



# Architectural & Engineering Services **TERMS OF REFERENCE**

## **HRSDC Regina Call Centre Fit-Up**

**For:**  
**Human Resources and Skills  
Development Canada (HRSDC)**  
**Alvin Hamilton Building**  
**Regina, Saskatchewan**

August 2, 2013



## Table of Contents:

<b>I</b>	<b>PROJECT DESCRIPTION</b>	<b>3</b>
I.1	GENERAL	3
I.2	BACKGROUND INFORMATION	3
I.3	SUMMARY OF DESIGN WORK	4
I.4	OBJECTIVES	4
I.5	SUMMARY OF SERVICES AND QUALIFICATIONS	5
I.6	SCHEDULE	7
I.7	COST	7
I.8	EXISTING DOCUMENTATION	8
I.9	CODES, ACTS, STANDARDS, REGULATIONS	8
<b>2</b>	<b>REQUIRED SERVICES</b>	<b>9</b>
2.1	GENERAL REQUIREMENTS	9
2.2	PROJECT REVIEW AND APPROVAL	9
2.3	PRE-DESIGN SERVICE	10
2.4	DESIGN DEVELOPMENT SERVICE	11
2.5	DESIGN SERVICES	12
2.6	TENDER SERVICES	14
2.7	CONSTRUCTION SUPPORT SERVICE	15
2.8	COMMISSIONING SERVICE	16
2.9	POST CONSTRUCTION SERVICE	17
<b>3</b>	<b>PROJECT ADMINISTRATION</b>	<b>18</b>
3.1	GENERAL REQUIREMENTS	18
<b>4</b>	<b>APPENDIX A</b>	<b>19</b>
4.1	SCHEMATIC DESIGN	19



## I PROJECT DESCRIPTION

### I.1 GENERAL

#### I.1.1 PURPOSE

1. Public Works & Government Services Canada (PWGSC) requires the services of an architectural and/or interior design firm, acting as prime consultant together with a multi-disciplinary team of sub-consultants for the provision of service required for this project.

#### I.1.2 THE PWGSC GENERAL PROCEDURES AND STANDARDS DOCUMENT (GP&S)

1. The TOR document must be used in conjunction with the GP&S, as the two documents are complimentary.
2. The TOR describes project-specific requirements, services and deliverables while the GP&S document outlines with minimum standards and procedures common to all projects.
3. In the case of a conflict between the two documents, the requirements of the TOR override the GP&S Document.

#### I.1.3 PROJECT INFORMATION

Project Information	
Project Title:	HRSDC Regina Call Centre Fit-Up
Project Address:	Alvin Hamilton Building, Regina, Saskatchewan
PWGSC Project Number:	R.054633.002
PWGSC Contracting Officer:	TBD

### I.2 BACKGROUND INFORMATION

#### I.2.1 USER DEPARTMENT

1. The User Department referred to throughout the TOR is Human Resources and Skills Development Canada (HRSDC)
2. HRSDC is a single, integrated department with three main business lines: Human Resources and Skill Development Canada, Labour Program and Service Canada (front end), touching all aspects of Canadian's lives. They create programs and support initiatives that help Canadians move through life's transitions – from families with children to seniors, from school to work, from one job to another, from unemployment to employment and from the workforce to retirement.

#### I.2.2 NEED & GOALS

1. The design will be for interior renovations and fit-up to existing office space in the Crown owned Alvin Hamilton building in Regina, Saskatchewan including relocation of existing equipment and demolition.
2. HRSDC's long term strategy is to consolidate all back-end operations – including the call centre – into one location in Regina. As the Alvin Hamilton Building will be the call centre, HRSDC requires open cubicle space located on a single floor to ensure continuous operations and the minimum amount of unproductive time. The east and north side of the second floor in the Alvin Hamilton Building is large enough to accommodate the call centre. For this project the call centre will be comprised of workstations and circulation space only. Other support spaces (e.g. kitchenette, meeting rooms, etc.) will be shared with existing operations in the building.
3. HRSDC requires the call centre to be in-service by December 12, 2014.



4. The work is to be based on the Schematic Design dated July 18, 2013 prepared by HRSDC. See Appendix A.

### **I.2.3 EXISTING CONDITIONS**

- .1 The second floor office space allocated within the Crown owned Alvin Hamilton building currently serves as office space for two federal government departments (including HRSDC).
- .2 The existing space is in good condition and aside from demolition and new construction (including new finishes – carpet, paint, window treatments, ceiling, etc.) will require adjustments to the mechanical and electrical system where necessary.

