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Travaux publics et Services gouvernementaux
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7e étage, suite 7300
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APPEL D'OFFRES

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Title - Sujet Serv Consultant St-Germain Foundry	
Solicitation No. - N° de l'invitation EF928-201499/A	Date 2019-10-24
Client Reference No. - N° de référence du client EF928-201499	GETS Ref. No. - N° de réf. de SEAG PW-\$MTC-790-15504
File No. - N° de dossier MTC-9-42159 (790)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2019-12-04	
Time Zone Fuseau horaire Heure Normale du l'Est HNE	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Guilbault, Isabelle	Buyer Id - Id de l'acheteur mtc790
Telephone No. - N° de téléphone (514) 476-8192 ()	FAX No. - N° de FAX (514) 496-3822
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: MINISTERE DES TRAVAUX PUBLICS ET SERVICES GOUVERNEMENTAUX CANADA PL.BONAVENTURE,PORTAIL S-O,BUR.7300 800 RUE DE LA GAUCHETIERE O. MONTREAL Québec H5A1L6 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

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

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REQUEST FOR PROPOSAL (RFP)

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SUPPLEMENTARY INSTRUCTIONS TO PROPONENTS (SI)

SI1 INTRODUCTION

1. Public Works and Government Services Canada (PWGSC) intends to retain an individual consulting firm or joint venture to provide the professional services for the project as set out in this Request for Proposal (RFP).
2. This is a single phase selection process. The nature of the requirement and the anticipated limited number of response by the industry leads PWGSC to believe that this approach will not unduly force a large number of firms to expend an overall unreasonable amount of effort in response to PWGSC..
3. Proponents responding to this RFP are requested to submit a full and complete proposal. The proposal will cover not only the qualifications, experience and organization of the proposed Consultant Team, but also the detailed approach to the work, and the pricing and terms offered. A combination of the technical and price of services submissions will constitute the proposal.

SI2 PROPOSAL DOCUMENTS

1. All instructions, general terms, conditions and clauses identified in the RFP by number, date and title, are hereby incorporated by reference into and form part of this solicitation and any resultant contract.

All instructions, general terms, conditions and clauses identified in the RFP 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.

2. The following are the proposal documents:

- (a) Supplementary Instructions to Proponents (SI);
R1410T (2017-08-17), General instructions (GI) – Architectural and/or Engineering services – Request for Proposal;
Submission Requirements and Evaluation (SRE);

Subsection 2.b. of section GI16, Submission of proposal of R1410T, incorporated by reference above, is deleted in its entirety and replaced with the following:

- b. send its proposal only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit specified on page 1 of the RFP;
- (b) the general terms, conditions and clauses, as amended, identified in the Agreement clause;
- (c) State of Work;
- (d) the document entitled "Doing Business with PWGSC Documentation and Deliverables Manual";
- (e) any amendment to the solicitation document issued prior to the date set for receipt of proposals; and

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(f) the proposal, Declaration/Certifications Form and Price Proposal Form.

3. Submission of a proposal constitutes acknowledgment that the Proponent has read and agrees to be bound by these documents.

SI3 QUESTIONS OR REQUEST FOR CLARIFICATION

Questions or requests for clarification during the solicitation period must be submitted in writing to the Contracting Authority named on the RFP - Page 1 at e-mail address isabelle.guilbault@tpsgc-pwgsc.gc.ca as early as possible. Enquiries should be received no later than **five (5) working days** prior to the closing date identified on the front page of the Request for Proposal. Enquiries received after that date may not be answered prior to the closing date of the solicitation.

SI4 CANADA'S TRADE AGREEMENTS

This procurement is subject to the provisions of the North American Free Trade Agreement (NAFTA), the World Trade Organization - Agreement on Government Procurement (WTO-AGP), the Canada-European Union Comprehensive Economic and Trade Agreement (CETA), and the Canadian Free Trade Agreement (CFTA).

SI5 CERTIFICATIONS

The certifications in Annex E and additional information listed below should be completed and submitted with the proposal, but may be submitted afterwards. If any of these certifications or additional information are not completed and submitted as requested, the Contracting Authority will inform the Proponent in the time frame within which to provide the information must be provided. Failure to provide the certifications or additional information listed below within the time frame provided will render the proposal non-responsive.

1. Integrity Provisions – Declaration of Convicted Offences

In accordance with the Ineligibility and Suspension Policy (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Proponent must **provide with its bid, as applicable**, to be given further consideration in the procurement process, the required documentation as per R1410T (2017-08-17), General instructions 1 (GI1), Integrity Provisions – Proposal, **Section 3b**.

2. Federal Contractors Program for Employment Equity - Proposal Certification

By submitting a proposal, the Proponent certifies that the Proponent, and any of the Proponent's members if the Proponent is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "[FCP Limited Eligibility to Bid](#)" list available at the bottom of the page of the Employment and Social Development Canada (ESDC) - Labour's website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html>).

Canada will have the right to declare a proposal non-responsive if the Proponent, or any member of the Proponent if the Proponent is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list at the time of contract award.

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

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The Proponent must provide the Contracting Authority with a completed Federal Contractors Program for Employment Equity - Certification (see Appendix B - Declaration/Certifications Form), before contract award. If the Proponent is a Joint Venture, the Proponent must provide the Contracting Authority with a completed Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

SI6 SECURITY REQUIREMENT

This requirement does not have security requirements

SI7 WEBSITES

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

Employment Equity Act

<http://laws-lois.justice.gc.ca/eng/acts/E-5.401/index.html>

Federal Contractors Program (FCP)

<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html>

Certificate of Commitment to Implement Employment Equity form LAB 1168

<http://www.servicecanada.gc.ca/cgi-bin/search/eforms/index.cgi?app=profile&form=lab1168&dept=sc&lang=e>

Ineligibility and Suspension Policy

<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>

Code of Conduct for Procurement

<http://www.tpsgc-pwgsc.gc.ca/app-acq/cndt-cndct/contexte-context-eng.html>

Lobbying Act

<http://laws-lois.justice.gc.ca/eng/acts/L-12.4/?noCookie>

Buy and Sell

<https://buyandsell.gc.ca/>

Supplier Registration Information

<https://srisupplier.contractsCanada.gc.ca>

Consultant Performance Evaluation Report Form

<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/2913-1.pdf>

Canadian economic sanctions

<http://www.international.gc.ca/sanctions/index.aspx?lang=eng>

National Joint Council (NJC) Travel Directive

<http://www.njc-cnm.gc.ca/directive/travel-voyage/index-eng.php>

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TERMS, CONDITIONS AND CLAUSES

AGREEMENT

1. The Consultant understands and agrees that upon acceptance of the offer by Canada, a binding Agreement shall be formed between Canada and the Consultant and the documents forming the Agreement shall be the following:
 - (a) the Front Page and this Agreement clause;
 - (b) the General Terms, Conditions and Clauses, as amended, identified as:
 - R1210D (2018-06-21), General Condition (GC) 1 - General Provisions – Architectural and/or Engineering Services
 - R1215D (2016-01-28), General Condition (GC) 2 - Administration of the Contract – Architectural and/or Engineering Services
 - R1220D (2015-02-25), General Condition (GC) 3 - Consultant Services
 - R1225D (2015-04-01), General Condition (GC) 4 - Intellectual Property
 - R1230D (2018-06-21), General Condition (GC) 5 - Terms of Payment – Architectural and/or Engineering Services
 - R1235D (2011-05-16), General Condition (GC) 6 - Changes
 - R1240D (2018-06-21), General Condition (GC) 7 - Taking the Services Out of the Consultant's Hands, Suspension or Termination
 - R1245D (2016-01-28), General Condition (GC) 8 - Dispute Resolution – Architectural and/or Engineering Services
 - R1250D (2017-11-28), General Condition (GC) 9 - Indemnification and Insurance
 - (c) Statement of Work;
 - (d) the document entitled "Doing Business with PWGSC Documentation and Deliverables Manual";
 - (e) any amendment to the solicitation document incorporated in the Agreement before the date of the Agreement;
 - (f) the proposal, the Declaration/Certifications Form and the Price Proposal Form.

2. The documents identified above by title, number and date are hereby incorporated by reference into and form part of this Agreement, as though expressly set out herein, subject to any other express terms and conditions herein contained.

The documents identified above by title, number and date 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>

3. If there is a discrepancy between the wording of any documents that appear on the following list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.
 - (a) any amendment or variation in the Agreement that is made in accordance with the terms and conditions of the Agreement;
 - (b) any amendment to the solicitation document incorporated in the Agreement before the date of the Agreement;
 - (c) this Agreement clause;

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- (d) Supplementary Conditions;
 - (e) General Terms, Conditions and Clauses;
 - (f) Agreement Particulars;
 - (g) Statement of Work;
 - (h) the document entitled "Doing Business with PWGSC Documentation and Deliverables Manual";
 - (i) the proposal.

SUPPLEMENTARY CONDITIONS (SC)

SC1 SECURITY REQUIREMENT

There is no security requirement applicable to this Agreement.

SC2 LANGUAGE REQUIREMENTS

1. Communication between Canada and the Consultant shall be in the language of choice of the Consultant Team, which shall be deemed to be the language of the Consultant's proposal.
2. The Consultant's services during construction tender call (such as addenda preparation, tenderers' briefing meetings, technical answers to questions by bidders, including translation of bidder's questions) shall be provided expeditiously in both languages, as necessary.
3. The Consultant's services during construction shall be provided in the language of choice of the Contractor. The successful Contractor will be asked to commit to one or other of Canada's official languages upon award of the Construction Contract and, thereafter construction and contract administration services will be conducted in the language chosen by the Contractor.
4. Other required services in both of Canada's official languages (such as construction documentation) are described in detail in the Statement of Work.
5. The Consultant Team, including the Prime Consultant, Sub-Consultants and Specialists Consultants shall ensure that the services being provided in either language shall be to a professional standard.

SC3 FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY - DEFAULT BY THE CONSULTANT

The Consultant understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Consultant and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the contract. If the AIEE becomes invalid, the name of the Consultant will be added to the "FCP Limited Eligibility to Bid" list. The imposition of such a sanction by ESDC will constitute the Consultant in default as per the terms of the contract.

AGREEMENT PARTICULARS

The Agreement Particulars will be issued at time of award of contract and will identify the fee to be paid to the Consultant for the services determined in the Price Proposal Form.

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ANNEX A

REQUEST FOR PROPOSAL / STATEMENT OF WORK

(PDF attached)



REQUEST FOR PROPOSAL

Drawings and Technical Specifications

Management of Airborne Contamination and Environmental Monitoring of the Saint-Germain Foundry – Quebec Region

Requested by: **Environmental Services
Public Works and Government Services Canada
Quebec Region**

Project No.: **R.057850.101**

September 2019

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FIGURE 1

1. BACKGROUND

1.1. Situation

Environmental Services (ES) at Public Works and Government Services Canada (PWGSC) wishes to retain the services of an environmental consulting firm (hereinafter the “Consultant”) for the following:

- Preparation of environmental management plans and cost estimates;
- Preparation of tender documents (plans and technical specifications) for the management of airborne contamination in the fallow area (Area C) and possibly for the wooded area (Area A);
- Technical support during the tendering and contract award period for the remediation work;
- Environmental monitoring of remediation work performed by contractors hired by PWGSC to ensure they respect the specifications in the drawings and specifications as well as applicable regulations; and
- Performance of related tasks (See section 2.2 Additional services (AS)).

1.2. Site description

The site is located at 1348 10e Rang in Saint-Edmond-de-Grantham and the area concerned is located on lot 5 466 367 cadaster of Quebec, formerly No. 977 (pt 977) of the cadaster of Grantham Township in the Drummond registry division. The geographic coordinates are: latitude 45°51'31.71", longitude 72°40'19.37".

According to the available information, the site was used for agriculture until the late 1960s. Between 1977 and 2006, St-Germain Foundry operated a metal foundry in Saint-Edmond-de-Grantham. On February 9, 2006, the federally incorporated St-Germain Foundry was dissolved by the Director of Corporations. Under the *Canada Business Corporations Act* (CBCA), Justice Canada confirmed, in July 2010, that the land on which the Saint-Germain Foundry is located was vested in PWGSC.

Before the federal government took over management, the province's Department of Environment (MELCC) was responsible for the site and had conducted a few environmental characterization studies.

From 2010 to 2013, PWGSC, as the owner, took reasonable due diligence measures to make the site safe and manage contamination at the site. In this regard, demolition and environmental assessment and characterization work was undertaken. The site was cleaned, a pile of foundry waste was covered with a tarp, and a barricade was installed along with signs prohibiting access to the site.

In 2012–2013, a detailed characterization confirmed that the foundry waste and ashes had been spread out over the entire former work area to a depth of up to 2 m, representing a volume of about 12,500 m³. The foundry waste and ashes constitute a hazardous material under the *Regulation Respecting Hazardous Materials* (c. Q-2, r. 32) because they leach lead at a concentration in excess of the standard prescribed by regulation. Contaminated soil (about 10,000 m³) under the surface layer of the hazardous material was also identified at the time. In addition, the characteristics of the foundry waste were studied in greater detail to obtain as much information as possible for assessing the remediation options for the site. Lastly, groundwater quality and flow conditions as well as the quality of surface water and sediments from ditches were also assessed.

The initial surface area of the entire property at the site was 133,600 m². Note that in spring 2014, the wooded portion of the site representing about 80% of the initial area was sold to an individual.

The site is considered a Class 1 site (with a score of 72.5 – Action required) in the Canadian Council of Ministers of the Environment (CCME) National Classification System for Contaminated Sites (NCSCS).

The former work area underwent environmental remediation from 2016 to 2019. The foundry waste and the associated contaminated soils and sediments were removed and disposed of at authorized disposal and treatment sites. Throughout the work, mitigation measures were implemented to prevent the dispersion of dust beyond the work area.

The activities of the former foundry, including open-pit burning and spreading of ashes and waste across the site's surface, began in 1977 and continued until 2004. During and after the industrial operations, smoke and/or dust from foundry waste was carried by the wind and deposited on the ground in the area around the site of the former work area of the Saint-Germain Foundry, resulting in airborne contamination.

The results of a characterization study conducted in summer 2017 showed airborne dioxin and furan contamination in addition to the airborne metal contamination reported in 2013. This airborne contamination affects surface soils in the wooded and fallow areas of the federal property.

There is no building at the site and no water or electrical power supply. The property in question and the adjacent properties are located in an agricultural zone. This site is not currently in use.

Figure 1 shows the characteristics of this site.

1.3. Environmental context

Airborne contamination has been identified in two areas adjacent to the former work area: 1) the fallow area (Area C), and 2) the wooded area (Area A). A number of surface soil sampling campaigns were conducted in these areas for the purpose of characterizing the airborne contamination in 2012, 2018 and 2019 by Englobe as well as in 2016 by

Sanexen. Initially, the contamination identified was associated with the presence of metals only. In summer 2017 and winter 2018, surface soil samples collected in the wooded (A) and fallow (C) areas confirmed that these areas were affected by airborne dioxin and furan contamination. Chemical analyses confirmed that the surface soils (0 to 0.05 m) presented significantly higher concentrations of metals and of dioxins and furans than did the underlying soils.

Area C – Fallow Area

According to the Phase 1 Environmental Assessment, in 1964, there were three buildings along 10e Rang or the access road, possibly used for farming. While the foundry still in operation, there were three other buildings in the area.

The fallow area (C) to be rehabilitated covers an estimated area of 15,350 m². It is located to the west of the site where remediation work was carried out from 2016 to 2019. This area includes:

1. a zone that was previously farmed (now fallow) south of the property;
2. a partially rehabilitated access road in the zone near the work area;
3. a zone with waste that was rehabilitated during the construction project. In the case of this zone, the remediation objectives were achieved vertically; however, the walls remain contaminated.
4. disturbed contaminated surface soil that was removed to build a temporary access road, then put back once the road was dismantled.
5. a small wooded area.
6. the western embankment, bordering the rehabilitated ditch along the rehabilitated area.

Based on the available analytical results, the surface soils (0 to 0.2 m in depth) present significantly higher concentrations of metals and of dioxins and furans than do the underlying soils (see Table 1).

Table 1: Area C Contamination Level

Depth (m)	Federal		Provincial	
	Metals	D&F*	Metals	D&F
0–0.2 m	>CCME industrial	>CCME	B–C	B–C
0.2–0.4 m	<CCME agricultural	>CCME	<A	<B**
0.4–0.7 m	<CCME agricultural	>CCME	<A	<B

*: CCME guidelines for DFs are the same for agricultural, residential/parkland, commercial or industrial uses and represent the value of the natural background concentration.

** : with the exception of a single sample, which had a natural background concentration just below Criterion B.

Area A – Wooded Area

The wooded area of Area A corresponds to the L-shaped wooded area to the east and north of the former work area, measuring approximately 11,500 m² (see Figure 1).

Based on an aerial photograph from 1964, this area appears to have been cleared in the past. However, the wooded area was never used for foundry activities and all samples taken from the wooded area correspond to native soil. Based on the nature and distribution of the contamination, it is clear that the contamination identified is of airborne origin.

The analytical results for the surface soils show metal concentrations that are higher than the CCME guidelines for industrial use and higher than Criterion B of the MELCC's policy. Copper (Cu), lead (Pb), and dioxins and furans are the main contaminants. Contaminant concentrations decrease with increasing distance from the former work area. The affected soils are located at depths ranging from 0 to 30 cm from the surface.

An assessment of the toxicology and ecotoxicology risks was conducted for this area. Considering the unacceptable risks to human health and the environment related to the airborne metal and/or dioxin and furan contamination, the risk assessment recommends the removal of most of the surface soil from the wooded area.

Ground water

Concerning ground water, the assumption is that after the former work area has been rehabilitated, the problem identified with respect related to the ground water under the work area will gradually disappear naturally after the main source of contamination is removed.

1.4. Short description of remediation / risk management projects

PWGSC wishes to sell or transfer the site in question because it does not meet any organizational needs. The work planned in order to manage the airborne contamination will be carried out in two phases, beginning in the fallow area (Area C). If PWGSC decides to take further action, the wooded area (Area A) will then be addressed. Although PWGSC is likely to take action in the wooded area, this portion of the mandate is considered an option in case no intervention is planned.

In order to allow the Consultant to submit an estimate for the work described in this request for proposals (RFP), the preliminary scope of work envisaged for the two areas is set out below. This scope may be modified by the Consultant as necessary during the course of its mandate.

In preparation for the remediation/risk management projects, a detailed characterization of surface soil quality in both areas and an environmental assessment of the two projects

is currently under way. The two studies will be made available to the Consultant for the mandate.

1.4.1 Phase 1 – Fallow area (Area C)

The planned project involves rehabilitating and managing airborne contamination at the site so as to permit the sale of the property without conditions/limitations.

The option of carrying out risk management for this area has been rejected because this approach would lead to a restriction on its use. Indeed, because this area is located between the site's access road and the rehabilitated former work area, there can be no restriction on its use without significantly limiting the use of the property.

