



Architectural & Engineering Services **TERMS OF REFERENCE**

Alvin Hamilton Building Restack

For:

**Employment and Social
Development Canada (ESDC);
Environment Canada (EC);
Health Canada and Public Health
Agency of Canada (HC and PHAC)**

**Alvin Hamilton Building
Regina, Saskatchewan**

September 25, 2015



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1 PROJECT DESCRIPTION

1.1 GENERAL

1.1.1 PURPOSE OF TERMS OF REFERENCE (TOR)

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

1.1.2 THE PWGSC GENERAL PROCEDURES AND STANDARDS DOCUMENT (GP&S)

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

1.1.3 PROJECT INFORMATION

- .1 This fit-up project is comprised of approximately 7,050 m²u general office and special purpose space on eleven (11) floors of the Alvin Hamilton Building (AHB) for five (5) Government of Canada departments. The four departments are grouped into three (3) separate tenancies as described in this TOR.

Project Information	
Project Title:	Alvin Hamilton Building Restack
Project Address:	Alvin Hamilton Building 1783 Hamilton Street Regina, Saskatchewan
PWGSC Project Numbers:	R.068737 (ESDC); R.067157 (EC); R.067241 (HC/PHAC)

1.2 BACKGROUND INFORMATION

1.2.1 USER DEPARTMENT NEEDS

- .1 The User Departments are currently over accommodated and need to reduce their operating costs with a reduction in leased area based upon current Government of Canada Workplace 2.0 Fit-Up Standards. The space required to meet the future needs of the User Departments identified in this TOR is available in the Crown owned Alvin Hamilton Building.
- .2 The Alvin Hamilton Building (AHB) space will also permit consolidation of operations for some of the User Departments.

1.2.2 USER DEPARTMENTS

- .1 The User Departments referred to throughout the TOR include:
 - .1 Employment and Social Development Canada (ESDC);
 - .1 ESDC is a single integrated department with three main business lines: Employment and Social Development Canada; Labour Program and Service Canada Centres. These business lines impact all aspects of Canadian's lives by administering the programs and supporting 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.

.1 A Service Canada Centre is not included in this project.

.2 Environment Canada (EC);

.1 EC's responsibilities include protecting the environment, conserving the country's natural heritage and providing weather and meteorological information to keep Canadians informed and safe,

.2 EC is a diverse organization where their programs, services and people lead the way in implementing the Government of Canada's environmental agenda. EC collaborates with partners at home and abroad to realize concrete progress on initiatives that will protect the health of their people and their planet.

.3 Health Canada (HC);

.1 Health Canada is responsible for helping the people of Canada maintain and improve their health. They are committed to improving the lives of all of Canada's people and to making this country's population among the healthiest in the world as measured by longevity, lifestyle and effective use of the public health care system. HC supports research and fosters partnerships with researchers across the country and the world. They also work collaboratively with the provinces and territories to test ways in which the Canadian health care system can be improved and ensure sustainability for the future,

.2 The HC office in Regina is actively involved in the support and the delivery of public health and health services on-reserve and in Inuit communities. HC also provides primary care services on-reserve in remote and isolated areas where there are no provincial services readily available.

.4 Public Health Agency of Canada (PHAC);

.1 PHAC mandate is to promote and protect the health of Canadians through leadership, partnership, innovation and action in public health. The role of PHAC is to:

.1 Promote health;

.2 Prevent and control chronic diseases and injuries;

.3 Prevent and control infectious diseases;

.4 Prepare for and respond to public health emergencies;

.5 Serve as a central point for sharing Canada's expertise with the rest of the world;

.6 Apply international research and development to Canada's public health programs; and

.7 Strengthen intergovernmental collaboration on public health and facilitate national approaches to public health policy and planning.

.2 HC and PHAC will share one tenancy.

1.2.3 EXISTING CONDITIONS

.1 The Alvin Hamilton Building (AHB) office building is owned by the Government of Canada.

.2 The AHB is 10 storeys with a mechanical penthouse and one below grade concourse / basement level. The total rentable area is approximately 19,000 m².

.3 All floors except the mechanical penthouse are renovated for this fit-up project:



- .1 The existing main through 10th floors and portions of the basement are currently fit up as office space. A portion of the basement is currently fit-up as commercial kitchen/cafeteria space and will be targeted for refit as laboratory space;
- .2 ESDC is currently located on the basement, main, 2nd, 3rd, 4th, 5th, 6th, 7th, and 10th floors;
- .3 EC is currently located in leased space at 2365 Albert Street, Regina. The lease expiry is September 30, 2017;
- .4 HC/PHAC is currently located in leased space at 2045 Broad Street, Regina. The least expiry is March 31, 2018;
- .5 The Canada Revenue Agency (CRA) currently occupy space on the basement, 2nd, 8th and 9th floors at AHB. A separate project is underway to relocate CRA in advance of the planned construction for this project.
- .4 The most recent Building Performance Report (BPR) for the Alvin Hamilton Building provided by the Asset and Facility Management group was conducted on June 24, 2014 and indicates an overall satisfactory performance rating.

1.2.4 CONSTRAINTS AND CHALLENGES

- .1 The Consultant will be required to become familiar with the project site and obtain local information as required.
- .2 All site visits must be arranged through the Departmental Representative.
- .3 The construction on the project site will be performed during the full operation of the facilities. Project phasing must be planned to ensure that disruption to the daily operation of the facilities is kept to a minimum.
- .4 Environmental conditions must be kept under control during all phases of the work.
- .5 The project scope must be tailored to meet the User Department's budget. Diligent cost estimating and cost control is required.
- .6 Due to limited area available for swing space in the Alvin Hamilton building careful construction phasing of the Alvin Hamilton building will be required.
 - .1 Swing space is only required for the ESDC project, and will be space internal to ESDC in the building;
 - .2 Construction phasing is required to meet all in-service dates.
- .7 Scheduled completion dates must be met. In-service dates are scheduled in three stages:
 - .1 October 1, 2018 (ESDC);
 - .2 October 1, 2017 (EC);
 - .3 April 1, 2018 (HC, PHAC);
 - .4 The in-service dates on the milestone schedule in Appendix B are shown as December 8, 2017 for EC and May 18, 2018 for HC/PHAC. The consultant will be required to bring the schedule back in line with the in-service dates listed above.
- .8 An inventory of existing equipment and furniture for re-use must be completed by the Consultant in the Pre-Design phase.
- .9 Long lead time items:
 - .1 Office furniture and equipment components procured using Consolidated Procurement Instruments (CPI).
- .10 Construction on the 4th 5th and 6th floors for HC/PHAC and 10th floor for EC fit-up cannot begin until ESDC is relocated from these floors.



- .11 A delay in the current CRA project may delay new construction on the 2nd, 8th and 9th floors.

1.2.5 PROJECT DELIVERY APPROACH

- .1 This project will use a traditional design-bid-build approach.
- .2 It is anticipated that three (3) tender packages will be required for this project:
 - .1 Fit-Up for all User Departments;
 - .2 EC furniture components;
 - .3 HC/PHAC furniture components.
- .3 There will be multiple sub-packages required for each of the furniture component packages.
- .4 The Consultant shall prepare each tender package and ensure full co-ordination of the work of all disciplines.

