5 Deliverables**

The CM must submit to the DR:

- a) Detailed, summary and master schedules of the overall Project within 40 working days of Contract award. The CM must revise and resubmit as required for the approval of the DR. The CM must resubmit monthly updates with each monthly report in a format acceptable to the DR and include:
  - i. Monthly schedule update;
  - ii. Separate 6-week look-ahead schedule of the Work and its Critical Path, including design or other activities that are anticipated to start or be completed, requiring decision-making, elements that require specific Design Team involvement or required design progress, upcoming pre-qualification and competitive sourcing activities, and all other relevant activities



- 
- that are anticipated or required to occur;
- iii. Detailed schedules and roll ups for each Project element;
  - iv. Roll up master schedule for the overall Project;
  - v. Identification of Critical Path and near Critical Paths and interdependencies between Project elements;
  - vi. Variance report to summarize slippages and or improvements in schedules against Baselines and previous monthly reports, including the reasons for the changes;
  - vii. Assessment of progress and assessment of risk of delivery for the Critical Path activities;
  - viii. Written summary of design production progress and design issues. Include impact analysis on competitive sourcing or sole-sourcing of the Work;
  - ix. List of issues and risks of items that may have future impact on the schedules and what actions are being taken to reduce or eliminate the impact; and
  - x. List of the top five issues that must be resolved in order not to jeopardize the Project schedule;
- b) Reports monthly or more frequently when required on the productivity and performance management framework and actual productivity and performance of Subcontractors and suppliers, including trends in the overall Work and design production;
  - c) Time impact of early or late delivery of DPs, materials, equipment, and the Design Team's and CM's services;
  - d) Time impact analysis of all proposed changes through the implementation of the Work and design, in coordination with the cost impact analysis of the said proposed change; and
  - e) Response comments within two (2) working days of request, sooner if the request is urgent.

#### 6.3.7 Risk Management

The DR will maintain a risk management plan and risk registry for the overall Project.

The CM must:

- a) Develop and maintain for the duration of the Contract a risk registry for the Work of the Project that identifies all implementation opportunities and risks, including those that relate to the Design Team's design and the Building Representatives occupancies and building access;
- b) Continually analyze the impacts of these opportunities and risks, developing opportunity optimization and risk mitigation measures for each as they arise;
- c) Adjust the Work and CM's services implementation strategy processes as required to maximize opportunities and mitigate risks;
- d) With the input of the DR and Design Team, develop a lessons-learned database, continually update and refine the database, and ensure that learnings are incorporated in future design iterations, new designs and the Work;
- e) Align information generated from the CM's Cost, time services into a 5 x 5 risk matrix per risk registry entry;
- f) Provide detailed qualitative and quantitative analysis per risk registry entry that takes into account short-term, mid-term and long-term opportunities and risks, as well as the cumulative effect of opportunities and risk on the Project;
- g) Clearly document the rationale for actions taken;
- h) Closeout and archive risk registry entries when appropriate;

- 
- i) Participate in risk workshops throughout the duration of the Contract;
  - j) Develop and continually implement a claims avoidance program that fully integrates Work cost, time, and productivity requirements prescribed throughout these ToR; and
  - k) Thoroughly assess and document in detail all Subcontractor and Supplier, and any other parties claim or intent to file a claim.

#### **6.3.7.1 Deliverables**

The CM must submit to the DR:

- a) A draft risk registry within 40 working days of Contract award and incorporate agreed changes or modifications provided by the DR in a final draft within 20 working days of receipt the comments, for approval by the DR;
- b) Updates to the risk registry considering the quantitative and qualitative data from information sources as well as cumulative effects;
- c) A monthly summary of key opportunities, risks, and CM's advice, options, and recommendations;
- d) Monthly, as a separate volume, all new or updated matters related to the CM's claims avoidance program, all claims or intent to claim;
- e) And Design Team quarterly or more often as appropriate, an updated lessons-learned database; and
- f) Written comments on the DR's overall Project risk management plan and risk registry.

#### **6.3.8 Human Resource Management**

The CM must develop and implement a human-resource management plan specific to this Contract. The purpose of the human-resource management plan is to document the deployment of appropriate human resources with the necessary skills beyond those of the CM's Key Individuals, and describe effective management of team activities throughout the Contract.

The CM's human resource management plan must include, but is not limited to:

- a) The roles and responsibilities of the CM's team, including expected resourcing levels per area of expertise to meet the requirements of the Project throughout the Contract;
- b) CM team organization charts and how positions interact/relate to other members of the CM's team and the Project Team;
- c) A staffing plan to include:
  - i. How and when resources/skills will be deployed;
  - ii. A forward-looking work plan reflective of all CM services required over the next 6-month and 12-month periods that considers succession; and
  - iii. How Project information will be transferred to new personnel; and
- d) Any other human resource relevant information about the provision of the CM's services for the Contract;

##### **6.3.8.1 Deliverables**

The CM must submit to the DR:

- a) A Contract-specific roles and responsibility matrix, organization chart(s), and forward-looking staffing plan within 40 working days of Contract award. Revise these documents as requested by the DR; and



- 
- b) Updates to these documents every three months thereafter, or as agreed by the DR.

#### 6.3.9 Health and Safety Management

The CM must continuously have care, custody, and control of the Work during all phases of the Work, including the on-site activities of all contractors retained by the PWGSC, or others, and take on the role of Constructor. The CM must comply with all the requirements of provincial health and safety acts and regulations, as per section 2.5 - Approvals of these ToR.

The CM must also comply with:

- a) The *Canada Labour Code part II* and relevant regulations under the Code including the *National Building Code of Canada* (NBCC) for fire safety in construction and the most current *National Fire Code of Canada* for fire prevention, firefighting, and life safety in building in use;
- b) The PWGSC Fire Protection Requirements for Construction, Alteration, and Demolition Operations; and
- c) The Workplace Hazardous Materials Information System (WHMIS) for use, handling, storage and disposal of hazardous materials, as well as the labelling and the provision of Material Safety Data Sheets (MSDS) acceptable to the labour program, under the *Employment, Workforce Development and Labour Act*.

For Work in occupied buildings, the CM must give the DR 48 hours' notice for Work involving designated substances, hazardous substances, and before painting, caulking, installing carpet or using adhesives.

The CM must develop and implement a Project-specific health and safety plan(s) applicable to all Work site(s) during construction. The Project-specific health and safety plan(s) must apply to every individual entering the defined Work sites and will be administered and enforced by the CM. The plan(s) must describe how the CM will provide safety awareness training, certifications for Subcontractors and suppliers and their personnel who access each Work site, site safety inspections, reporting and tracking site health and safety incidences, statistical analysis and comparison to industry indices.

The CM's health and safety plan(s) must consider any ongoing construction or public and building use at adjacent locations.

The CM must base the health and safety plan(s) on a preliminary and ongoing hazard assessment of each Work site. The CM must update the Project-specific health and safety plan(s) as site conditions or hazards change and inform all persons on the site of the change of condition(s) or hazard(s). The CM must resubmit the updated plan to the DR immediately.

The CM must provide emergency response coordination for responses to site problems during working and non-working hours. In consultation with the DR, the CM must establish a list of contacts for responses and communication. In case of an emergency where the safety of individuals or property is concerned, or Work is endangered by the actions of the Subcontractors, suppliers or other persons, the CM must take immediate action to secure the individuals, property or Work including stopping Work, if required. In all situations, the CM must notify the DR and give immediate written notice to the Subcontractor, Supplier or other person(s) of the hazard.

##### 6.3.9.1 CM's Responsibilities

The CM must:

- a) Before cutting and welding operations commence, issue hot Work permits and then continuously monitor all welding, soldering, grinding, and/or cutting Work. The CM must store flammable liquids in approved containers. No open flame must be used unless permitted and authorized by the CM;
- b) Within an occupied building, provide at least 48 hours' notice to the DR before commencing cutting, welding or soldering procedure, and include the following:
  - i. Notice of intent, indicating devices affected, time and duration of isolation or bypass;

- 
- ii. Advise of completed welding permit as defined in the PWGSC Fire Protection Requirements for Construction, Alteration, and Demolition Operations; and
    - iii. Return welding permit to site Superintendent immediately on completion of procedures for which permit was issued;
  - c) Assign a firewatcher as described in the PWGSC Fire Protection Requirements for Construction, Alteration, and Demolition Operations when welding or cutting operations are carried out in areas where combustible materials within 10 meters may be ignited by conduction or radiation;
  - d) Where Work requires interruption of fire alarms, fire suppression, extinguishing or protection systems:
    - i. Provide watchman service, as described in the PWGSC Fire Protection Requirements for Construction, Alteration, and Demolition Operations, who is conversant with fire emergency procedures and who will perform a fire picket duty within unprotected and unoccupied (no workers) areas once per hour; and
    - ii. Retain the services of the manufacturer(s) or existing fire protection system maintenance contractors on daily basis to isolate and protect all devices relating to:
      - 1. Modification of fire alarms, fire suppression, extinguishing or protection systems; and/or
      - 2. Cutting, welding, soldering or other construction activities, which might activate fire protection systems;
  - e) Immediately on completion of cutting, welding, soldering, or other construction Work, restore fire protection systems to normal operation and verify that all devices are fully operational;
  - f) Inform fire alarm system monitoring agency and the municipal Fire Department immediately before isolation and immediately on restoration of normal operation;
  - g) Provide full health and safety protection stipulated under the Canada Labour Code to all visitors to the site, workers, staff, Subcontractors and suppliers;
  - h) Provide competent health and safety officer(s), analyze and document site conditions daily;
  - i) Provide site-specific health and safety orientation sessions to all workers and visitors;
  - j) Give precedence to safety and health of public and site personnel and protection of environment over cost and schedule considerations;
  - k) Perform ongoing site-specific safety hazard assessments;
  - l) Implement a site contingency and emergency response process that includes standard operating procedures for implementation during emergency situations;
  - m) Ensure the 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 the conduct of Work or installations may affect them;
  - n) Define safety requirements in Design Packages or solicitation packages and enforce compliance of Subcontractors and suppliers;
  - o) Respond to any unforeseen or peculiar safety-related factor, hazard, or condition that becomes evident during performance of the Work, follow procedures in place for employee's right to refuse Work in accordance with provincial acts and regulations and advise DR verbally and in writing of any such situation;
  - p) In consultation with the DR, post applicable items, articles, notices, and orders in conspicuous location on-Site in accordance with applicable acts and regulations;
  - q) Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by the DR. Provide the DR with a written report of action(s) taken to correct non-compliance of health and safety issues identified;

- 
- r) Use powder actuated devices, explosives or blasting procedures only after receipt of written permission and instruction from the DR;
  - s) Keep Material Safety Data Sheets on-site for viewing by the DR;
  - t) Retain all fire safety documents and standards on-site;
  - u) In each Subcontract the CM issues under this Contract, incorporate the DR approved construction health and safety plan and include provisions to ensure full compliance with said plan; and
  - v) Maintain on-site sufficient personal protective equipment to equip a minimum of five visitors per site.