### **I.2.4 CONSTRAINTS AND CHALLENGES**

- .1 The Consultant will be required to become familiar with the project site, Alvin Hamilton rules and procedures and obtain local information as required.
- .2 Public Works and Government Services Canada (PWGSC), recognizes the responsibility to ensure the health and safety of all persons on Crown construction projects and the entitlement of both federal employees and private sector workers to the full protection afforded them by occupational health and safety regulations.
- .3 The Consultant is subject to security checks. All consultants who need to access HRSDC's existing space must be escorted. A minimum of 48 hours notice is required to arrange for an escort.
- .4 All site visits must be arranged through the Departmental Representative (i.e. PWGSC Project Manager).
- .5 The construction on the project site will be performed during the full operation of the building facilities. Project phasing must be planned to ensure that disruption to the daily operation of the facilities is kept to a minimum.
- .6 The work will be carried out during normal working hours, when the building is fully occupied and operational.
- .7 Environmental conditions must be kept under control during all phases of the work.
- .8 The project scope must be tailored to meet the User Department's budget. Diligent cost estimating and cost control is required.
- .9 Consultant's key personnel must be available to respond to emergencies within 4 hours.

### **I.2.5 PROJECT DELIVERY APPROACH**

- .1 This project will use a traditional design-bid-build approach.
- .2 It is anticipated that only one tender package will be required for this project.
- .3 The Consultant shall prepare the tender package and ensure full co-ordination of the work of all disciplines including furniture.

## **I.3 SUMMARY OF DESIGN WORK**

### **I.3.1 BASE BUILDING RENOVATION WORK**

#### **I.3.2 FIT-UP WORK**

- .1 This Work consists of reconfiguration of approximately 975 square metres (usable) of office facilities facility to fit-up the HRSDC call centre.

## **I.4 OBJECTIVES**

### **I.4.1 FUNCTIONAL REQUIREMENTS**

- .1 The Schematic Design accompanying this TOR defines User Department's functional requirements.



## **I.4.2 DESIGN PERFORMANCE**

- .1 Provide an office space that meets the functional needs of HRSDC as indicated in the Schematic Design in Appendix A:
  - .1 Meets or exceeds the requirements of the National Building Code.
  - .2 Will endure and remain serviceable for its unique purpose by:
    - .1 Incorporating suitable high quality materials into the design that are of a quality, durable and are constructed with the best workmanship possible;
    - .2 Employing advanced systems and technologies to support contemporary operating requirements with capacity for growth and change;
    - .3 Fully integrating all components and systems, including architectural, structural, mechanical, electrical, IT, multimedia, furniture and security design; and
    - .4 Welcomes access by visitors while respecting security requirements.
- .2 The office space must:
  - .1 Provide a healthy and safe working environment that meets or exceeds all codes for fire, health, and life safety, including the Canada Labour Code, that fully supports optimum work productivity;
  - .2 Provide efficient and productive accommodations with planning configurations and workspaces that are flexible, functional, responsive and efficient in keeping with current PWGSC, Treasury Board, Health Canada and User Department Standards;
  - .3 Fully integrate and optimize the performance of components and systems;
  - .4 Embody contemporary sustainable design and application principles and is implemented in an environmentally responsible manner;
  - .5 Be designed for ease of maintenance, with systems that can be accessed and easily repaired and / or replaced for the duration of the lease;
  - .6 Allow capacity for growth and change, as indicated in the federal office standards (the level of quality is to be based on Government of Canada Workplace 2.0 Fit-up Standards);
  - .7 Provide integration with User systems for security and information IT/MM services.
- .3 Design, including access to workstations, shall conform to CSA-B651-12, Barrier Free Design.
- .4 Design shall conform to the security and telecommunication standards provided by HRSDC.

## **I.4.3 PROJECT DELIVERY**

- .1 Deliver the project within the construction budget established during preliminary project approval.
- .2 Deliver the project within the key milestones and according to the detailed project schedule listed in this TOR.
- .3 Ensure that each Consultant team member understands the project requirements, for seamless delivery of the required services.
- .4 Provide a continuous risk management program; address the risks associated specifically with this project.