After the preliminary steps are completed and the Consultant has prepared the plans and specifications, PSPC will hire a contractor to carry out the remediation work based on these plans and specifications. The preferred scenario at the present time is remediation by excavation/disposal of the contaminated soils.

To begin with, an area of about 15,000 m², representing a volume of approximately 6,500 m³, must be rehabilitated, taking into account the objective of rehabilitating the former work area, in accordance with CCME Canadian soil quality guidelines for industrial use. Note that the contamination levels are variable and generally decrease with depth. Another remediation objective may be used provided there is no limitation in use, in particular, the province's Criterion B. This option must be considered by the Consultant.

For the small wooded zone in this area, ideally the mature trees would be conserved. As necessary, this wooded area could be used to conduct pilot tests for the larger scale remediation of the wooded area.

Based on the available land survey plan, the common ditch north of the site is included within the property boundaries. During the dry period, a coffer dam must be installed to prevent fish from moving into this ditch. If this is not possible and the coffer dam is installed during a wet period, electrofishing must be conducted in the common ditch before work begins there. PWGSC will obtain any necessary notifications and authorizations from Fisheries and Oceans Canada. Based on the available land survey plan, the ditch running along 10e Rang does not lie within the boundaries of the federal property.

The preliminary plan is for the excavations to be backfilled with the same type of material as that removed and for the surface to be restored with vegetation.

Work to stabilize embankments

Stabilization of the embankments that border the eastern, southern and western boundaries of the former work area must be included in component 1 of the Contractor's mandate. The purpose of this work is to ensure that the contamination covering the embankments or the minor contamination within the embankments is not remobilized and does not re-contaminate the former work area that has been rehabilitated.

After the eastern, southern and western ditches were rehabilitated, sediment barriers were installed in 2018 to contain any inputs of contaminants from the embankments. The inner walls of the embankments are those facing the former work area of the foundry. The outer walls face the wooded zones. It is strongly suspected that the outer walls of the embankments are contaminated to the same degree as the soils in the adjacent wooded zone. The inner walls of the embankments were partially rehabilitated during the work on the former work area.

The eastern, southern and perhaps western embankments, bordering the rehabilitated area, must be stabilized to ensure that the surface contamination that covers the embankment is not re-mobilized and does not re-contaminate the sector corresponding to the former work area of the foundry.

The design for stabilizing the embankments must be developed by the Consultant so as to integrate these specifications with the plans and specifications. A well-thought-out method must be used and it must favour the conservation of mature trees.

1.4.2 Phase 2 – Wooded area (Area A)

After the contamination management project, PWGSC expects to see restrictions imposed on the use of this area as a result of the intervention.

The wooded area (A) to be rehabilitated covers an area estimated to be between 0 m² and 11,500 m², depending on the option that is selected. At present, the project scope and work method have not yet been defined. The variables concern the remediation objective (to be decided based on the reduction of risks to human health and the environment), the environmental effects, the available budgets, and other considerations.

The conservation of mature trees must be favoured. The Consultant must redo the calculations for the quantity of contaminated soil to be excavated to obtain more accurate quantities and costs and submit the best remediation option. Thus, for this area, it will be necessary to evaluate and compare several options in order to provide PWGSC with guidance for its decision making.

1.4.3 Related Work

Work on wells

Work on the wells must be included in Phase 1. This work must be carried out by the Consultant (and the subcontractor). The wells to be dismantled or installed are located in the fallow area and in the former work area.

Four wells (11-MW4, 12-MW2A [old], 12-MW3A and 12-MW3B) measuring 6 to 11 m in depth must be dismantled. Since the PVC in these wells is apparently crooked, the plan is to inject bentonite grout directly into the PVC of the wells and to use hollow-stem augers over the first metre in relation to ground level. This approach would eliminate the preferential pathways from the surface.

The installation of four new wells is planned. Two of the wells need to be installed to replace wells 12-MW3A and 12-MW3B—respectively 5 and 10 m deep—with an above-ground protective portion. Note that the bedrock is located at a depth of 5 m in this spot. In addition, two new wells with the same properties must be installed; their location has yet to be determined. The development of the wells must be included in the “work on wells” item.

Groundwater sampling

Three ground-water sampling campaigns are planned as part of the Consultant’s mandate: one per year over three consecutive years. The following wells must be sampled (15 wells): 12-MW5, 11-MW5, 12-MW2A (new), 16-MW5, 12-MW7, 11-MW1, 12-MW1, 16-MW-1, 16-MW2, 16-MW3 and 16-MW4, 12-MW3A (new), 12-MW3B (new), New Well 1 and New Well 2. Most of the wells are 6 m deep, and four wells are up to 11 m deep.

All 15 wells must be sampled using the MicroPurge method (flow <0.2 L/minute). PWGSC will cover the cost of the chemical analyses.

A letter report on the work performed on the wells must be produced at the end of the first and second campaigns, including an interpretation of the trends based on earlier data. A comprehensive report must be produced at the end of the third campaign. This report must include a more in-depth interpretation of the hydrogeological context and the changes in the contamination over time using the data available since 2011 and statistical methods like the CCME water quality index¹ as well as the calculation tool in the new version of the MELCC’s *Guide technique de suivi de la qualité des eaux souterraines* [technical guide to monitoring groundwater quality](updated in fall 2017).

1.5. Contractor’s general mandate

The Contractor’s main activities in the projects of the two phases are as follows:

- Prepare a health and safety plan, an environmental protection plan, and an environmental emergency response plan before work commences;
- Obtain and provide all authorizations and permits required to show that activities comply with current provincial, federal or other laws, regulations and standards;
- Restore the electrical power connection and the power line to supply the facilities at the work site;
- Perform the work safely;
- Set up a truck decontamination area;

¹ https://www.ccme.ca/en/resources/canadian_environmental_quality_guidelines/index.html

- Manage and treat the water from the excavations and the truck decontamination area, as necessary;
- Cut, uproot and dispose of trees affected by the clearing work and those that may be affected by the recovery of contaminated materials;
- Excavate, segregate, characterize, transport and dispose of/remediate contaminated surface soils and residual materials, where applicable, at duly authorized sites;
- Survey the excavations and the area of land on which work has been carried out to justify the billed quantities and show compliance with the specifications;
- Where applicable, remove, transport and dispose of at duly authorized sites any underground infrastructure (e.g., concrete foundations, septic tanks or other debris) encountered while excavating. These elements must be characterized or cleaned as necessary;
- Collect and analyze the samples required to confirm that the remediation objectives have been achieved;
- Identify and, as necessary, stockpile >B and <CCME industrial soils for the purpose of off-site management where applicable;
- Backfill the site with clean granular fill material supported by certificates of analysis of soil quality, compact and level this material, and develop the site in accordance with the specifications;
- Reshape and redevelop the ditches and embankments in accordance with the specifications;
- Implement the mitigation measures established for the purpose of limiting impacts on the environment and neighbours; and
- Implement the monitoring or follow-up program, if applicable.

An environmental impact assessment (EIA) is in progress while the tender documents are being prepared. The resulting mitigation measures may change the scope of work, primarily in the wooded area. These measures must be included in the tender documents. A report is planned for early October 2019.

The work will be carried out within the lots belonging to the federal government.

The work may be carried out in two phases each lasting one calendar year. The approximate completion date for the work of Phase 1 is December 21, 2020, and the preliminary completion date for the work of Phase 2 is December 21, 2021.

The prime Consultant must orient the specifications so as to meet all quality, budget and scheduling requirements.

1.6. Environmental studies

For information purposes, the following documents will be provided to the Consultant after the contract is awarded. Note that most of the studies concern the contamination of the former work area that has been rehabilitated.

Plans

- CAD survey drawings

Reports on the former work area

- Biogénie, Février 2010. Évaluation environnementale de site Phase II complémentaire, Ancienne fonderie située au 348 10e Rang, Saint-Edmond-de-Grantham, Québec, Reference ZY9478-001-610, Final report, 146 p.
- Franz Environnement Inc, Septembre 2012. Caractérisation environnementale de l'eau souterraine et de l'eau de surface, Ancienne Fonderie St-Germain, 1348, 10e Rang, Saint-Edmond-de-Grantham, Québec, Project No. 2288-1101, Final report 235 p.
- LVM Inc., Mars 2013b, Options de réhabilitation et/ou de gestion des sols et des matières résiduelles, Ancienne fonderie St-Germain, 1348, 10e Rang, Saint-Edmond-de-Grantham, final report, Ref. No.: 045-P-0001686-0-01-230-RE-R-0100-00.
- LVM, March 2014, Suivi 2013 de la qualité environnementale de l'eau souterraine et de surface, Ancienne Fonderie St-Germain, 1348 du 10e Rang, Saint-Edmond-de-Grantham, Project 045-P- 0001686-0-01-250-HG-R-0100-00, final report, 367 p.
- LVM Inc., Mai 2015, Essai-pilote – Traitement des matières résiduelles dangereuses et des sols, Ancienne fonderie St-Germain, 1348, 10e Rang, Saint-Edmond-de-Grantham, final report, Ref. No.: 045-P-0001686-0-01-230-RE-R-0100-00, 178 p.
- LVM, Juillet 2015, Suivi 2014 de la qualité environnementale de l'eau souterraine et de surface, Ancienne Fonderie St-Germain, 1348 du 10e Rang, Saint-Edmond-de-Grantham, Project 045-P- 0001686-0-01-232-RE-R-0100-01, final report, 314 p.
- LVM, Mars 2016, Aménagement de nouveaux puits d'observation, Ancienne fonderie Saint-Germain, 1348 du 10e Rang, Saint-Edmond-de-Grantham, Ref. No.: 045-P-0001686-0-01-235-HG-R-0100-00
- Technorem, Février 2016, Réhabilitation environnementale de l'ancienne fonderie St-Germain à Saint-Edmond-de-Grantham, Québec – Mise à jour des coûts, (estimation de classe C), PR15-63, XX p.
- Technorem, Mars 2016, Évaluation des options de réhabilitation, Ancienne fonderie St-Germain à Saint-Edmond-de-Grantham, Québec, preliminary version (final version to come)

- ENVIROSERVICES, Juillet 2016, Évaluation des effets environnementaux, en vertu de la Loi canadienne sur l'évaluation environnementale 2012, Projet de réhabilitation de la Fonderie Saint-Germain à Saint-Edmond-de-Grantham, Dossier 398-061;
- CNRC, Mai 2016, Revalorisation des résidus de l'ancienne fonderie St-Germain, située à Saint-Edmond-de-Grantham (Québec) – Rapport technique, NRC-EME-55767;

Reports on the issue of airborne contamination

- SNC Lavalin Environnement, Février 2012. Évaluation environnementale de site – Phase I, Ancienne Fonderie Saint-Germain, 1348, 10e rang, Saint-Edmond-de-Grantham, Dossier 608578, final report, 230 p.
- LVM Inc., Mars 2013a, Caractérisation environnementale de site phase II, Ancienne fonderie Saint-Germain, 1348, 10e Rang, Saint-Edmond-de-Grantham, final report, Ref. No.: 045-P-0001686-0-01-230-HG-R-0200-00.
- WSP, Mars 2016, Évaluation des risques d'exposition aux poussières pouvant contenir du plomb et/ou de l'amiante lors de la réalisation de certaines tâches, Ancienne fonderie Saint-Germain, 151-00080-22 ;
- ENVIROSERVICES, Juin 2016, Validation de l'habitat du poisson – Fonderie Saint-Germain, 1348, 10^e Rang à Saint-Edmond-de-Grantham, 32 pp.
- SANEXEN, Octobre 2017, Caractérisation environnementale complémentaire des sols – Terrain correspondant à l'aire boisée du lot 977 Ptie localisé sur le site de l'ancienne fonderie Saint-Germain à Saint-Edmond-de-Grantham, 79 pp;
- ÉCOGÉNIE, Septembre 2018, Caractérisation écologique du boisé de la fonderie Saint-Germain, 56 pp;
- SANEXEN, Septembre 2019, Évaluation quantitative détaillée des risques posés par la contamination aéroportée du secteur boisé adjacent à l'ancienne aire de travail, Fonderie Saint-Germain à Saint-Edmond-de-Grantham, Ref. No. : RA16-377-8, 104 pp. + annexes.
- PWGSC remediation plan for the Saint-Germain Foundry;
- PWGSC remediation specifications templates (conventional);
- Report on detailed characterization of airborne contamination (in preparation);
- Report on the assessment of the environmental effects of remediation / risk management projects for airborne contamination (in preparation);
- Report on remediation of the former work area of the Saint-Germain Foundry (in preparation); and Report on monitoring of groundwater quality before, during and after remediation work (in preparation)
- **Spreadsheet** Preliminary version of the site closure tool for the former work area

2. REQUIRED SERVICES (RS) AND ADDITIONAL SERVICES (AS)

The ultimate goal is to ensure that the work that is conducted at the site of the former Saint-Germain Foundry by a Contractor hired by PWGSC as part of a separate mandate, complies with the plans and specifications and/or management requirements as well as the applicable regulations.

The Consultant will also be responsible for preparing the plans and specifications, providing support during the bid solicitation period, and conducting environmental monitoring of the construction work.

2.1. Description of the Required Services (RS) under this mandate

RS 3 / RS 4 - DESIGN - MANAGEMENT PLAN & PREPARATION OF PLANS AND TECHNICAL SPECIFICATIONS AND WORK SUPERVISION

Objective

The Consultant must develop a management plan based on the basis of existing data and PWGSC requirements and integrate the most recent data (in particular, data from the EIA currently in progress and other data as necessary) for the purpose of making the final selection of the site remediation option for the fallow area (C) and the wooded area (A). The Consultant must prepare the plans and technical specifications (tender documents) as well as the final cost estimate for each phase. Note that the remediation of the wooded area (A) is optional; however, a cost must be presented for this portion.

The Consultant must prepare one technical specification for each objective. One specification per objective outlines the expected results, leaving the Contractor a certain degree of freedom as to the means and methods to be used; however, a method of corroborating the results obtained must be defined, without unnecessarily limiting the processes.

General

In collaboration and through discussion with PWGSC, the Consultant will determine the environmental management option for the site that is best for the Government of Canada. PWGSC will then confirm in writing, if applicable, which of the proposed options is to be developed by the Consultant when preparing the plans and specifications.

If modifications are necessary, describe all the changes to be made, analyze the impact on all project components and resubmit everything for approval, if necessary. During the development of plans and specifications, the available version of the site closure tool that has been partially filled out must be taken into consideration to ensure that the scope of the mandate for the airborne contamination management project includes all the points necessary for site closure.

The Required Services for this phase are:

- Develop and clarify the design elements that may influence project development;

- Provide advice and recommendations on project planning in order to achieve the most effective and most economical work sequence;
- Plan meetings as necessary to discuss and confirm PWGSC's needs;
- Support PWGSC in presenting the project to government or local authorities as required;
- Analyze the constructability of the project and advise on the construction process and duration;
- Identify and quantify potential risks and make contingency recommendations in order to minimize negative cost impacts;
- Based on all material available at the time, prepare a milestone schedule for consideration;
- Review all statutes, regulations, codes and by-laws applicable to the project design;
- Prepare the preliminary and final versions (signed and stamped by an engineer) of the plans and specifications;
- Prepare meeting minutes and distribute to attendees;
- Update the project schedule and cost forecasts; and
- Present the specifications to the client when 99% complete.

The mandate may more specifically include the following activities:

- Detail and clarify the objectives;
- Draw up a list of all sections to be consulted in the National Master Specification (NMS), where applicable, and produce a complete specification encompassing options with regard to sustainable development and greening;
- Approach other relevant authorities as necessary (ECCC, DFO, HC, municipality, MELCC, etc.);

During planning, the Consultant must incorporate environmental protection and sustainable development components from the following non-exhaustive list:

- Develop the design and evaluate options focussing on beneficial environmental strategies (use of the Sustainable Development Analysis Tool²); and
- Integrate the results of the EIA and the risk assessment.

For these Required Services, the deliverables are:

- ✓ The management plan briefly describing the options analyzed and, in greater detail, the selected option;
- ✓ The work schedule and its various steps;
- ✓ The plans and technical specifications for tendering purposes at:
 - 60% completion: French only;
 - 99% completion: bilingual, but separately; and

² Sustainable Development Analysis Tool: <http://oadd.tpsgc.gc.ca/index.aspx?lang=eng>

- 100% completion: incorporating all revisions required to the 99% version and intended to provide PWGSC with complete construction documents for tender calls, which includes:
 - A complete set of the original construction drawings,
 - Complete sets of the original specifications.

Official languages requirements:

The Consultant must submit construction documents in both official languages:

- The Consultant must prepare all construction documents in Canada's two official languages.
- Both official languages are considered to be equal in status; neither is considered to be a translation of the other.
- The Consultant is responsible for the accuracy and completeness of the texts and for the consistency of the documents.
- It is standard practice to produce a single set of drawings (originals) on which written information is shown in both languages and separate written documents for each language for tendering, records drawings, and operation and maintenance documentation.

RS-5 - TENDER AND CONTRACT AWARD

Objective

The purpose of this phase is to obtain and evaluate bids from qualified contractors to construct the project as per the Tender Documents and to award the construction contract according to government regulations.

PWGSC will handle most of this part of the project. However, the Consultant will be involved in preparing certain elements, particularly the answers to bidder questions during the tendering process.

General

The scope of work includes:

- Attending information meetings for bidders (e.g., site visit during tendering process);
- Preparing addenda in response to questions arising during the tendering process that will be issued by the Contracting Authority (PWGSC);
- If PWGSC decides to re-tender the project, providing advice and assistance to the Project Manager;
- Examining and reporting any cost and schedule impact created by the issuance of tender/contract addenda; and
- Translating (English-French) the questions/answers during the tendering process.
- Producing a construction cost estimate.

RS-6 WORK SUPERVISION

Objective

The purpose of this phase is to make sure that the work performed by the Contractor hired by PWGSC complies with the specifications of the management plans and/or the plans and specifications as well as the applicable regulations.

General

The scope of work consists of:

- During project implementation, acting as a PWGSC Representative to the extent stipulated in this document;
- Reviewing and analyzing the environmental protection plan and the environmental emergency response plan submitted by the Contractor;
- Reviewing the Contractor's occupational health and safety plan and preparing comments and recommendations for PWGSC regarding approval of the occupational health and safety plan;
- Determining and justifying the supervision requirements for the construction work (full- or part-time);
- Supervising the remediation work to determine if the work conforms to the Contract Documents;
- Organizing, facilitating and producing minutes for the kickoff and monitoring meetings; note that the meetings may be held in English;
- Keeping PWGSC informed of the progress and quality of the work and reporting any defects or deficiencies in the work observed during the course of the site review;
- Determining the amounts owing to the Contractor based on the progress of the work and certifying payments to the Contractor (review and approval of progress claims);
- As necessary, conducting a survey to validate quantities;
- Interpreting the requirements of the Contract Documents;
- Providing cost advice during the project;
- Advising the Project Manager of all potential changes to scope during the implementation of the project;
- Reviewing the documents submitted by the Contractor;
- Preparing and justifying change orders for issue by the Departmental Representative;
- Monitoring the analysis results obtained by the Contractor, collecting confirmation samples as necessary and interpreting these results;
- Producing site reports to assess the applicable quantities for payment; and
- Indicating any changes or material/equipment substitutions on Record Documents.