#### **6.3.9.2 Deliverables**

The CM must submit to the DR:

- a) A draft construction health and safety plan for review within 15 working days of Contract award;
- b) A final Project-specific construction health and safety plan for approval by the DR before the implementation of any Work;
- c) A copy of the Notice of Project filed with the Ontario Ministry of Labour prior to starting construction operations;
- d) Copies of on-site contingency and emergency response plans within two months after Contract award and updates as necessary;
- e) For Work in occupied buildings:
  - i. Forty-eight hours' notices for Work involving designated substances, hazardous substances, and before painting, caulking, installing carpet or using adhesives; and
  - ii. Notices of intent to start cutting, welding or soldering procedures as required;
  - iii. Written requests to use powder actuated devices, explosives or blasting procedures, as required; and
  - iv. Copies of incident and accident reports within five (5) working days of each incident and accident, or within 1 working day if there is a fatality;

#### **6.3.10 Work Restrictions Plan**

##### **6.3.10.1 Scope**

The CM must develop an overall Work restrictions plan in collaboration with the Design Team, Building Representatives, and DR, and then adapt the plan as needed to seasonal, building and site-specific requirements. The purpose of this(ese) plan(s) is to identify the restrictions, constraints and requirements that must be imposed on the construction in order that stakeholder approval is received before start of construction. In developing the plan(s) CM must consider the challenges and constraints listed in section 5 of the ToR. Once stakeholder approval is received, the CM and the Design-Team must work together to incorporate the approved requirements into the DPs. The CM must inform its Subcontractors and suppliers of the constraints and requirements, including those that impose a cost and schedule impact.

The constraints and requirements within the CM's approved Work restrictions plan must include, but are not limited to:

- a) Environmental control;
- b) Commissioning and seasonal commissioning;
- c) Scheduling restrictions;
- d) Sequence of Work;

- 
- e) Construction safety;
  - f) Hours of Work;
  - g) Delivery of equipment/materials;
  - h) Waste disposal;
  - i) Air monitoring;
  - j) Scaffolding;
  - k) Temporary services;
  - l) Noise;
  - m) Welding;
  - n) Security clearances, security of information and physical security of personnel, equipment and the Work;
  - o) Shutdown of services;
  - p) Storage;
  - q) Parking;
  - r) Access to site and buildings and use of loading locks during pre-construction, construction and post-construction phases of the Project;
  - s) Fire watch;
  - t) Site plan showing limits of Work and staging areas;
  - u) Washrooms and lunchrooms; and
  - v) Any other element related to the implementation of the Work, etc.

The approved Work restrictions plan has a direct bearing on the development of the CM's front-end tender package and the Division 1 Specification prepared and submitted by the Design Team. The CM, DR and the Design Team must discuss and agree on the exact delineation of the Design Team's Division 1 Specification versus the CM's front-end tender packages in the design process.

The CM must consider all elements of the Work restrictions plan in the development and updates of the Construction Cost Estimate and Work schedule.

The CM must implement the Project-specific Work restrictions plan.

#### **6.3.10.2 Deliverables**

The CM must submit to the DR and Design Team:

- a) A Project-specific Work restrictions plan within 30 working days of Contract award;
- b) Work restrictions plan updates reflective of new or changed building or site access protocols; and
- c) An itemized list of Work restrictions plan elements that belong in the CM's front-end and the Design Team's Division 1 Specification.

#### **6.3.11 Procurement**

##### **6.3.11.1 Procurement Strategy and Process Plan**

The CM must develop a procurement strategy and process plan that is honest and enhances access, competition, and fairness for awarding all DPs, for approval by the DR.

The CM must pre-qualify Subcontractors and suppliers for the purpose of implementing Work and

providing design assist services where permitted under 6..2.11.2 Solicitation Requirements. The CM cannot bid on Subcontracts. However, in unique circumstances and only with the written preapproval of the DR, the CM itself may competitively and transparently bid on project Work.

PWGSC may audit the CM's procurement process or require changes to the CM's procurement plan at any time, at the sole discretion of the DR. The CM must, as part of its total fixed monthly fee, participate in procurement audits and ensure procurement information and related Contract information is provided to the DR.

The CM's procurement strategy and process plan must include as a minimum:

- a) A list of recommended solicitation packages to maximize Work implementation effectiveness;
- b) A description of the fair, open, honest solicitation selection process that the CM will use to address:
  - i. Competitive public solicitations; and
  - ii. Single source solicitations;
- c) A description of the process to competitively pre-qualify Subcontractors, suppliers, and design assist services;
- d) A description of supply arrangements or standing offer arrangements contemplated for Work and design assist services;
- e) A copy of the generic solicitation documents the CM will use, which may be standard industry forms (Canadian Construction Documents Committee - CCDC) or custom forms appropriate for the Work required including:
  - i. Instructions to solicitors;
  - ii. Solicitation form;
  - iii. General conditions;
  - iv. Supplementary conditions,
  - v. Terms of payment; and
  - vi. Form of award;
- f) A description of minimal and standard solicitation periods and submission delivery address;
- g) A description of the process for pre-solicitation Site meetings;
- h) A description of the procedures for response to written solicitation inquiries, issuance of solicitation amendments, and cut-off dates for solicitation inquiries before the close of bidding/tendering;
- i) A description of the process to establish solicitation bonding or surety, and insurance requirements for all Subcontracts;
- j) A description of solicitation receipt and opening procedures including physical or electronic time and date stamping of submissions on receipt and the opening of submissions;
- k) A description of Subcontractor mark-up allowances for changes in the Work as follows:
  - i. Through issue of a 'Site Instruction' or 'Supplemental Instruction' (SI), additional costs may be incurred by Subcontractors engaged in the Work. On Work performed in accordance with to an SI on a lump sum basis by Subcontractors' own employees, Subcontractors may charge fifteen percent (15%) mark-up. On Work performed on a lump sum basis by Sub-Subcontractors, Subcontractors may charge ten percent (10%) mark-up. On work completed on a time and material basis, Subcontractors may charge a ten percent (10%) mark-up. Included within the mark-up allowance is all general supervision, co-ordination, administration, overhead, margin, profit and the risk of undertaking the Work for the Subcontractor. Subtract credits from extras prior to applying the markup. When a Subcontract Change results in a net credit, the markup shall not apply.

- 
- ii. The value and method of valuation of the Cost will be as agreed by the CM and Subcontractor and, failing agreement, will be as follows:
1. The value of a Subcontract Change will be the net incremental additional cost (or saving) of implementing the Subcontract Change, calculated as the aggregate cost, if any, of any additions to the Subcontractor's obligations required to implement the Subcontract change minus the aggregate cost savings, if any, from all reductions resulting from the implementation of the Subcontract change.
  2. The costs of a Subcontract Change will be the direct costs as defined in Contract Cost Principles of the Contract that are reasonably incurred to implement the Subcontract change, supported by invoices, purchase orders, time sheets and other customary industry documentation, as follows:
    - i. Construction Labour: the direct costs incurred by the entity that engages the construction labour, based on the number of labour and direct labour-supervision hours required to undertake the Subcontract change. Labour rates shall be established in accordance with ANNEX A - BASIS OF PAYMENT of the Contract.
    - ii. Materials and Equipment: the direct costs incurred by the entity that procures the Materials, consumables and equipment, for the supply and delivery of such Materials, consumables and equipment, including the cost of any associated testing, commissioning, spare parts, manuals and software, and including any related design and engineering;
    - iii. Miscellaneous: all other additional direct costs associated with the Subcontract change, including wastage, disposal, insurance, financing and permits calculated at the direct cost to the entity that directly incurs such costs; and
    - iv. Bonding: The cost of bonding will be reimbursed as a bottom line addition to change pricing and will not be subject to mark-ups or profit;
- l) A description of acceptable labour rates, which must be in accordance with applicable trade union agreements and as indicated in ANNEX A – BASIS OF PAYMENT of the Contract;
- m) A description of the planning, scheduling, and reporting requirements to gather workforce, Material, equipment information/usage after Subcontract award;
- n) A list of scheduled shutdowns and allowances for Work stoppage;
- o) A description of solicitation evaluation and recommendation process, including how bids/tenders will be analyzed and summarized; and
- p) A description of the process to address cases where solicitation does not produce an acceptable offer.

#### **6.3.11.2 Solicitation Requirements**

The CM must competitively solicit the Work whenever it is cost effective to do so. Solicitations must be issued in English and French, unless Subcontractors or suppliers are unilingual. Subcontracts estimated at less than \$25,000, including harmonized sales tax, may be single-sourced to qualified Supplier only on the written approval of the DR. The CM must not split Subcontracts or Subcontract amendments to avoid the obligation for competitive solicitation of the Work.

For Subcontracts estimated at \$25,000 or more but less than \$100,000, including harmonized sales tax, the CM must invite a minimum of three qualified suppliers to submit bids. The CM must notify in writing Subcontractors who are unsuccessful.

On the written agreement of the DR, may set aside the requirement to solicit a minimum of three bids if it has demonstrated that less than three firms can perform the Work. The DR will not agree to set aside the requirement to solicit a minimum of three bids simply because the CM is unaware of three or more



---

contractors or suppliers capable of performing the Work/services.

For Subcontracts estimated at \$100,000 or more, including harmonized sales tax, the CM must advertise publicly through MERX™ Private, in accordance with the following open bidding procedures:

- a) The public advertisement must include, at a minimum, a description of the nature of the Work to perform, information about any technical requirements, financial guarantees or other documentation to provide with the submission, the completion date for the Work, the address of the submission closing location and the final date and time for receiving submissions, the identification of a contact point for obtaining solicitation documents and from which further information may be obtained, the date, time and place of the public opening of the submissions;
- b) For Subcontracts evaluated at over \$5,000,000, the period for receipt of submissions must be no less than 40 days from date of publication of the notice;
- c) Solicitation documentation must include all the public advertisement information, as well as identification of the submission validity period, the criteria for awarding the Subcontract including any factors other than price for consideration in the evaluation of submissions, the terms of payment, the requirement for bid bonds, contract surety and insurance in accordance with the procurement strategy and process plan, and any other terms or conditions;
- d) During the solicitation, the CM must reply promptly to any request for solicitation documents or any reasonable request for relevant information made by a Supplier participating in the solicitation. Information provided in response to questions during the solicitation period must be published on MERX™ Private for all solicitors; and
- e) Supply arrangements and standing offers cannot exceed \$1 million, including harmonized sales tax, per call up, unless otherwise agreed by the DR.

#### **6.3.11.3 Deliverables**

The CM must submit to the DR:

- a) A draft procurement strategy and process plan within 20 working days of Contract award and incorporate agreed changes or modifications provided by the DR in a final draft within 15 working days of receipt the DR's comments;
- b) A procurement strategy and process plan approved by the DR ten (10) working days before soliciting any Work and implement the approved procurement strategy and process plan for all solicitations; and
- c) As and when requested, the CM must revise the approved procurement process and resubmit to the DR for revised approval.

#### **6.3.12 Waste Management**

The CM must prepare a waste reduction plan in accordance with the requirements prepared by the Design Team and submit the plan to the DR and Design Team for review and for the approval of the DR. The CM's waste reduction plan and reports must include:

- a) A description of the process to ensure compliance with PWGSC guidelines provided by the DR, and the requirements of local authorities having jurisdiction;
- b) A description of the strategy and methodology the CM will use to optimize solid waste diversion from landfill and dispose of toxic or hazardous materials in the most appropriate manner;
- c) All related schedules outlining expected inventory targets and results required when waste audits are conducted;
- d) A description of a non-hazardous solid waste reduction program for eliminating waste through reduction, reuse and recycling including:

- 
- i. Requirements for sorting construction waste on-site by types; and
    - ii. A description of the most practical manner for recycling each individual material;
  - e) Specific procedures for conducting waste management audits on-site, including audit objectives, frequency and format.
  - f) Provide monthly audit reports of the waste management including:
    - i. Subcontractors' disposal practices for paints, solvents and pressure treated wood scraps and other similar products or materials; and
    - ii. A waste management audit indicating the degree to which recycling requirements are being achieved and recommendations for improvements, if objectives are not being met.

#### 6.3.13 Sustainability and Environmental

The Design Team will incorporate sustainability requirements into each DP. The CM must prepare documentation for the Design Team to meet applicable Green Globes or LEED evaluation requirements. The CM must identify and record site management issues at the start of construction and ensure Subcontractors and suppliers provide sustainability documentation as their Work progresses. The CM must compile and logically organize all sustainability and environmental information, give the information to the Design Team as the information becomes available for the Design Team's verification of conformance to sustainability requirements.