## **I.5 SUMMARY OF SERVICES AND QUALIFICATIONS**

### **I.5.1 GENERAL SERVICES**

- .1 The prime consultant will provide a full consulting team including the following consultant services and specialties:
  - .1 Professional Architectural / Interior Design Services;



- .1 Prime Consultant,
- .2 Project management of the consultant team,
- .3 Interior Design specialist.
- .2 Professional Engineering Services:
  - .1 Mechanical Engineering;
    - .1 All mechanical systems in the area of renovation and in other areas as required to serve the floor under renovation including HVAC, plumbing, and fire protection.
  - .2 Electrical Engineering;
    - .1 All electrical systems in the area of renovation and in other areas as required serving the floor under renovation including voice/data communications, electrical, lighting, security systems, cable TV, etc,
    - .2 Data/Telecommunications systems, outlets and provision of cabling, cable tray and conduit is in contract and is part of Consultant's services,
    - .3 Computers, servers, UPS systems and other equipment are not in contract and will be supplied and installed by the User Department.
- .3 Commissioning Specialist:
  - .1 Independent from the mechanical and electrical engineers listed above to conduct the work as described in this TOR.
- .4 Cost Estimating Specialist:
  - .1 Independent quantity surveyor.



## **I.6 SCHEDULE**

### **I.6.1 GENERAL**

- .1 Deliver the project to be ready for occupancy in accordance with the project milestone listing identified below.
- .2 Completion dates shown are relative to an assumed start date of December 11, 2013.
- .3 Prepare a Project Schedule, in accordance with the milestone list.

### **I.6.2 ANTICIPATED MILESTONE DATES**

<b>Project Phase</b>	<b>Milestone Completion Date</b>
Consultant Contract Award	December 11, 2013
Design Development Report	January 10, 2014
50% Detailed Design	February 13, 2014
99% Detailed Design	March 20, 2014
Final Construction Documents (100%)	April 3, 2014
Construction Tender	April 5, 2014
Construction Contract Award	July 17, 2014
Construction Start	July 30, 2014
Substantial Completion of Construction	November 24, 2014
Commissioning Completion, Final Inspection and Acceptance	December 5, 2014
In- Service	December 12, 2014
Post Construction Warranty Evaluation	September 12, 2015

## **I.7 COST**

### **I.7.1 CONSTRUCTION BUDGET**

- .1 The construction estimate does not include Project Management fees, administration costs, Consultant fees, Risk Allowance, Escalation or GST and is in 'Budget-Year (Current)' dollars.

### **I.7.2 ESTIMATED CONSTRUCTION COST**

- .1 The estimated construction cost (excluding GST), is anticipated at this time to be as follows:

<b>Estimated Construction Cost</b>	<b>Budget-Year \$</b>
Construction Cost (including contingency)	\$ 575,000
Furniture	(not in contract)
Construction Budget at time of tender	\$ 575,000



## **I.8 EXISTING DOCUMENTATION**

### **I.8.1 AVAILABLE FOR THE CONSULTANT**

- .1 Limited as-built drawings and Operation & Maintenance Manuals will be available on the project site and the Consultant will be responsible for verifying the accuracy of the information incorporated into the design.
- .2 The Consultant will be provided with AutoCAD scaled floor plans of the building.
  - .1 The drawings will require modifications by the Consultant.

### **I.8.2 DISCLAIMER**

- .1 Reference information will be available in the language in which it is written.
- .2 The documentation may be unreliable and is offered, “as is” for the information of the Consultant.

## **I.9 CODES, ACTS, STANDARDS, REGULATIONS**

### **I.9.1 GENERAL**

- .1 A listing of Codes, Acts, Standards and Guidelines potentially applicable to this project are contained in the GP&S Document.
- .2 The Authorities Having Jurisdiction (AHJ) on this project are:
  - .1 The local AHJs;
  - .2 The Fire Protection Engineer of Labour Canada;
- .3 The Consultant must identify, analyze and design the project in accordance with the requirements of all AHJs and all applicable Codes, Acts, Standards and Guidelines and Legislation:
  - .1 The applicability of various Codes, Acts, Standards and Guidelines listed in the GP&S document arise out of direct and indirect references in documents which apply to Federal buildings, such as the Canada Labour Code;
  - .2 The consultant team must be fully versed with the legislation and requirements that are unique to Federal Government buildings in Canada;
  - .3 The consultant team must be fully versed with the legislation and requirements that are unique to Federal Government projects tendered through Public Works & Government Services Canada.