Details

Laboratory chemical analyses

- The chemical analyses for samples collected at the site will be performed by a laboratory mandated directly by PWGSC. The Consultant will be responsible for filling out the analysis requests, transferring the samples to the laboratory, reviewing confirmations of receipt, and tracking requests with the laboratory as well as interpreting their results.

Pre-construction meetings

- Immediately after contract award, arrange a briefing meeting with the Contractor and the Departmental Representative.
- The Consultant prepares the minutes of the meeting and distributes copies to all participants and to other persons agreed upon with the Project Manager.
- Call site meetings as often as required (at least once every two weeks), commencing with the pre-construction briefing meeting.
- Prepare minutes of the meetings and distribute copies to all participants. Note that meeting minutes may have to be drafted in English. The Project Manager may invite the Client to attend any of these meetings

Project schedule

- Once the construction contract is awarded, obtain the Project Schedule from the Contractor. This schedule must be detailed enough for use in monitoring the commissioning component.
- Monitor the approved construction schedule, take the necessary steps to ensure that the schedule is maintained and submit a detailed report to the Departmental Representative concerning any delays;
- Keep accurate records of causes of delays and associated costs;
- Make every effort to help the Contractor avoid delays with respect to the Project Schedule, in particular by acting proactively and with agility and by providing the Contractor with clear, accurate answers that are consistent with requirements.

Time extensions

- Only the Department can approve a request to extend a deadline. Any approval will be issued in writing by the Project Manager.

Cost breakdown

- Obtain from the Contractor a detailed cost breakdown on the standard PWGSC form and submit to the Department with the first Progress Claim.

Labour requirements

- The Contractor is bound by the Contract to maintain competent and suitable workmen on the project and to comply with the Canada Department of Labour - Labour Conditions. Inform the Department of any labour situations that appear to require corrective action by the Department.
- The Consultant must ensure that a copy of the Labour Conditions is posted in a conspicuous place on site.

Bylaw compliance

- Ensure that construction complies with applicable municipal bylaws and regulations; and
- Matters pertaining to the Department of Labour must be referred to the Departmental Representative.

Construction safety

- All project sites that are occupied by federal employees during construction are subject to the *Canada Occupational Safety and Health Act* and *Regulations* administered by Health and Welfare Canada, the *Canada Labour Code* and/or the provincial regulations, whichever is the most stringent;
- In addition to the above, the Contractor must comply with municipal safety laws and regulations, and with any instructions issued by the officers of authorities having jurisdiction relating to construction safety; and
- Serve as principal contractor when so designated.

Worksite supervision

- As necessary, provide non-resident construction inspection services;
- Ensure compliance with Contract Documents;
- Provide services of qualified personnel who are fully knowledgeable about the technical, environmental and administrative requirements of the project;
- Ensure that stages or aspects of the work are inspected prior to being covered up;
- Assess quality of work and identify in writing to the Contractor and to the Department all defects and deficiencies observed at the time of such inspections;
- Review and analyze the management plan for excavated material provided by the Contractor and the environmental protection plan;
- Notify PWGSC of any environmental non-conformities at the site; and
- Submit any lists of directives, clarifications or deficiencies in writing to PWGSC.

Clarifications

- Provide clarifications on plans and specifications or site conditions, as required to prevent project delays.

Work progress reports

- Report to the Department regularly on the progress of the work.

Inspection and testing

- Prior to the tender period, provide the Department with the recommended list of tests to be undertaken, including on-site testing.
- Collect confirmation samples and send them to the laboratory;
- When the contract is awarded, assist the Departmental Representative in briefing the testing firm on required services, distribution of reports, communication lines, etc.;
- Review all test reports and take the necessary action with the Contractor when work fails to comply with the contract;

- Immediately notify the Project Manager when tests fail to meet project requirements and when the necessary corrective work will affect the schedule; and
- Assist the Departmental Representative in evaluating the testing firm's invoices for services performed.

Changes in the work

- The Consultant does not have authority to change the work or the price of the Contract. However, the Consultant must submit to the Department preliminary estimates for the cost of the required changes and must establish the planned change notices (CCNs) and the change orders (COs);
- All modifications must be approved by the Department;
- Upon Departmental approval, obtain detailed quotations from the Contractor. Review prices and promptly forward recommendations to the Department;
- The Department will issue Consultant-prepared CCNs and COs to the Contractor, with copy to the Consultant;
- All changes, including those not affecting the cost of the project, must be covered by Change Orders; and
- The practice of "trade-offs" is prohibited.

Contractor's progress claims

- Each month the Contractor submits a progress claim for work and materials as required in the Construction Contract.
- The claims are made by completing the following forms where applicable:
 - Request for Construction Payment
 - Cost Breakdown for Unit and/or Combined Price Contract
 - Cost Breakdown for Fixed Price Contract
 - Statutory Declaration Progress Claim
 - Review and sign designated forms and promptly forward claims to the Department (Project Manager) for processing.
- Claims must be reviewed and approved by the Consultant for payment by the Department.

Acceptance board

The Consultant must inform the Department when satisfied that the project is substantially completed. The Consultant must ensure that its representative, the sub-consultant representative, the Resident On-Site Reviewer, the Contractor and major subcontractor representatives form part of the Project Acceptance Board and attend all meetings as organized by the Department.

Interim inspection

The Acceptance Board must inspect the work and list all unacceptable and incomplete work on a designated form. The Board must accept the project from the Contractor subject to the deficiencies and uncompleted work listed and priced.

Interim certificates

Payment requires completion and signing, by the parties concerned, of the following documents:

- Interim Certificate of Completion
- Cost Breakdown for Fixed Price Contract;
- Cost Breakdown for Unit and/or Combined Price Contract;
- Inspection and Acceptance;
- Statutory Declaration – Interim Certificate of Completion
- Worker's Compensation Board Certificate.

Verify that all items are correctly stated and ensure that completed documents and any supporting documents are furnished to the Department for processing.

Final inspection

The Consultant must inform the Department when satisfied that all work under the contract has been completed, including correction of the deficiency items listed on the Inspection and Acceptance form as a result of the interim inspection. The Department reconvenes the Acceptance Board, which makes a final inspection of the project. If everything is satisfactory, the Board makes final acceptance of the project from the Contractor.

Final Certificate of Completion

The final payment requires completion and signing, by the parties concerned, of the following documents:

- Final Certificate of Completion
- Cost Breakdown for Fixed Price Contract
- Inspection and Acceptance
- Statutory Declaration – Final Certificate of Completion
- Cost Breakdown for Unit and/or Combined Price Contract
- Workers' Compensation Board Clearance Certificate
- Hydro Certificate, where applicable.

Verify that all items are correctly stated and ensure that completed documents and any supporting documents are furnished to the Department for processing.

Deliverables

- Daily supervision reports
- Tables of interpreted results
- Detail drawings when required to clarify, interpret or supplement the Construction Documents
- Interim or Final Certificate
- List of deficiencies; and
- Remediation report, preliminary and final versions

2.2. Description of Additional Services (AS) that may be required under a follow-up contract

The Additional Services task list is non-exhaustive and in no way limits the professional obligations of the Consultant, its Sub-Consultants and its Specialist Consultants to perform the required tasks for the purpose of fulfilling the mandate of the project.

AS 1 - ADDITIONAL ENVIRONMENTAL CHARACTERIZATION WORK

Following a review of the available documentation, if any gaps in the information are identified, additional characterization work or other environmental work may be necessary before or during the Contractor's work.

Where applicable, the Consultant will be asked to provide a technical and financial service proposal.

The work must be performed in accordance with the specifications of this Request for Proposals, the Canadian Standards Association CSA-Z769-00 (R2010) standard and the federal and provincial documentation listed in Section 3.0. The health and safety plan must be submitted to PWGSC for authorization before the work commences.

AS-2 OTHER RELATED WORK

Other related work may be requested of the Consultant. This work will be carried out upon approval of a proposal from the Consultant using the hourly rates provided for in the supervision phase (RS-6).

As necessary but not limited to, the following services may be required and may require a change to the Consultant's contract:

- Complete the site closure tool;
- Additional land survey(s);
- Sampling of surface water;
- Digging of test trenches;
- Drilling of boreholes;
- Materials testing work;
- Chemical analyses;
- Technical notices;
- Additional work on wells;
- Statistical studies;
- Survey of road condition; and

3. REFERENCES

PWGSC wishes to draw the Consultant's attention to the CCME's recently published (May 2016) guide to federal site characterization, for which the references are:

- Guidance Manual for Environmental Site Characterization in Support of Environmental and Human Health Risk Assessment (CCME, 2016)
 - o Volume 1: Guidance Manual
 - o Volume 2: Checklists
 - o Volume 3: Suggested Operating Procedures
 - o Volume 4: Analytical Methods

PWGSC also wishes to draw the Consultant's attention to Quebec's Soil Protection and Rehabilitation of Contaminated Sites Policy (July 2016), which became application following its publication and for which the references are:

- BEAULIEU, Michel. 2016. Guide d'intervention - Protection des sols et réhabilitation des terrains contaminés. Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques, ISBN 978-2-550-76171-6, 210 p.

Moreover, the Consultant must perform the work in accordance with the applicable federal, provincial and municipal acts, regulations, codes, guides and standards, which include, but are not limited to, the following:

- *Canadian Environmental Protection Act*;
- *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations*;
- *Fisheries Act*;
- Canadian Environmental Quality Guidelines;
- Guidelines for Canadian Drinking Water Quality (Health Canada);
- Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil (CCME);
- Canada-Wide Standard for Petroleum Hydrocarbons (PHC) in Soil: Technical Supplement (CCME)
- Federal Approach to Contaminated Sites;
- Guidance Manual on Sampling, Analysis, and Data Management for Contaminated Sites, Volume I: Main Report (CCME, 1993);
- Guidance Manual on Sampling, Analysis, and Data Management for Contaminated Sites, Volume II: Analytical Method Summaries (CCME, 1993);
- Quebec's *Environment Quality Act*;
- Quebec's *Land Protection and Rehabilitation Regulation*;
- Quebec's *Regulation Respecting the Burial of Contaminated Soils*;

- Quebec's *Regulation Respecting Hazardous Materials*;
- Quebec's *Regulation Respecting the Landfilling and Incineration of Residual Materials*;
- Soil Protection and Contaminated Sites Rehabilitation Policy (MELCC);
- Guide d'intervention – Protection des sols et réhabilitation des terrains contaminés [Action guide – Soil protection and rehabilitation of contaminated sites] (MELCC, 2016) (available in French only);
- Guidance Document on Federal Interim Groundwater Quality Guidelines for Federal Contaminated Sites – Federal Contaminated Sites Action Plan (June 2016);
- Site Characterization Guide (MELCC, 2003);
- Guide d'échantillonnage à des fins d'analyses environnementales, Cahier 1 – Généralités [Environmental analysis sampling guide, Book 1 – General] (MELCC, July 2008) (available in French only);
- Guide d'échantillonnage à des fins d'analyses environnementales. Cahier 3 – Échantillonnage des eaux souterraines [Environmental analysis sampling guide, Book 3 – Groundwater sampling] (MELCC), version of February 23, 2012;
- Guide d'échantillonnage à des fins d'analyses environnementales, Cahier 5 – Échantillonnage des sols [Environmental analysis sampling guide, Book 5 – Soil sampling] (MELCC), version of February 5, 2010, and addenda (available in French only);
- Guide d'échantillonnage à des fins d'analyses environnementales, Cahier 8 - Échantillonnage des matières dangereuses [Environmental analysis sampling guide, Book 8 - Hazardous materials sampling] (MELCC, September 2008) (available in French only);
- Guide technique de suivi de la qualité des eaux souterraines [Technical guide to monitoring groundwater quality] (MELCC), updated in fall 2017 (available in French only);
- Mode de conservation pour l'échantillonnage des sols [Conservation method for soil sampling] (Centre d'expertise en analyse environnementale du Québec) (available in French only);
- Mode de conservation pour l'échantillonnage des eaux souterraines [Conservation method for groundwater sampling] (Centre d'expertise en analyse environnementale du Québec) (available in French only);
- Liste des méthodes suggérées pour la réalisation des analyses de laboratoire [List of suggested methods for laboratory testing] (MELCC, 3rd Edition, May 1999) (available in French only);
- Lignes directrices pour le traitement des sols par biodégradation, bioventilation ou volatilisation [Guidelines for the treatment of soil by bidoegradation, bioventing or volatilization] (MELCC, November 1999) (available in French only);

- Liste des centres régionaux de traitement de sols contaminés autorisés au Québec pour usage public [List of regional treatment centres for contaminated soils authorized in Quebec for public use] (MELCC) (available in French only);
- Lieux commerciaux d'enfouissement sécuritaire de sols contaminés conformes au Règlement sur l'enfouissement des sols contaminés [Commercial contaminated soil secure landfills pursuant to the *Regulation Respecting the Burial of Contaminated Soils*] (MELCC, May 2014) (available in French only);
- Lignes directrices relatives à la gestion de béton, de brique et d'asphalte issus des travaux de construction et de démolition et des résidus du secteur de la pierre de taille [Guidelines for managing concrete, brick and asphalt from construction and demolition work and waste from the cut stone sector] (MELC, June 2019) (available in French only);
- La gestion des matériaux de démantèlement – Guide de bonnes pratiques [Management of dismantling/decommissioning materials – Best practices guide] (MELCC) (available in French only);
- Guide de valorisation des matières résiduelles inorganiques non dangereuses de source industrielle comme matériaux de construction [Guide to the reclamation of inorganic non-hazardous industrial waste as construction materials] (MELCC, June 19, 2002) (available in French only);
- Workplace Hazardous Materials Information System (WHMIS);
- Criteria for the Assessment of Sediment Quality in Quebec and Application Frameworks: Prevention, Dredging and Remediation (Environment Canada, 2007);
- Phase II Environmental Site Assessment, CSA-Z769-F00 (C2013).

In case of omissions or contradictions between these requirements, the most stringent requirements will apply.

The Consultant must obtain from federal, provincial and municipal authorities the necessary permits to perform the work and must pay the applicable fees.

4. METHODOLOGY

The Consultant will act as a representative of PWGSC. All decisions necessary to effectively carry out the work must be made in close collaboration between the Consultant and PWGSC.

4.1 Meetings and presentations

After the contract is awarded, a kickoff meeting must be held with all project stakeholders. At this meeting, the Consultant will present a work schedule and provide any necessary clarifications concerning the work to be performed. Prior to the meeting, the Consultant must draw up a list of clarifications and additional information required. The reports will be given to the Consultant at this meeting.

Additionally, for tendering purposes, the following must be planned for each phase, at a minimum:

- A kickoff meeting (PWGSC offices in Montreal);
- A site visit;
- A meeting to present results and the developed options, including a meeting for managers with minimal technical content at PWGSC (PWGSC offices in Montreal).

4.2 Site work

The purpose of this section is to specify the methodology for certain site work that may be carried out by the Consultant.

Site access

The site of the former Saint-Germain Foundry is accessible 12 months a year by land (10e Rang). Site access is controlled by a gate with a padlock. A key is therefore needed to access the site.

The Consultant must have its own transportation, without support from PWGSC, and pay all travel costs. PWGSC must be informed of the project start date as soon as possible. PWGSC must be notified 48 hours prior to any planned site visit.

Location of the infrastructure

Before beginning the characterization work, the Consultant will be responsible for locating all underground infrastructure (e.g., Info-Excavation).

Materials and equipment

The Consultant must provide all the materials and equipment required to perform the work and must ensure that this equipment is in proper working order.

The equipment used by the Consultant's subcontractor(s) must comply with the guidelines set out in the guides listed in Section 3. This equipment must be able to sample soils, ground water, surface water and sediment.

Test trenches

All necessary precautions must be taken during trench-digging so as not to damage any barrels or containers that might be encountered while carrying out the work. Since the contamination is present in the first 30 cm below the soil surface, the anticipated depth of the test trenches is no more than 1 m, but this may vary depending on the site sectors concerned.

The soils/residual materials observed in the trenches must be described and sampled continuously.

The trenches must be backfilled with excavated material with compacting performed in every 30 cm layer without soil density tests. Once backfilled, the surface of the trench must be stable and level with the surrounding soil.

Drilling of boreholes

The Consultant must have a track-mounted drilling rig for the drilling. To prevent the entrainment of contaminants to other geological horizons, it is important to avoid injecting a large amount of water during the drilling of boreholes. The use of drilling mud is to be avoided. If water must be injected, the volumes of water used must be recorded and presented in the report and the water used must be removed during well development.

It should be noted that there is no source of water at the site.

In addition to the usual procedures for cleaning sampling equipment, drilling equipment must be steam-cleaned or pressure-cleaned between drillings to prevent cross-contamination.

Monitoring wells

The installed monitoring wells must have a diameter of 2 inches (PVC casing). The annular space of the wells must be sealed with bentonite/cement-bentonite grout injected from one foot above the screen to the land surface. A casing centralizer must be used in deep wells.

In addition, there must be an aluminum locking cap attached to the HDPE protective casing at the top of the well. The Consultant must provide the locks.

Monitoring well development

Well development must be done with a mechanical actuator and a surge block. The volume of water injected during drilling that is not recovered during the drilling must be pumped/removed from the wells. The pumped water must be clear at the end of development. The volume of water pumped during well development must be recorded in the report.

Measurement of ditch water levels and flow

Measurements of ground-water levels and free phase (dense and light) levels must be taken prior to sampling, at least 24 hours after well development.

The surface water levels must also be measured to validate directions of flow. The location of the point of measurement for surface water must allow the level of surface water in the ditch to be evaluated using accurate data from the topographic survey by PWGSC.

As necessary, the Consultant will be required to measure the flow rate in the site's ditches and/or stream.

Water levels and flow must be measured on consecutive days.

Permeability testing

Rising head permeability tests must be conducted to determine the hydraulic conductivity of each stratigraphic unit in the area around the well in question. These tests must be performed using a pump and a submersible data logger to detect changes in water level over time.

Soil and waste sampling

The soil and waste must be sampled continuously.

The sampling methodology and the sample preservation methods must comply with the guidelines set out in the guides listed in Section 3.0. For example, the methodology for soil sampling must take the following into account, without limitation: the stratigraphy encountered, organoleptic indicators of contamination and the thickness of the stratigraphic unit (stratigraphic units sampled separately, maximum thickness represented by a 1.0-metre sample, except as otherwise indicated [e.g., smaller horizon needed for surface and sub-surface risk assessment]).

Measurements of volatile organic compounds (VOCs) must be taken using a gas detector (**PID**) on all soil samples collected.

Groundwater sampling

After well development, the Consultant must wait at least 24 hours before beginning groundwater sampling. This sampling must be done on consecutive days.