1.3 SUMMARY OF DESIGN WORK

1.3.1 FIT-UP WORK

- .1 Fit-up for this project includes all floors with the exception of the mechanical penthouse.
- .2 General accommodation breakdown of Fit-up Work (refer also to Appendix A for detailed breakdown):
 - .1 ESDC (2,992 m²u):
 - .1 New AHB Location – Basement, Main, 2nd, 3rd, and 4th floors;
 - .2 Number of employees - Full Time Equivalents (FTEs), 159;
 - .3 Basic Office Space, 2,574 m²u;
 - .1 Includes 485.5 m²u of required support space for a recently completed ESDC call centre (December, 2014). The call centre was fit-up with the understanding that this space would be available in the near future.
 - .4 Special Purpose Space (SPS), 418 m²u;
 - .5 ESDC space required for this project includes the following sub-groups:
 - .1 Human Resource Services Branch,
 - .2 Integrity Services Branch,
 - .3 Labour Market,
 - .4 Social Development Program,
 - .5 Chief Financial Officer Branch,
 - .6 Processing and Payment Services Branch,
 - .7 IITB staff,
 - .8 College staff,
 - .9 Labour Program,
 - .10 Citizen Services,
 - .11 Program Delivery Branch,
 - .12 Call Centre (support space).
 - .6 Other Special Requirements;
 - .1 Enhanced cooling in dedicated LAN room,
 - .2 Security system and card reader access and specialized fit-up of the SPS Evidence and Secure Storage rooms
- .2 EC (1248m²u):
 - .1 New AHB Location – Basement, 9th and 10th floors;



- .2 Number of employees - Full Time Equivalents (FTEs), 69;
- .3 Basic Office Space, 948 m²u;
- .4 Special Purpose Space (SPS), 300 m²u;
 - .1 SPS space includes laboratory space.
- .5 EC space required for this project includes the following sub-groups;
 - .1 Strategic Policy and Regional Directors General Offices,
 - .2 Enforcement Branch,
 - .3 Meteorological Service of Canada,
 - .4 Environmental Stewardship Branch,
 - .5 Corporate Services Branch,
 - .6 Science and Technology Branch.
- .6 Other Special Requirements;
 - .1 Enhanced floor loading capacity for file room,
 - .2 Storage for dangerous goods (i.e. weapons and chemicals),
 - .3 Separate HVAC, climate control and ventilation required in designated areas,
 - .4 Security system and card reader access.
 - .5 Laboratory;
 - .1 Meteorological Service S/R and Workshop - testing and assessment of field instrumentation and for shipping and receiving of equipment,
 - .2 Enforcement Evidence Room – Chemicals: store documents that have been obtained by a search warrant and are considered evidence; store chemical/sample evidence or dangerous goods for short term until they can be transported to a laboratory for analysis,
 - .3 Enforcement Secure Wet Lab/S&T Wet Lab/Organics Handling Lab - clean and sanitize analytical equipment, calibrate instruments and equipment, prepare and analyze samples, fume hood, storage of hazardous chemicals used as cleaners, standards and preservatives for legal samples, legal sampling equipment, preparation and handling or liquid reagents used in the preparation of biological media,
 - .4 S&T Biological Lab - handling and preparation of biological samples complete with fume hood,
 - .5 S&T Shipping/Receiving/Pure Water Lab - staging, shipping and receiving of samples and equipment complete with fume hood,
 - .6 S&T Clean Bottles/Containers Lab - contaminant free storage,
 - .7 S&T Northern WQ Programs/Oil Sands WQ Program Prep Lab - storage of chemicals, preparation for field trips, contaminant free environment, water quality reagents prepared for transport into the field, cleaning and preparing equipment using chemicals and including fume hood, meter calibration, bacteriological analysis, biological specimens processed and storage, aqueous samples processed and stored, chemicals, samples, equipment received and shipped,
 - .8 S&T Contamination Free Sample Equipment Storage - contamination free storage for glass containers, sample vessels, sampling equipment, biological sample storage, biological equipment storage.
- .3 HC and PHAC (2809m²u):
 - .1 New AHB Location – Basement, 4th, 5th, 6th, and 8th floors;



- .2 Number of employees - Full Time Equivalents (FTEs), 185;
 - .1 HC = 174 FTEs,
 - .2 PHAC = 11 FTEs.
- .3 Basic Office Space, 2,413 m²u;
- .4 Special Purpose Space (SPS), 396 m²u;
- .5 HC space required for this project includes the following sub-groups;
 - .1 Communications and Public Affairs Branch,
 - .2 e-Health,
 - .3 Facilities,
 - .4 Financial Management Advisory Services,
 - .5 Health Funding Arrangements Team,
 - .6 Health Promotion and Disease Prevention,
 - .7 Health Protection Division,
 - .8 Human Resources,
 - .9 Informatics,
 - .10 Information Management,
 - .11 Medical Health Officers,
 - .12 Non-Insured Health Benefits,
 - .13 PCP Compliance and Enforcement,
 - .14 Policy, Planning, Partnerships,
 - .15 Primary Care and Clinical Services,
 - .16 First Nations and Inuit Health Branch,
 - .17 Regional Executive's Office,
 - .18 Security and Corporate Services Branch,
 - .19 TCP Compliance and Enforcement,
 - .20 Horizontal Liaison Division.
- .6 PHAC space required for this project includes the following sub-groups;
 - .1 Provincial Manager,
 - .2 Program Consultants,
 - .3 Administrative Assistant,
 - .4 Evaluation Consultant,
 - .5 Regional Surveillance Analyst.
- .7 Other Special Requirements;
 - .1 Enhanced floor loading capacity for Central Records room,
 - .2 Storage for dangerous goods (i.e. pesticides),
 - .3 Security system and card reader access.
 - .4 Laboratory requirements:
 - .1 Environmental Health Lab: for sample preparation and storage of testing equipment, testing of food, water, air, mould, radon, pests.
 - .2 Pesticide Lab: used for sensitive legal files, store plant tissue samples for residue analysis, sample preparation and storage of pesticides
 - .3 Immunization Medical Room: for immunizations, clinical exams and fit-to-work interviews.
 - .4 Hearing and Vision Testing Room: for clinical testing of eyes and hearing including hearing booth.



- .3 Fit-up Work mandatory standards to Government of Canada Workplace 2.0 Fit-up Standards.
 - .1 ESDC space to also meet ESDC Interior Design Standards.
 - .2 A hard and/or electronic copy will be provided by the Departmental Representative.

1.4 OBJECTIVES

1.4.1 GENERAL GOALS

- .1 Achieve an efficient, enduring, sustainable and economically viable fit-up, appropriate for its use, through leadership and integration of innovation and technical excellence in the course of the life cycle for the new construction. Meet (at minimum) the following design objectives:
 - .1 Meet or exceed the requirements of the National Building Code (2010);
 - .2 At minimum, the scheduled completion dates must be met to achieve the Deficit Reduction Action Plan (DRAP) space release targets.
 - .3 Fully integrate all components and systems including architectural, mechanical, electrical, IT and security design;
 - .4 Provide an integrated design and construction process involving:
 - .1 Interdisciplinary collaboration, including all stakeholders as may be identified, design professionals, constructors and authorities having jurisdiction,
 - .2 Agreed upon design principles and decision making protocols.
 - .5 Enable a healthy, safe, positive and vibrant workplace for employees to advance wellbeing and productivity through the provision of good air quality, a balance of natural and artificial lighting, acoustic control, sufficient space requirements and efficient building systems;
 - .6 Ensure conformance with appropriate fire protection measures and life safety requirements to assure a feeling of safety and security among building occupants at all times;
 - .7 Review trends and identify, through benchmarking, requirements necessary to provide creative, functional and cost effective fit-up solutions;
 - .8 Integrate innovative universal design and accessibility to enable inclusiveness and non-discrimination;
 - .9 Ensure sustainability through flexible solutions that address the PWGSC's changing needs and potential future uses of the building;
 - .10 Ensure a consistent level of service is provided to meet each User Department's unique needs and goals;
 - .11 Achieve design excellence that will be recognized by the architectural and/or interior design and engineering industry.