### **I.9.2 MUNICIPAL REVIEWS AND PERMITS**

- .1 Building Permit: The Contractor will apply for a Building Permit from the City of Regina along with the supporting documentation for permit application. The Consultant shall provide advice to the Contractor in order to help resolve all Building Permit related issues. The construction site will be inspected by municipal authorities.
- .2 Occupancy Permit: The Contractor shall apply for an Occupancy Permit and the Consultant will coordinate the resolution of all outstanding issues related to obtaining the permit, from a design perspective. Municipal authorities will have access to the site as required.





## 2 REQUIRED SERVICES

### 2.1 GENERAL REQUIREMENTS

#### 2.1.1 SERVICES

- .1 Pre-Design Service;
- .2 Design Development Service;
- .3 Detailed Design Service; to provide detailed design documents for review at 50%, 99%, 100% (if required) completion stages;
- .4 Tender Services - to assist the Departmental Representative;
- .5 Construction Support Service;
- .6 Commissioning Service;
- .7 Post Construction Service.

### 2.2 PROJECT REVIEW AND APPROVAL

#### 2.2.1 GENERAL

- .1 Comply with all applicable laws and regulatory requirements as required by the General Conditions of the Contract.

#### 2.2.2 FEDERAL GOVERNMENT

- .1 The federal authorities having jurisdiction over this project are:
  - .1 HRSDC for fire prevention engineering services and life safety;
    - .1 The purpose of this review is fire protection, health and life safety,
    - .2 Submission documents shall be in the following format: drawings and specifications.
    - .3 Submissions will be reviewed at 50% and at 99% completed detailed design documents,
    - .4 Expected turnaround time is 2 weeks and
    - .5 For each review, provide one submission plus any follow-up submission.
  - .2 User Department for functional design, IT and security systems.

#### 2.2.3 PWGSC REVIEWS, APPROVALS AND PRESENTATIONS

- .1 Project delivery team approval:
  - .1 This includes both the PWGSC Professional & Technical Team reviews and User approval;
    - .1 The purpose of this review is technical quality assurance,
    - .2 Submissions will be reviewed at design development phase, detailed design documents 50% and 99% phases and 100% phase if necessary,
    - .3 Expected turnaround time is 2 weeks,
    - .4 For each review, provide one submission (including responses to previous review) plus any follow-up submissions.

#### 2.2.4 MUNICIPAL AUTHORITIES

- .1 The federal government generally defers to municipal authorities for specific regulations, standards and inspections but in areas of conflict, the more stringent authority prevails.
- .2 Municipal authority review:
  - .1 The purpose of this review is information and awareness;
  - .2 Submission documents shall be in the following format: drawings and specifications;
  - .3 Submission will be reviewed for detailed design at 99% completion;



- .4 Expected turnaround time is 4-6 weeks;
- .5 For each review, provide one submissions plus any follow-up submissions.

## **2.3 PRE-DESIGN SERVICE**

### **2.3.1 GENERAL**

- .1 The Consultant Team will review and analyze all available project information, consult with the Departmental Representative, and deliver a comprehensive Pre-Design Report.

### **2.3.2 SCOPE AND ACTIVITIES**

- .1 The Consultant shall:
  - .1 Visit the project site, analyze site conditions, document any conditions that will impact project delivery & design and report the results to the Departmental Representative;
  - .2 Review:
    - .1 All existing reports, documents and material related to the project, including the Schematic Design and the requirements identified in the TOR,
    - .2 Information available on existing facilities, including:
      - .1 Interiors, including interior construction, interior finishes, etc.;
      - .2 Services, including plumbing, HVAC, fire protection, electrical, telecommunications, building automation, etc.;
      - .3 Equipment and furnishings.
  - .3 Analyse:
    - .1 All the program/schematic design information and project requirements to identify any conflicts or potential additional work and indicate the impact on project scope, schedule and costs;
    - .2 All existing information relating to this project and compare with site conditions.
  - .4 Identify:
    - .1 All additional information that will be required to deliver the project; confirm that the information is correct and indicate any missing information that needs to be provided;
    - .2 All authorities having jurisdiction (AHJ) over the project and applicable codes, regulations and standards that apply; and
    - .3 Any conflicts that will need to be addressed with respect to scope, quality, schedule, cost.
  - .5 Report:
    - .1 On adjustments required to the budget, risk analysis and schedule, including allowances for reviews and approvals for each stage of the project life cycle.