The CM must:

- a) Provide advice on the source and availability of regional materials and materials with recycled content;
- b) Develop and implement a comprehensive waste management program for the Work;
- c) Conduct on-site verifications related to the use of acceptable materials, compile and verify MSDS sheets and WHMIS information;
- d) If applicable to the Project, review preliminary, revised and final sustainability assessment for the design and provide to the Design Team information as to necessary changes to the post-construction Green Globes or LEED questionnaire; and
- e) If applicable to the Project, sign the final questionnaire and provide all final documentation

#### 6.4 CONSTRUCTION SERVICES

The CM must maintain competent project management, supervisory, quality management and field staff on site during implementation of the Work to monitor and ensure the safe performance of the Work. The CM must identify unacceptable Work daily and validate it is properly corrected to avoid delays and schedule impacts to other segments of the Work. The CM must ensure that its workforce follows the quality management processes identified by the CM. The CM must ensure that adequate back-up personnel is available for all of the CM's services.

The CM must:

- a) Monitor progress on-site and ensure coordination of Subcontractors and suppliers;
- b) Establish site organization and lines of authority in order to carry out the overall plans of the CM, DR and the Design Team;
- c) Schedule and conduct progress meetings at which Subcontractors and suppliers, DR, Design Team and CM can discuss jointly such matters as procedures, progress, problems, risks, costs and scheduling;
- d) Provide ongoing Monitoring of the schedule as the Work proceeds; assess against performance



---

measurement criteria, itemize work ahead and behind schedule and take corrective action as required to ensure schedule impact is eliminated;

- e) Complete the Work according to the DPs, schedule and Construction Cost Estimate;
- f) Monitor and document progress of all Subcontractors and suppliers, including all deliveries, to ensure their actions on the site do not compromise the Work;
- g) Ensure damages are properly back charged to the appropriate Subcontractor or Supplier;
- h) Review the adequacy of personnel, Plant, and availability of Material and supplies of Subcontractors and suppliers, including those making deliveries to meet the schedule. Implement remedial action when requirements of a schedule are not being met;
- i) Monitor and document on an ongoing daily basis all health and safety matters;
- j) Provide ongoing inspection of all aspects of the Work, documenting matters for action or follow-up by Subcontractors and suppliers, or referral to the Consultant Team. Ensure the Work is completed as specified using photographs and narratives to document issues and their correction and establish a timeline for corrective Work; and
- k) Review and analyze the accuracy and validity of claims or disputes of Subcontractors and suppliers. Advise the DR of the most prudent means and methods of resolving said claims or disputes, mitigating further time and cost impact to the delivery of the Work. If requested by the DR, retain the services of a third-party advisor.

#### 6.4.1 Project Site Office

As part of the Division 1 expenditures, the CM must provide, fit up and maintain a project site office to the approval of the DR. Ensure appropriate facilities are in place to support the DR and Design Team and for on-site meetings.

#### 6.4.2 Construction

The CM must:

- a) Manage all Work and all of the CM's services for the safe operation and co-ordination of the site, including site organization, safety, and control as "contractor" and "constructor" duties defined in the provincial health and safety acts and regulations;
- b) Provide temporary services and site facilities, site security, traffic management, management of the waste and management program for the site; protection, hoarding and screening, fencing, cranes and lifts; building and temporary services, system, and equipment maintenance, and other miscellaneous works related to managing a construction site adjacent to other buildings or public areas;
- c) Coordinate, schedule, implement, protect and commission the Work as prescribed and approved by the DR;
- d) Procure, coordinate, administer and manage all Work;
- e) Prepare and execute Subcontracts with the successful Subcontractors and suppliers, as well as:
  - i. Coordinate and manage these Subcontracts in an integrated manner to avoid any conflicts between the Work of any of the CM's Subcontractors, suppliers, the CM's own forces, and PWGSC's or other contractors;
  - ii. Coordinate, manage and ensure completion all the Work in strict adherence to the accepted drawings and specifications of each solicitation package, including all addenda and authorized Change Orders;
  - iii. In consultation with the Design Team, develop and implement a procedure for review,

---

certification, processing and payment of Subcontractor and suppliers for the approval of the DR; and

- iv. Provide timely response to correct issues, as they occur.

#### 6.4.3 Commissioning

The DR, the CM, the Design Team, the 3rd part Commissioning Agent, the Subcontractors and suppliers, and the Building Representatives will form the commissioning team and will provide input to the commissioning plan(s) prepared by PWGSC's 3rd party Commissioning Agent.

The CM must administer and continually manage the implementation of the commissioning plan(s) prepared by the Design Team including the seasonal commissioning activities for all Work.

The CM must:

- a) Review and provide input on all commissioning documentation provided by the Design Team and the 3<sup>rd</sup> party Commissioning Agent, including the commissioning plan(s);
- b) Ensure all information on labelling protocols, maintenance data requirements and protocols are understood by the Subcontractors and suppliers and schedule related training sessions with Building Representatives' operations staff;
- c) Confirm that the Work of Subcontractors and suppliers is sufficiently complete to warrant inspection and testing by the Design Team and the 3<sup>rd</sup> party Commissioning Agent and schedule the required inspections and tests;
- d) Develop and implement a site quality management program to:
  - i. Minimize delays because of poor workmanship or Subcontractor or Supplier error;
  - ii. Reduce deficiencies and call-backs during warranty periods; and
  - iii. Reduce long-term risk to the PWGSC arising from poor workmanship;
- e) Administer and manage independent quality control testing, such as concrete or compaction testing, etc., as may be required by the DR, the Design Team, the 3<sup>rd</sup> part Commissioning Agent, or the CM to confirm the adequacy of the Work or performance verification report;
- f) Ensure that all test results, documents, and manuals are provided by Subcontractors and suppliers, Monitor the Design Team and 3<sup>rd</sup> party Commissioning Agent review process, and report to the DR on the progress of the commissioning effort;
- g) Direct Subcontractors and suppliers to complete, repair, adjust or rebuild portions of the Work that do not meet the verification standards, Monitor deficiencies and ensure that they are corrected;
- h) Detail seasonal commissioning activities within the Work schedule and complete these activities on time with the proper documentation and or follow-up action;
- i) With the Design Team and 3<sup>rd</sup> party Commissioning Agent, Monitor and inspect the Work of the Project during its warranty period and during seasonal commissioning activities to ensure defects are corrected as defined in the commissioning plan(s);
- j) Coordinate the federal, provincial, and municipal inspections required for occupancy or use;
- k) Undertake all actions required to close-out Subcontracts including final warranty reviews and Subcontract close-outs;
- l) Coordinating the training of Building Representatives' operational staff and the equipment handovers;
- m) Participate in the start-up and performance verification process ensuring all Work is implemented as described in DPs and as required by the 3<sup>rd</sup> party Commissioning Agent;

- 
- n) Once commissioning is about to start, organize weekly commissioning meetings as part of the construction meetings, prepare and distribute agenda, chair meetings, prepare and distribute meeting minutes within two (2) working days of the meeting to the attendees;
  - o) Present an updated commissioning schedule at all commissioning meetings and identify any variances and issues for address at those commissioning meetings;
  - p) Gather all forms dealing with product information and labelling from Subcontractors and suppliers and review and verify that the information is correct;
  - q) Witness with the Design Team and 3<sup>rd</sup> party Commissioning Agent all testing, before Substantial Performance, including, as required for the Project, but not limited to, a complete verification of the controls sequence of applicable systems in a dynamic operating state;
  - r) Complete and sign-off of all verification reports and compile the reports into a comprehensive commissioning manual as the Work progresses, including commissioning manual updates to include seasonal commissioning activities; and
  - s) Review standard operating procedures prepared by the Design Team for each building or DES system, advise the DR, and Design Team and 3<sup>rd</sup> party Commissioning Agent of accuracy and review, and advise again during seasonal commissioning.

#### 6.4.4 Cleaning

The CM must provide cleaning services throughout the life of the Project. Construction cleaning is to be carried out to ensure a safe Work environment and to protect site systems and heritage elements from excessive dust, debris and damage.

As DPs and construction areas are completed, The CM must undertake a final construction cleaning of the entire area.

The CM must complete a construction cleaning of the entire area before substantial performance.

The CM must employ qualified personnel for all cleaning to the satisfaction of the DR.

The CM must advise the DR in writing and obtain the DR's authorization before final cleaning is to proceed and obtain acceptance of cleaning in writing from DR when completed. The CM must complete construction cleaning before Substantial Performance.

### 6.5 POST-CONSTRUCTION SERVICES

The CM must:

- a) Coordinate with Subcontractors and Suppliers to provide final record documents (operations and maintenance manuals, as-built drawings and specifications) as prescribed in each DP;
- b) Assemble record documents and provide to the DR, in whole packages or as directed by the DR;
- c) Review and validation the accuracy of warranties and guarantees;
- d) Review the draft and final commissioning report, seasonal commissioning reports, standard operating procedures, technical maintenance and any other applicable manuals and comment on the accuracy and completeness;
- e) Arrange for inspections of the Work as outlined in the commissioning plan(s) to determine all deficiencies for correction:
  - i. Prepare a deficiency list for review and acceptance by the DR and the Design Team;

- 
- ii. Provide a deficiency correction schedule and submit to the DR approval and Design Team for coordination. Indicate when the correction of deficiencies covered under the warranty will take place;
    - iii. Arrange for and correct all identified deficiencies in accordance with the schedule and advise when all deficiencies have been properly corrected; and
    - iv. Obtain the Design Team's written acceptance that the deficiencies are corrected and submit to the DR said acceptance.
  - f) Attend all warranty site meetings on or off the site as required by the DR;
  - g) Participate in a lesson's learned workshop at the final Substantial Performance and 6 months after final Substantial Performance and provide an updated lesson learned log to the DR;
  - h) Provide a post-construction evaluation and cost analysis report within one (1) month of the completion of each DP, include lessons learned, outstanding issues and any Work that was not completed, or was deferred. Submit a sample format for this report for review and acceptance by the DR. Amend as required;

## ToR APPENDIX A - TERMS

The following terms are used in this Terms of Reference and supplement defined terminology of the Contract, as indicated in GC1.1.2, "Terminology":

Baseline	The original approved plan, estimate and/or schedule by the DR (Project, DP, or activity), plus or minus approved scope changes.
Contract Cost Principles	The principles used to determine reasonable direct and indirect costs related to the Contract, as defined at the following website: <a href="https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/3/1031-2/6">https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/3/1031-2/6</a>
Critical Path	A series of activities that determines the longest duration of the Project.
Critical Path Method	A network analysis technique used to predict Project duration by analyzing which sequence of activities (which path) has least amount of scheduling flexibility (least amount of float).
Design Package	The part of the overall Work for the Project that is specific to a limited number of trades or even one trade and is prepared by the Design Team to acquire or construct one or more Project element.
Float	The amount of time that an activity may be delayed from its early start without delaying the project finish date. Float is a mathematical calculation and can change as a project progresses and changes are made to the Project plan. Float is available to both PWGSC and the Construction Manager.
Monitoring	The capture, analysis, and reporting of Project performance, usually as compared to plan.
National Capital Region	The designated geographical area in the provinces of Quebec and Ontario, as defined in the National Capital Act, surrounding, and including the cities of Gatineau, Quebec and Ottawa, Ontario, which may also be referred to as Canada's Capital Region.
National Master Specification	The standard framework used for writing construction Specifications for all PWGSC projects, including this Project.
Network (Logic) Diagram	A schematic display of logical relationships of Project activities and is always drawn from left to right to reflect Project chronology.
Project Team	The combined private sector and government sector teams responsible for delivering the Project including the Design Team, the CM, the DR, PMSS, PWGSC's Commissioning Agent, and the Building Representatives.
Terms of Reference	The document forming part of the Contract providing the statement of work the CM must perform. The Work described therein is all-inclusive in that it comprises all the Work needed to complete the Work of the Contract, except as provided for in other Contract documents.