Measurements of levels of ground water and free-phase products (dense and light) must be taken using an interface probe prior to sampling.

The Consultant is required to use the MicroPurge method (flow rate < 0.2 L/minute) for groundwater sampling. The pumping method must be compatible with the sampling of volatile organic compounds (VOCs). The following physico-chemical parameters must be measured at the site: pH, temperature, conductivity, dissolved oxygen, turbidity and oxidation-reduction (redox) potential. The methodology described in the MDDELCC sampling guide must be used. The Ground Water Sampling Log presented in Figure 2 of the USEPA document *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures* (USEPA EPA/540/S-95/504), or its equivalent, must be completed and appended to the report for each well sampled.

Management of drilling water, wash water, well development water and sampling water

Wash water, water recovered during drilling and water pumped from the wells may not be discarded untreated or without first being sampled and submitted for chemical analyses to demonstrate that it can be safely discharged into the environment. In the proposed price, the Consultant must make provision for treatment of the water on site **or** factor in the cost of transport and disposal of the pumped water. A storage method for the water must also be specified.

Sample preservation and transportation

The sample preservation methodology used must comply with the guides listed in Section 3.0. The Consultant must ensure that the integrity and quality of the samples are preserved during shipment to the laboratory. Only samples requiring analysis are to be sent to the laboratory. The Consultant is responsible for preserving the other samples in a proper manner.

Sample identification

Samples must be identified as follows to ensure temporal continuity. For example, the monitoring wells will be identified as MW-18-XX, where 18 indicates the year, MW indicates monitoring well, and XX is a sequential number. Instead of MW, use TT for test trench, SW for surface water and SE for sediment.

Site clean-up

The Consultant will be responsible for cleaning up the site as the work progresses. No waste is to be left on site. After the fieldwork, the site must be restored to its original condition, to the satisfaction of PWGSC, on the same day as the sampling.

Location of borings

All sampling points (monitoring wells, trenches, surface water and sediment) must be surveyed and graded. The coordinates of each point must be transmitted in MTM zone 8, NAD 83 (SCRS). The precision of the coordinates must be 0.5 m in x and y, and 0.001 m in z.

Quality assurance and quality control

During all stages of the project, the Consultant must implement a quality assurance/quality control (QA/QC) program to ensure the quality and reliability of the data obtained. This program must be applied to the characterization project, for both field sampling and laboratory work. It must include duplicate sampling for quality control, with at least 10% of the samples submitted for chemical analyses duplicated. Field blanks for volatile compounds must be prepared once a day during groundwater sampling activities. Trip blanks must be included with each shipment of samples to the laboratory.

4.3 Class C cost estimates

PWGSC already has an order of magnitude for the total project costs for each option on the basis of the information available at the time (Class D estimate, $\pm 30\%$). The estimate is based on historical financial data for similar work and, to the extent possible, takes into account all factors that modify the costs.

It was used to establish the indicative estimate required by Treasury Board for preliminary project approval.

When preparing the plans and technical specifications, the Consultant must prepare more accurate Class C cost estimates (with a margin of error of 15% to 20%).

Tasks to be completed include, but are not limited to:

- Preparing estimates with a detailed breakdown based on project briefs and preliminary concepts or other provisional information;
- Providing advice and recommendations on project planning in order to achieve the most cost-effective project sequence;
- Identifying and quantifying potential risks and making contingency recommendations in order to minimize negative cost impacts;
- Identifying, forecasting and analyzing project-related issues, including possible market shortages and potential price fluctuations; and
- Including contingencies, administrative fees and profits in the estimates.

5. HEALTH AND SAFETY

This section will apply if the Consultant provides additional services in the field.

In accepting this contract, the Consultant agrees to assume all of the responsibilities normally assigned to the principal contractor under the Quebec *Act Respecting Occupational Health and Safety* and to supervise the worksite. Before commencing the work, the Consultant must comply with the following requirements:

- Regardless of the number of workers assigned to the site, send the Departmental Representative a safe work plan (**health and safety plan***) and a mechanical inspection certificate for the machinery used at the site;
- Ensure that workers have received the training and information needed to perform the work safely and that all tools and protective equipment required are available, comply with the applicable standards, acts and regulations, and are in use;
- Always comply with the Quebec *Act Respecting Occupational Health and Safety* and the *Safety Code for the Construction Industry*;
- Notify workers that they have the right to refuse to perform any work that poses a danger to their health or safety; and
- Mark off, barricade and control access to the work area.

In the event of an unforeseen incident, the Consultant must take all necessary measures, including cessation of work, to protect the health and safety of workers and the public, and must contact the Departmental Representative promptly.

* The occupational health and safety plan must be specific to the site and the work to be carried out. The Consultant will be responsible for implementing the plan during the performance of the work. The occupational health and safety plan must be submitted to the PWGSC representative one week before the work is slated to begin. A version signed by the subcontractors must be kept at the site while the fieldwork is under way and must be sent to the PWGSC representative after the fieldwork is completed.

6. DELIVERABLES

6.1 Description and reproduction of deliverables

Deliverables associated with the Required Services (RS) include:

- 1) a site management plan depending on the remediation option selected;
- 2) the plans and specifications for tendering of the environmental remediation work (60%, 99% and 100%) for the fallow Area C; and
- 3) as an option, tender ready plans and specifications for the environmental remediation work (60%, 99% and 100%) for the wooded Area A;
- 4) one environmental site remediation report per phase; and
- 5) two letter reports and one comprehensive report for groundwater quality monitoring (see section 1.4.3 for details on their content).

The environmental remediation report must address the site issues and incorporate data from previous studies.

The preliminary version of every deliverable must be submitted in electronic format, including all appendices and drawings. One (1) hard copy of the final version of the report, including all PWGSC comments, must be provided along with two (2) compact discs containing a copy of the final report in electronic format (documents in native and PDF formats). The reports must be written in good quality French and printed on both sides of the paper. All the Consultant's drawings must be drafted using CAD tools and must be submitted in CAD format. All photographs and figures in the reports must be in colour. All materials (maps, photographs, plans, etc.) acquired as part of this mandate will remain the property of PWGSC and must be submitted with the final report.

The deliverables must contain the relevant information with respect to the following (without being limited thereto):

6.2 Management Plan

Executive summary (in French and English)

Site description

- History of work and summary of previous work;
- Summary of the environmental issues.

Methodology

- Description of the method used to select the options; and
- Summary of issues specific to PWGSC (which will be discussed at a meeting).

Presentation of remediation and/or management options

Discussion/analysis and selection of the preferred option

Conclusion and recommendation

6.3 Plans and specifications for the call for tenders for the environmental remediation work

Consider the following aspects when preparing the plans and technical specifications for tendering:

- The specifications may be prepared using the format and requirements of the new DDN numbering system, or a more conventional format may be used. This aspect must be discussed in advance with PWGSC;
- At each step, the documents must be submitted to PWGSC in electronic format;
- Final submission: one (1) complete set of the signed and stamped original plans (reproducible originals) and original specifications, the Class C estimate, the electronic copies of drawings in .dwg format, and an electronic copy of the specifications;
- The documents submitted (plans and specifications) must be in English and French;
- Drawings must be prepared using AutoCAD and be submitted in an appropriate format (generally A1, A0 or B1);
- The Consultants must comply with the most recent version of the PWGSC Computer Aided Drafting and Design (CADD) Standards for AutoCAD; and
- The drawings must be in the metric system.

6.4 Environmental remediation report

The Consultant must produce a remediation report once the remediation work has been completed. The remediation report must include, but not be limited to, information relevant to the points below.

Executive summary (in French and English)

Introduction

- Objectives and scope of work.

Site description

- History of work;
- Description of environmental issues.

Methodology and description of work

- Physical characteristics of the work area (stratigraphy, presence of debris, etc.)
- Health and safety;
- Remediation work based on the selected option;
- Quality control for the Contractor's land surveys;
- Analytical program;
- Quality assurance and quality control program;
- Mitigation measures.

Analysis results

- Evaluation criteria;
- Description and interpretation of results (including certificates of analysis);
- Results and interpretation of the QA/QC program.

Balance of quantities

- Excavated material;
- Material disposed of off-site;
- Borrow materials (where applicable).

Conclusions and recommendations

References

Tables

Tables compiling the results of soil, sediment, groundwater and surface water analyses that clearly indicate when the applicable criteria, recommendations and standards are exceeded.

Figures

The report must include a general location map and a site plan, piezometric maps for each hydrogeological unit, and plans or figures showing the locations of excavations and monitoring wells. The analysis results must be shown schematically (with reference to federal guideline levels and provincial criteria).

Appendices – At a minimum, a photographic report, certificates of analysis, the completed site closure tool, analysis certificates and quality controls.

7. TIMELINES

Work related to Required Services 3 and 4 (RS-3 and RS-4) must begin as early as possible after contract award as the objective is for them to be completed prior to March 31, 2020.

PWGSC wishes to launch the tendering process for construction work (RS-5) in spring 2020 so that the environmental remediation work of the fallow area (C) (the supervision of which corresponds to RS-6) can be implemented in summer 2020.

Any changes to the schedule must receive prior approval from PWGSC. If one or more optional activities are not carried out, the number of weeks allotted to those activities will be removed from the schedule.

8. CONFIDENTIALITY OF INFORMATION

Any information received and documents produced in connection with this contract remain the sole property of PWGSC. The Consultant may not disclose, reproduce or make reference to any documents consulted or produced in connection with this contract without the explicit prior written consent of PWGSC. This measure applies to all types of documents, including electronic formats. PWGSC reserves the right to use the documents produced by the Consultant as it sees fit.

All materials (maps, photographs, drawings, etc.) acquired as part of this mandate will remain the property of PWGSC and must be submitted with the final report.

FIGURE 1
SITE PLAN



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ANNEX B

PRICE PROPOSAL FORM / PRICE TABLE

Instructions : Complete this Price Proposal Form and submit in a **separate sealed envelope** with the Name of Proponent, Name of Project, PSPC Solicitation Number, and the words "PRICE PROPOSAL FORM" typed on the outside of the envelope. Price Proposals are not to include Applicable Taxes.

Note : The following tables must be used. Any fees incurred to meet the requirements of this contract but not specifically covered by an item in the proposal must be divided proportionally among each of the items in the proposal.

- Annex B1 – Lump sum works
- Annex B2 – Staff fees cost SR-6
- Annex B3 – Estimated expenditure SR-6
- Annex B4 – Cost summary

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Annex B1 – Lump sum works *

Lump sum works – Phase 1 Fallow area (C)

Item	Description of activities	Cost (without tax)
B1-1.1	SR-3/SR-4/SR-5 Fallow area including Management plan (Area C)	\$
B1-1.2	Remediation report fallow area (C)	\$
B1-1.3	Work on wells (see Section 1.4.3)	\$
B1-1.4	Water sampling campaigns 1 et 2 (without report)	\$
B1-1.5	Water sampling campaign 3 (without report)	\$
B1-1.6	Water sampling campaigns reports 1 et 2	\$
B1-1.7	Water sampling campaign report 3	\$
Total B1-1 to transcribe on summary		\$

Lump sum works – Phase 2 Wooded area (A) - optional

Item	Description of activities	Cost (without tax)
B1-2.1	SR-3/SR-4/SR-5 Wooded area (Area A)	\$
B1-2.2	Remediation report Wooded area (A)	\$
Total B1-2 to transcribe on summary		\$

TOTAL B1		\$
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* Lump sum works include when applicable staff fees (including fieldworks), travel and subsistence expenses and required equipment. However, the sampling campaigns costs don't include analysis.

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Annex B2 – Staff fees cost SR-6 **

Element 1 – Fallow area (C)

Item	Description of position	Hourly rate	Number of Hours ***	Total
B2-1.1	Project Director	\$/h	12	\$
B2-1.2	Project Manager (including travel and subsistence expenses)	\$/h	375	\$
B2-1.3	Worksite supervisor, Environmental or material testing, simple rate (travel, lodging and subsistence expenses include)	\$/h	950	\$
B2-1.4	Worksite supervisor, Environmental or material testing, additional rate after 50h weekly (travel, lodging and subsistence expenses include)	\$/h	90	\$
B2-1.5	Worksite support (travel, lodging and subsistence expenses include)	\$/h	50	\$
B2-1.6	Secretary	\$/h	10	\$
B2-1.7	Technical drafter	\$/h	20	\$
Total B2-1 to transcribe on summary				\$

Phase 2 – Wooded area (A) – optional

Item	Description of position	Hourly rate	Number of Hours ***	Total
B2-2.1	Project Director	\$/h	12	\$
B2-2.2	Project Manager (including travel and subsistence expenses)	\$/h	300	\$
B2-2.3	Worksite supervisor, Environmental or material testing, simple rate (travel, lodging and subsistence expenses include)	\$/h	525	\$
B2-2.4	Worksite supervisor, Environmental or material testing, additional rate after 50h weekly (travel, lodging and subsistence expenses include)	\$/h	50	\$
B2-2.5	Worksite support, (travel, lodging and subsistence expenses include)	\$/h	30	\$
B2-2.6	Secretary	\$/h	10	\$
B2-2.7	Technical Drafter	\$/h	20	\$
Total B2-2 to transcribe on summary				\$

TOTAL B2			\$
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** Staff fees will be paid based on the work actually performed according to the unit rates set out in Table B2 and upon presentation of documentary evidence.

*** Quantities estimated for the proposal.

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Annex B3 – Estimated expenditures SR-6 ****

Phase1 – Fallow area (C)

Item	Description	Unit cost	Quantity	Total
B3-1.1	Fieldwork and soil testing equipment	\$/month	4	\$
B3-1.2	Transportation of samples	\$/number	45	\$
Total B3-1 to transcribe on summary				\$

Phase 2 Wooded area (A) – optional

Item	Description	Unit cost	Quantity	Total
B3-2.1	Fieldwork and soil testing equipment	\$/month	4	\$
B3-2.2	Transportation of samples	\$/number	45	\$
Total B3-2 Total B3-1 to transcribe on summary				\$

TOTAL B3				\$
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**** Expenditure will be reimbursed on the basis of work actually done at the unit rates shown in Table B3 and upon presentation of documentary evidence. Other expenses will be paid at actual cost plus 5% of the administration fees, upon presentation of documentary evidence.

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Annex B4 – Costs summary

Phase 1

Annex B1-1 – Total – Lump sum worksSR-3/SR-4/SR-5	\$
Annex B2-1 – Total – Staff fees cost - SR6	\$
Annex B3-1 – Total – Estimated expenditure - SR6	\$
Total – Phase 1	\$

Phase 2 – Optional

Annex B1-2 – Total – Lump sum worksSR-3/SR-4/SR-5	\$
Annex B2-2 – Total – Staff fees cost - SR6	\$
Annex B3-2 – Total – Estimated expenditure - SR6	\$
Total – Phase 2	\$

TOTAL – PHASE 1 AND 2 \$

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ANNEX C

TEAM IDENTIFICATION FORM

The Proponent must identify a person for each member of the key personnel identified below:

Title of the position	1	2	3	4	5	6 ¹
	Project Director	Principal Project Manager	Subsidiary Project Manager	Principal Worksite Supervisor	Subsidiary Worksite Supervisor	Expert of CEAEQ
<i>(To be completed by the Proponent)</i>						
Name, First name						
Professional accreditation (name of the Ordre)						
Membership Number						
Name of the Firm						
Years of Experience						

¹ The expert with the *Centre d'expertise en analyse environnementale du Québec* (CEAEQ) can be one of the five (5) person listed above or be a distinct one.

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ANNEX D

DOING BUSINESS WITH PWGSC DOCUMENTATION AND DELIVERABLES MANUAL

(PDF attached)



Doing Business with PWGSC

Documentation and Deliverables Manual



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Revisions

Version	Date	Description
0.1	August 14, 2017	Draft version for consultation.
1.0	January 12, 2018	Original Issuance

1 General

1.1 Effective Date

January 12, 2018

1.2 Authority

This manual is issued by the authority of the Director General, Technical Services, Real Property Branch (RPB), Public Works and Government Services Canada (PWGSC).

1.3 Purpose

This document provides architectural and engineering (A&E) consultants with the requirements for producing deliverables for PWGSC projects in order to ensure a well-documented design process, and facilitate review by PWGSC staff.

1.4 Scope

This document shall apply to design-bid-build projects undertaken by PWGSC on its own behalf as well as for other government departments (OGDs). It is applicable to all regions of PWGSC and can be supplemented with regional addendum.

1.5 Harmonization with Terms of Reference

This document shall be used in conjunction with the project's Project Brief / Terms of Reference (TOR). In case of a conflict between documents, the requirements of the TOR prevail over those of this document.

1.6 Departmental Name Change

In the fall of 2015, Public Works and Government Services Canada (PWGSC) was renamed Public Services and Procurement Canada (PSPC).

This name change is occurring in a phased approach, and for most documents PSPC should be used. However, all contract documents shall use the legal name Public Works and Government Services Canada (PWGSC) until the name has been changed in legislation.

1.7 Terminology

This document utilizes the following terminology:

- “shall” is used to express a requirement, a provision the Consultant is obligated to meet; “should” is used to express a recommendation; and
- “may” is used to express an option or that which is permissible within the limits of this document.

1.8 Definitions

Addenda: Changes to the construction documents or tendering procedures, issued during the tendering process.

Construction Documents: The drawings and specifications (including addenda).

Drawings: The graphic means of showing work to be done, as they depict shape, dimension, location, quantity of materials and relationship between building components.

Reports: Written account given of a particular matter after thorough investigation or consideration prepared by the Consultant.

Specifications: Written descriptions of materials and construction processes in relation to quality, colour, pattern, performance and characteristics of materials, installation and quality of work requirements.

2 Construction Documents

2.1 General

This section provides direction to Consultant firms on the preparation of construction documents (namely specifications and drawings) to be submitted to PWGSC for real property projects across Canada.

Specifications, drawings, and addenda shall be complete and clear so that contractors can prepare bids without guesswork.

2.1.1 Principles of PWGSC Contract Documents

Contact documents shall be prepared based on common public procurement principles. PWGSC does not use Canadian Construction Documents Committee (CCDC) documents.

PWGSC is responsible for preparing and issuing the construction contract and the terms and conditions as well as all other related bidding and contractual documents. For detailed information, the standard acquisition clauses and conditions commonly used by PWGSC in the contracting process are available on the buyandsell.gc.ca website.

2.1.2 Translation

When bilingual documents are required in the Terms of Reference, all documentation including drawings, specifications, reports as well as all bidder questions shall be in both official languages.

Ensure that English and French documents are equal in all respects. There can be no statements where one version takes precedence over the other.

2.1.3 Construction Documents Definitions

Unless otherwise indicated in the Project Brief / Terms of Reference, construction document submissions (33%, 50 or 66%, 99%, and 100% / final) shall meet the definitions outlined below. Further discipline based requirements may be included in the TOR.