### **2.3.3 DELIVERABLES**

- .1 The Consultant shall:
  - .1 Prepare and submit a Pre-Design Report, for review and acceptance by the Departmental Representative and revise as required.
    - .1 Refer to the GP&S Document for contents and report content.
  - .2 Provide an updated milestone project schedule.



## **2.4 DESIGN DEVELOPMENT SERVICE**

### **2.4.1 GENERAL**

- .1 Develop the Schematic Design provided by HRSDC.
- .2 Prepare the Design Development documents, which consist of drawings and other documents to describe the scope, quality and cost of the project in sufficient detail to facilitate design approval, confirm code compliance and obtain authorization to prepare the construction documents.

### **2.4.2 SCOPE AND ACTIVITIES**

- .1 The Consultant shall:
  - .1 Further develop the schematic design and expand the intent for each design discipline to complete the Design for this project;
  - .2 Present / submit the design for review and approval to committees, review groups and authorities having jurisdiction as required;
  - .3 Prepare a class 'B' cost estimate, update the schedule and the risk analysis and identify any conflicts that will need to be addressed with respect to scope, quality, schedule, cost;
  - .4 Continue to review all applicable statutes, regulations and by-laws in relation to the design of the project and conduct a detailed code analysis;
  - .5 Analyse the constructability of the project and advise on the construction phasing process and duration;
  - .6 Develop outline specifications for all systems and principle components and equipment proposed for use in the project;
  - .7 Coordinate a multi-disciplinary approach to interior design and commissioning.

### **2.4.3 DELIVERABLES**

- .1 The Consultant shall:
  - .1 Prepare and submit the Design Development Report, for review and acceptance by the Departmental Representative;
    - .1 Refer to the GP&S Document for contents and report content.
  - .2 Provide an outline Specification;
  - .3 Provide a Class "B" cost estimate representing the increased level of design detail now available;
    - .1 Use detailed costs, i.e. measured quantities with minimal allowances or lump sums,
    - .2 Include escalation rates projected through to the implementation of the project,
    - .3 After acceptance, the Class B estimate shall become the updated Construction Cost Plan.
  - .4 Provide a preliminary Commissioning Plan.
  - .5 Provide an updated milestone project schedule including allowances for reviews and approvals for each stage of the project life cycle;
  - .6 Provide an updated report on any deviations that may affect cost or schedule and recommend corrective measures;
  - .7 Provide an updated Project Log.



## **2.5 DETAILED DESIGN SERVICES**

### **2.5.1 GENERAL**

- .1 The objective of this stage is to translate the Design Phase findings into construction drawings and specifications for the purpose of tendering.
- .2 The Consultant must obtain written authorization from the Departmental Representative before proceeding with Construction Documents.
- .3 Prepare one tender package co-ordinated with all disciplines.

### **2.5.2 SCOPE AND ACTIVITIES**

- .1 Create construction documents in accordance with the General Procedures and Standards (GP&S) document:
  - .1 Design according to the budget and schedule;
    - .1 Non-compliances will require revisions to the contract documents.
  - .2 Update the cost estimates;
    - .1 Provide a cost breakdown by unit rate and/or trade for review of bids and comparison with the successful Contractor's cost breakdown.
  - .3 Update the project schedule;
  - .4 Establish a quality control process for the construction and contract administration stage.
- .2 The Consultant shall:
  - .1 Coordinate the work of various disciplines, including scope changes required to remain within budget;
  - .2 In consultation with Departmental Representative, approve construction materials, processes and specifications considering sustainability and commissioning;
  - .3 Apply a process of continuing cost control, with increasing level of detail during production of contract/construction documents;
    - .1 At each review, prepare an up-to-date estimate demonstrating compliance with the Construction Cost Plan,
    - .2 Non-compliances will require revisions to the contract documents.
  - .4 Prepare a Class A cost estimate at the 99% phase, using 100% measured quantities;
    - .1 Provide a cost breakdown by trade for review of bids and comparison with the successful Contractor's cost breakdown.
  - .5 Provide written response to PWGSC comments at 50% and 99% completion review stages and integrate comments into final construction documents;
  - .6 Participate in the risk management process;
  - .7 Update Project Log tracking approved major decisions;
  - .8 Update the schedule;
  - .9 Establish quality control process for construction and contract administration phase;
  - .10 Provide commissioning specifications, PI/PV forms, training plans and integrated systems testing; include PI/PV forms within applicable sub-sections of the specifications.