1.4.2 FUNCTIONAL REQUIREMENTS

- .1 On the basis of the Departmental Representative's information and the space summaries in Appendix A of this TOR, the Consultant will meet with the User Departments to further develop functional requirements.

1.4.3 ENVIRONMENTAL/SUSTAINABLE DEVELOPMENT

- .1 Use sustainable design principles to achieve a minimum building performance rating of LEED® Silver.
- .2 The Consultant must apply for a LEED® certification and follow the LEED® certification process throughout the project.

1.4.4 PROJECT DELIVERY



- .1 Deliver the project within the construction budget established during preliminary project approval.
- .2 Deliver the project within the key milestones in this TOR.
- .3 Ensure that each Consultant team member understands the project requirements for seamless delivery of the required services.
- .4 All submissions (including construction documents) must distinguish between the three tenancies with separate sections in reports/drawings/documents:
 - .1 ESDC;
 - .2 EC;
 - .3 HC/PHAC.
- .5 Ensure co-ordination of services with other consultants hired by PWGSC including (but not limited to):
 - .1 Shared Services Canada (information technology and telephone installations);
 - .2 Furniture installers;
 - .3 Professional movers.
- .6 Provide a quality management plan that includes rigorous quality reviews performed in-house by the Consultant Team such that submissions are fully complete and coordinated.
- .7 Provide a continuous risk management program addressing the risks associated specifically with this project.

1.5 SUMMARY OF SERVICES AND QUALIFICATIONS

1.5.1 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 (NCIDQ certified);
 - .1 Prime Consultant,
 - .2 Project management of the consultant team,
 - .3 LEED Accredited specializing in Interior Design.
 - .2 Professional Engineering Services;
 - .1 Mechanical Engineering,
 - .2 Electrical Engineering,
 - .3 Commissioning specialist;
 - .1 Independent from the mechanical and electrical engineers above to conduct the work as described in this TOR.
 - .4 Cost Estimating specialist;
 - .1 Independent cost estimator certified by the Canadian Institute of Quantity Surveyors.
 - .5 Laboratory Design specialist.



1.6 SCHEDULE

1.6.1 GENERAL

- .1 Deliver the project to be ready for occupancy in accordance with the in-service dates listed in 1.2.4.7.
- .2 Completion dates shown are relative to an assumed start date of January 11, 2016.
- .3 Prepare a Master Project Schedule in accordance with the PWGSC Milestone Schedule in Appendix B.

1.7 COST

1.7.1 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.

1.7.2 ESTIMATED CONSTRUCTION COST

- .1 The total estimated construction cost (excluding GST), is anticipated at this time to be seven-million-one-hundred-sixty-thousand dollars (\$7,160,000). The total cost may be allocated as follows:
 - .1 ESDC \$2,326,000;
 - .2 EC \$1,793,000;
 - .3 HC, PHAC, \$3,041,000.

1.8 EXISTING DOCUMENTATION

1.8.1 AVAILABLE FOR THE CONSULTANT

- .1 Limited as-built drawings and Operation & Maintenance Manuals will be available at the start of the Pre-Design phase. The Consultant will be responsible for verifying the accuracy of the information incorporated into the design.
- .2 Building drawings in AutoCAD (dwg) format.
 - .1 The drawings will require modifications by the Consultant.
 - .2 The drawings will require the Consultant's verification of all critical dimensions and features pertaining to the fit-up.
- .3 ESDC Interior Design Standards.
- .4 Functional program questionnaires (see Appendix C for sample).

1.8.2 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.

1.9 CODES, ACTS, STANDARDS, REGULATIONS

1.9.1 GENERAL

- .1 A listing of Codes, Acts, Standards and Guidelines potentially applicable to this project are contained in the GP&S Document. In addition the following standards also apply to this project:
 - .1 Commissioning (Cx) to comply with CAN/CSA Standards Z320-11.
 - .2 Accessible Design for the Built Environment – CSA B651-12;
 - .3 Government of Canada Workplace 2.0 Fit-Up Standards;
 - .4 ESDC Interior Design Standards (July, 2014, v1.0.0);



- .2 The Authorities Having Jurisdiction (AHJ) on this project are:
 - .1 The local AHJs;
 - .2 Treasury Board of Canada.
- .3 The Consultant must identify, analyse 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.
 - .4 The Consultant team must fully incorporate the Commissioning Processes and Procedures using the acceptable standard but not limited to CSA Z320-11 and ASHRAE Guideline 0-2005.



2 REQUIRED SERVICES

2.1 GENERAL REQUIREMENTS

2.1.1 SERVICES

- .1 Commissioning Service.
- .2 Cost Estimating Service.
- .3 Office Furniture Support Service (OFSS).
- .4 Pre-Design Service including:
 - .1 Functional Requirement Development.
- .5 Schematic Design Service.
- .6 Design Development Service.
- .7 Construction Document Service:
 - .1 Provide construction documents for review at 33%, 66% and 99% (tender ready) completion stages.
- .8 Tender Services - to assist the Departmental Representative.
- .9 Construction Support Service.
- .10 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 PWGSC REVIEWS, APPROVALS AND PRESENTATIONS

- .1 Project delivery team approval includes both the PWGSC Architectural & Engineering Centre of Expertise (A&ECoE) reviews and User Department approval:
 - .1 The purpose of this review is technical quality assurance (including fire protection, health and life safety);
 - .2 The purpose of these reviews is to ascertain for PWGSC that the Consultant has reasonably fulfilled the objectives of this project;
 - .3 PWGSC will not provide solutions, detailed comments and/or coordination for the Consultant;
 - .4 Work that does not meet the objectives of the project will be rejected, rejected work will require further design (including re-design), coordination and documentation at the Consultant's expense;
 - .5 Quality assurance for the project design and documentation remains the responsibility of the Consultant;
 - .6 Submissions will be reviewed at the pre-design phase, schematic design phase, development phase and construction documents phases (33%, 66% and 99% complete);
 - .7 Expected turnaround time is 2 weeks;
 - .8 Submission requirements;
 - .1 One (1) electronic PDF copy on CD or DVD,
 - .2 Written reports and specifications – 8 ½" x 11".
 - .3 6 hard copies,
 - .4 Additional follow-up submissions as required.



2.2.3 PROVINCIAL, TERRITORIAL AND MUNICIPAL AUTHORITIES

- .1 The federal government generally defers to provincial and 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 for a building permit;
 - .2 Submit documents in formats such as reports, drawings, specifications or other formats as required by the Municipal authority;
 - .3 Submission will be reviewed for building permit at 99% completion of the construction documents;
 - .4 For each review provide one submission (i.e. electronic copies of documents in pdf format) plus any follow-up submissions.

2.3 COMMISSIONING SERVICE

2.3.1 GENERAL

- .1 The purpose of the Commissioning Service is to ensure that a fully functioning project is delivered to the Client.
- .2 Commissioning (Cx) is an integral part of the Consultants' required services and therefore, required activities and deliverables are listed within each project phase service.
- .3 Provide Commissioning Service on the basis of CSA Z320-11, Canadian Standards Association Building Commissioning Standard.

2.4 COST ESTIMATING SERVICE

2.4.1 GENERAL

- .1 In addition to the cost management requirements of the GP&S document provide breakdown cost estimates as per the following funding accountabilities (refer also to the Government of Canada Workplace 2.0 Fit-Up Standards, article A3.3):
 - .1 Base Building (PWGSC funded);
 - .1 ESDC,
 - .2 EC,
 - .3 HC/PHAC.
 - .2 Fit-Up (PWGSC funded);
 - .1 ESDC,
 - .2 EC,
 - .3 HC,
 - .4 PHAC.
 - .3 Other Fit-Up (User Department funded);
 - .1 ESDC,
 - .2 EC,
 - .3 HC,
 - .4 PHAC.
- .4 Consultant billing and construction bidding will also follow the breakdown cost estimates as described above.
- .5 Cost estimates, consultant billing and construction bidding are also required to be broken down by fiscal year (i.e. April 1-March 31).