- 33%: shall demonstrate general intent of design and compliance and alignment with relevant standards. Summary specification required, but not a full specification.
- 50% or 66%: shall show full system, all components, requirements, and lack only minor details on drawings. Specifications shall be well advanced and contain major work and material requirements and lack only minor details.
- 99%: shall be for final review by PWGSC, lacking no detail and complete with a project specific specification.
- 100% (or final): shall address comments by PWGSC as required, signed and sealed by the responsible design professional in compliance with various provincial jurisdiction requirements, ready for tender.

2.1.4 Quality Assurance

It is the sole responsibility of the Consultant firms to undertake their own quality control process and to review, correct, and coordinate their documents (between disciplines). The Consultant shall also ensure the constructability of their design.

2.1.5 Quality Assurance Deliverables

For every construction document submission (33 %, 50 % or 66 %, 99 % and 100 %), the Consultant shall provide:

- a completed and signed Checklist for the Submission of Construction Documents (see Appendix A); and
- an index as per Appendix B.

2.1.6 Terminology & Quantities

The Consultant shall use the term “Departmental Representative” instead of Engineer, PWGSC, Owner, Consultant or Architect. “Departmental Representative” means the person designated in the Contract, or by written notice to the Contractor, to act as the Departmental Representative for the purposes of the Contract, and includes a person, designated and authorized in writing by the Departmental Representative to the Contractor.

Notations such as “verify on site,” “as instructed,” “to match existing,” “example,” “equal to,” “equivalent to,” and “to be determined on site by Departmental Representative” shall not be indicated in specifications nor in drawings, as such wording promotes inaccurate and inflated bids.

Construction documents shall permit bidders to bid accurately. If a precise quantity is impossible to identify (e.g. cracks to be repaired), then provide an estimated quantity for bidding purposes (to be used in conjunction with unit prices). Ensure that the terminology used throughout construction documents is consistent and does not contradict applicable codes and standards.

2.1.7 Units of Measure

All units of measure within drawings and specifications shall be based on the International System of Units (SI).

2.2 Drawings

2.2.1 General

Drawings shall be prepared in accordance with the [PWGSC National CADD Standard](#) and the Canadian Standards Association CSA B78.5-93: *Computer-Aided Design Drafting (Buildings)*. Drawing shall also meet the following criteria:

- dimensions shall be in metric only (no dual dimensioning);
- no trade names present on any drawings; and
- no specification-type notes are on any drawing.

2.2.2 Information to be Included

Drawings should show the quantities of the elements, the configuration of the project, the dimensions, and details of how the work is constructed. There should be no references to future work or information that will be changed by future addenda. The scope of work should be clearly detailed, and elements not in the Contract should be eliminated or kept to an absolute minimum.

2.2.3 Title Blocks and Revision Notes

PWGSC title block shall be used for drawings and sketches (including addenda).

The percent of drawing completion should be included in the revision notes. Revision notes shall be inputted during design development, but cleared for 100% complete drawing (ready for tender).

2.2.4 Drawing Numbers

Drawings should be numbered in sets according to the type of drawing and the discipline involved as indicated in the following table. The requirements of the *PWGSC National CADD Standard* supersede these requirements, where warranted.

Discipline	Drawing
Demolition	D01, D02, etc.
Architecture	A01, A02, etc.
Civil	C01, C02, etc.
Landscaping	L01, L02, etc.
Mechanical	M01, M02, etc.
Electrical	E01, E02, etc.
Structural	S01, S02, etc.
Interior Design	ID01, ID02, etc.

2.2.5 Presentation Requirements

Present the drawings in sets, providing the applicable demolition, site plan, civil, landscaping, architecture, structural, mechanical, and electrical drawings in that order. All drawings should be of uniform standard size.

2.2.6 Legends

Provide a legend of symbols, abbreviations, references, etc., on the front sheet of each set of drawings, or in the case of large sets of drawings, provided the legend immediately after the title sheet and index sheets.

2.2.7 Schedules and Tables

Where schedules or tables occupy entire sheets, locate them at the back of each set of drawings for convenient reference.

2.2.8 North Arrow

Include a north arrow on all plans. Orient all plans in the same direction for easy cross-referencing. Wherever possible, lay out plans so that the north point is at the top of the sheet.

2.2.9 Drawing Symbols

Follow generally accepted drawing conventions, understandable by the construction trades and in accordance with PWGSC publications.

2.2.10 As-Built Drawings

As-built drawings are official record drawings and shall represent as constructed conditions including location and size of equipment, devices, plumbing lines, mechanical and electrical equipment, structural elements etc. As-built drawings shall be updated in CAD, handwritten notes are not acceptable.

2.2.11 Submission Format

Unless otherwise stated in the Terms of Reference, drawing submissions shall be in electronic and hard copy format.

2.2.11.1 Drawing Hard Copy Deliverable Format

Drawing submitted in hard copy shall be:

- printed to scale with black lines on white paper;
- bound with staple or other means into sets, where presentations exceed 50 sheets, the drawings for each discipline may be bound separately for convenience and ease of handling; and
- of a paper size as agreed to with the Departmental Representative.

2.2.11.2 Drawing Electronic Copy Deliverable Format

Drawing submitted electronically shall be provided:

- without password protection or printing restrictions;
- in two formats:
 - PDF/E-1 (in compliance with ISO 24517-1);
 - .dwg format; and
- in accordance with Appendix D.

2.3 Building Information Modelling (BIM)

PWGSC is committed to using non-proprietary or “OpenBIM” standards. As such, the Consultant is not required to use any specific proprietary software format. For the sake of legacy information quality, the Consultant shall use the international standards of interoperability for BIM (IFC) in all cases where models are submitted. Consultants shall work with software that is compliant to this standard.

Where used, BIM shall not replace the submission requirements outlined by this document. Rather, consultants shall submit models in addition requirements outlined herein.

Where BIM is used, models and modelled information shall be submitted in the following two formats:

- .native (whichever format is native to the Modelling software used by the Consultant);
- .ifc (Industry Foundation Classification – IFC4 – [ISO 16739:2013](#)); and

All Modelled Information, and Model Information Exchanges shall conform to:

- Project-specific requirements, such as they are laid out in the Project Execution Plan, Project Documentation and Model Element Table; and
- The project-identified BIM Standards & Guidelines.

Models for electronic submissions shall be organized as per Appendix D.

2.4 Specifications

2.4.1 National Master Specification

Specifications prepared for PWGSC shall follow the most current version of the [National Master Specification \(NMS\)](#) format offered by the National Research Council.

The Consultant has overriding responsibility for the content of construction project specifications. For each specification, he or she shall edit, amend, and supplement the NMS template as deemed necessary to produce an appropriate project specification free of conflict and ambiguity. The Consultant should refer to the latest *NMS User's Guide* and *NMS Development Guide* issued by the National Research Council for further guidance on using the NMS.

2.4.2 Index

Specifications shall include an index which list all specification sections, including numbers of pages, as well as the division and section names in the format shown in Appendix B.

2.4.3 Specification Organization

Narrow scope sections describing single units of work should be used for complex work. Broad scope sections may be used for less complex work. The Consultant shall use consistently for the entire specification either the NMS 1/3 page format, the NMS 2/3-page format or the Construction Specifications Canada (CSC) full-page format.

Start each section on a new right hand page and show the PWGSC project number, NMS section title, NMS section number, page number, and specification date on each page. The project title, and Consultant's name are not to be indicated.

2.4.4 Standards

Code and standard references in the NMS may not be up to date, the Consultant shall ensure that the project specification use the current applicable edition of all references quoted.

2.4.5 Specifying Materials

Specifications should make use of generic names in referencing construction materials. The Consultant should refer to the latest version of the *NMS Development Guide* issued by the National Research Council for further details. The term "Acceptable Manufacturers" shall not be used, as this restricts competition and does not ensure the actual material or product will be acceptable.

2.4.5.1 Alternate Products and Materials

Alternative materials to those specified may be considered during the solicitation period; however, the onus will be on the Consultant to review and evaluate all requests for approval of alternative materials.

2.4.5.2 Sole Sourcing

Sole sourcing of materials and/or work is only allowed in exceptional and justifiable circumstances. Prior to including sole source materials and/or work, the Consultant shall contact the Departmental Representative to obtain approval for the sole sourcing. Consultants shall provide proper justification for all individual sole source requirements.

Sole sourcing for materials and work may be required when performing work on existing proprietary systems, such as fire alarm systems, building automation systems (BAS) etc.

Wording for the sole source of work should be in Part 1 as follows:

Designated Contractor

- .1 Retain the services of [_____] to do the work of this section.

Wording for the sole source of building automation system should be in Part 1 as follows:

Designated Contractor

- .1 Retain the services of [_____] or its authorized representative to complete the work of all building automation system sections.

Wording for the sole source of building automation system should be in Part 2 as follows:

Materials

- .1 There is an existing [_____] system presently installed in the building. All materials must be selected to ensure compatibility with the existing [_____] system.

Wording for the sole source of materials (i.e. fire alarm systems) should be in Part 2 as follows:

Acceptable Materials

- .1 The only acceptable materials are [_____].

2.4.6 Measurement for Payment

The measurement for payment shall be provided in lump sum or unit prices.

2.4.6.1 Unit Prices

Unit prices should only be used in instances where the quantity can only be roughly estimated (e.g. earth work). The approval of the Departmental Representative shall be sought in advance of their use. In each applicable NMS section where unit prices are used, add new or replace paragraph title “Measurement for Payment” with “Unit Prices.” and use the following wording:

[The work for this section] or [define the specific work if required, e.g. rock excavation] will be paid based on the actual quantities measured on site and the unit prices stated in the Bid and Acceptance Form.

Provide a unit price table, sample shown below, to designate the work to which a unit price arrangement applies. The table shall include:

- the price per unit and the estimated total price for each item listed;
- a complete description of each type of work covered; and
- items as described in the referenced specification section.

Item	Specification Reference	Class of Labour, Plant or Material	Unit of Measurement	Estimated Quantity	Price per Unit GST/HST extra	Estimated Total Price GST / HST extra
TOTAL ESTIMATED AMOUNT						

2.4.7 Cash Allowances

Construction documents shall be complete and contain all of the requirements for the contractual work. Cash allowances are to be used only under exceptional circumstances (i.e. utility companies, municipalities), where no other method of specifying pricing is appropriate.

To include cash allowances, obtain approval from the Departmental Representative in advance, and use Section 01 21 00 – Allowances of the NMS to specify the criteria.

2.4.8 Warranties

The 12-month warranty period specified in PWGSC’s standard acquisition clauses and conditions with regard to the contract should typically be retained as is. Extended warranties should only be used where experience has shown that serious defects are likely to appear after expiry of the standard one-year warranty period. When necessary to extend beyond the 12 month warranty period,

use the following wording in Part 1 of the applicable technical sections, under the heading “Extended Warranty”:

For the work of this Section [____], the 12 month warranty period is extended to [____] months.

Where the extended warranty is intended to apply to a particular part of a specification section, modify the previous text as follows:

For [____], the 12 month warranty period is extended to [____] months.

2.4.9 Miscellaneous Requirements

Paragraphs noted as “Scope of Work” shall not be included. Within Part 1 – General of specifications, the paragraphs “Summary” and “Section Includes” shall not be utilized.

2.4.10 Specification Coordination

All sections of the specifications shall be coordinated, including the “Related Sections” portion of specifications and appendices. References to non-existent sections shall not be present within the specifications.

2.4.11 Regional Guide

The Consultant should contact the Departmental Representative to obtain the region’s requirements for Division 01 (General Requirements) or other short-form specifications as appropriate.

2.4.12 Health and Safety

All project specifications are required to include Section 01 35 29 – Health and Safety Requirements. Confirm with the Departmental Representative to determine if there are any instructions to meet regional requirements.

2.4.13 Subsurface Investigation Reports

If required, subsurface investigation report(s) shall be included after Section 31, and the following paragraph added to Section 31:

Subsurface Investigation Report(s)

- .1 Subsurface investigation report(s) are included in the specification following this section.

If the Departmental Representative determines that it is not practical to include the subsurface investigation report(s), alternate instructions will be provided.

Where tender documents are to be issued in both official languages, the subsurface investigation report(s) shall be issued in both languages.

In addition to providing the subsurface investigation report(s), the foundation information required by the current *National Building Code of Canada* (Division C, Part 2, 2.2.4.6) shall be included on foundation drawings.

2.4.14 Prequalification and Pre-Award Submissions

Do not include in the specifications any mandatory contractor and/or subcontractor prequalification or pre-award submission requirements that could become a contract award condition. If a

prequalification process or a pre-award submission is required, contact the Departmental Representative.

There should be no references to certificates, transcripts, samples, the license numbers of a trade or subcontractor, or any other documentation or item being included with the bid.

2.4.15 Contracting Issues

Specifications describe the workmanship and quality of the work and shall not contain any contracting issues. Division 00 of the NMS is not used by PWGSC, except for the Seals page 00 01 07 and the Table of Contents 00 01 10. In specifications, remove all references to the following:

- general instructions to bidders;
- general conditions;
- Canadian Construction Documents Committee (CCDC) documents;
- priority of documents;
- security clauses and clearances;
- terms of payment or holdback;
- the tendering process;
- bonding requirements;
- insurance requirements;
- alternative and separate pricing;
- site visits (mandatory or optional); and
- the release of lien and deficiency holdbacks.

2.4.16 Specification Submission Format

Unless otherwise stated in the Terms of Reference, specification submissions shall be in electronic and hard copy format.

2.4.16.1 Specification Hard Copy Deliverable Format

Specifications submitted in hard copy shall be printed on both sides of 216 mm x 280 mm white bond paper.

2.4.16.2 Specification Electronic Copy Deliverable Format

Specifications submitted electronically shall be:

- provided in PDF/A (in compliance with ISO 19005) format, without password protection and printing restrictions; and
- in accordance with Appendix D.

2.5 Addenda

2.5.1 Format

Prepare addenda using the format shown in Appendix C. No signature-type information is to appear.

Every page of the addendum (including attachments) shall be numbered consecutively. All pages shall have the PWGSC project number and the appropriate addendum number. Sketches shall appear in the PWGSC format, signed and sealed.

No Consultant information (name, address, phone #, Consultant project #, etc.) should appear in addenda or their attachments (except on sketches).

2.5.2 Content

Each item should refer to an existing paragraph of the specification or note/detail on the drawings. The clarification style is not acceptable.

Where there are many or major changes to a section or drawing, consider deleting the entire section or drawing and replacing it with a new version.

3 Cost Estimates

3.1 Cost Estimates Submission Formats

3.1.1 Format

Construction cost estimates for projects shall be prepared in the elemental analysis format, which is in accordance with the latest edition issued by the Canadian Institute of Quantity Surveyors (CIQS) for all PWGSC regions excluding Quebec. Within Quebec region the cost estimates shall be prepared in the Unifomat II format.

3.1.2 Contents

All cost estimates shall contain the following:

- introduction narrative complete with an outline description of the cost estimate basis;
- description of information obtained and used in the cost estimate including the date received;
- listing of notable inclusions;
- listing of notable exclusions;
- listing of items/issues carrying significant risk;
- summary of the itemized cost estimate;
- itemized breakdown of cost estimate by elemental analysis for Class B, C, and D; and
- itemized breakdown of costs estimate in both elemental analysis and National Master Specification division format for Class A, including measured quantities, unit rate pricings and amounts for each item of work.

Allowances, if deemed necessary by Consultant, shall contain the following:

- design allowance to cover unforeseen items during design phase;
- escalation allowance for changes in market conditions between the date of the cost estimate and the date tender is called;
- construction allowance to cover unforeseen items during construction; and
- the basis of calculations of the above allowances.

3.2 Classes of Cost Estimates for Construction Projects

PWGSC applies a detailed, four-level classification using the terms Class A, B, C and D. Apply these estimate classifications at the project stages as defined in the TOR. For projects required to be submitted to Treasury Board (TB) for approval: an indicative estimate shall be at least a Class D and a Substantive Estimate shall be at least a Class B.

3.2.1 Class D (Indicative) Estimate

Based upon a comprehensive statement of requirements, an outline of potential solutions and/or functional program, this estimate is to provide an indication of the final project cost that will enable ranking to be made for all the options being considered. This cost estimate shall be prepared in elemental analysis format. The level of accuracy of a Class D cost estimate shall be such that no more than a 20% design allowance is required.

3.2.2 Class C Estimate

Based on schematic/conceptual design and/or comprehensive list of project requirements, this estimate shall be adequately detailed and shall be sufficient for making the correct investment decision. This cost estimate shall be based on measured quantities of all items of work and prepared

in elemental analysis format. The level of accuracy of a Class C cost estimate shall be such that no more than a 15% design allowance is required.

3.2.3 Class B (Substantive) Estimate

Based on design development drawings and outline specifications, which include the preliminary design of all major systems and subsystems, as well as the results of all site/installation investigations, this estimate shall provide for the establishment of realistic cost objectives and be sufficient to obtain effective project approval.

This cost estimate shall be based on measured quantities of all items of work and prepared in elemental analysis format. The level of accuracy of a Class B cost estimate shall be such that no more than a 10% design allowance is required.

3.2.4 Class A (Pre-Tender) Estimate

Based on completed construction drawings and specifications prepared prior to calling competitive tenders, this estimate shall be sufficient to allow a detailed reconciliation and/or negotiation with any contractor's tender submission. This cost estimate shall be based on fully measured quantities of all items of work and prepared in both elemental analysis and Trade division format as per MasterFormat™. The level of accuracy of a Class A cost estimate shall be such that no more than a 5% design allowance is required.

4 Project Schedules

4.1 Schedule Format

Project schedules shall be submitted in the .mpp file extension (compatible with MS Project). The schedule shall include:

- major and minor milestones;
- activities representing discrete elements of work assigned to one person which:
 - are named using verb-noun combination (i.e. Review Design Development Report);
 - contain realistic durations in days;
- project logic linking activities with appropriate relationships finish-start (FS), finish-finish (FF), start-start (SS); and
- Identification of the critical path activities.

4.2 Progress Report

The progress report shall detail the progress of each activity up to the date of the report. It shall also include any logic changes made, both historic and planned; projections of progress and completion; as well as the actual start and finish dates of all activities being monitored.

The contents of each progress report will vary depending on the requirements at each project phase. A progress report should include:

- an executive summary;
- a narrative report;
- a variance report;
- a criticality report;
- an exception report (as required);
- the master schedule with cash flow projections; and
- the detailed project schedule (network diagram or bar charts).

4.2.1 Executive Summary

The executive summary should provide a synopsis of narrative, variance, criticality and exception report, and is not to exceed one page.

4.2.2 Narrative Report

The project narrative shall detail the work performed to date, comparing work progress to planned, and presenting current forecasts. This report should summarize the progress to date, explaining current and possible deviations and delays and the required actions to resolve delays and problems with respect to the Detailed Schedule, and Critical Paths.