## ToR APPENDIX B – ACRONYMS and ABBREVIATIONS

ACPDR	Advisory Committee on Planning, Design and Realty
ASHRAE	American Society of Heating, Refrigeration and Air-conditioning Engineers
CADD	Computer-aided Design and Drafting
CCN	Contemplated Change Notice
CEAA	<i>Canadian Environmental Assessment Act 2012</i>
CGA	Canadian Gas Association
CGSB	Canadian General Standards Board
CM	Construction Manager
CMP	Construction Management Plan
COHS	Canada Occupational Health and Safety Regulations
CPM	Critical Path Method
CRCA	Canadian Roofing Contractors' Association
CSA	Canadian Standards Association
CSO	Corporate Security Officer
DD	Design Development
DP	Design Package
DR	Departmental Representative
EC	Environment Canada
ECMP	Environmental Compliance Management Program
FC	Field Clarification
FHBRO	Federal Heritage Buildings Review Office
FLUDA	Federal Land Use and Design Approval
LCC	Life Cycle Costing
MSDS	Material Safety Data Sheets
NFCC	National Fire Code of Canada
NBCC	National Building Code of Canada
NCC	National Capital Commission
NMS	National Master Specification
PC	Parks Canada
PDF	Portable Document Format
RFI	Request for Information
SD	Schematic Design
SOP	Standard Operating Procedures
ToR	Terms of Reference
TSSA	Technical Standards and Safety Authority
TTMAC	Terrazzo, Tile, Marble Association of Canada

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

---

ULC	Underwriters Laboratories of Canada
VE	Value Engineering
WHMIS	Workplace Hazardous Materials Information System

---

## **ToR APPENDIX C – PROCESS MAPS**

The following process maps depict the general workflow involved with subject in question.

Time periods indicated show activity duration.

Process maps applicable to the Contract include:

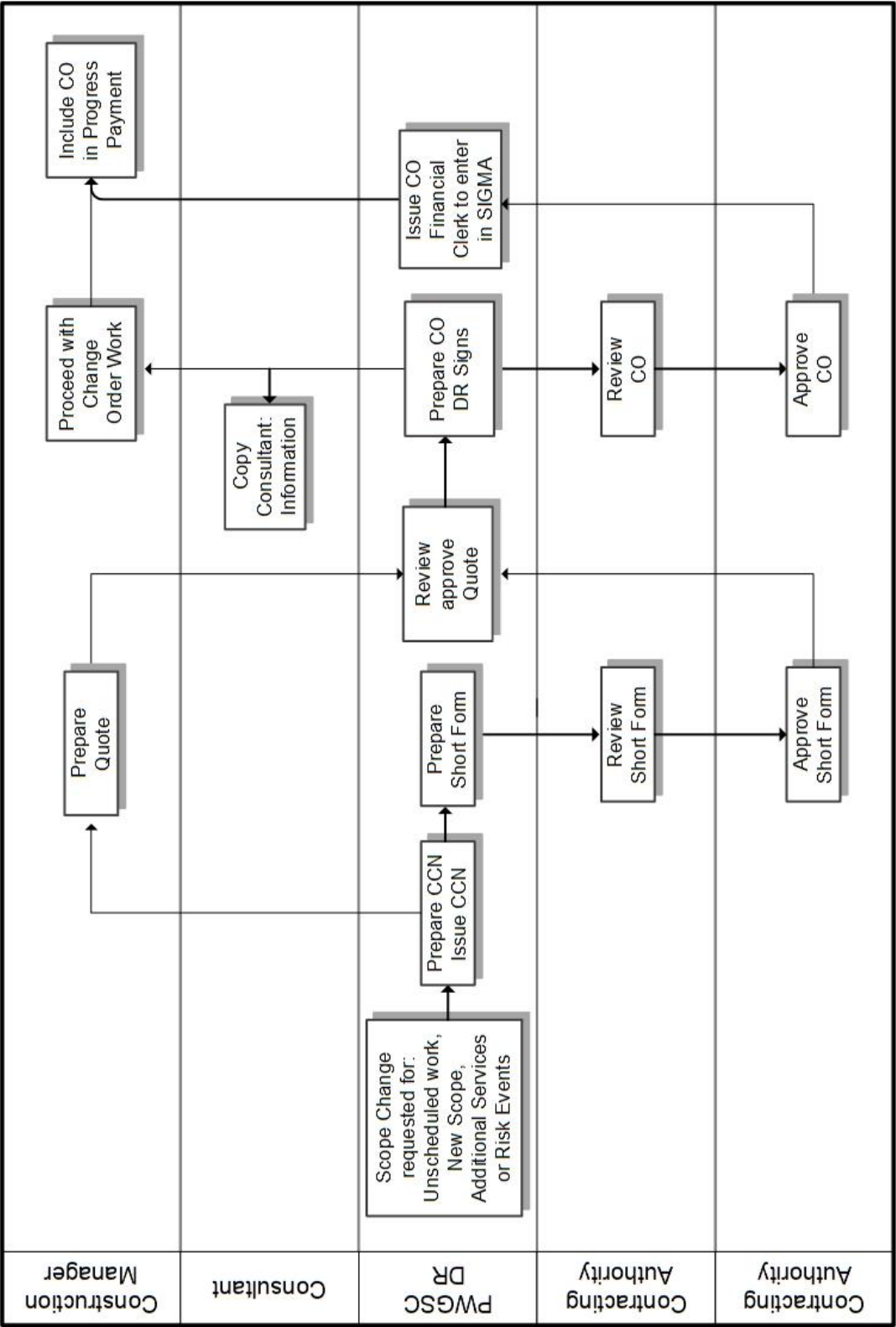
- Changes to CM Contract;
- Expenditure Authority (EA) for Subcontract Changes;
- Design and DP Submissions;
- Request for Information (RFI);
- Field Clarification (FC) and Supplementary Instruction; and
- Construction Submittals.

The term “Consultant” noted in the Appendix D process maps means Design Consultant or Environmental Consultant, as applicable.

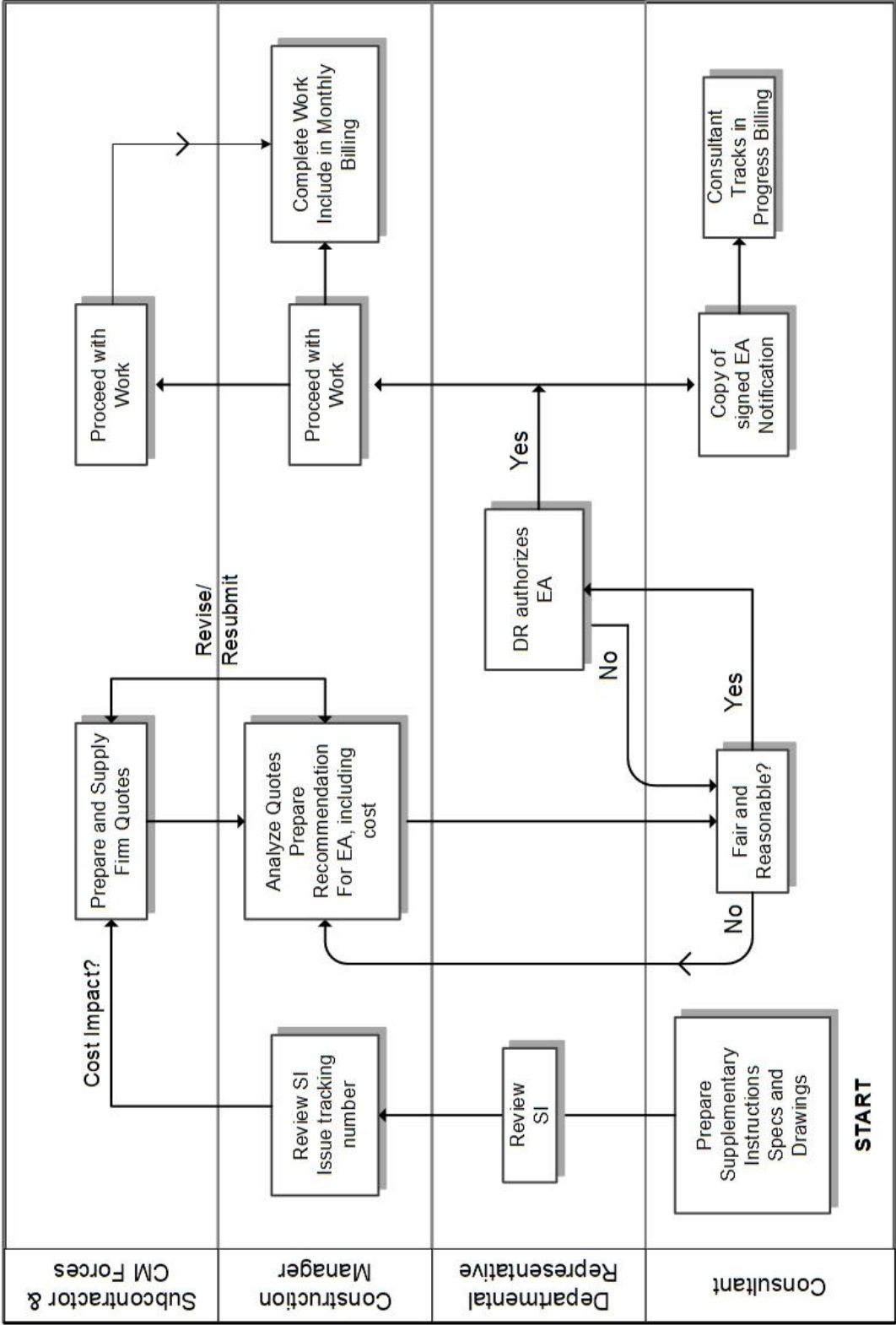
Refer to the DR for clarification or refinement of any individual workflow process. The DR may redefine existing and add new workflow processes during the Contract.