### **2.5.3 DELIVERABLES**

- .1 50% complete Construction Documents.
  - .1 A revised Class "B" Estimate.
  - .2 An updated project schedule.



- .3 Construction Drawings:
  - .1 Architectural and Interior Design:
    - .1 Cover sheet with list of drawings;
    - .2 Floor Plans and reflected ceiling plans;
    - .3 Large scale details drawings;
    - .4 Door schedule, hardware schedule and room finish schedule (schedules are preferred over finish drawings);
    - .5 Wall types;
    - .6 Millwork details;
    - .7 Furniture layouts;
    - .8 Interior elevations.
  - .2 Mechanical:
    - .1 Floor Plans;
    - .2 Identify mechanical equipment in the different areas. Show all major ductwork and piping. Include cross sections of mechanical ductwork and piping in mechanical room and other congested areas. Complete diffuser locations;
    - .3 Identify mechanical components either on schedules shown on drawings, or in specifications;
    - .4 Complete control specifications including sequences of operation of all mechanical, instrumentation and execution. Flow diagrams, system layouts, equipment selections and sizes, floor plan layouts showing major equipment;
    - .5 EMCS network architecture, mechanical control schematics, sequence of operation for each mechanical system, electrical control schematics, and DDC input/output point schedules.
    - .6 Testing, Adjusting & Balancing Plan.
  - .3 Electrical:
    - .1 Floor Plans and single line diagrams;
    - .2 Lighting layout showing circuits, switching information, fixture types;
    - .3 Power and system layout showing circuits and panel locations;
    - .4 Electrical room equipment layouts and communication system layout and diagrams;
    - .5 Light fixture cut sheets.
  - .4 Specifications:
    - .1 Index to specifications (include all sections to be used for 100% completed construction documents);
    - .2 Draft Division 01 including draft Commissioning Sections;
    - .5 All drawings and specifications are to be fully coordinated between all disciplines.
- .2 99% complete Construction Documents, fully coordinated as if ready for tender.
  - .1 This submission incorporates all revisions required by the review of the previous submission.
  - .2 The Consultant shall submit documents to the PWGSC Departmental Representative.
  - .3 Submit the completed pre-tender Commissioning Plan.
  - .4 Submit all the Commissioning component verification sheets, and commissioning system test procedures and Commissioning Integrated System Tests procedures required to be included in the specifications.



- .5 The submittal shall include:
  - .1 A Class "A" Estimate;
  - .2 An updated project schedule;
  - .3 Construction Drawings;
    - .1 Drawings should reflect 99% completeness with a complete design without any incomplete details.
  - .4 Complete Specifications;
    - .1 Specifications should be complete with all sections and thoroughly coordinated with the drawings.
  - .5 Response to PWGSC written comments of previous submittal;
  - .6 Prepare drawing and specification package as directed by the Departmental Representative for review by HRSDC (Federal Fire Commissioner).
- .3 Final (100%) Construction Documents ready for tendering.
  - .1 This submission incorporates all revisions required by the review of the previous submission.
  - .2 The Consultant shall submit documents to the Departmental Representative, local municipality, or any other Authority having jurisdiction.
  - .3 The submittal shall include:
    - .1 Signed and sealed documents;
    - .2 An updated Class 'A' cost estimate;
    - .3 An updated project schedule;
    - .4 Construction Drawings & Specifications;
      - .1 As per the GP&S document.
    - .5 Response to PWGSC written comments of previous submittal;
    - .6 Advise the Departmental Representative of all issues raised by other officials and all Consultants' responses.
  - .4 The Consultant must confirm in writing that:
    - .1 The documents are ready to be issued for tender;
    - .2 The checklist in the GP&S Document has been reviewed in concert with the requirements of the Consultant Agreement; and
    - .3 A full review and coordination of the Contract Documents are complete and in accordance with professional standard of care.

## **2.6 TENDER SERVICES**

### **2.6.1 GENERAL**

- .1 The object of this phase is to support the Departmental Representative with the tender.
- .2 The Contract Authority for this project is the Real Property Contracting branch (RPC) of PWGSC.