4.2.3 Variance Report

The variance report, with supporting schedule documentation, should detail the work performed to date and compare work progress to work planned. It should summarize the progress to date and explain all causes of deviations and delays and the required actions to resolve delays and problems with respect to the detailed schedule and critical paths. The variance report shall be presented in the following format:

Paper size: Letter
Paper format: Portrait
Title format: Project Title, Report Type, Print Date, Data Date, Revision Block
Body text: Narratives for each report to match other reports
Columns: Activity ID, Activity Name, Planned Finish, Revised Finish, Variance, Activity % Complete

4.2.4 Criticality Report

The criticality report identifies all activities and milestones with negative, zero, and up to five days' Total Float. It is used as a first sort for ready identification of the critical paths, or near-critical paths, through the entire project. The criticality report shall be presented in the following format:

Paper size: Letter
Orientation: Portrait
Title format: Project Title, Report Type, Print Date, Data Date, Revision Block
Body text: Narratives for each report to match other reports
Columns: Activity ID, Activity Name, Duration, Start, Finish, Activity % Complete, Total Float

4.2.5 Exception Report

The exception report shall be provided when unforeseen or critical issues arise. The Consultant shall advise the Departmental Representative and submit the details and proposed solutions in the form of an exception report. The report shall include sufficient description and detail to clearly identify:

- scope changes, including identifying the nature, reason, and total impact of all identified and potential project scope changes affecting the project;
- delays and accelerations, including identifying the nature, reason, and total impact of all identified and potential duration variations; and
- options enabling a return to the project baseline, including Identifying the nature and potential effects of all proposed options for returning the project within the baselined duration.

The exception report shall be provided in the following format:

Paper size: Letter
Orientation: Portrait
Title format: Project Title, Report Type, Print Date, Data Date, Revision
Body text: Narrative to match other reports

Paper size: Letter
Orientation: Landscape
Title format: Project Title, Report Type, Print Date, Data Date, Revision
Columns: Activity ID, Activity Name, Duration, Remaining Duration, Start, Finish, Total Float

4.2.6 Master Schedule

A master schedule including cash projection shall be provided in the following format:

Paper size: 11X17
Orientation: Landscape
Columns: Activity ID, Activity Name, Duration, Activity % Complete, Start, Finish, Total Float
Footer format: Project Title, Report Type, Print Date, Data Date, Revision Block
Sorting: Early Start, then Early Finish, then Activity ID based on the WBS.

4.2.7 Detailed Project Schedule

A detailed project schedule shall be provided along with a network diagram or bar charts in the following format:

Paper size: 11X17
Orientation: Landscape
Columns: Activity ID, Activity Name, Duration, Activity % Complete, Start, Finish, Total Float
Footer format: Project Title, Report Type, Print Date, Data Date, Revision Block
Sorting: Early Start, then Early Finish, then Activity ID based on the WBS.

Appendix A Checklist for the Submission of Construction Documents

Date:	
Project Title:	Project Location:
Project Number:	Contract Number:
Consultant's Name:	PWGSC Departmental Representative
Review Stage (stages may vary at discretion of project team): 33% <input type="checkbox"/> 50% or 66% <input type="checkbox"/> 99% <input type="checkbox"/> 100% <input type="checkbox"/>	

Drawings\Design			
Item	Verified by	Explanations	Action By
1 Index			
1a The index shows a complete listing of drawing titles and numbers.			
2 Title Blocks			
2a The title block is as per the <i>PWGSC National CADD Standard</i> .			
3 Units			
3a All units of measure are metric.			
4 Trade Names			
4a Trade names are not used.			
5 Specification Notes			
5a There are no specification-type notes.			
6 Terminology			
6a The term "Departmental Representative" is used instead of "Engineer," "PWGSC," "Owner," "Consultant," or "Architect."			
6b Notations such as "verify on site," "as instructed," "to match existing," "example," "equal to," "equivalent to," and "to be determined on site by" are not used.			
7 Information to be included			
7a The project quantities, configurations, dimensions, and construction details are included.			
7b References to future work and elements not in the tender documents do not appear or are kept to an absolute minimum and clearly marked.			

Drawings\Design			
Item	Verified by	Explanations	Action By
8 Quality Assurance			
8a Coordination review of the design between various disciplines has been completed by the Consultant.			
8b Constructability review of design has been performed.			
9 Signing and Sealing			
9a Every final drawing bears the seal and signature of the responsible design professional in compliance with various provincial jurisdiction requirements.			

Specifications			
Item	Verified by	Explanations	Action by
1 National Master Specification			
1a The current edition of the National Master Specification (NMS) has been used.			
1b Sections have been included for all work identified on drawings and sections have been edited.			
2 Index			
2a The index shows a complete list of specifications sections with the correct number of pages.			
3 Organization			
3a Either the NMS 1/3- or 2/3-page format or the Construction Specifications Canada full-page format is used consistently for the entire specifications.			
3b Each section starts on a new page and the project number, section title, section number, page number and date is shown on each page.			
3c The Consultant's name is not indicated.			
4 Terminology			
4a The term "Departmental Representative" is used instead of "Engineer," "PWGSC," "Owner," "Consultant," or "Architect."			
4b Notations such as "verify on site," "as instructed," "to match existing," "example," "equal to," "equivalent to," and "to be determined on site by" are not used.			
5 Dimensions			
5a Dimensions are provided in metric only.			
6 Standards			
6a The current edition of all references quoted is used.			
7 Specifications Materials			
7a The method of specifying materials uses recognized standards. Actual brand names and model numbers are not specified.			
7b Materials are specified using standards and performance criteria.			

Specifications			
Item	Verified by	Explanations	Action by
7c Non-restrictive, non-trade name “prescription” or “performance” specifications are used throughout.			
7d The term “Acceptable Manufacturers” is not used.			
7e No sole sourcing has been used.			
7f If sole sourcing has been used, the correct wording has been used and a justification, estimate, and specification have been provided to the Departmental Representative for the sole-sourced products.			
8 Measurement for Payment			
8a Unit prices are used only for work that is difficult to estimate.			
9 Cash Allowances			
9a No cash allowances have been used or if they have, approval from the Departmental Representative has been received.			
10 Miscellaneous Requirements			
10a No paragraphs noted as “Scope of Work” are included.			
10b In Part 1 - General of any section, the paragraphs “Summary” and “Section Includes” are not used.			
11 Specification Coordination			
11a The list of related sections and appendices are coordinated.			
12 Health and Safety			
12a Section 01 35 29.06 – Health and Safety Requirements is included.			
13 Subsurface Investigation Reports			
13a Subsurface investigation reports are included after Section 31.			
14 Prequalifications			
14a There are no mandatory contractor and/or subcontractor prequalification requirements or references to certificates, transcripts, licence numbers of a trade or subcontractor, or other such documentation or item included in the bid.			

Specifications			
Item	Verified by	Explanations	Action by
15 Contracting Issues			
15a Contracting issues do not appear in the specifications.			
15b Division 00 of the NMS is not used except 00 01 07 (Seals Page) and 00 01 10 (Table of Contents).			
16 Quality Assurance			
16a There are no specification clauses with square brackets “[]” or lines “_” indicating that the document is incomplete or missing information.			
17 Signing and Sealing			
17a Every final specification bears the seal and signature of the responsible design professional as required. Seals and signatures shall be shown in NMS section 00 01 07.			

I confirm that the drawings and specifications have been thoroughly reviewed and that the items listed above have been addressed or incorporated. I acknowledge and accept that by signing, I am certifying that all items noted above have been addressed.

Consultant's Representative: _____

Firm name: _____

Signature: _____ Date: _____

Appendix B Drawings and Specifications Table of Contents Template

B.1 General

List all drawings by number and title.

For specifications, list all divisions, sections (by number and title), and the number of pages in each section.

B.2 Sample Table of Contents

Project No: _____ **Table of Contents** **Index**
Page 1 of _____

DRAWINGS:

C-1 Civil
L-1 Landscaping
A-1 Architecture
S-1 Structural
M-1 Mechanical
E-1 Electrical

SPECIFICATIONS:

DIVISION	SECTION	NO. OF PAGES
01	01 00 10 – General InstructionsXX
	01 14 25 – Designated Substances ReportXX
	01 35 30 – Health and SafetyXX
23	23 xx xx	
26	26 xx xx	

Appendix C Addenda Formatting Template

C.1 Instructions

To re-issue a drawing with an addendum:

- indicate the drawing number and title; and
- list the changes or indicate the revision number and date.

To re-issue a specification with an addendum:

- indicate the section number and title; and
- list all changes (i.e. deletions, additions, and replacements) by article or paragraph.

The addendum, drawings and specifications should be sent as separate files.

C.2 Sample Addendum

Date: _____

Addendum Number: _____

Project Number: _____

**The following changes in the bid documents are effective immediately.
This addendum will form part of the construction documents.**

DRAWINGS:

- 1 A1 Architecture
.1

SPECIFICATIONS:

- 1 Section 01 00 10 – General Instructions
 - .1 Delete article (xx) entirely.
 - .2 Refer to paragraph (xx.x),
delete the following: ...
and replace with the following: ...
- 2 Section 23 05 00 – Common Work Results - Mechanical
 - .1 Add new article (x) as follows:

Appendix D Directory Structure and Naming Convention Standards for Construction Tender Documents

D.1 Electronic Submissions

Electronic submittals of drawings, specification and models shall be in the following format unless otherwise specified in the Terms of Reference or instructed by the Departmental Representative:

- On media burned to read only memory (ROM) on either CD-ROM or DVD+R where:
 - CD-ROMs comply with ISO 9660:1988 standards;
 - DVD+Rs are 4.7 GB, single-sided, single-layer and comply with ISO/IEC 17344:2006 standards;
 - media is “closed” upon completion of burning; and
 - media is usable in such a way that files may be accessed and copied from it.

If BIM model size is greater than storage capacity of a DVD, refer to Terms of Reference or contact the Departmental Representative for transmission instructions.

Some projects may require the Consultant to upload files to an electronic system outlined in the Terms of Reference or as instructed by the Departmental Representative.

D.2 Directory Structure

D.2.1 1st Tier Subfolder

The 1st tier of the directory structure shall be “Project #####” where ##### represents each digit of the Project Number. The Project Number must always be used to name the 1st tier folder and it is always required. Free text can be added following the Project Number, to include such things as a brief description or the project title.

D.2.2 2nd Tier Subfolder

The 2nd tier of the directory structure shall consist of: “Bilingual - Bilingue”, “English” and “Français” folders. The folders of the 2nd tier cannot be given any other names since the Government Electronic Tendering System (GETS) uses these names for validation purposes. At least one of the “Bilingual - Bilingue”, “English” and “Français” folders is always required, and these must always have one of the applicable subfolders of the 3rd tier.

D.2.3 3rd Tier Subfolder

The 3rd tier of the directory structure shall consist of: “Drawings - Dessins”, “Drawings”, “Models”, “Specifications”, “Reports”, “Dessins”, “Modèles”, “Devis” and “Rapports”. The folders of the 3rd tier cannot be given any other names since GETS also uses these names for validation purposes. There must be always at least one of the applicable 3rd tier folder in each document.

D.2.4 4th Tier Subfolder - Drawings

The 4th-tier subfolders for Drawings should reflect the various disciplines of the set of drawings. Because the order of appearance of the subfolders on the screen will also determine the order of printing, it is necessary to start with a number the identification name of the subfolders in the “Drawings – Dessins”, “Drawings” and “Dessins” folders. The first subfolder must be always reserved for the Title Page and/or the List of Drawings unless the first drawing of the set is an actual numbered discipline drawing.

The 4th tier “Drawings” and “Dessins” folder shall follow the naming convention:

- Y

Where:

= a two digit number ranging from 01 to 99 (leading zeros must be included)

Y = the title of the folder Example: 03 – Mechanical

For the “Drawings - Dessins” folder:

= Y - Z

Where:

= a two digit number ranging from 01 to 99 (leading zeros must be included)

Y = the English title of the folder

Z = the French title of the folder

Example:

04 - Electrical – Électrique

The numbering of the 4th tier subfolders is for sorting purposes only and is not tied to a specific discipline. For example, “Architecture” could be numbered 05 for a project where there is four other disciplines before “Architecture” in the set of drawings or 01 in another project where it’s the first discipline appearing in the set.

The order of the drawings shall be the same as in the hard copy set. GETS will sort each drawing for both screen display and printing as per the following rules:

- The alphanumerical sorting is done on an ascending order;
- The alphanumerical order of the subfolders determines the order of appearance on the screen as well as the order of printing (as an example: all the drawing PDF files in the 01 sub-older will be printed in alphanumerical order before the drawings in the 02 sub- folder etc.);

Each drawing PDF file within each subfolder will also be sorted alphanumerically. This will determine the order of appearance on the screen as well as the order of printing (i.e. Drawing A001 will be printed before Drawing A002, Drawing M02 before Drawing M03, etc.).

D.2.5 4th-Tier Subfolders for Specifications

The “Specifications” and “Devis” folders must have 4th tier subfolders created to reflect the various elements of the specifications. Because the order of appearance of the subfolders on the screen will also determine the order of printing, it is necessary to start with a number the identification name of the subfolders in the “Specifications” and “Devis” folders.

The 4th tier subfolders for specifications must adhere to the following standard naming convention for the “Specifications” and “Devis” folders:

- Y

Where:

= a two digit number ranging from 01 to 99 (leading zeros must be included)

Y = the title of the folder

Example:

02 – Divisions

Numbering of the 4th tier subfolders is for sorting purposes only and is not tied to an element of the specifications.

It is essential to ensure that the order of the elements of the specifications on the CD-ROM be exactly the same as in the hard copy. GETS will sort each element of the specifications for both screen display and printing as per the following rules:

- The alphanumerical sorting is done on an ascending order.
- The alphanumerical order of the subfolders determines the order of appearance on the screen as well as the order of printing (as an example: all the specifications PDF files in the 01 subfolder will be printed, in alphanumerical order before the PDF files in the 02 subfolder, etc.).
- Each specifications PDF file within each subfolder will also be sorted alphanumerically. This will determine the order of appearance on the screen as well as the order of printing (i.e. Division 01 will be printed before Division 02, 01 - Appendix A before 02 - Appendix B, etc.).

D.2.6 Directory Structure Example

The following is an example of the directory structure for the tender document, refer to previous sections for requirements, and use only sections applicable to the given project:

```
Project #####
  Bilingual – Bilingue
    Drawings – Dessins
      01 - Drawing List – Liste des dessins
      02 – Demolition – Démolition
      03 – Architecture – Architectural
      04 – Civil – Civil
      05 – Landscaping - Aménagement paysager
      06 – Mechanical – Mécanique
      07 – Electrical – Électricité
      08 – Structural - Structural
      09 – Interior Design – Aménagement intérieur
  English
    Drawings
      01 - Drawing List
      02 – Demolition
      03 – Architecture
      04 – Civil
      05 – Landscaping
      06 – Mechanical
      07 – Electrical
      08 – Structural
      09 – Interior Design
    ...
    Models
    Specifications
      01 – Index
      02 – Divisions
      03 – Appendices
    Reports
  Français
    Dessins
    Modèles
    Devis
    Rapports
```

D.3 Naming Convention for PDF Files

Each drawing, specifications division or other document that are part of the tender documents must be converted in PDF format (without password protection) in accordance with the following standard naming convention and each PDF file must be located in the appropriate subfolder of the directory structure.

D.3.1 Drawing File Names

Each drawing must be a separate single page PDF file. The naming convention of each file shall be:

X### - Y

Where:

X = the letter or letters from the drawing title block (“A” for Architecture or “ID” for Interior Design for example) associated with the discipline

= the drawing number from the drawing title block (one to three digits)

Y = the drawing name from the drawing title block (for bilingual drawings, the name in both English and French is to appear).

Example:

A001 - First Floor Details

Each drawing that will be located in the appropriate discipline 4th tier subfolders must be named with the same letter (“A” for Architecture Drawings for example) and be numbered. The drawing number used to name the PDF file must match as much as possible the drawing number of the actual drawing (the exception being when leading zeros are required).

The following important points about drawings are to be noted:

- The drawing PDF files within each subfolder are sorted alphanumerically for both displaying and printing. If there are more than 9 drawings in a particular discipline the numbering must use at least two numerical digits (i.e. A01 instead of A1) in order to avoid displaying drawing A10 between A1 and A2. The same rule applies when there are more than 99 drawings per discipline i.e. three digits instead of two must be used for the numbering (for example M003 instead of M03);
- If drawing PDF files are included in the “Bilingual - Bilingue” folder, these cannot be included as well in the “English” and/or “Français” folders;
- If drawings not associated with a particular discipline are not numbered (title page or list of drawings for example), these will be sorted alphabetically. While this does not represent a problem if there is only one drawing in the subfolder, it could disrupt the order when there are two or more drawings. If the alphabetical order of the drawings name does not represent the order on the hard copy set, the drawings are to be named as per the following standard convention when converted in PDF format to ensure proper display and printing order.

D.3.2 Specifications

Each specifications division must be a separate PDF file and all pages contained in each PDF file must have the same physical size (height, width). The drawings and specifications index must also be a separate PDF file. If there are other documents that are part of the Specifications (e.g. Appendix or other) these are to be separate PDF files as well.

D.3.3 Documents Other Than Specifications Divisions

Because PDF files within the Specifications subfolders are sorted alphanumerically (in ascending order) for both on screen display and printing order, all files that appear in folders other than the “Divisions” subfolder must be named using a number:

- Y

Where:

= Two digit number ranging from 01 to 99 with leading zeros required

Y = Name of the document

Example:

01 – Drawings and Specifications Index

D.3.4 Specifications Divisions

The specifications divisions must be named as follows:

Division ## - Y

Where:

Division ## = the actual word “Division” followed by a space and a two digit number ranging from 01 to 99 (with leading zeros required)

Y = name of the Specifications Division as per CSC/CSI MasterFormat™

Example:

Division 05 – Metals

The Numbering of the Divisions cannot be altered from CSC/CSI MasterFormat™ even if some Divisions are not used in a given project. For example, Division 05 will always remain Division 05 even if Division 04 is not used for a given project.

D.4 Media Label

The CD-ROM or DVD+R shall be labeled with the following information:

Project Number / Numéro de projet

Project Title / Titre du projet

Documents for Tender / Documents pour appel d'offres

Disk X of/de X

Example:

Project 123456 / Projet 123456

Repair Alexandra Bridge / Réparation du pont Alexandra

Documents for Tender / Documents pour appel d'offres

Disk 1 of/de 1



Services publics et
Approvisionnement Canada

Public Services and
Procurement Canada

Canada



Doing Business with PWGSC Quebec Region ADDENDUM



www.pspc-spac.gc.ca

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Revisions

Version	Date	Description
0.1	May 2, 2018	Draft version for consultation
1.0	June 1 st , 2018	Original issuance

A1 General

A1.1 Effective Date of Addendum

June 1st, 2018.

A.1.2 Authority

This addendum is issued by the authority of the Director, Professional and Technical Services, Quebec Region Centre of Expertise, Public Works and Government Services Canada (PWGSC).

A.1.3 Purpose of Addendum

The purpose of this addendum is to make changes to the « Doing Business with PWGSC – Documentation and Deliverables Manual » document on the requirements for the production of deliverables on PWGSC projects in the Quebec Region (excluding the National Capital Region). This addendum is part of the Contract documents.