2.5 OFFICE FURNITURE SUPPORT SERVICE

2.5.1 GENERAL

- .1 Provide Office Furniture Support Services (OFSS) from project inception to close-out. These services are focused on the furniture and equipment required to ensure that the finished project is ready for use by the occupant.
- .2 ESDC will be responsible for providing the design, layouts and procurement of their furniture. The consultant will be responsible for inventory & tagging of existing ESDC furniture and equipment for the purposes of move management and coordination of tie-in of power/voice/data into the new panel systems furniture.
- .3 PWGSC will procure new furniture components for HC/PHAC and EC using a competitive bid process. Components will include:
 - .1 Federal Government Consolidated Procurement Instruments (CPI) to purchase furniture components and installation (goods and services) listed within the CPIs and procured by a select tender.

2.5.2 SCOPE AND ACTIVITIES

- .1 OFSS during Pre-Design Services:
 - .1 Discuss and confirm with the Departmental Representative quality, scope, costs, furniture procurement strategy and schedule associated with;
 - .1 Roles and responsibilities within the PWGSC furniture procurement models,
 - .2 Lines of communication,
 - .3 Project specific Furniture Procurement Strategy.
 - .2 Review PWGSC furniture and equipment procurement tools and methods as provided by the Departmental Representative;
 - .1 Request clarification as required.
 - .3 Provide an assessment of existing furniture (excludes ESDC);
 - .4 Provide an inventory of existing furniture and equipment to be used for this project.
 - .5 Provide a cost-benefits analysis (excludes ESDC).
- .2 OFSS during Schematic Design and Design Development Services:
 - .1 Develop and update the furniture and equipment plan with;
 - .1 Improvements Design submissions,
 - .2 Selected Design Option,
 - .3 Furniture Procurement Strategy (excludes ESDC).
 - .2 Coordinate with required disciplines to ensure that all building systems are incorporated into office furniture plans to support the design and program requirements.
 - .3 As per the Furniture Procurement Strategy;
 - .1 Identify commodities to be procured using the Consolidated Procurement Instruments (CPI).
 - .4 Tag and track furniture and equipment items to be reused and/or surpluses.
 - .5 Develop and update the itemized Furniture Procurement Schedules coordinated with the approved design option and the PWGSC Furniture Procurement Strategy;
 - .6 During the procurement periods and pre-awards provide advice and timely responses / clarifications to the manufacturer(s)' queries as requested by the Departmental Representative;



- .7 Participate on evaluation board for furniture manufacturers' bid submission(s) for furniture commodity package(s).
- .3 OFSS during Construction Document Services:
 - .1 Coordinate with required disciplines to ensure that all building systems are incorporated into office furniture as necessary;
 - .2 Coordinate with the Departmental Representative and User Department in the selection of furniture colours and finishes upon award of contract(s). Furniture colours and finishes must coordinate with the overall colour scheme of the project;
 - .3 Review supplier shop drawings / installation drawings;
 - .4 Prepare and provide staging and/or installation area as per the Departmental Representative schedule;
 - .5 Provide Move-In management services;
 - .6 Provide periodic field services to review installation and deficiencies and assist the Departmental Representative with administration services;
 - .7 Confirm elevator size and capacity and availability;
 - .8 Run ventilation system 24 hours a day until off gassing is no longer detected prior to in-service date.
- .4 In addition to those meetings associated with the general project delivery and coordination:
 - .1 Arrange and provide minutes for two (2) furniture focused meetings in Regina as scheduled by the Departmental Representative.
 - .1 Meeting #1 – EC.
 - .2 Meeting #2 – HC/PHAC.
 - .3 ESDC will provide schematic floor plans and furniture and equipment plans.

2.5.3 DELIVERABLES

- .1 OFSS with all Pre-Design Service Submissions:
 - .1 Inventory of existing furniture and equipment for re-use or surplus;
 - .2 Furniture assessment (excludes ESDC);
 - .3 Cost-benefit analysis;
 - .4 Review the appropriateness to the Furniture Procurement Strategy with input from the Departmental Representative, PWGSC Architecture and Engineering Centre of Expertise and PWGSC Acquisitions Representatives;
 - .5 Preliminary list of separate commodity packages that must be prepared to support the PWGSC Furniture Procurement Strategy based upon the existing furniture inventory, assessment, cost-benefit analysis and as per requirements of the CPI's.
- .2 OFSS with all Schematic Design, Design Development Services and Furniture Procurement submissions as per approved project delivery schedule. Prepare generic furniture plans as described in the Government of Canada Workplace 2.0 Fit-up Standards that include:
 - .1 Systems furniture components, loose furniture commodities and accessories to support the design;
 - .2 Critical installation dimensions;
 - .3 Accessories and lighting components to be supported from the panels;
 - .1 Identify these components on interior elevations or on isometric views of typical workstation types;



- .4 Coordinate and identify all power, telecommunications and any other infrastructure connection locations within the project;
- .5 Furniture Schedule of;
 - .1 Furniture components for re-use and surplus to support the Departmental Representative's approved Design and swing space,
 - .2 Based upon the approved Furniture Procurement Strategy include,
 - .1 Tagging and tracking of furniture and equipment to be re-used and/or surpluses based upon the selected Design,
 - .2 Incorporate all furniture and equipment items to be reused into drawings,
 - .1 Differentiate between furniture and equipment items to be reused from new furniture & equipment items.
 - .3 Updated list of all separate commodity packages as per CPI requirements.
- .3 Provide 100% Office Furniture Tender Package(s) no later than the 66% Construction Document Submission:
 - .1 Prepare separate tender and installation documents for each CPI furniture commodity including, but not limited to;
 - .1 Commodity descriptor(s),
 - .2 Commodity schedule(s),
 - .3 Commodity drawing(s).
 - .2 Master furniture schedule incorporating all commodity packages;
 - .3 Class C furniture cost estimates.
- .4 OFSS during Construction Document Services through to Post Occupancy:
 - .1 Office furniture and accessory finish sample board to coordinate with the fit-up design finish selections for approval by the Departmental Representative and the User Department;
 - .2 Office furniture and accessories Finish Schedule;
 - .3 Reviewed Shop Drawings and Installation Drawings;
 - .4 Confirmation listing identifying that all power, telecommunications and any other affected building infrastructure is connected as required to the commodity components;
 - .5 Move-in plan and schedule;
 - .6 Provision of packaging waste collection and disposal facilities;
 - .7 Deficiency and final acceptance lists for each commodity installation.

2.6 PRE-DESIGN SERVICE

2.6.1 GENERAL

- .1 The Consultant Team will:
 - .1 Meet with representatives of the User Departments to confirm and document functional requirements;
 - .2 Review and analyse all available project information, consult with the Departmental Representative and deliver a comprehensive Pre-Design Report including functional requirements.
- .2 The Pre-Design Report will consolidate the Scope of the design and will be utilized as the benchmark project control document to monitor progress of the project.