### **2.6.2 SCOPE AND ACTIVITIES**

- .1 When requested, the Consultant will be required to:
  - .1 Provide the Departmental Representative with information required by bidders to interpret construction documents;
  - .2 Prepare addenda, in response to all questions within two (2) business days during the bidding period and submit to Departmental Representative;
  - .3 Attend pre-tender site visits;



- .4 If PWGSC decides to re-tender the project, or any specific tender package, provide full services to the Departmental Representative;
- .5 During Bid Review and Analysis, assist the Departmental Representative, as required, by analyzing and reconciling any differences between pre-tender estimates and submitted bids.

## **2.7 CONSTRUCTION SUPPORT SERVICE**

### **2.7.1 GENERAL**

- .1 The object of this phase is to support the Departmental Representative with the construction phase and ensure the quality, budget and schedule of the project.

### **2.7.2 SCOPE AND ACTIVITIES**

- .1 The Consultant shall:
  - .1 Share all project information with PWGSC;
    - .1 All material specifications and test results (where applicable) shall be turned over to the Departmental Representative for future maintenance by PWGSC and others,
    - .2 This service is required for each construction package developed.
  - .2 For General Services:
    - .1 Provide ten (10) copies of reviewed shop drawings;
    - .2 Prepare record drawings and specifications based on Contractor's as-builts;
    - .3 Update Project Log tracking approved major decisions, including those impacting project scope, budget and schedule;
    - .4 Prepare and issue a communications protocol and a shop drawing review protocol in consultation with the Departmental Representative
    - .5 Provide Area Measurement/ Space Usage Report.
  - .3 For Site Visits:
    - .1 Provide bi-weekly field reviews and as required to fulfil the Consultant's professional obligations to monitor the construction activities throughout the construction period and keep the Departmental Representative informed of work progress;
      - .1 Reject unsatisfactory work,
      - .2 Provide written reports.
  - .4 For Construction & contract administration:
    - .1 Provide Time Management Report, based on Contractor's submissions and on-site performance;
    - .2 Provide additional drawings to clarify, interpret or supplement Construction Documents;
    - .3 Interpret contract documents as required;
    - .4 Assist the Departmental Representative to prepare Certificate of Substantial Completion and provide sign-off;
    - .5 Arrange construction meetings, update Master Schedule, obtain detailed cost breakdown from the contractor, ensure compliance with labour laws and bylaws, , provide construction inspection services, provide clarifications, measure work, provide detail drawings and examine shop drawings, monitor training;
    - .6 Review work at regular intervals to determine conformity with the contract documents and keep Departmental Representative informed of work progress;
    - .7 Review and comment on various documents such as Contractor's Progress Claims and updated schedules;



- .8 Monitor performance of the Contractor;
- .9 Offer timely technical advice time on all disputes and claims between PWGSC and the Contractor;
- .10 Conduct inspections and reject unsatisfactory work;
- .11 Authorize special tests, inspections and minor works that do not impact project cost and schedule;
- .12 Furnish supplemental instructions to the Contractor with reasonable promptness or in accordance with a schedule for such instructions agreed to by PWGSC and the Contractor;
- .13 Determine the amounts owing to the Contractor based on work progress, and certify payments to the Contractor and;
- .14 Provide a Post-Construction Evaluation report.
- .5 Permits:
  - .1 Assist the Contractor and provide required documentation in order to obtain the building permit.
- .6 For cost services:
  - .1 Assist the Construction team with cost management advice, if requested;
  - .2 Evaluate change orders; claims, work completed and cash flow;
  - .3 After issue of contract provide details for evaluating the project's cost performance and;
  - .4 Provide cost reports with updates at the end of each month.
- .7 For Scheduling Services:
  - .1 Report Review contractor's monthly schedule report; report findings and recommendations to the PWGSC for further discussion with the Contractor.
- .8 For Changes to the work:
  - .1 Assist the Departmental Representative to prepare CCN's and COs, to be issued by the Departmental Representative.
- .9 Assist the Departmental Representative to prepare Certificate of Final Completion and provide sign-off.

## **2.8 COMMISSIONING SERVICE**

### **2.8.1 GENERAL**

- .1 The purpose of the Commissioning Service is to ensure that a fully functioning project is delivered to the Client.