A.1.4 Scope

This addendum shall apply to design-bid-build projects undertaken by PWGSC on its own behalf as well as for other for other government departments in the Quebec Region (excluding the National Capital Region). It **supplements** the « Doing Business with PWGSC – Documentation and Deliverables Manual » document as provided for in Section 1.4 of said document. The terms and conditions of said document are applicable to this addendum. Yet in case of contradiction between documents, the requirements of the « Doing Business with PWGSC – Quebec Region Addendum » document take precedence.

The Consultant shall check with the Departmental Representative that these documents are up-to-date. The most recent updated version is the one that applies to the project.

A2 Modifications

A2.1 Article 2.2.1_General

Replace the PWGSC National CADD Standard with the PWGSC Quebec Region [CADD Standard](#) (Computer Aided Design and Drafting) Supplement. The Supplement can be downloaded along with the Quebec Region [templates and drawing formats](#).

A2.2 Article 2.2.4_Drawing Numbers

Replace table with the following one. For the Quebec Region, the different drawing types and disciplines involved must be numbered as shown in the table.

Discipline	Drawing
Architectural	A01, A02, etc.
Civil	C01, C02, etc.
Landscaping	AP01, AP02, etc.
Structural	S01, S02, etc.
Mechanical	M01, M02, etc.
Industrial mechanical process	MP01, MP02, etc.
Electrical	E01, E02, etc.
Electronic security, intrusion detection, access control and video-surveillance	SS01, SS02, etc.
Information technology (e.g. : telecom and data)	TI01, TI02, etc.
Food Services	SA01, SA02, etc.
Interior Design	I01, I02, etc.

A2.3 Article 2.2.6_Legends

Add: Only project-specific symbols shall be included in the legends.

A2.4 Article 2.3_Building Information Modelling (BIM)

Add: The template must export CADD drawings as an AutoCAD software-specific DWG file. These drawings must be reformatted to meet the PWGSC Quebec Region CADD (Computer Aided Design and Drafting) Supplement.

A2.5 Article 2.4.2_Index

Add: The Specifications package must include a single table of contents. Divisions and sections must be presented in ascending order. The table of contents must also list all drawing sheets by discipline.

A2.6 Article 2.4.11_Regional Guide

Add: In the Quebec Region, the NMS specifications section 01 11 00 - Summary of Work is not to be used. Instead, use section 01 11 01 – Work Related General Information. Obtain the document from the Departmental Representative.

A2.7 Article 2.4.12_Health and Safety

Add: In the Quebec Region, the NMS specifications section 01 35 29 - Health and Safety Requirements is not to be used. Instead, use 01 35 29.06 - Health and Safety Requirements (with annexes) specific to the Quebec region. Obtain the documents from the Departmental Representative.

A2.8 Article 2.4.16.1_ 2.4.16.1 Specification Hard Copy Deliverable Format

Add: Each section must start on the front of a sheet. The hard copy must consolidate all sections of all disciplines in ascending numerical order. When the specifications package needs to be divided into several volumes due to its size, the volume number shall be identified on the cover page as well as the total number of volumes (example: volume 2 of 3). For ease of reference, the Table of Contents (section 00 01 10) must be duplicated at the start of each volume.

A2.9 Article 3.1.1_Format

Add: Departmental Representatives in the Quebec Region apply a standardized three-tier front page summary for all their projects. The Consultant shall translate his estimates on said front page. The Consultant shall therefore obtain the relevant Excel file from the Departmental Representative at the start of the project.

A2.10 Appendix A_Checklist for the Submission of Construction Documents

For the Quebec Region, the present appendix cancels and replaces Appendix A shown in the « Doing Business with PWGSC – Documentation and Deliverables Manual » document.

Appendix A Checklist for the Submission of Construction Documents (Quebec Region)

Date:	
Project Title:	Project Location :
Project Number:	Construction Contract Number:
Consultant's Name:	PWGSC Departmental Representative:
Review Stage (stages may vary at discretion of project team): 33% <input type="checkbox"/> 50% or 66% <input type="checkbox"/> 99% <input type="checkbox"/> 100% <input type="checkbox"/>	

Drawings/Design		
Item	Verified by:	Explanations
1 Index		
1a The index shows a complete listing of drawing titles and numbers.		
2 Title Blocks		
2a Title blocks are as per the <i>PWGSC Quebec Region CADD Standard</i> .		
3 Units		
3a All units of measure are metric only.		
4 Trade Names		
4a Trade names are not used.		
5 Specification Notes		
5a There are no specification-type notes.		
6 Terminology		
6a The term "Departmental Representative" is used instead of "Engineer," "PWGSC," "Owner," "Consultant," or "Architect."		
6b Notations such as "verify on site," "as instructed," "to match existing," "example," "equal to," "equivalent to," and "to be determined on site by" are not used.		

Drawings/Design		
Item	Verified by:	Explanations
7 Information to be included		
7a The project quantities, configurations, dimensions, and construction details are included.		
7b References to future work and elements not in the tender documents do not appear or are kept to an absolute minimum and clearly marked.		
8 Quality Assurance		
8a Coordination review of the design between various disciplines has been completed by the Consultant.		
8b Constructability review of design has been performed.		
9 Signing and Sealing		
9a Every final drawing bears the seal and signature of the responsible design professional in compliance with various provincial jurisdiction requirements.		

Specifications		
Item	Verified by:	Explanations
1 National Master Specification		
1a The current edition of the National Master Specification (NMS) has been used.		
1b Sections have been included for all work identified on drawings and sections have been edited.		
2 Index		
2a The index shows a complete list of specifications sections with the correct number of pages, the proper titles and section names as well as the list of drawings for each discipline.		
3 Organization		
3a The same page format is used consistently for the entire specifications.		
3b Each section starts on a new page and the project number, section title, section number, page number and date is shown on each page.		
3c The Consultant's name and the project title are not indicated.		
4 Terminology		
4a The term "Departmental Representative" is used instead of "Engineer," "PWGSC," "Owner," "Consultant," or "Architect."		
4b Notations such as "verify on site," "as instructed," "to match existing," "example," "equal to," "equivalent to," and "to be determined on site by" are not used.		
5 Dimensions		
5a Dimensions are provided in metric only.		
6 Standards		
6a The current edition of all references quoted is used.		

Specifications		
Item	Verified by:	Explanations
7 Materials' Specifications		
7a The method of specifying materials uses recognized standards. Actual brand names and model numbers are not specified.		
7b Materials are specified using standards and performance criteria.		
7c Non-restrictive, non-trade name "prescription" or "performance" specifications are used throughout.		
7d The term "Acceptable Manufacturers" is not used.		
7e No sole sourcing has been specified.		
7f If sole sourcing has been specified, the correct wording has been used and a justification, estimate, and specification have been provided to the Departmental Representative for the sole-sourced products.		
8 Measurement for Payment		
8a Unit prices are used only for work that is difficult to estimate.		
9 Cash Allowances		
9a No cash allowances have been used or if they have, approval from the Departmental Representative has been received.		
10 Miscellaneous Requirements		
10a No paragraphs noted as "Scope of Work" are included.		
10b In Part 1 - General of any section, the paragraphs "Summary" and "Section Includes" are not used.		
10c Section 01 11 01 Work Related General Information is included.		
11 Specification Coordination		
11a The list of related sections and appendices are coordinated.		

Specifications		
Item	Verified by:	Explanations
12 Health and Safety		
12a Section 01 35 29.06 – Health and Safety Requirements (Quebec Region) is included.		
13 Subsurface Investigation		
13a Subsurface investigation reports are included after Section 31.		
14 Prequalification		
14a There are no mandatory contractor and/or subcontractor prequalification requirements or references to certificates, transcripts, licence numbers of a trade or subcontractor, or other such documentation or item included in the bid.		
15 Contracting Issues		
15a Contracting issues do not appear in the specifications.		
15b Division 00 of the NMS is not used except 00 01 07 (Seals Page) and 00 01 10 (Table of Contents).		
16 Quality Assurance		
16a There are no specification clauses with square brackets “[]” or lines “ ” indicating that the document is incomplete or missing information.		
17 Signing and Sealing		
17a Every final specification bears the seal and signature of the responsible design professional as required. Seals and signatures shall be shown in NMS section 00 01 07.		

I confirm that the drawings and specifications have been thoroughly reviewed and that the items listed above have been addressed or incorporated. I acknowledge and accept that by signing, I am certifying that all items noted above have been addressed.

Consultant’s Representative: _____

Firm name: _____

Signature: _____ Date: _____

A2.11 Appendix B_Drawings and Specifications Table of Contents Template

For the Quebec Region, the present appendix cancels and replaces Appendix B shown in the « Doing Business with PWGSC – Documentation and Deliverables Manual » document.

Appendix B Drawings and Specifications Table of Contents Template (Quebec Region)

B.1 General

For specifications, list all divisions, sections (by number and title) and the number of pages in each section.
List all drawings by number and title, and classify by discipline.

B.2 Example of Table of Contents

Project N°: **TABLE OF CONTENTS** Section 00 01 10
Date: Page 1

SPECIFICATIONS:

DIVISION	SECTION	NUMBER OF PAGES
01	01 11 01 – Work Related General InformationXX
	01 14 00 – Work RestrictionsXX
	01 35 29.06 – Health and Safety RequirementsXX
23	23 xx xx	
26	26 xx xx	

DRAWINGS:

Architectural

A00 Title page
A01 Demolition – Plan of 1st floor
A0x xx

Structural

S01 Legend
S02 xx

Mechanical

M01 Legend
M02 xx

[END OF DOCUMENT]

N° de l'invitation - Sollicitation No.
EF928-201499/A

N° de la modif - Amd. No.

Id de l'acheteur - Buyer ID
MTC-790

N° de réf. du client - Client Ref. No.
EF928-201499

File No. - N° du dossier
MTC-9-42159

N° CCC / CCC No./ N°VME -MS

ANNEX E

TYPE FORM FOR PRESENTATION OF PRIO PROJECTS

(PDF attached)

ANNEX E

TYPE FORM FOR PRESENTATION OF PRIOR PROJECTS

Previous project number :					
Type of project :	<input type="radio"/> Evaluation for the rehabilitation or environmental management options of contaminated sites	<input type="radio"/> Preparation of plans and specifications for environmental remediation of contaminated sites	<input type="radio"/> Environmental remediation work surveillance on contaminated sites	<input type="radio"/> Environmental characterization project for contaminated sites	<input type="radio"/> Other : _____
Name of project :					
Location of project :					
Name of firm :					
The firm was :		<input type="radio"/> Main Firm	<input type="radio"/> Part of a Joint-Venture		
If part of a Joint-Venture :	Name of partner(s) :				
Responsibilities of firm (must be sufficiently detailed to provide understanding of the relationship between the description of the previous project and the extent of the firm's involvement, as well as the relationship to this project)					
Description of project (must be sufficiently detailed to provide an understanding of the exact nature of the project and the services to be performed) :					
Service performance: the Proponent must specify whether the services for which it is or was responsible were performed or whether they have not yet been performed, and why :					
Initial budget :		Final Budget :			
Reason for difference in final budget :					
Project start date (month/year) :		Project end date (month/year) :	If an incomplete multi-year project, date of first year completed (month/year) :		
Reason for not meeting deadline :					
Relevance of project to this project (must be sufficiently detailed to provide an understanding of the relationship to the services required in this project) :					
Name(s) of mandatory key personnel proposed for this project who were also part of the team assigned to the previous project, including their duties and responsibilities (must be sufficiently detailed to provide an understanding of the relationships to the positions and responsibilities assigned to these individuals for this project) :					
Client name, address and daytime telephone number (updated) :					

Note: PWGSC reserves the right to verify references.

N° de l'invitation - Sollicitation No.
EF928-201499/A

N° de la modif - Amd. No.

Id de l'acheteur - Buyer ID
MTC-790

N° de réf. du client - Client Ref. No.
EF928-201499

File No. - N° du dossier
MTC-9-42159

N° CCC / CCC No./ N°VME -MS

ANNEX F

DECLARATION/CERTIFICATIONS FORMS

Project Title:

Name of Proponent:

Street Address:

Mailing Address:

Address:

Street Number / Street Name, Unit / Suite / Apartment Number

City, Province, Territory

Postal Code

Telephone Number: ()

Fax Number: ()

E-Mail:

Procurement Business Number:

Type of Organization: ____ Sole Proprietorship ____ Partnership ____ Corporation ____ Joint Venture	Size of Organization: Number of Employees _____ Graduate Architects / Professional Engineers _____ Other Professionals _____ Technical Support _____ Other _____
--	---

N° de l'invitation - Sollicitation No.
EF928-201499/A

N° de la modif - Amd. No.

Id de l'acheteur - Buyer ID
MTC-790

N° de réf. du client - Client Ref. No.
EF928-201499

File No. - N° du dossier
MTC-9-42159

N° CCC / CCC No./ N°VME -MS

ANNEX F

DECLARATION/CERTIFICATIONS FORMS (CONT'D)

Federal Contractors Program for Employment Equity - Certification

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

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

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

Complete both A and B.

A. Check only one of the following:

- A1. The Proponent certifies having no work force in Canada.
 - A2. The Proponent certifies being a public sector employer.
 - A3. The Proponent certifies being a federally regulated employer being subject to the *Employment Equity Act*.
 - A4. The Proponent certifies having a combined work force in Canada of less than 100 permanent full-time and/or permanent part-time employees.
- A5. The Proponent has a combined work force in Canada of 100 or more employees; and
- A5.1. The Proponent certifies already having a valid and current Agreement to Implement Employment Equity (AIEE) in place with ESDC-Labour.

OR

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

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ANNEX F

DECLARATION/CERTIFICATIONS FORMS (CONT'D)

B. Check only one of the following:

B1. The Proponent is not a Joint Venture.

OR

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

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ANNEX F

DECLARATION/CERTIFICATIONS FORMS (CONT'D)

Former Public Servant (FPS) - Certification

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPS, proponents must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of proposals is completed, Canada will inform the Proponent of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the proposal non-responsive.

Definitions

For the purposes of this clause,

"former public servant" is any former member of a department as defined in the *Financial Administration Act*, R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- (a) an individual;
- (b) an individual who has incorporated;
- (c) a partnership made of former public servants; or
- (d) a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the *Public Service Superannuation Act* (PSSA), R.S., 1985, c.P-36, and any increases paid pursuant to the *Supplementary Retirement Benefits Act*, R.S., 1985, c.S-24 as it affects the PSSA. It does not include pensions payable pursuant to the *Canadian Forces Superannuation Act*, R.S., 1985, c.C-17, the *Defence Services Pension Continuation Act*, 1970, c.D-3, the *Royal Canadian Mounted Police Pension Continuation Act*, 1970, c.R-10, and the *Royal Canadian Mounted Police Superannuation Act*, R.S., 1985, c.R-11, the *Members of Parliament Retiring Allowances Act*, R.S., 1985, c.M-5, and that portion of pension payable to the *Canada Pension Plan Act*, R.S., 1985, c.C-8.

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ANNEX F

DECLARATION/CERTIFICATIONS FORMS (CONT'D)

Former Public Servant in Receipt of a Pension

As per the above definitions, is the Proponent a FPS in receipt of a pension?
YES () NO ()

If so, the Proponent must provide the following information, for all FPS in receipt of a pension, as applicable:

- (a) name of former public servant;
- (b) date of termination of employment or retirement from the Public Service.

By providing this information, proponents agree that the successful Proponent's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with Contracting Policy Notice: 2012-2 and the Guidelines on the Proactive Disclosure of Contracts.

Work Force Adjustment Directive

Is the Proponent a FPS who received a lump sum payment pursuant to the terms of a work force reduction program? YES () NO ()

If so, the Proponent must provide the following information:

- (a) name of former public servant;
- (b) conditions of the lump sum payment incentive;
- (c) date of termination of employment;
- (d) amount of lump sum payment;
- (e) rate of pay on which lump sum payment is based;
- (f) period of lump sum payment including start date, end date and number of weeks;
- (g) number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

For all contracts awarded during the lump sum payment period, the total amount of fees that may be paid to a FPS who received a lump sum payment is \$5,000, including Applicable Taxes.

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ANNEX F

DECLARATION/CERTIFICATIONS FORMS (CONT'D)

Name of Proponent:

DECLARATION:

I, the undersigned, being a principal of the proponent, hereby certify that the information given on this form and in the attached proposal is accurate to the best of my knowledge. If any proposal is submitted by a partnership or joint venture, then the following is required from each component entity.

..... name signature
..... title	
I have authority to bind the Corporation / Partnership / Sole Proprietorship / Joint Venture	
..... name signature
..... title	
I have authority to bind the Corporation / Partnership / Sole Proprietorship / Joint Venture	
..... name signature
..... title	
I have authority to bind the Corporation / Partnership / Sole Proprietorship / Joint Venture	

During proposal evaluation period, PWGSC contact will be with the following person:_____.

Telephone Number: () _____ Fax Number: () _____

E-mail: _____

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SUBMISSION REQUIREMENTS AND EVALUATION (SRE)

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1. Offer Preparation Instructions

1.1. Offer Preparation Instruction

Canada requests that Offerors provide their offer in separately bound sections as follows:

Section I : Technical Offer (4 hard copies)

Section II : Financial Offer (1 hard copies)

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

Section I : Technical Offer

In their technical offer, Offerors should explain and demonstrate how they propose to meet the technical requirements of this call for offers and how they will carry out the Work as described in the Technical Specifications (Annex A). For the point rated technical criteria, they should refer to the specifications described at Part 4 - Proposal evaluation procedures and selection method.

Section II : Financial Offer

Offerors must submit their financial offer in accordance with the Basis of Payment (see Annex B). The total amount of Applicable Taxes must be shown separately, if applicable.

1.2. Quality and Clarity of the Offers

The technical offer must contain all the information requested in this document without any superfluous or irrelevant material. The level of quality must be on a par with the standards customarily required for the drafting of study reports, in terms of clarity, appearance, language and document structure.

In order to help the offer's evaluation, Canada asks that proponents to respect the order of evaluation criteria (part 4 of this document), under the same sections. To avoid duplication, offerors can reference as accurately as possible (paragraph, page) to the sections of their offer for a covered subject.

1.3. Exigences spécifiques de présentation des offres

Canada requests that offerors follow the format instructions described below in the preparation of their offer:

- Submit one (1) original and three (3) copies of the technical offer;
- Submit one (1) original and one (1) copies of the financial offer (separate sealed envelope);
- Use 8.5 x 11 inch (216 mm x 279 mm) paper;
- Minimum font size: 11 point Times or equivalent ;
- Minimum margins: 25 mm right and 12 mm left, top and bottom
- Offers must be submitted double-sided
- One (1) page means one side of a sheet of paper.
- Fold-out sheets (11" x 17") for tables, organization charts, etc. will be counted as two (2) pages
- Use a numbering system that corresponds to the offer solicitation (see Section 2.2.2).