2.6.2 SCOPE AND ACTIVITIES

- .1 The Consultant shall:
 - .1 Confirm and document project specific Objectives and Goals outlined in this TOR with the User Department.
 - .2 Visit the project site, analyse existing conditions, document any conditions that will impact project delivery and design;
 - .3 Review all existing reports, documents and material related to the project, including the requirements identified in this TOR;
 - .4 Review information available on existing facilities including:
 - .1 Interior construction and finishes, etc.,
 - .2 Services (including plumbing, HVAC, fire protection, electrical, telecommunications, building automation, etc.),
 - .3 Equipment and furnishings.
 - .5 Analyse all the program information and project requirements to identify any conflicts or potential additional work and indicate the impact on project scope, schedule and costs;
 - .6 Develop a preliminary Building Code Analysis based on the applicable codes, regulations and standards;
 - .1 Applicable Codes, Standards and Regulations,
 - .2 Compliance and non-compliance concerns,
 - .3 Strategy for dealing with non-compliant aspects of the work.
 - .7 Establish the sustainability targets based on LEED® Silver requirements;
 - .8 Analyse requirements for Information Services, Multi-media and Security to confirm design standards;
 - .1 Specifications for requirements will be provided by Shared Services Canada (SSC) and the User Departments.
 - .9 Identify all additional information that will be required to deliver the project;
 - .10 Identify all authorities having jurisdiction (AHJ) over the project and applicable codes, regulations and standards that apply;
 - .11 Report on adjustments required to the budget, risk analysis and schedule, including allowances for reviews and approvals for each stage of the project life cycle.
 - .12 Initiate the Commissioning process;
 - .1 Define the Commissioning Team (including roles and responsibilities) for all project phases,
 - .2 Review project objectives and functional requirements to outline a preliminary commissioning scope,
 - .3 Develop a draft Commissioning (Cx) Plan as per CSA Z320-11 to incorporate who, what, when, where and how and the Owner Project Requirement based upon the functional requirements document.
 - .4 Establish and develop a draft commissioning cost estimate for all component(s), system(s) and integrated system(s) within the context of each discipline.

2.6.3 FUNCTIONAL REQUIREMENTS SCOPE AND ACTIVITIES

- .1 Review the space requirement summaries included in Appendix A of this TOR.
- .2 Meet with the Departmental Representative and each User Department to confirm programmatic and operational requirements.



- .1 Develop and document for User Department approval the relationship and adjacencies of all functional areas.
- .3 Collaborate with the identified lead User Department representatives and Departmental Representative to identify and define the following required operational and service infrastructure:
 - .1 Required special conditions to support the project program;
 - .2 Security, acoustic and special fire separation requirements;
 - .3 Potential occupational health and safety requirements;
 - .4 IT requirements;
 - .1 Shared Services Canada (SSC) will provide IT specifications.
 - .5 Major equipment and millwork requirements for each functional space;
 - .6 Storage requirements including size, locations and furnishings / equipment.
- .4 Prepare a preliminary building code analysis.
 - .1 Include with the Pre-Design report.

2.6.4 FUNCTIONAL REQUIREMENT MEETINGS

- .1 Arrange and facilitate three (3) design meetings in Regina shortly after appointment of the Consultant Team;
 - .1 Participate in a site tour to understand the occupancy and operational requirements, office support areas, Special Purpose Space needs and layouts, project related requirements.
- .2 Arrange and facilitate follow up sessions during Pre-Design Functional Requirement Services as required.

2.6.5 DELIVERABLES

- .1 The Consultant shall prepare and submit a Pre-Design Report encompassing the project scope, all related investigations and analyses, along with the specific deliverables noted below, for review and acceptance by the Departmental Representative:
 - .1 Provide clear separation of User Department specific requirements and goals within the report (i.e. ESDC, EC and HC/PHAC);
 - .2 Refer to the GP&S Document for report content;
 - .1 Include construction phasing and duration in the schedule.
 - .3 Include necessary sections to document and present the items listed in the "Scope and Activities" section above for each tenancy;
 - .4 Include office furniture deliverables as identified in the TOR OFSS for Pre-Design service submission requirements;
 - .5 Preliminary commissioning approach or outline;
 - .6 A summary of key Owner Project Requirements (OPR), in priority sequence, for evaluation of the project success;
 - .7 A Basis of Design (BOD) report component which directly responds to the OPR, which records any and all assumptions being used to inform the design and which will form the basis on which to commission the building;
 - .8 Class D estimate;
 - .9 Include an updated milestone project schedule;
 - .10 Include documentation of all functional requirements.



2.7 SCHEMATIC DESIGN SERVICE

2.7.1 GENERAL

- .1 The Consultant Team will review and analyse all available project information, consult with the Departmental Representative and deliver a comprehensive Schematic Design Report.
 - .1 ESDC will provide the Consultant with a schematic floor plan for review and incorporation into the Schematic Design Report.
 - .1 Develop the ESDC provided floor plan as required to meet the requirements of the "Scope & Activities" section below including options from engineering disciplines.

2.7.2 SCOPE & ACTIVITIES

- .1 The Consultant shall:
 - .1 Prepare a minimum of three (3) viable options for each discipline to meet the functional and technical requirements for the project;
 - .1 Analyse and develop each option with regard to the project goals including cost and schedule for each design option,
 - .2 Develop each Design Option in sufficient detail to clearly indicate all key elements in the design.
 - .3 Assess each design option against project specific Objectives and Goals documented in the Pre-Design report.
 - .2 Review, validate and update the details of the Functional Program requirements, including space data sheets;
 - .3 Update the sustainable design strategy based on LEED® Silver requirements;
 - .4 Update the budget, schedule and risk analysis and identify any conflicts that will need to be addressed with respect to scope, quality, schedule, cost;
 - .1 Prepare a Class 'C' Cost Estimate for each option.
- .2 Out of this process one option for each of the three tenancies (ESDC, EC, HC/PHAC) will be selected as the basis to proceed to Design Development:
 - .1 The Departmental Representative, in concert with others, shall select the preferred option for each of the three tenancies to be further developed;
 - .2 Although the Consultant is required to identify preferred options, the Departmental Representative reserves the right to select another option.
- .3 Develop a draft Basis of Design document to describe the selected options as per CSA Z320-11 including and are not limited to:
 - .1 Illustrate the general form, scale, and relationship of the major project component(s), system(s) type of construction proposed and the building systems and equipment impacted and/or recommended in support of the design options;
 - .2 Illustrate a general description of the work indicating the major systems and/or material choices for the design options;
 - .3 Demonstration that design options satisfy the OPR.
- .4 Update all Cx documents.

2.7.3 DELIVERABLES

- .1 The Consultant shall prepare and submit the Schematic Design Report for review and acceptance by the Departmental Representative and include:
 - .1 Clear separation of options for each of the three tenancies within the report (i.e. ESDC, EC and HC/PHAC);
 - .2 Report content as per the GP&S document;



- .1 Include construction phasing and duration in the schedule.
- .3 Necessary sections to document and present the items listed in the "Scope and Activities" section above;
- .4 Office furniture deliverables as identified in the TOR OFSS for Schematic Design service submission requirements.
- .5 Recommendations for 'best' option complete with the related Basis of Design and any assumptions contained therein;
- .6 Updated Owner Project Requirements (OPR), goals and objectives including updated preliminary Cx Plan and Cx Cost Estimate.

2.8 DESIGN DEVELOPMENT SERVICE

2.8.1 GENERAL

- .1 Further develop the options selected for refinement at the completion of Schematic Design.
- .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.