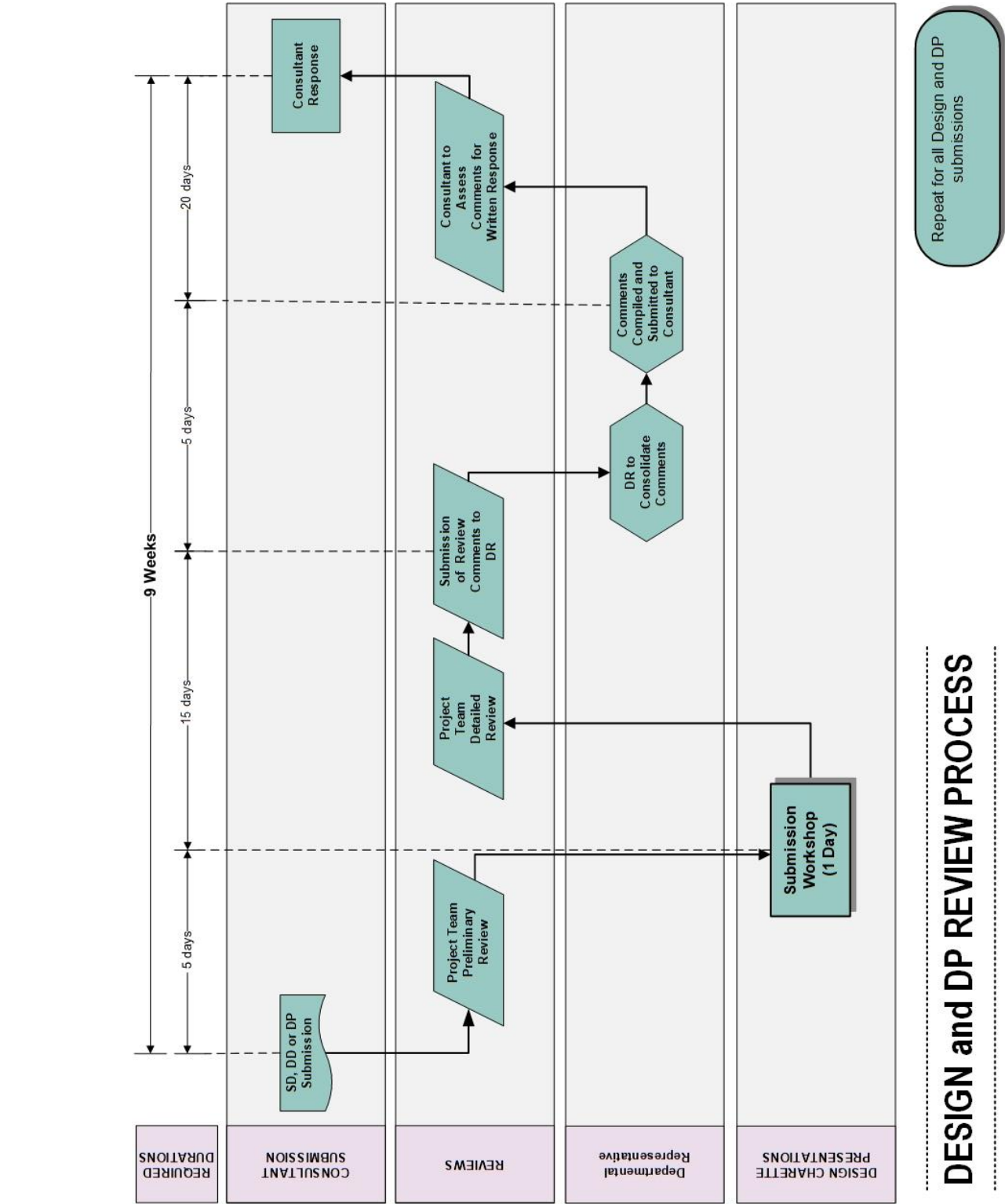
CHANGE TO CM CONTRACT



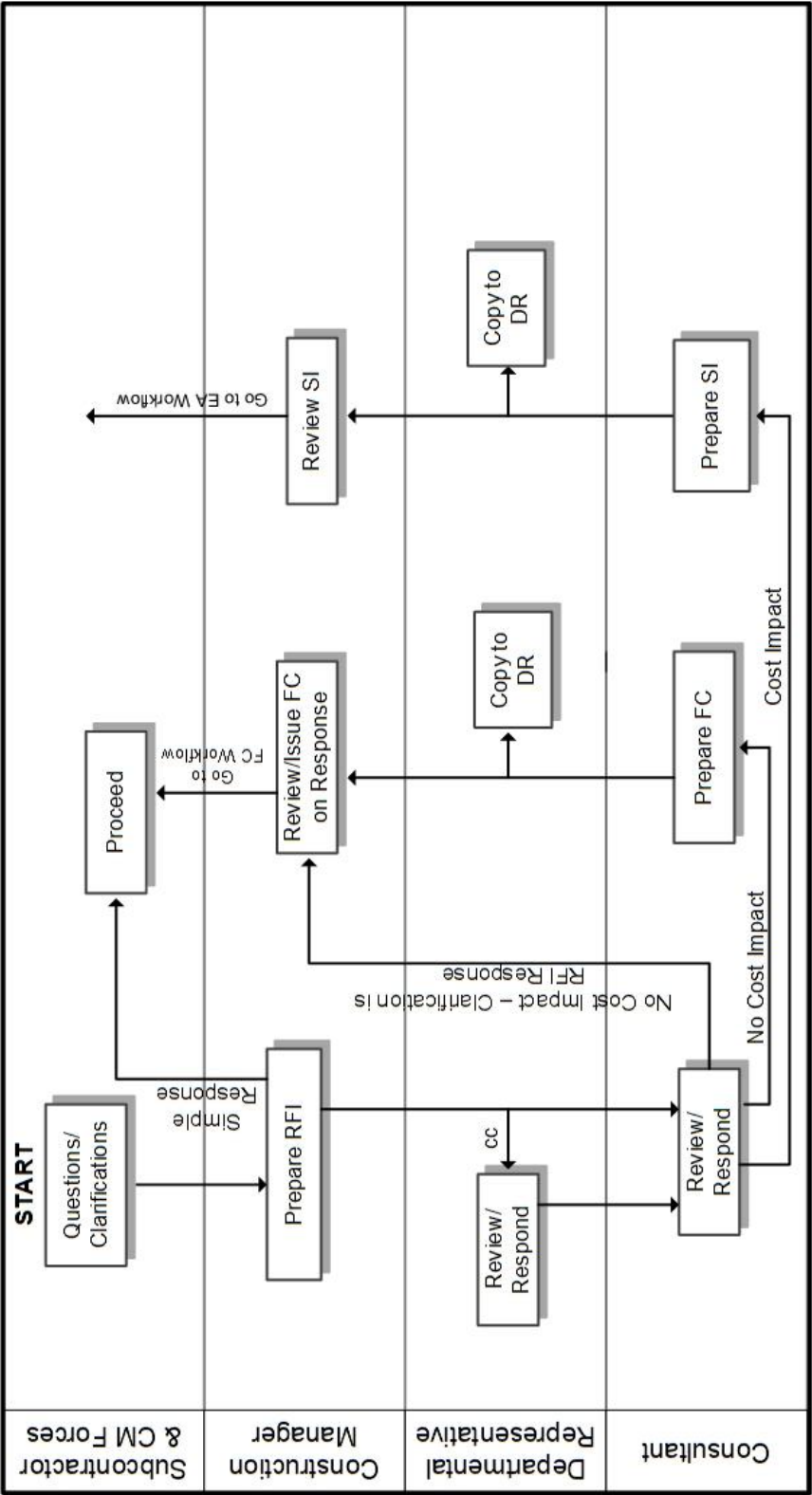
EXPENDITURE AUTHORITY (EA) WORKFLOW



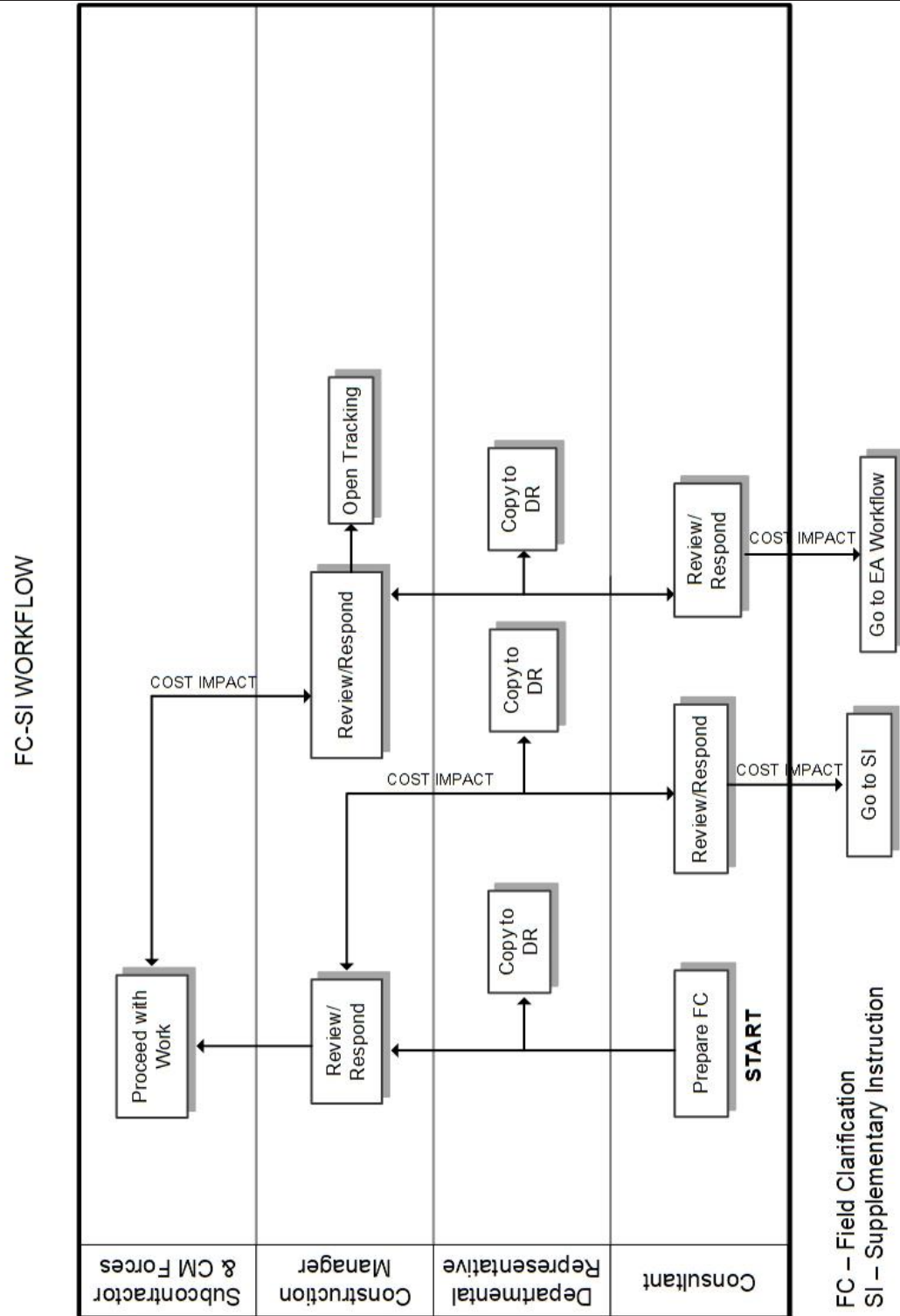
SI – Supplementary Instruction



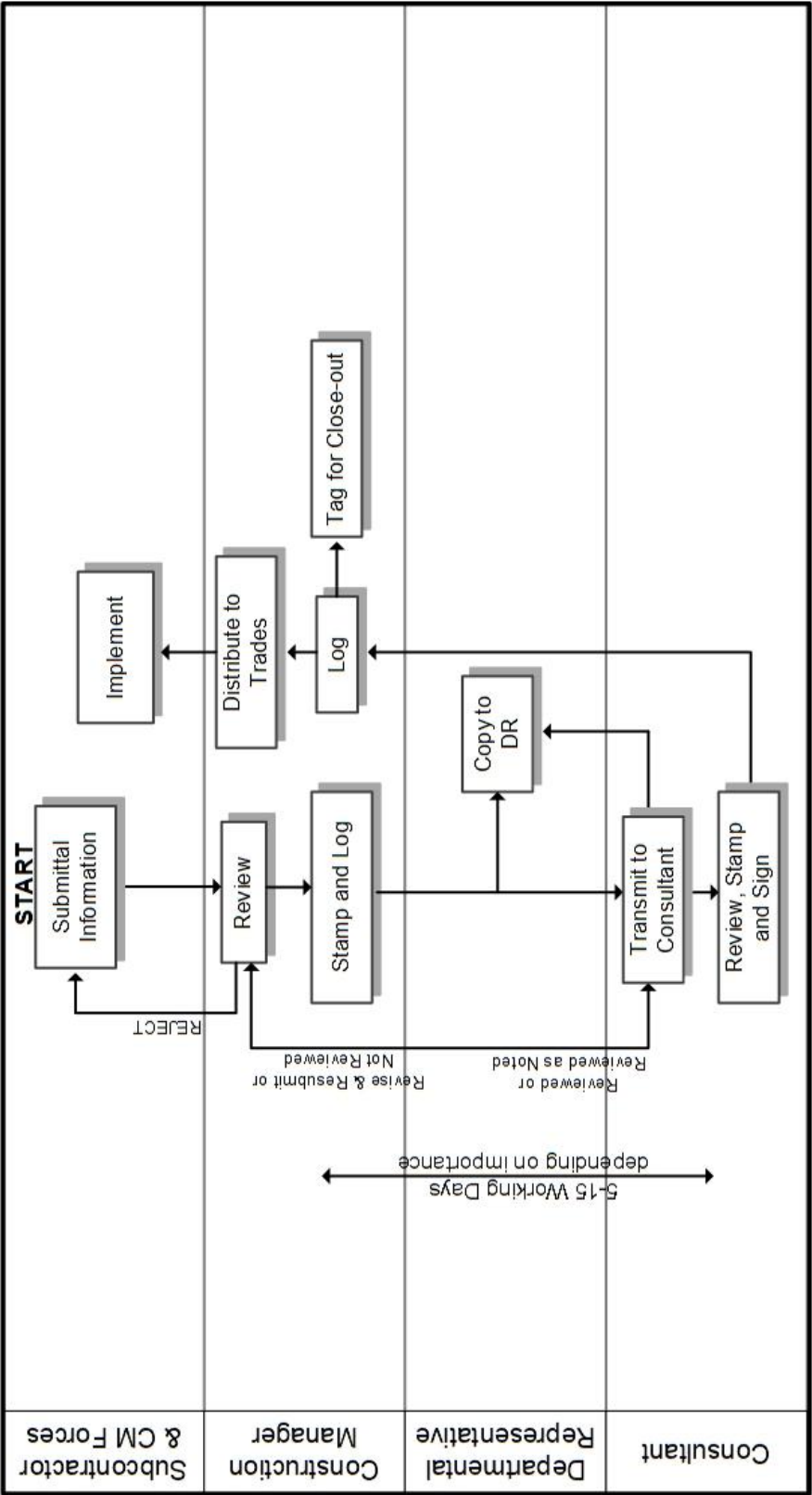
RFI WORKFLOW



RFI – Request for Information  
FC – Field Clarification  
SI – Supplementary Instruction



CONSTRUCTION SUBMITTALS FLOWCHART



---

## **ToR APPENDIX D – REFERENCE INFORMATION**

1. Extensive information and documentation about the PWGSC's National Project Management System (NPMS) can be found on-line at:  
<https://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/index-eng.html>
2. Information on cost estimates can be found within the NPMS website at:  
<https://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/bi-rp/conn-know/couts-cost/definition-eng.html>
3. The DR will provide the CM Contract-specific documentation, which the CM must review, understand, and consider in the planning and implementation of its services and Work. This documentation includes:
  - a) Project-specific scope, time, cost information; and
  - b) Fire Protection Requirements for Construction, Alteration, and Demolition Operations

**End of ANNEX C – TERMS OF REFERENCE**

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

## ANNEX D

### SECURITY REQUIREMENT CHECKLIST (SRCL)



Government of Canada  
Gouvernement du Canada

Contract Number / Numéro du contrat

EP635-192601

Security Classification / Classification de sécurité  
UNCLASSIFIED

#### SECURITY REQUIREMENTS CHECK LIST (SRCL)

#### LISTE DE VÉRIFICATION DES EXIGENCES RELATIVES À LA SÉCURITÉ (LVERS)

PART A - CONTRACT INFORMATION / PARTIE A - INFORMATION CONTRACTUELLE		
1. Originating Government Department or Organization / Ministère ou organisme gouvernemental d'origine		2. Branch or Directorate / Direction générale ou Direction RPS / IAM
3. a) Subcontract Number / Numéro du contrat de sous-traitance		3. b) Name and Address of Subcontractor / Nom et adresse du sous-traitant
4. Brief Description of Work / Brève description du travail Construction Manager for Confederation Heights Campus.		
5. a) Will the supplier require access to Controlled Goods? Le fournisseur aura-t-il accès à des marchandises contrôlées? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Non Oui		
5. b) Will the supplier require access to unclassified military technical data subject to the provisions of the Technical Data Control Regulations? Le fournisseur aura-t-il accès à des données techniques militaires non classifiées qui sont assujetties aux dispositions du Règlement sur le contrôle des données techniques? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Non Oui		
6. Indicate the type of access required / Indiquer le type d'accès requis		
6. a) Will the supplier and its employees require access to PROTECTED and/or CLASSIFIED information or assets? Le fournisseur ainsi que les employés auront-ils accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Specify the level of access using the chart in Question 7. c.) (Préciser le niveau d'accès en utilisant le tableau qui se trouve à la question 7. c.)		
6. b) Will the supplier and its employees (e.g. cleaners, maintenance personnel) require access to restricted access areas? No access to PROTECTED and/or CLASSIFIED information or assets is permitted. Le fournisseur et ses employés (p. ex. nettoyeurs, personnel d'entretien) auront-ils accès à des zones d'accès restreintes? L'accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS n'est pas autorisé. <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Non Oui		
6. c) Is this a commercial courier or delivery requirement with no overnight storage? S'agit-il d'un contrat de messagerie ou de livraison commerciale sans entreposage de nuit? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Non Oui		
7. a) Indicate the type of information that the supplier will be required to access / Indiquer le type d'information auquel le fournisseur devra avoir accès		
Canada <input type="checkbox"/>	NATO / OTAN <input type="checkbox"/>	Foreign / Étranger <input type="checkbox"/>
7. b) Release restrictions / Restrictions relatives à la diffusion		
No release restrictions Aucune restriction relative à la diffusion <input type="checkbox"/>	All NATO countries Tous les pays de l'OTAN <input type="checkbox"/>	No release restrictions Aucune restriction relative à la diffusion <input type="checkbox"/>
Not releasable À ne pas diffuser <input type="checkbox"/>		
Restricted to: / Limité à: <input type="checkbox"/>	Restricted to: / Limité à: <input type="checkbox"/>	Restricted to: / Limité à: <input type="checkbox"/>
Specify country(ies): / Préciser le(s) pays:	Specify country(ies): / Préciser le(s) pays:	Specify country(ies): / Préciser le(s) pays:
7. c) Level of information / Niveau d'information		
PROTECTED A PROTÉGÉ A <input type="checkbox"/>	NATO UNCLASSIFIED NATO NON CLASSIFIÉ <input type="checkbox"/>	PROTECTED A PROTÉGÉ A <input type="checkbox"/>
PROTECTED B PROTÉGÉ B <input type="checkbox"/>	NATO RESTRICTED NATO DIFFUSION RESTREINTE <input type="checkbox"/>	PROTECTED B PROTÉGÉ B <input type="checkbox"/>
PROTECTED C PROTÉGÉ C <input type="checkbox"/>	NATO CONFIDENTIAL NATO CONFIDENTIEL <input type="checkbox"/>	PROTECTED C PROTÉGÉ C <input type="checkbox"/>