In 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process according to the [Policy](#)

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on Green Procurement: (<https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573>). To assist Canada in reaching its objectives, Offerors should:

- 1) use paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

1.4. Specific Requirements for Offer Format

The maximum number of pages, including text, tables, figures, plans, diagrams and organization charts) to be submitted for the Rated Requirements is 11 pages. The maximum number of pages indicated for each point rated criterion must also be respected

The following are not part of the page limitation mentioned above :

- Covering letter;
- Integrity Provisions – Required Documentation;
- Front page of the RFP;
- Front page of revision(s) to the RFP ;
- Declaration/Certifications Form (Section III);
- Team Identification Form (Annex C);
- *Curriculum vitae* (CV) of Key People required at Section n 2.2.2.1;
- Financial offer including the Price Proposal Form (Section II).

Offeror must take into account and comply with all the described requirements for offer preparation.

Consequence of non-compliance: any pages which extend beyond the above page limitation and any other attachments will be extracted from the offer and will not be forwarded to the PWGSC Evaluation Board members for evaluation.

2. Proposal Evaluation Procedures and Selection Method

This part describes the evaluation criteria that will be used by the PWGSC Evaluation Board members in order to evaluate the offers' compliance and quality. The evaluation procedures includes the rating of information of the offer in respect with the evaluation criteria described in the present part.

2.1. Evaluation Procedures

The technical offer must contain all the information requested in this document without any superfluous or irrelevant material. The level of quality must be on a par with the standards customarily required for the drafting of study reports, in terms of clarity, appearance, language and document structure.

The technical offer must comply with all mandatory requirements. If that is the case, the technical offer will be deemed responsive and will be evaluated on the basis of the point rated criteria. Failure to meet the mandatory requirements will render the offer non responsive and no further evaluation will be carried out.

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Evaluation procedure will be done as following:

- a) Offers will be assessed in accordance with the entire requirement of the Request of proposal including the technical and financial evaluation criteria;
- b) An evaluation team composed of representatives of Canada will evaluate the offers;
- c) The evaluation of rated requirements with respect to the technical offer will be carried out by an evaluation board composed of representatives of Public Works and Government Services Canada. The evaluation method for technical rated requirements is presented in Section 2.2;
- d) Only the price offer of proponents whose technical offer have received a passing score will be evaluated. The evaluation method for price offer is presented in Section 2.3.

2.2. Technical Evaluation

In order to determine the score for the technical criteria, each offer previously meeting the mandatory technical criteria will be evaluated and awarded an overall technical mark. The overall technical mark represents **70%** of the overall evaluation score of the proposal (including financial criteria - see Section 2.4).

2.2.1 Mandatory Technical Criteria

The technical proposal must mandatorily include points listed in the following Sections without however being limited to them. If these mandatory technical criteria are not satisfied, the Tenderer's proposal will be judged inadmissible.

2.2.1.1. Key People on the Tenderer's Team and Organization Chart

For the present Contract, the Tenderer must submit the names of five (5) required key people from the Team assigned to project execution, respecting the years of relevant² experience requested and if applicable, the name of the company that hires these people if it is different from that of the Prime Consultant

Thus, the Tender must identify one person for each of the key positions defined below:

- ✓ A project director with at least ten (10) years relevant² experience in project management for environmental rehabilitation of contaminated sites, over the past fifteen (15) years;
- ✓ Two (2) project managers (principal and subsidiary) with at least ten (10) years relevant² experience in environmental characterization and rehabilitation of contaminated sites, over the past fifteen (15) years;
- ✓ Two (2) worksite supervisors (principal and subsidiary) with at least eight (8) years of relevant² experience in environmental characterization and rehabilitation of contaminated sites, over the past ten (10) years;

The Tenderer must present among his key people for the project at least:

- ✓ One (1) professional entered in the list of experts with the Centre d'expertise en analyse environnementale du Québec (CEAEQ). This person can be one of the five (5) person listed above or be a distinct one;

² "Relevant experience" is understood as being in the services and additional services listed in Annex A.

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An example of an acceptable (typical) form for the presentation of the information about identification of the team members is provided in Annex C. Except for the CEAEQ expert, several key positions cannot be occupied by one single person.

An organization chart must also be included (**maximum of one page**) which must indicate the name of the key resources, the name of the company for which the person works together with their functions in connection with the present contract. It will also have to present the relations that the key resources of the Team will have and also the additional staff, subcontractors and companies involved in the scope of the Project.

The verifications of the academic training and professional accreditation will be done using CVs which will have to be sent to the Section 2.2.2.1 – Experience and Qualification of Key Resources from the Tenderer's Team.

2.2.1.2. The Firm's Execution of Comparable Projects

For the present Contract, the Tenderer must have previously performed five (5) recent projects (i.e. undertaken during the last eight (8) years) in Canada, pertaining to environmental site assessments related to the statement of work (Annex A).

The submitted projects must include at least :

- ✓ An evaluation for the rehabilitation or environmental management options of contaminated sites;
- ✓ A preparation of plans and specifications for environmental remediation of contaminated sites;
- ✓ A project of environmental remediation work surveillance on contaminated sites, and;
- ✓ An environmental characterization project for contaminated sites;

2.2.2 Point Rated Technical Criteria

The compliant proposals (meaning those which satisfy all the mandatory criteria) will be examined, evaluated and scored by a PWGSC evaluation committee.

At this stage, the financial proposals will not have been opened and only the technical components of the proposal will be evaluated based on the criteria listed in the following sections.

2.2.2.1. Point Rated Criterion 1 : Experience and qualifications of the key resources on the Tenderer's Team (maximum 2 pages – 23 points)

For this point rated criterion, the Consultant must demonstrate that it possesses resources with the necessary academic training, work experience and skills, aptitudes and expertise for all of the services required to deliver the types of projects described in the statement of work (Annex A).

The Tenderer must next describe the experience and skill of the mandatory key people proposed for the execution of the Contract Work (identified in Section 2.2.1.1). It must bring out the strong points of the team's resources and underline their responsibilities, commitments and prior executions

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In the description of the Offeror's team, the participation of the key personnel proposed for the submitted projects (Section 2.2.1.2) and the teams of specialists who have shown to have previously worked together will be considered during the evaluation.

For this purpose, the proposer must provide a curriculum vitae a (CV) for each member of the mandatory key people (**maximum of two pages per person – not included in the maximum number of pages**) identified in Section 2.2.1.1 - *Key People on the Tenderer's Team*. The CV must include, without being limited to it :

- ✓ The person's name;
- ✓ The name of their current employer;
- ✓ The number of years working for their current employer;
- ✓ The title of the position and the responsibilities of the person for their current employer;
- ✓ The number of years of experience at this position for their current employer;
- ✓ The title of the position proposed for the present project;
- ✓ The academic training including:
 - The diploma, the year it was obtained and the name of the degree granting institution;
 - Other relevant training, including the year and the name of the institution;
- ✓ Professional accreditations, including the accreditation number;
- ✓ Experience working with federal requirements (including the number of projects done);
- ✓ Professional experience relevant to the present Project (ideally at least five relevant projects) including the start date, end date, employer's name, main responsibilities and achievements related to:
 - The position proposed for this person on the present Project;
 - Other relevant experience not related to the position proposed for the present Project.

**2.2.2.2. Point Rated Creterion 2 :
Experience and performance of the Tenderer's Team in connection with prior projects
(maximum 5 pages – 23 points)**

For this point rated criterion, the Consultant must show that, over the course of the last eight (8) years, the Consultant or its key personnel has successfully fulfilled and completed at least five (5) environmental site assessment projects in Canada in relation to the services described in the statement of work (Annex A). The Consultant must demonstrate that it has carried out projects of a diverse nature that are comparable and relevant to the statement of work. The completeness of the requested information, as well as the relevance, scope, complexity and achievement of project objectives will be evaluated in relation to the scope of the required services (Annex A).

The evaluation of the submitted past projects will consider the following points, among others:

- ✓ Recent (i.e. undertaken during the last eight (8) years);
- ✓ Complexity and scale of the project;
- ✓ Project involving multiple media³ and/or contaminants;
- ✓ Project concerning abandoned industrial sites;

³ Throughout this document, the term "media" will be defined as follows: soil, waste matter, sediment, groundwater, surface water, wastewater, immiscible-phase products (floating or dense), air, etc.

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-
- ✓ Project involving multiple types of required services as described in Annex A; and
 - ✓ Delivery by the key personnel members of the team proposed in this bid.

To do this, in a maximum of **one (1) page per project**, the Tenderer must present brief descriptions of five (5) projects that meet the requirements of the mandatory criterion presented in Section 2.2.1.2.

Preferably, those five (5) projects should include at least two (2) projects that were carried out in Quebec and two (2) projects carried out on behalf of departments or federal agencies, or in accordance with federal requirements. The expression "carried out on behalf of departments or federal agencies" means that the bidder was awarded a contract by a department or federal agency, in which it acted as the project's primary consultant.

Information to be supplied for each project:

- ✓ Project title, client and nature (e.g. Preparation of plans and specifications);
- ✓ Concise, detailed description of the project and objectives;
- ✓ Scope of services rendered that are relevant to the statement of work, the project objectives, the constraints and the documents to be produced as part of the project;
- ✓ Specific characteristics of the project;
- ✓ Summary of the project's costs (initial budget and cost of completion of the project);
- ✓ Summary of the project timeline;
- ✓ In a situation of schedule and cost overruns, provide the justifications;
- ✓ The demonstration of the relevance of the project compared to the requirements of the present Contract;
- ✓ Client references (names, addresses and telephone numbers of clients whose names are given as references regarding the execution of work);
- ✓ Names of key Consultant personnel responsible for project delivery.

The Proponent (as defined in GI2 Article "Definitions" of R1410T General Instructions to Proponents) must have knowledge of the above projects.

An example of an acceptable form (typical) for the presentation of the information about the presentation of prior projects is provided in Annex D.

- Note : PWGSC reserves the right to verify references.

**2.2.2.3. Point Rated Creterion 3 :
Understanding of the scope and overall execution of the Project
(maximum 1 page – 9 points)**

In application of this point rated criterion, the Consultant must provide an understanding of the scope of the mandate(s) to be performed over the life of the Project. The various phases of the Project (evaluation and choice of the option of environmental rehabilitation or management, preparation of plans and specifications for the construction, carrying out of additional environmental studies, supervision of construction works) must be presented summarily as well as the personnel key provided at each step. The tenderer must demonstrate understanding of the project's goals, functional and technical requirements, constraints and aspects that will affect the finished product.

The quality of the information provided will be assessed and judged according to its clarity and brevity, as well as whether it is complete and presented in a consistent manner.

Information that should be supplied:

- ✓ functional and technical requirements;
- ✓ important issues, challenges and constraints;
- ✓ the preliminary schedule; review schedule and cost information and assess risk management elements that may affect the project.

**2.2.2.4. Point Rated Creterion 4 :
Procedure, Methodology and Approach for Management of the Services
Proposed by the Bidder**

(3 pages – 15 points)

For this point rated criterion, the Consultant will explain how it plans to perform the services, meet the project constraints, and apply service management procedures to ensure the continuity and consistency of production control and the effectiveness of communications, as well as the team structure and management method.

The Consultant must demonstrate that it understands the scope of the requested services (Annex A) and the manner in which they are to be delivered. It must also explain how its project team will be organized with regard to the approach and methodology used for the performance of the required services. Finally, it must define the procedures that it will implement to be able to deliver the required services as per the schedule and the agreed cost, and to guarantee their quality.

Information that should be supplied:

- ✓ Description of the Offeror's organizational structure used to deliver the required services:
 - Confirmation of the creation of a full project team, including the names of the Consultant and the subcontractors and their role on the projects ensuing from the Standing Offer for all of the required services;
 - Organization chart (**maximum one page**) with position titles and names; Composition of the team, responsibilities and reporting relationships, and identification of relevant subcontractors;
 - Description of the procedure applied by the Consultant to execute subsequent contracts and identification of relevant subcontractors;
- ✓ Description of the Offeror's project management for the purpose of executing the subsequent mandate(s) for the contract:
 - Description of a service action plan describing implementation strategies for the main activities and the order in which those activities will be implemented;
 - Intended approach in responding to individual subsequent mandate(s) for the contract;
 - Assignment of resources and availability of qualified back-up personnel;
 - Communication strategies;
- ✓ Response times: explanation of how requirements pertaining to response times will be met;
- ✓ Description of the means and methods selected for resolving conflicts among the various project stakeholders (interpersonal conflicts, etc.);
- ✓ Description of the means implemented to present "fair and reasonable" costs for call-ups for the Standing Offer; and
- ✓ Description of the firm's service quality assurance and control plan.

2.2.3 Evaluation and Rating of Technical Criteria

2.2.3.1. Generic Evaluation Table

PWGSC Evaluation Board members will evaluate the strengths and weaknesses of the offer according to the evaluation criteria and will rate each criterion with even numbers (0 to 10 points) for each point rated criterion using the generic evaluation table below:

	INADEQUATE	WEAK	ADEQUATE	FULLY SATISFACTORY	STRONG
0 point	2 points	4 points	6 points	8 points	10 points
Did not submit information which could be evaluated	Lacks complete or almost complete understanding of the requirements.	Has some understanding of the requirements but lacks adequate understanding in some areas of the requirements.	Demonstrates a good understanding of the requirements.	Demonstrates a very good understanding of the requirements.	Demonstrates an excellent understanding of the requirements.
	Weaknesses cannot be corrected	Generally doubtful that weaknesses can be corrected	Weaknesses can be corrected	No significant weaknesses	No apparent weaknesses
	Proponent do not possess qualifications and experience	Proponent lacks qualifications and experience	Proponent has an acceptable level of qualifications and experience	Proponent is qualified and experienced	Proponent is highly qualified and experienced
	Team proposed is not likely able to meet requirements	Team does not cover all components or overall experience is weak	Team covers most components and will likely meet requirements	Team covers all components - some members have worked successfully together	Strong team - has worked successfully together on comparable projects
	Sample projects not related to this requirement	Sample projects generally not related to this requirement	Sample projects generally related to this requirement	Sample projects directly related to this requirement	Leads in sample projects directly related to this requirement
	Extremely poor, insufficient to meet performance requirements	Little capability to meet performance requirements	Acceptable capability, should ensure adequate results	Satisfactory capability, should ensure effective results	Superior capability, should ensure very effective results

2.2.3.2. Rating of Point-Rated Technical Criteria

a) Evaluation Score

The information provided by offerors is rated from 0 to 10 on each rated requirement;

b) Weighted Score

The evaluation score will be multiplied by a weighting factor to obtain a weighted score for each rated requirement.

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c) Final Score

The final technical score is obtained by adding the weighted scored of each rated requirement.

2.2.3.3. Technical Passing Score

The offeror must meet the following two requirements otherwise the offer will be considered non-responsive :

- ✓ Obtain a minimum passing score for point rated criteria n° 1.0, 2.0, 3.0 and 4.0 listed in the table 1 of Section 2.4.1; which are : experience and qualifications of the key resources, experience and performance in connection with prior projects, understanding of the scope and overall execution of the Project and Procedure, Methodology and Approach for Management of the Services; and
- ✓ Obtain an overall score for the technical offer equal to or greater than **49 out of 70** (e.g. 70%) for the required points of all the point-rated criteria. A 70 points rating scale is used.

Failure to meet these two requirements will render the offer non-responsive and no further evaluation will be carried out.

2.3. Financial Evaluation

In order to determine the score for the financial criteria, each offer previously meeting the mandatory technical criteria will be evaluated and awarded an overall financial mark. The overall financial mark represents **30%** of the overall evaluation score of the proposal (including technical criteria - see Section 2.4).

The financial offer must mandatorily include points listed in the following sections without however being limited to them. If these mandatory financial criteria are not satisfied, the Tenderer's proposal will be judged inadmissible.

2.3.1 List of Unit Rates and Submission Form (Price Table)

Offeror must join to his financial offer the Price Table Form (Annex B) completed and signed by an authorized person of the firm.

Only the financial offer of proponents whose technical offer have received a passing score will be evaluated.

2.3.2 Rating of the Financial Offer

Only financial offers for technical responsive offers will be assessed.

Retained financial offers will be rated as following :

- In order to determine the score for the financial criteria, each offer will be evaluated proportionally to the the lowest price for the services submitted among all acceptable offers, and for a maximum financial score of 30 points.

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As an example, here is the calculation which will be done to determine the Financial score:

	Offeror #1	Offeror #2	Offeror #3	Offeror #4
Total cost of tender	10K\$	13K\$	25K\$	32K\$
Calculation	$(10K\$ / 10K\$) \times 30$	$(10K\$ / 13K\$) \times 30$	$(10K\$ / 25K\$) \times 30$	$(10K\$ / 32K\$) \times 30$
Financial offer score rounded to the first decimal	30	23,1	12	9,4

2.4. Offers Selection Method

2.4.1 Calculation of the Offer's Final Score

Calculation of the offer's final score will be made according to the following process:

1. To be acceptable, an offer must :
 - a. Meet all the requirements of the call for offers; and,
 - b. Meet all the required technical criteria (Section 2.2.1); and
 - c. Obtain a minimum passing score for point rated criteria n° 1.0, 2.0, 3.0 and 4.0 listed in the table 1 of Section 2.4.1; et
 - d. Obtain an overall score for the technical offer equal to or greater than **49 out of 70** (e.g. 70%) for the required points of all the point-rated criteria. A 70 points rating scale is used.
2. Failure to meet requirements a) or b) or c) and d) will render the offer non responsive and no further evaluation will be carried out.
3. Score obtained for each criterion will be multiplied by his weighting factor indicated in the table 1 to obtain a weighted score.
4. For each offer, rating for technical merit and price will be added to determine the final offer's score.

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TABLE 1 – POINT RATED CRITERIA AND SCORING OF OFFERS

	Weighting factor (A)	Score (B = 0 à 10)	Weighted score (C = A x B)	Passing score
Point Rated Technical Criteria				
<i>1.0 Experience and qualifications of the key resources on the Tenderer's Team</i>	2,3	0-10	/23	14/23
<i>2.0 Experience and performance of the Tenderer's Team in connection with prior projects</i>	2,3	0-10	/23	14/23
<i>3.0 Understanding of the scope and overall execution of the Project</i>	0,9	0-10	/9	6/9
<i>4.0 Procedure, Methodology and Approach for Management of the Services</i>	1,5	0-10	/13	9/15
5.0 TECHNICAL TOTAL SCORE (sum of 1.0, 2.0, 3.0 et 4.0)			/70	49/70
Financial criteria				
6.0 FINANCIAL SCORE			/30	
FINAL OFFER'S SCORE (sum of 5.0 et 6.0)			/100	

2.4.2 Offer Selection

A proportion of **70%** will be given to the **technical merit** and a proportion of **30%** to the **price**.

The responsive Offer receiving the highest score or the one with the lowest price for the services will not necessarily be retained. The responsive Offer receiving the highest Final Offer's Score (combination of technical and financial score) is the first entity that the Evaluation Board will recommend for the Contract award. In the case of a tie for the final score, the Proponent submitting the lower price for the services will be recommended.