2.8.2 SCOPE AND ACTIVITIES

- .1 The Consultant shall:
 - .1 Further develop the selected schematic design options and expand the intent for each design discipline to complete the Design for this project;
 - .2 Finalize the selected design options in an integrated manner to ensure that all major components have been considered in a collaborative environment and that the design continues to support the project specific Objectives and Goals documented in the approved Pre-Design report;
 - .3 Present / submit the design for review and approval to review groups as required;
 - .4 Prepare a class 'B' cost estimate, update the schedule, the risk analysis and identify any conflicts that will need to be addressed with respect to scope, quality, schedule and cost;
 - .5 Continue to review all applicable statutes, regulations and by-laws in relation to the design of the project and conduct a detailed code analysis to demonstrate compliance;
 - .1 If there are non-compliance issues, develop alternative solutions to support the design and submit for approval to the local AHJ.
 - .6 Develop outline specifications for all systems, principle components and equipment, including manufacturers literature;
 - .7 Update the sustainable design strategy and report on sustainability targets using the sustainability assessment tools for a LEED® Silver certification;
 - .8 Provide a written response to the PWGSC Schematic Design Quality Assurance (QA) review.
 - .9 Update Basis of Design (BOD) document and Owner Project Requirements (OPR).
 - .10 Commissioning:
 - .1 Identify and provide a system components list to be commissioned;
 - .2 Commissioning issues logs and tracking logs specific to the project;



- .3 Develop pre-functional and functional verification and test forms specific to each component(s), system(s) and integrated system(s) as per CSA Z320-11 including and are not limited to;
 - .1 Outlining the Cx objective,
 - .2 Single line flow diagram overlaid with P&ID,
 - .3 Methodologies,
 - .4 Line by line procedures,
 - .5 Sequence of operation and control logic narrative;
- .4 Develop draft Commissioning project Risks and Cost Estimate;
- .5 Develop detail Verification Event Matrixes to accommodate single, multiple and variance analysis to design set points and system(s) responses specific to normal, power outage and emergency condition;
- .6 Prepare outline draft Commissioning construction documents.

2.8.3 DELIVERABLES

- .1 The Consultant shall prepare and submit the Design Development Report for review and acceptance by the Departmental Representative and include:
 - .1 Clear separation of User Department specific requirements and goals within the report (i.e. ESDC, EC and HC/PHAC);
 - .2 Report content as per the GP&S document;
 - .1 Include construction phasing and duration in the schedule.
 - .3 Sections necessary to document and present the items listed in the "Scope and Activities" section above.
 - .4 Building Code Analysis Report and Alternative Solutions Report (if relevant);
 - .5 Include a more detailed and updated Basis of Design, with an analysis that confirms the adequacy of the developed design solution for each key project requirement, goal and objective;
 - .6 An updated milestone project schedule including allowances for reviews and approvals for each stage of the project life cycle;
 - .7 An updated risk analysis including deviations that may affect cost or schedule;
 - .1 Recommend corrective measures.
 - .8 An updated project log tracking approved major decisions.
 - .9 Commissioning:
 - .1 Approved Owner Project Requirements (OPR) and Basis of Design documentation;
 - .2 Commissioning Plan;
 - .3 Updated Cx issues log and tracking log for each discipline;
 - .4 Include a Cx cost breakout for each discipline in the cost estimate;
 - .5 Include commissioning specifications in the outline specifications;
 - .6 Include Cx schedule in the milestone project schedule;
 - .7 Cx Verification Event Matrix.

2.9 CONSTRUCTION DOCUMENTS SERVICE

2.9.1 GENERAL

- .1 The objective of this stage is to translate the Design Development phase 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 up to three (3) tender packages co-ordinated with all disciplines:
 - .1 Fit-Up for all User Departments;
 - .2 EC furniture components;
 - .3 HC/PHAC furniture components.
- .4 Prepare space planning (swing space) drawings and phasing drawings to assist with the temporary relocation of ESDC during construction.

2.9.2 SCOPE AND ACTIVITIES

- .1 Create construction documents in accordance with the GP&S document.
- .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.
 - .2 Breakout costs for each User Department group (3) as per the Government of Canada Workplace 2.0 Standards funding accountabilities (refer also to 2.4 Cost Estimating Services).
- .3 Update the project schedule.
- .4 Establish a quality control process for the construction and contract administration stage.
- .5 The Consultant shall:
 - .1 Prepare preliminary move/occupancy strategy;
 - .2 Prepare phased move/occupancy strategy in coordination with available swing space;
 - .3 Design according to the budget and schedule;
 - .4 Coordinate the work of various disciplines including scope changes required to remain within budget;
 - .5 In consultation with the Departmental Representative approve construction materials, processes and specifications considering sustainability and commissioning;
 - .6 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,
 - .7 Prepare a Class A cost estimate for the 99% submission, using 100% measured quantities;
 - .1 Provide a cost breakdown by trade for review of bids and comparison with the successful Contractor's cost breakdown,
 - .2 Provide a Commissioning cost estimate breakdown by discipline.
 - .8 Continue to review all applicable statutes, codes, regulations and by-laws in relation to the design of the project and revise the building code analysis accordingly;
 - .9 Advise Departmental Representative and resolve issues other governmental authority officials raise, and adjust Construction Documents as required;
 - .10 Provide written responses to PWGSC comments at 33%, 66% and 99% review stages prior to the next submission and integrate comments into final construction documents;
 - .11 Participate in the risk management process;
 - .12 Update project log tracking approved major decisions;



- .13 Provide commissioning forms and check lists specific to each component(s), system(s) and integrated system(s) including and are not limited to;
 - .1 Cx Issues Log, Cx sequence of event, Cx tracking log, Cx system components check list, Cx meeting minutes and Cx verification event matrix and responses,
 - .2 Installation verification, pre functional and functional performance verification and test,
 - .3 Name plate data,
 - .4 First test or retest following correction of an issue,
 - .5 Identification of the component(s), system(s) and integrated system(s) under test including location and construction document designation,
 - .6 Expected design performance parameters and responses,
 - .7 Observed performance including indication of whether or not this performance is acceptable and/or deviation from design set point and qualify,
 - .8 Design Engineer of Record date and signatures along with those performing and witnessing the test,
- .14 Update and incorporate Cx Plan, Cx forms and training requirements into Cx construction document within the context of Division 01 specifications.

2.9.3 DELIVERABLES

- .1 Include items listed in the “Scope and Activities” section above the PWGSC GP&S document and items listed below.
- .2 Updated report at each submission noting any deviations from earlier Basis of Design submissions and, as necessary, reconfirming key Owner Project Requirements, goals and objectives along with:
 - .1 An updated estimate demonstrating compliance with the Construction Cost Plan;
 - .2 An updated project log, tracking approved major decisions;
- .3 33% complete Construction Documents:
 - .1 An updated Class “B” Estimate;
 - .2 Updated OPR and BOD documents;
 - .3 An updated project schedule;
 - .4 Construction Drawings;
 - .1 Drawings should reflect 33% completeness with all Plan, Elevation, Details, and Sections shown.
 - .5 Specifications;
 - .1 Index to specifications,
 - .2 Draft Division 01,
 - .3 Updated Commissioning document,
 - .1 Cx Building Envelope,
 - .2 Cx cost estimate,
 - .3 Cx risk and complexity assessment,
 - .4 Draft Cx Construction Document specification Division 01,
 - .5 LEED Cx related specification check sheets and forms as applicable.
- .4 66% complete Construction Documents:
 - .1 Updated class “B” estimate;
 - .2 Updated OPR and BOD documents;
 - .3 Updated project schedule;