CONFIDENTIAL CONFIDENTIEL <input type="checkbox"/>	NATO SECRET NATO SECRET <input type="checkbox"/>	CONFIDENTIAL CONFIDENTIEL <input type="checkbox"/>
SECRET SECRET <input type="checkbox"/>	COSMIC TOP SECRET COSMIC TRÈS SECRET <input type="checkbox"/>	SECRET SECRET <input type="checkbox"/>
TOP SECRET TRÈS SECRET <input type="checkbox"/>		TOP SECRET TRÈS SECRET <input type="checkbox"/>
TOP SECRET (SIGINT) TRÈS SECRET (SIGINT) <input type="checkbox"/>		TOP SECRET (SIGINT) TRÈS SECRET (SIGINT) <input type="checkbox"/>

TBS/SCT 350-103(2004/12)

Security Classification / Classification de sécurité  
UNCLASSIFIED

Canada



Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004



Contract Number / Numéro du contrat
EP635-192601
Security Classification / Classification de sécurité UNCLASSIFIED

<b>PART A (continued) / PARTIE A (suite)</b>	
8. Will the supplier require access to PROTECTED and/or CLASSIFIED COMSEC information or assets? Le fournisseur aura-t-il accès à des renseignements ou à des biens COMSEC désignés PROTÉGÉS et/ou CLASSIFIÉS? If Yes, indicate the level of sensitivity. Dans l'affirmative, indiquer le niveau de sensibilité :	<input checked="" type="checkbox"/> No Non <input type="checkbox"/> Yes Oui
9. Will the supplier require access to extremely sensitive INFOSEC information or assets? Le fournisseur aura-t-il accès à des renseignements ou à des biens INFOSEC de nature extrêmement délicate? Short Title(s) of material / Titre(s) abrégé(s) du matériel : Document Number / Numéro du document :	<input checked="" type="checkbox"/> No Non <input type="checkbox"/> Yes Oui
<b>PART B - PERSONNEL (SUPPLIER) / PARTIE B - PERSONNEL (FOURNISSEUR)</b>	
10. a) Personnel security screening level required / Niveau de contrôle de sécurité du personnel requis	
<input checked="" type="checkbox"/> RELIABILITY STATUS COTE DE FIABILITÉ	<input type="checkbox"/> CONFIDENTIAL CONFIDENTIEL
<input type="checkbox"/> TOP SECRET - SIGINT TRÈS SECRET - SIGINT	<input type="checkbox"/> SECRET SECRET
<input type="checkbox"/> SITE ACCESS ACCÈS AUX EMPLACEMENTS	<input type="checkbox"/> NATO CONFIDENTIAL NATO CONFIDENTIEL
	<input type="checkbox"/> NATO SECRET NATO SECRET
	<input type="checkbox"/> TOP SECRET TRÈS SECRET
	<input type="checkbox"/> COSMIC TOP SECRET COSMIC TRÈS SECRET
Special comments: Commentaires spéciaux : _____	
NOTE: If multiple levels of screening are identified, a Security Classification Guide must be provided. REMARQUE: Si plusieurs niveaux de contrôle de sécurité sont requis, un guide de classification de la sécurité doit être fourni.	
10. b) May unscreened personnel be used for portions of the work? Du personnel sans autorisation sécuritaire peut-il se voir confier des parties du travail? If Yes, will unscreened personnel be escorted? Dans l'affirmative, le personnel en question sera-t-il escorté?	<input checked="" type="checkbox"/> No Non <input type="checkbox"/> Yes Oui
<b>PART C - SAFEGUARDS (SUPPLIER) / PARTIE C - MESURES DE PROTECTION (FOURNISSEUR)</b>	
<b>INFORMATION / ASSETS / RENSEIGNEMENTS / BIENS</b>	
11. a) Will the supplier be required to receive and store PROTECTED and/or CLASSIFIED information or assets on its site or premises? Le fournisseur sera-t-il tenu de recevoir et d'entreposer sur place des renseignements ou des biens PROTÉGÉS et/ou CLASSIFIÉS?	<input checked="" type="checkbox"/> No Non <input type="checkbox"/> Yes Oui
11. b) Will the supplier be required to safeguard COMSEC information or assets? Le fournisseur sera-t-il tenu de protéger des renseignements ou des biens COMSEC?	<input checked="" type="checkbox"/> No Non <input type="checkbox"/> Yes Oui
<b>PRODUCTION</b>	
11. c) Will the production (manufacture, and/or repair and/or modification) of PROTECTED and/or CLASSIFIED material or equipment occur at the supplier's site or premises? Les installations du fournisseur serviront-elles à la production (fabrication et/ou réparation et/ou modification) de matériel PROTÉGÉ et/ou CLASSIFIÉ?	<input checked="" type="checkbox"/> No Non <input type="checkbox"/> Yes Oui
<b>INFORMATION TECHNOLOGY (IT) MEDIA / SUPPORT RELATIF À LA TECHNOLOGIE DE L'INFORMATION (TI)</b>	
11. d) Will the supplier be required to use its IT systems to electronically process, produce or store PROTECTED and/or CLASSIFIED information or data? Le fournisseur sera-t-il tenu d'utiliser ses propres systèmes informatiques pour traiter, produire ou stocker électroniquement des renseignements ou des données PROTÉGÉS et/ou CLASSIFIÉS?	<input checked="" type="checkbox"/> No Non <input type="checkbox"/> Yes Oui
11. e) Will there be an electronic link between the supplier's IT systems and the government department or agency? Disposera-t-on d'un lien électronique entre le système informatique du fournisseur et celui du ministère ou de l'agence gouvernementale?	<input checked="" type="checkbox"/> No Non <input type="checkbox"/> Yes Oui

TBS/SCT 350-103(2004/12)

Security Classification / Classification de sécurité  
UNCLASSIFIED

Canada

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004



Contract Number / Numéro du contrat
EP635-192601
Security Classification / Classification de sécurité
UNCLASSIFIED

**PART C - (continued) / PARTIE C - (suite)**

For users completing the form **manually** use the summary chart below to indicate the category(ies) and level(s) of safeguarding required at the supplier's site(s) or premises.