### **2.8.2 SCOPE AND SERVICES**

- .1 Integrated and comprehensive commissioning for the project in accordance with the requirements in the GP&S document,
- .2 The project will be accepted and the Certificate of Substantial Completion will be issued only after:
  - .1 Successful completion of integrated systems tests, life safety support systems tests and after meeting all requirements of the authority having jurisdiction;
  - .2 All test certificates, commissioning reports and commissioning documentation have been approved by the Departmental Representative.
- .3 During the Construction Phase:
  - .1 Monitor and report on contract commissioning activities;
  - .2 Review and certify verification sheets as they are completed by the contractor;





- .3 Review commissioning schedule;
- .4 Witness all component, system and integrated systems tests;
- .5 Review and comment on commissioning test results;
- .6 Provide advice and recommendations for fine tuning;
- .7 Finalize the Design Intent Report and Client / Users O&M Manual to reflect as-commissioned operation and maintenance of each system.

### **2.8.3 DELIVERABLES**

- .1 Commissioning Plan,
- .2 Commissioning Specifications in Division 01,
- .3 CV Sheets to be executed by the Contractor,
- .4 PVT Sheets to be executed by the Contractor,
- .5 Reviewed and Accepted Commissioning (Evaluation) Report.

## **2.9 POST CONSTRUCTION SERVICE**

### **2.9.1 GENERAL**

- .1 The purpose of this phase is to support the Departmental Representative in obtaining all final documents required for project close out.

### **2.9.2 SCOPE AND ACTIVITIES**

- .1 Project Close-out Services:
  - .1 Revise documentation to reflect all changes, revisions and adjustments after completion of commissioning;
  - .2 Prepare record drawings (AutoCAD format as per GP&S requirements) and specifications based on Contractor's as-builts;
  - .3 Prepare and submit Final Certificate of Completion and final records;
  - .4 Review the Operations and Maintenance Manual;
  - .5 Review the integrated Commissioning Manual;
  - .6 Participate in Lessons Learned workshops if requested.
- .2 Warranty Services:
  - .1 Monitor and certify rectification of deficiencies before expiry of warranties;
  - .2 Monitor environmental and life safety system checks to be carried out by Contractor/O&M staff before expiration of warranties;
  - .3 Sign off on the Final Completion of the construction contract;
  - .4 Participate in warranty inspections with Departmental Representative and Contractor;
  - .5 Provide warranty deficiency list;
  - .6 Provide Final Warranty Review report.

### **2.9.3 DELIVERABLES**

- .1 Warranty Deficiency List,
- .2 Final Certificate,
- .3 As-Built and Record Drawings and As-Built Specifications,
- .4 Comments to O&M Manual,
- .5 Signed final Commissioning Manual,
- .6 Sign-off on Warranty.



## **3 PROJECT ADMINISTRATION**

### **3.1 GENERAL REQUIREMENTS**

#### **3.1.1 PWGSC PROCEDURES AND STANDARDS**

- .1 In addition to adhering to the general project administration requirements contained in section 2 of the GP&S document, the Consultant shall comply with the project specific requirements in this section.

#### **3.1.2 LANGUAGE**

- .1 No variation.

#### **3.1.3 MEDIA**

- .1 No variation.

#### **3.1.4 PROJECT MANAGEMENT**

- .1 No variation.

#### **3.1.5 LINES OF COMMUNICATION**

- .1 No variation.

#### **3.1.6 MEETINGS**

- .1 Design Phase:
  - .1 Weekly meetings with PWGSC and the Consultant team will normally be held in the Winnipeg offices of PWGSC or via teleconference.
- .2 Construction Phase:
  - .1 Bi-Weekly meetings with PWGSC, the Consultant team and the Contractor will normally be held at the construction sites for the duration of the project and as required.

#### **3.1.7 CONSULTANT RESPONSIBILITIES**

- .1 No variation.

#### **3.1.8 PWGSC RESPONSIBILITIES**

- .1 No variation.

#### **3.1.9 USER DEPARTMENT RESPONSIBILITIES**

- .1 No variation.

#### **3.1.10 REVIEW AND APPROVAL BY PROVINCIAL AND MUNICIPAL AUTHORITIES**

- .1 No variation.

#### **3.1.11 BUILDING PERMITS AND OCCUPANCY PERMITS**

- .1 No variation.

#### **3.1.12 TECHNICAL AND FUNCTIONAL REVIEWS**

- .1 No variation.



## **4 APPENDIX A**

### **4.1 SCHEMATIC DESIGN**