- .4 Construction Drawings;
 - .1 Drawings should reflect 66% completeness with all planned and required drawings / sheets shown.
- .5 Specifications;
 - .1 Index to specifications (identifying all sections to be used for the project),
 - .2 Draft Division 01 including draft commissioning sections,
 - .3 Updated Commissioning document,
 - .1 Cx Building Envelope,
 - .2 Cx cost estimate,
 - .3 Cx risk and complexity assessment,
 - .4 Draft Cx Construction Document specification Division 01,
 - .5 LEED Cx related specification check sheets and forms as applicable.
- .5 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 and a written response for the PWGSC 66% QA review;
 - .2 The Consultant shall submit documents to the Departmental Representative, local municipality, or any other Authority having jurisdiction;
 - .3 Class "A" estimate;
 - .4 An updated project schedule;
 - .5 Construction Drawings;
 - .1 Drawings should reflect 99% completeness as a complete design without any incomplete drawings (as if ready for tendering).
 - .6 Specifications complete with all sections and thoroughly coordinated with the drawings:
 - .1 Component, System and assembly requirement(s) including;
 - .1 Close Loop System Verification,
 - .2 Close Loop Integration System Verification.
 - .7 Updated Commissioning Plan;
 - .1 Updated Cx issues and resolution log.
- .6 Final (100%) Construction Documents ready for tendering:
 - .1 This submission incorporates all revisions required by the review of the previous submission and a written response for the PWGSC 99% QA review;
 - .2 Advise the Departmental Representative of all issues raised by other officials;
 - .3 The submittal shall include;
 - .1 Signed and sealed documents:
 - .1 6 – hard copies;
 - .2 1 – electronic copy in PDF format.
 - .2 An updated Class 'A' cost estimate (include Cx cost breakout),
 - .3 An updated project schedule,
 - .4 Construction Drawings & Specifications as per the GP&S document.
 - .5 An updated Commissioning Plan;
 - .1 Updated Cx issues and resolution log.
 - .6 Commissioning;
 - .1 Updated draft from previous 99% submission to the 100% completion submission.



- .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.

2.10 TENDER SERVICES

2.10.1 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 PWGSC Real Property Contracting (RPC) branch.

2.10.2 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 the 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.

2.11 CONSTRUCTION SUPPORT SERVICE

2.11.1 GENERAL

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

2.11.2 SCOPE AND ACTIVITIES

- .1 The Consultant shall share all project information with PWGSC:
 - .1 All material specifications, mixes and test results shall be turned over to the Departmental Representative for future maintenance by PWGSC and others.
- .2 General Services:
 - .1 Review shop drawings, test reports and other submissions;
 - .2 Prepare record drawings and specifications based on Contractor's as-builts;
 - .3 Update the 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 Review and comment on Contractor's commissioning submittals including:
 - .1 Contractor's Commissioning Plan;
 - .2 Project and Project Commissioning Issues Logs;
 - .3 Cx Report;
 - .4 Cx Schedule reflecting the Performance Verification Tests;



- .5 Outstanding activities.
- .6 Assist the Contractor and provide required documentation in order to obtain the building permit;
- .3 Construction & Contract Administration:
 - .1 Provide bi-weekly field reviews and as required to fulfill 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.
 - .2 Provide construction progress reports based on Contractor's submissions and on-site performance;
 - .3 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;
 - .4 Provide additional drawings to clarify, interpret or supplement the contract documents;
 - .5 Review and comment on various documents such as the Contractor's Progress Claims and updated schedules;
 - .6 Offer timely technical advice on all disputes and claims between PWGSC and the Contractor;
 - .7 Authorize special tests, inspections and minor works that do not impact project cost and schedule;
 - .8 Determine the amounts owing to the Contractor based on work progress and certify payments to the Contractor;
 - .9 Assist the Departmental Representative to prepare the Certificate of Substantial Completion and provide sign-off;
 - .10 Provide a Post-Construction Evaluation report.
- .4 Cost Services:
 - .1 After issue of contract provide details for evaluating the project's cost performance;
 - .2 Assist the construction team with cost management advice, if requested;
 - .3 Evaluate change orders, claims, work completed and cash flow.
- .5 Changes to the Work:
 - .1 Assist the Departmental Representative to prepare Contemplated Change Notices (CCNs) and Change Orders (COs) to be issued by the Departmental Representative.
- .6 Draft of Final Commissioning Report documenting all commissioning work, testing, verification and results achieved during the project construction specific to component(s), system(s), different levels of integration between system(s) and assemblies. Include at a minimum the following:
 - .1 Engineer of Record to review, approve and sign off all submittals for performance parameters before and after execution of test and for adherence to OPR and BOD;
 - .2 Conduct field reviews, witness and complete reports with Cx forms verifying tests for compliance with the OPR and the BOD including but not limited to;
 - .1 All factory test reports and data,



- .2 Installation, pre-functional, functional performance testing and TAB,
 - .1 Component(s) based checks,
 - .2 System(s) based checks,
 - .3 Integrated system(s) based checks,
 - .4 Seasonal/deferred commissioning for those systems that have been functionally tested and/or handed over in seasons where retesting and commissioning will be required during the opposite season.
- .3 Prepare and update Cx Tracking Log and Cx issue log specific to component(s), system(s) and integrated system(s) that failed the tests and documents how the failed test impacted other component(s) either upstream to or downstream of the component in question;
- .4 Provide bi-weekly Cx issues report and meeting minutes for distribution;
- .5 Provide Trending Report to confirm the design performance parameters;
- .6 Review and comments to Operation and Maintenance Manual (O&M) and Training Manual for completeness and accuracy in advance to ensure;
 - .1 Complete system, assembly, maintenance and inspection procedures,
 - .2 Complete repair procedures including disassembly, component(s) removal replacement and reassembly,
 - .3 Complete emergency instructions for operating the facility during various standard and/or nonstandard and emergency conditions,
 - .4 Key Warranty requirements.
- .7 Review with the Contractor's standard submittals for enhanced commissioning specific to LEED targets established in the design phase.
- .7 Certify Substantial Completion for Interim Acceptance Report sign off and ensuring:
 - .1 All component(s), system(s), integrated system(s) are fully commissioned, completed and functional as per Construction Specification Document, OPR and BOD;
 - .2 All test certificates, final project commissioning reports, training and project O&M manual complete;
 - .3 Successful completion of life safety systems and their components (i.e. fire alarm systems, sprinklers, standpipes, smoke control, ventilation, pressurization, hold open devices, elevators recalls, smoke fire shatters and dampers, emergency power, emergency lights, etc.);
 - .4 Engineer(s) of Record shall provide a Letter of Acceptance or Rejection more specifically that the OPR and the BOD has and/or has not been met and by extension system functionality has and/or has not been materialized;
 - .5 Recommendation of acceptance of the project to the Departmental Representative.

2.11.3 DELIVERABLES

- .1 Approved shop drawings, test reports/certificates and other submissions.
 - .1 Approved sprinkler shop drawings and hydraulic calculations to be submitted a minimum of 2 weeks before work commences.
- .2 Clarifications, Supplemental Instructions, Contemplated Change Notices and Change Order Recommendations.
- .3 Site Visit/Field Review Reports.
- .4 Reviewed Contractor Progress Claims.
- .5 Comments to Contractor Schedule, Change Orders.



.6 Completed Certificate of Substantial Completion.

.7 Cx Deliverables:

- .1 Final Commissioning Report;
- .2 Final OPR and BOD;
- .3 Certified Substantial Completion;

2.12 POST CONSTRUCTION SERVICE

2.12.1 GENERAL

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

2.12.2 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 Sign-off Final Commissioning Report;
- .7 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 the Departmental Representative and Contractor;
- .5 Provide warranty deficiency list;
- .6 Assist with the final PWGSC Cx evaluation.