Les utilisateurs qui remplissent le formulaire **manuellement** doivent utiliser le tableau récapitulatif ci-dessous pour indiquer, pour chaque catégorie, les niveaux de sauvegarde requis aux installations du fournisseur.

For users completing the form **online** (via the Internet), the summary chart is automatically populated by your responses to previous questions.

Dans le cas des utilisateurs qui remplissent le formulaire **en ligne** (par Internet), les réponses aux questions précédentes sont automatiquement saisies dans le tableau récapitulatif.

**SUMMARY CHART / TABLEAU RÉCAPITULATIF**

Category Catégorie	PROTECTED PROTÉGÉ			CLASSIFIED CLASSIFIÉ			NATO				COMSEC					
	A	B	C	CONFIDENTIAL  CONFIDENTIEL	SECRET	TOP SECRET  TRÈS SECRET	NATO RESTRICTED  NATO DIFFUSION RESTREINTE	NATO CONFIDENTIAL  NATO CONFIDENTIEL	NATO SECRET	COSMIC TOP SECRET  COSMIC TRÈS SECRET	PROTECTED PROTÉGÉ			CONFIDENTIAL	SECRET	TOP SECRET
											A	B	C			
Information / Assets Renseignements / Biens																
Production																
IT Media / Support TI																
IT Link / Lien électronique																

12. a) Is the description of the work contained within this SRCL PROTECTED and/or CLASSIFIED?

La description du travail visé par la présente LVERS est-elle de nature PROTÉGÉE et/ou CLASSIFIÉE?



No  
Non



Yes  
Oui

If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification".

Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire.

12. b) Will the documentation attached to this SRCL be PROTECTED and/or CLASSIFIED?

La documentation associée à la présente LVERS sera-t-elle PROTÉGÉE et/ou CLASSIFIÉE?



No  
Non



Yes  
Oui

If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification" and indicate with attachments (e.g. SECRET with Attachments).

Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire et indiquez qu'il y a des pièces jointes (p. ex. SECRET avec des pièces jointes).

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

## ANNEX E

### CERTIFICATE OF INSURANCE (Page 1 of 5)

Description and Location of Work Construction Management Services Address, Ottawa, Ontario	Contract No. EP635-192601
	Project No. R.000000.000

Name of Insurer, Broker or Agent	Address (No., Street)	City	Province	Postal Code
Name of Insured (Contractor)	Address (No., Street)	City	Province	Postal Code
Additional Insured  Her Majesty the Queen in Right of Canada as represented by the Minister of Public Works and Government Services				

Type of Insurance	Insurer Name and Policy Number	Inception Date D / M / Y	Expiry Date D / M / Y	Limits of Liability		
<b>Commercial General Liability</b> <b>Umbrella/Excess Liability</b>				Per Occurrence	Annual General Aggregate	Completed Operations Aggregate
				\$	\$	\$
				\$	\$	\$
<b>Builder's Risk / Installation Floater</b>				\$		
<b>Wrap-Up General Liability/Excess</b>				\$ o Per Incident o Per Occurrence		Aggregate \$
<b>All Risk in Transit Insurance</b>				\$		
<b>Environmental Impairment Liability Insurance</b>				\$ o Per Incident o Per Occurrence		Aggregate \$

I certify that the above policies were issued by insurers in the course of their Insurance business in Canada, are currently in force and include the applicable insurance coverage's stated on page 2 of this Certificate of Insurance, including advance notice of cancellation / reduction in coverage.

<div></div> Name of person authorized to sign on behalf of Insurer(s) (Officer, Agent, Broker)	<div></div> Telephone number
<div></div> Signature	<div></div> Date D / M / Y

## **CERTIFICATE OF INSURANCE (Page 2 of 5)**

### **General**

The insurance policies required on page 1 of the Certificate of Insurance must be in force and must include the insurance coverage listed under the corresponding type of insurance on this page.

The policies must insure the Contractor and must include Her Majesty the Queen in Right of Canada as represented by the Minister of Public Works and Government Services as an additional Insured.

The Policy shall be endorsed to provide the Owner with not less than 30 days' notice in writing in advance of any cancellation or change or amendment restricting coverage.

Without increasing the limit of liability, the policies must protect all insured parties to the full extent of coverage provided. Further, the policies must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.

### **Commercial General Liability**

The insurance coverage provided must not be substantially less than that provided by the latest edition of IBC Form 2100.

The policy must 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 structure or land whether such support be natural or otherwise if the work is performed by the insured contractor.

The policy must have the following minimum limits:

- (a) **\$5,000,000** Each Occurrence Limit;
- (b) **\$10,000,000** General Aggregate Limit per policy year if the policy contains a General Aggregate; and
- (c) **\$5,000,000** Products/Completed Operations Aggregate Limit.

Umbrella or excess liability insurance may be used to achieve the required limits.

### **Builder's Risk / Installation Floater**

The insurance coverage provided must not be less than that provided by the latest edition of IBC Forms 4042 and 4047. The policy must permit use and occupancy of any of the projects, or any part thereof, where such use and occupancy is for the purposes for which a project is intended upon completion.

The policy may exclude or be endorsed to exclude coverage for loss or damage caused by asbestos, fungi or spores, cyber and terrorism.

The policy must have a limit that is not 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 Canada 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 must be changed to reflect the revised contract value.

The policy must provide that the proceeds thereof are payable to Canada or as Canada may direct in accordance with GC10.2, "Insurance Proceeds" (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/5/R/R2900D/2>).

---

## CERTIFICATE OF INSURANCE (Page 3 of 5)

### Wrap-up General Liability

#### Scope of Policy

1. The insurance coverage provided must be primary to all other insurance policies and must not be substantially less than that provided by IBC Form 2100, as amended from time to time, except for liability arising from damage to the Work during construction, which must be limited to the completed operations period.
2. The policy must include an extension for a standard provincial and territorial form of non- owned automobile liability policy.
3. The policy must 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.

#### Amount of Insurance

1. The policy must have:
  - (a) an Each Occurrence Limit of not less than **\$25,000,000**; and
  - (b) a Completed Operations Aggregate Limit of not less than **\$25,000,000**.
2. Umbrella or excess liability insurance may be used to achieve the required limits.

#### Insured

1. The policy must insure the Contractor and must include, as additional insured:
  - (a) Canada, represented by Public Works and Government Services Canada;
  - (b) All consultant; and
  - (c) Any Subcontractor at any tier performing any part of the Work.
2. The Insurer must provide a waiver of subrogation against any named or additional insured.

#### Period of Insurance

Unless otherwise directed in writing by Canada, or, otherwise stipulated elsewhere herein, the policy required herein must 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 hazards must, in any event, be maintained for a period of at least two (2) years beyond the date of the Certificate of Substantial Performance.

#### All Risk in Transit Insurance

The Contractor must obtain on the Government's Property, and maintain in force throughout the duration of the Contract, All Risk Property in Transit insurance coverage for all applicable conveyances while under its care, custody

or control, in an amount of not less than **\$750,000.00**. The Government Property must be insured on replacement cost (new) basis.

## CERTIFICATE OF INSURANCE (Page 4 of 5)

- (a) Administration of Claims: The Contractor must notify Canada promptly about any losses or damages to Government Property and monitor, investigate and document losses of or damage to ensure that claims are properly made and paid.
- (b) The All Risk Property in Transit insurance must include the following:
  - i. Notice of Cancellation: The Insurer will endeavor to provide the Contracting Authority at least thirty (30) days written notice of any policy cancellation.
  - ii. Loss Payee: Canada as its interest appears or as it may direct.
  - iii. Waiver of Subrogation Rights: Contractor's Insurer to waive all rights of subrogation against Canada as represented by Public Works and Government Services Canada for any and all loss of or damage to the property however caused.

#### **Environmental Impairment Liability Insurance**

- 1. The Contractor must obtain Contractors Pollution Liability insurance, and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature, but for not less than **\$2,000,000** per accident or occurrence and in the annual aggregate.
- 2. If the policy is written on a claims-made basis, coverage must be in place for a period of at least 12 months after the completion or termination of the Contract.
- 3. The Pollution Liability insurance policy must include the following: Additional Insured: Canada is added as an additional insured, but only with respect to liability arising out of the Contractor's performance of the Contract. The interest of Canada as additional insured must read as follows:
  - (a) Canada, represented by Public Works and Government Services Canada.
  - (b) Notice of Cancellation: The Insurer will endeavor to provide the Contracting Officer thirty (30) days written notice of policy cancellation.
  - (c) Separation of Insureds: The policy must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.
  - (d) Contractual Liability: The policy must, on a blanket basis or by specific reference to the Contract, extend to assumed liabilities with respect to contractual provisions.
  - (e) Incidental Transit Extension: The policy must extend to losses arising from any waste, products or materials transported, shipped, or delivered via any transportation mode to a location beyond the boundaries of a site at which the Contractor or any entity for which the Contractor is legally liable for performing or has performed the operations described in the contract.
  - (f) Litigation Rights: Pursuant to subsection 5(d) of the Department of Justice Act, S.C.1993, c. J-2, s.1, if a suit is instituted for or against Canada which the Insurer would, but for this clause, have the right to pursue or defend on behalf of Canada as an Additional Named Insured under the insurance policy, the Insurer must promptly contact the Attorney General of Canada to agree on the legal strategies by sending a letter, by registered mail or by courier, with an acknowledgment of receipt.

For the province of Quebec, send to:  
Director Business Law Directorate,  
Quebec Regional Office (Ottawa),  
Department of Justice,  
284 Wellington Street, Room SAT-6042,  
Ottawa, Ontario, K1A 0H8

For other provinces and territories, send to:  
Senior General Counsel,  
Civil Litigation Section,  
Department of Justice  
234 Wellington Street, East Tower  
Ottawa, Ontario K1A 0H8

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

---

### **CERTIFICATE OF INSURANCE (Page 5 of 5)**

A copy of the letter must be sent to the Contracting Officer. Canada reserves the right to co-defend any action brought against Canada. All expenses incurred by Canada to co-defend such actions will be at Canada's expense. If Canada decides to co-defend any action brought against it, and Canada does not agree to a proposed settlement agreed to by the Contractor's insurer and the plaintiff(s) that would result in the settlement or dismissal of the action against Canada, then Canada will be responsible to the Contractor's insurer for any difference between the proposed settlement amount and the amount finally awarded or paid to the plaintiffs (inclusive of costs and interest) on behalf of Canada.