.3 Commissioning:

- .1 Coordinate deferred commissioning for those systems that have been functionally tested and/or turned over where retesting and commissioning is required;
- .2 Resolution of any warranty issues on commissioned systems during the warranty period;
- .3 Ensure that all completed operating and maintenance manuals, warranties, guarantees and other required submittals are turned over to the Departmental Representative;
- .4 Provide ongoing consultation with the construction teams in support of their project closeout activities and submittals related to systems and assemblies commissioning specific deliverables in compliance to the Commissioning Plan, Construction Specifications document, Owner's Project Requirements (OPR) and BOD;
- .5 Finalize the Commissioning Report;
- .6 Prepare final Commissioning Manual as per CSA Z320-11 including and are not limited to;



- .1 Final O&M Manual,
- .2 Post occupancy changes,
- .3 Lesson learned document.
- .7 For LEED certification Contractors post-occupancy Functional Performance Testing to evaluate and document energy and operational performance as compared to designed performance defined in the BOD and Construction Documents. Evaluations will occur at;
 - .1 Three (3) months and
 - .2 Ten (10) months of warranty expiration.

2.12.3 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 Final Certification of installation and warranty from manufacturers.
- .6 Final Commissioning Manual.
- .7 Sign-off on Warranty.
- .8 LEED certification.



3 PROJECT ADMINISTRATION

3.1 GENERAL REQUIREMENTS

3.1.1 PWGSC PROCEDURES AND STANDARDS

- .1 The consultant shall comply with the amendments and/or additions in this section in addition to adhering to the requirements contained in the GP&S section 3 (Project Administration).

3.1.2 MEETINGS

- .1 Design Phase:
 - .1 Bi-weekly meetings with PWGSC and the Consultant team will normally be held at the PWGSC offices in Regina. Team members outside of the Regina area may participate via teleconference / Webex;
 - .2 Meetings for the project start-up, presentation / discussion of each project deliverable and as required for functional programming will be held at the PWGSC offices in Regina, Saskatchewan.
- .2 Construction Phase:
 - .1 Bi-weekly meetings with PWGSC, the Consultant team and the Contractor will normally be held at the construction site for the duration of the project and as required.

3.1.3 BUILDING PERMITS AND OCCUPANCY PERMITS

- .1 The Consultant will apply for a Building Permit from the City of Regina on behalf of PWGSC at the completion of the 99% construction document phase.

3.1.4 TECHNICAL AND FUNCTIONAL REVIEWS

- .1 The role of the federal HRSDC fire commissioner no longer exists and has been replaced by the Client Department Fire Protection Coordinator where applicable. Fire protection, health and life safety reviews will be undertaken by the PWGSC Fire Protection Coordinator (DFPC) who is now part of the PWGSC Quality Assurance review team.



4 APPENDIX A

4.1 SPACE REQUIREMENTS - EMPLOYMENT AND SOCIAL DEVELOPMENT CANADA (ESDC)

4.1.1 ESDC SUMMARY TABLE

Description	Total (m ² u)	Special Requirements
General Office	861.10	Allocation for 159 FTEs
Support Space	1171.50	Includes 485.5 m ² u additional space for existing Call Centre
Circulation Space	541.49	35% of Open Office and Support Space
Special Purpose Space	417.98	Includes 10% Circulation Space
Total	2992.07	

4.1.2 ESDC SUPPORT SPACE SUMMARY TABLE (CALL CENTRE ONLY)

Description	Qty	Size (m ² u)	Total (m ² u)	Special Requirements
Quiet Room	1	5.0	5.0	Enclosed
Small Meeting Room	1	30.0	30.0	Enclosed
Medium Meeting Room	2	50.0	100.0	Enclosed
Training Room	1	40.0	40.0	Enclosed
Coaching Room	2	10.0	20.0	Enclosed
Locker Area	2	14.0	28.0	
Kitchenette	1	85.0	85.0	Enclosed / Partially Enclosed; 4.8 lineal metres of counter and upper/lower storage.
Shared Equipment Area	1	29.0	29.0	Enclosed / Partially Enclosed; 2.4 – 4.8 lineal metres of counter and upper/lower storage.
Telecom Room	1	6.5	6.5	Enclosed
Collaborative Spaces			142.0	Open - may be multiple areas located within the Open Office area.
Total			485.5	

4.1.3 ESDC SPECIAL PURPOSE SPACE SUMMARY TABLE

Description	Qty	Size (m ² u)	Total (m ² u)	Category	Special Requirements
Interview Room	3	12.10	36.30	Kiosk/Public Contact	
French Language Training Room	1	30.00	30.00	Educational	
Evidence Room	2	6.05	12.10	Inside Storage	
Labour Secure Storage	1	6.05	6.05	Inside Storage	



Basement Storage	1	218.90	218.90	Inside Storage	
Computer Training Room #1	1	72.03	72.03	Educational	
Computer Training Room #2	1	42.60	42.60	Educational	
Total	10		417.98		

4.2 SPACE REQUIREMENTS – ENVIRONMENT CANADA (EC)

4.2.1 EC SUMMARY TABLE

Description	Total (m ² u)	Special Requirements
General Office	376.10	Allocation for 69 FTEs
Support Space	326.00	Allocation for 69 FTEs
Circulation Space	245.70	35% of Open Office and Support Space
Special Purpose Space	300.00	Includes 10% Circulation Space
Total	1,247.80	

4.2.2 EC SPECIAL PURPOSE SPACE SUMMARY TABLE

Description	Qty	Size (m ² u)	Total (m ² u)	Category	Special Requirements
Meteorological Service S/R and Workshop	1	10.00	10.00	SPS Process	
Enforcement Interview Room	1	10.00	10.00	SPS Process	
Enforcement Evidence Room - Chemicals	1	20.00	20.00	SPS Storage	
Enforcement Evidence Room - Files	1	18.00	18.00	SPS Storage	
Enforcement Locker/Change Room with Shower	1	22.00	22.00	SPS Showers	
Enforcement Secure Wet Lab (included with S&T)	1	0	0	SPS Lab	
S&T Wet Lab/Organics Handling Lab	1	45.00	45.00	SPS Lab	
S&T Biological Lab	1	29.00	29.00	SPS Lab	
S&T Shipping/Receiving/Pure Water Lab	1	50.00	50.00	SPS Lab	
S&T Clean Bottles/Containers Lab	1	18.00	18.00	SPS Lab	
S&T Northern WQ Progs/Oil Sands WQ Prog Prep Lab	1	38.00	38.00	SPS Lab	
S&T Contamination Free Sample Equipment Storage	1	40.00	40.00	SPS Storage	
Total	12		300.00		



4.3 SPACE REQUIREMENTS - HEALTH CANADA (HC), PUBLIC HEALTH AGENCY OF CANADA (PHAC)

4.3.1 HC/PHAC/ SUMMARY TABLE

Description	Total (m ² u)	Special Requirements
General Office	833.00	Allocation for 185FTEs
Support Space	713.06	Allocation for 185 FTEs
Circulation Space	866.86	35% of Open Office and Support Space
Special Purpose Space	396.34	Includes 10% Circulation Space
Total	2809.26	

4.3.2 HC/PHAC/ SPECIAL PURPOSE SPACE SUMMARY TABLE

Description	Qty	Size (m ² u)	Total (m ² u)	Category	Special Requirements
Environmental Health Lab	1	15.40	15.40	Lab	
Pesticide Lab	1	12.98	12.98	Lab	
Immunization Medical Room	1	12.27	12.27	Medical	
Hearing and Vision Testing Room	1	12.27	12.27	Medical	
Patient Washroom	1	6.05	6.05	Medical	
Clinic Waiting Area	1	6.60	6.60	Medical	
Central Registry File Room (Information Management Centre)	1	66.55	66.55	Process Mailroom	
Stores in Support of FNIHB and Misc. Archived Storage, Promotional Items, IT Equipment	1	264.22	264.22	Inside Warehouse Storage	
Total	8		396.34		



5 APPENDIX B

5.1 PWGSC MILESTONE SCHEDULE



6 APPENDIX C

6.1 FUNCTIONAL PROGRAM QUESTIONNAIRE