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

## FORM 1

### BID SUBMISSION FORM

<b>Bidder's full legal name</b> <i>[Note to Bidders: Bidders who are part of a corporate group must take care to identify the correct corporation(s) as the Bidder.]</i>					
<b>Bidder's Operating Name (if any):</b>					
<b>Authorized Representative of Bidder for evaluation purposes (e.g., clarifications)</b>			Name:		
			Title:		
			Address:		
			Telephone #:		
			Cell #:		
			Email:		
<b>Bidder's Procurement Business Number (PBN)</b> <i>[Note to Bidders: Please ensure that the PBN you provide matches the legal name under which you have submitted your bid. If it does not, the Bidder will be determined based on the legal name provided, not based on the PBN, and the Bidder will be required to submit the PBN that matches the legal name of the Bidder.]</i>					
<b>Security Clearance Level of Bidder</b> <i>[include both the level and the date it was granted]</i> <i>[Note to Bidders: Please ensure that the security clearance matches the legal name of the Bidder. If it does not, the security clearance is not valid for the Bidder.]</i>  <i>Note to Bidders: In the case of a joint venture, all members must meet the security requirements.]</i>					
<b>In the case of a joint venture, the following must also be completed:</b>			Name of each member of the joint venture:		
			Name of the representative of the joint venture, i.e. the member chosen by the other members to act on their behalf, if applicable:		
			Name of the joint venture, if applicable:		
<b>Signature of Authorized Representative of Bidder</b>			<hr/>		



Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

## FORM 2

### CLIENT REFERENCE FORM FOR REPRESENTATIVE PROJECT M1a Construction Management Project

#### To be completed by client (Project Reference)

This hereby confirms that the following Contractor \_\_\_\_\_  
functioned in the role of Construction Manager (CM) or Design-Builder or Public Private Partnership and  
executed the work for the following project:

Item	Project Details	Response
1	Project Title	
2	Project Location	
3	Brief description of their Role and Level of Responsibility of the Building Construction Project	
4	<p>Brief Project Description of Work for the Building Construction Project</p> <p><b>Building Construction Project:</b> includes new building construction or renovation of an existing building. Note that multiple phases or multiple buildings within the umbrella of a single program are not considered admissible.</p>	
5	<p>Was the project Completed after June 1, 2009 or is it Underway?</p> <p><b>Completed:</b> means a project where all the terms and conditions of the contract were met and where a final certificate of completion has been issued or a final invoice paid and where the date on the certificate or payment instrument indicates the date of completion.</p> <p><b>Underway:</b> means a project currently in progress (minimum 80% of construction costs must have been incurred)</p>	<p>Completed (YES or NO)</p> <p>Completion Date: _____</p> <p><b>OR</b></p> <p>Underway (YES or NO)</p> <p>% complete: _____</p>
6	<p>Did the total Construction Value, excluding applicable taxes exceed \$15,000,000.00?</p> <p><b>Construction Value:</b> Means the final cost of the contract between client and firm, including all amendments. In the case of an Underway project, the price at time of bid submission including all amendments</p>	

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

This project was performed as described above. The specified work was carried out to our satisfaction, in accordance with the terms and conditions of the contract and with respect to the mutually agreed schedule and budget.

**Client Information:**

Client (Project Reference) Name: \_\_\_\_\_

Client (Project Reference) Title: \_\_\_\_\_

Client (Project Reference) Signature/Date: \_\_\_\_\_

Client (Project Reference) Telephone: \_\_\_\_\_

Client (Project Reference) E-mail: \_\_\_\_\_

**Contractor Information:**

Contractor Full Legal Name: \_\_\_\_\_

Contractor Authorized Representative

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_

**FORM 3**

**CLIENT REFERENCE FORM FOR REPRESENTATIVE PROJECT**

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

### M1b Construction Management Project

#### To be completed by client (Project Reference)

This hereby confirms that the following Contractor \_\_\_\_\_  
functioned in the role of Construction Manager (CM) or Design-Builder or Public Private Partnership and  
executed the work for the following project:

Item	Project Details	Response
1	Project Title	
2	Project Location	
3	Brief description of their Role and Level of Responsibility of the Building Construction Project	
4	<p>Brief Project Description of Work for the Building Construction Project</p> <p><b>Building Construction Project:</b> includes new building construction or renovation of an existing building. Note that multiple phases or multiple buildings within the umbrella of a single program are not considered admissible.</p>	
5	<p>Was the project Completed after June 1, 2009 or is it Underway?</p> <p><b>Completed:</b> means a project where all the terms and conditions of the contract were met and where a final certificate of completion has been issued or a final invoice paid and where the date on the certificate or payment instrument indicates the date of completion.</p> <p><b>Underway:</b> means a project currently in progress (minimum 80% of construction costs must have been incurred)</p>	<p>Completed (YES or NO)</p> <p>Completion Date: _____</p> <p><b>OR</b></p> <p>Underway (YES or NO)</p> <p>% complete: _____</p>
6	<p>Did the total Construction Value, excluding applicable taxes exceed \$15,000,000.00?</p> <p><b>Construction Value:</b> Means the final cost of the contract between client and firm, including all amendments. In the case of an Underway project, the price at time of bid submission including all amendments</p>	

This project was performed as described above. The specified work was carried out to our satisfaction, in accordance with the terms and conditions of the contract and with respect to the mutually agreed schedule and budget.

Client Information:

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

Client (Project Reference) Name: \_\_\_\_\_

Client (Project Reference) Title: \_\_\_\_\_

Client (Project Reference) Signature/Date: \_\_\_\_\_

Client (Project Reference) Telephone: \_\_\_\_\_

Client (Project Reference) E-mail: \_\_\_\_\_

**Contractor Information:**

Contractor Full Legal Name: \_\_\_\_\_

Contractor Authorized Representative

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

## FORM 4

### CLIENT REFERENCE FORM FOR REPRESENTATIVE PROJECT R1.1- Project #1

#### To be completed by client (Project Reference)

This hereby confirms that the following Contractor \_\_\_\_\_  
functioned in the role of Construction Manager (CM) or Design-Builder or Public Private Partnership and  
executed the work for the following project:

Item	Project Details	Response
1	Project Title	
2	Project Location	
3	<p>Was the project <i>Completed</i> after June 1, 2009 or is it <i>Underway</i>?</p> <p><b>Completed:</b> means a project where all the terms and conditions of the contract were met and where a final certificate of completion has been issued or a final invoice paid and where the date on the certificate or payment instrument indicates the date of completion.</p> <p><b>Underway:</b> means a project currently in progress (minimum 80% of construction costs must have been incurred)</p>	<p>Completed (YES or NO)</p> <p>Completion Date: _____</p> <p><b>OR</b></p> <p>Underway (YES or NO)</p> <p>% complete: _____</p>
4	<p>Did the total Construction Value, excluding applicable taxes exceed \$15,000,000.00?</p> <p><b>Construction Value:</b> Means the final cost of the contract between client and firm, including all amendments. In the case of an <i>Underway</i> project, the price at time of bid submission including all amendments</p>	

This project was performed as described above. The specified work was carried out to our satisfaction, in accordance with the terms and conditions of the contract and with respect to the mutually agreed schedule and budget.

Client Information:

Client (Project Reference) Name: \_\_\_\_\_

Client (Project Reference) Title: \_\_\_\_\_

Client (Project Reference) Signature/Date: \_\_\_\_\_

Client (Project Reference) Telephone: \_\_\_\_\_

Client (Project Reference) E-mail: \_\_\_\_\_

Contractor Information:

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

---

Contractor Full Legal Name: \_\_\_\_\_

Contractor Authorized Representative

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

## FORM 5

### CLIENT REFERENCE FORM FOR REPRESENTATIVE PROJECT R1.1- Project #2

#### To be completed by client (Project Reference)

This hereby confirms that the following Contractor \_\_\_\_\_  
functioned in the role of Construction Manager (CM) or Design-Builder or Public Private Partnership and  
executed the work for the following project:

Item	Project Details	Response
1	Project Title	
2	Project Location	
3	<p>Was the project <i>Completed</i> after June 1, 2009 or is it <i>Underway</i>?</p> <p><b>Completed:</b> means a project where all the terms and conditions of the contract were met and where a final certificate of completion has been issued or a final invoice paid and where the date on the certificate or payment instrument indicates the date of completion.</p> <p><b>Underway:</b> means a project currently in progress (minimum 80% of construction costs must have been incurred)</p>	<p>Completed (YES or NO)</p> <p>Completion Date: _____</p> <p><b>OR</b></p> <p>Underway (YES or NO)</p> <p>% complete: _____</p>
4	<p>Did the total Construction Value, excluding applicable taxes exceed \$15,000,000.00?</p> <p><b>Construction Value:</b> Means the final cost of the contract between client and firm, including all amendments. In the case of an <i>Underway</i> project, the price at time of bid submission including all amendments</p>	

This project was performed as described above. The specified work was carried out to our satisfaction, in accordance with the terms and conditions of the contract and with respect to the mutually agreed schedule and budget.

Client Information:

Client (Project Reference) Name: \_\_\_\_\_

Client (Project Reference) Title: \_\_\_\_\_

Client (Project Reference) Signature/Date: \_\_\_\_\_

Client (Project Reference) Telephone: \_\_\_\_\_

Client (Project Reference) E-mail: \_\_\_\_\_

Contractor Information:

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

Contractor Full Legal Name: \_\_\_\_\_

Contractor Authorized Representative

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_



Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

## FORM 6

### CLIENT REFERENCE FORM FOR REPRESENTATIVE PROJECT R1.1- Project #3

#### To be completed by client (Project Reference)

This hereby confirms that the following Contractor \_\_\_\_\_  
functioned in the role of Construction Manager (CM) or Design-Builder or Public Private Partnership and  
executed the work for the following project:

Item	Project Details	Response
1	Project Title	
2	Project Location	
3	<p>Was the project <i>Completed</i> after June 1, 2009 or is it <i>Underway</i>?</p> <p><b>Completed:</b> means a project where all the terms and conditions of the contract were met and where a final certificate of completion has been issued or a final invoice paid and where the date on the certificate or payment instrument indicates the date of completion.</p> <p><b>Underway:</b> means a project currently in progress (minimum 80% of construction costs must have been incurred)</p>	<p>Completed (YES or NO)</p> <p>Completion Date: _____</p> <p><b>OR</b></p> <p>Underway (YES or NO)</p> <p>% complete: _____</p>
4	<p>Did the total Construction Value, excluding applicable taxes exceed \$15,000,000.00?</p> <p><b>Construction Value:</b> Means the final cost of the contract between client and firm, including all amendments. In the case of an <i>Underway</i> project, the price at time of bid submission including all amendments</p>	

This project was performed as described above. The specified work was carried out to our satisfaction, in accordance with the terms and conditions of the contract and with respect to the mutually agreed schedule and budget.

Client Information:

Client (Project Reference) Name: \_\_\_\_\_

Client (Project Reference) Title: \_\_\_\_\_

Client (Project Reference) Signature/Date: \_\_\_\_\_

Client (Project Reference) Telephone: \_\_\_\_\_

Client (Project Reference) E-mail: \_\_\_\_\_

Contractor Information:

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

---

Contractor Full Legal Name: \_\_\_\_\_

Contractor Authorized Representative

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_

Solicitation No. - N° de l'invitation  
EP635-192601

Amd. No. - N° de la modif.  
000

Buyer ID - Id de l'acheteur  
FG347

Client Ref. No. - N° de réf. du client  
20192601

File No. - N° du dossier  
FG347EP635-192601A

Project No. - N° du projet  
R.090833.005, R.090895.005, R.090897.004  
R.090899.003, R.090908.004

## FORM 7

### INTEGRITY PROVISIONS- LIST OF NAMES

#### COMPLETE LIST OF EACH INDIVIDUAL WHO ARE DIRECTORS AND OR OWNER OF THE BIDDER

If the required list of names has not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to provide the names within the time frame specified will render the bid non-responsive. Providing the required names is a mandatory requirement for contract award.

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

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

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

Board of Directors (Use format - first name last name)		
First Name	Last Name	Position (if applicable)