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Architectural & Engineering Services **TERMS OF REFERENCE**

Functional Programming

**Parks Canada Agency
Fort Smith, Northwest
Territories**

February 11, 2022



Table of Contents:

1		
1	PROJECT DESCRIPTION	3
1.1	GENERAL	3
1.2	BACKGROUND INFORMATION	3
1.3	SUMMARY OF WORK	7
1.4	OBJECTIVES	9
1.5	SUMMARY OF SERVICES AND SPECIALTIES	10
1.6	SCHEDULE	10
1.7	EXISTING DOCUMENTATION	11
2	REQUIRED SERVICES	12
2.1	GENERAL REQUIREMENTS	12
2.2	PROJECT REVIEW AND ACCEPTANCE	12
2.3	COST MANAGEMENT SERVICE	13
2.4	FUNCTIONAL PROGRAMMING SERVICE	13
3	PROJECT ADMINISTRATION	17
3.1	GENERAL REQUIREMENTS	17
3.2	LANGUAGE	17
3.3	MEDIA	17
3.4	PROJECT MANAGEMENT	17
3.5	LINES OF COMMUNICATION	17
3.6	MEETINGS	17
3.7	CONSULTANT RESPONSIBILITIES	18
3.8	PWGSC RESPONSIBILITIES	18
3.9	USER DEPARTMENT RESPONSIBILITIES	19
3.10	TECHNICAL REPORTS	19
4	DEFINITIONS	21
4.1	PURPOSE	21
4.2	DEFINITIONS	21



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 the prime consultant with a multi-disciplinary team of sub-consultants qualified to provide functional programming services required to support the Parks Canada Agency in Fort Smith, NT throughout this project.

1.1.2 THE DOING BUSINESS WITH PWGSC DOCUMENTATION AND DELIVERABLES MANUAL

- .1 The TOR describes the project specific requirements, services and deliverables while the *Doing Business with PWGSC Documentation and Deliverables Manual* outlines the standards and procedures for documents, cost estimating and project scheduling.
- .2 Document precedence:
 - .1 In the event of a document conflict the TOR takes precedence.

1.1.3 PROJECT INFORMATION

Project Information	
Project Title:	Parks Canada (PC) Functional Program
Project Address:	149 McDougal Drive, Fort Smith, Northwest Territories
Contract Number:	TBD
PWGSC Project Number:	R.110233
PWGSC Contracting Officer:	TBD
PWGSC Departmental Representative:	Anton Pertschy

1.2 BACKGROUND INFORMATION

1.2.1 PURPOSE OF THE FUNCTIONAL PROGRAM

- .1 As the common service provider of real property and office accommodation for the Government of Canada, Public Service and Procurement Canada (PSPC) is initiating functional programming for Parks Canada Agency's (PCA) Fort Smith office with the intent of:
 - .1 Implementing surveys and workshops with PCA staff and management to determine departmental and branch needs;
 - .2 Obtaining a comprehensive understanding of what is required in terms of accommodation and space envelope;
 - .1 Investigating Activity Profiles, Mobility, and Workstyles;
 - .2 Dividing the space envelope into General Office space and Special Purpose Space (SPS) according to GCWorkplace criteria;



- .3 Introducing concepts of the Government of Canada Workplace Fit-up Standards to the PCA end user group;
- .4 Incorporating the Government of Canada Workplace Fit-up Standards wherever possible into design recommendations while identifying and justifying areas where application of these standard could not be applied;
- .5 Ensuring that design recommendations are efficient, effective, and innovative in meeting PCA's present and future needs;
- .6 Gaining an understanding of furniture, IT, security, and audio-visual (AV) requirements that PCA has at this location;
- .7 Presenting proposed solutions to PCA Accommodation Management and end user group;
- .8 Obtaining a high-level cost estimate for the recommended solutions.

1.2.2 USER DEPARTMENT

- .1 The User Department referred to throughout the TOR is the Parks Canada Agency (PCA).
- .2 On behalf of the people of Canada, the Parks Canada Agency protects and presents nationally significant examples of Canada's natural and cultural heritage, and foster public understanding, appreciation and enjoyment in ways that ensure the ecological and commemorative integrity of these places for present and future generations.
- .3 Parks Canada Agency have been located on the main and second floor in the Fort Smith GOCB at 149 McDougal Road office operations for the past eleven years. Their program has evolved and grown during that time.
- .4 Parks Canada has two business units located in Fort Smith, first is the Regional Field Unit Office containing the Regional Director's Office and Corporate Service elements. The Field Unit is responsible for 4 National Parks (NP) in Northern AB and Southern NT: Nááts'ihch'oh National Park Reserve, Nahanni National Park Reserve, Thaidene Nene National Park Reserve, and Wood Buffalo National Park. The second is the Administration Office and Visitor Reception Centre for Wood Buffalo National Park.
 - .1 These branches operate within the above units: Field Unit Operations includes Park Administration, Resource Conservation, Visitor Experience, Asset Management, Law Enforcement, Emergency Response and Fire Prevention and Fire Suppression Unit, Safety, and Superintendent office.

1.2.3 USER DEPARTMENT REQUIREMENTS

- .1 The Functional Program review should include site visits, meetings, surveys, questionnaires, and other tools deemed suitable by the consultants to capitalize on the opportunity to create a modernized workplace environment.
- .2 While this request is for an expansion, it will adhere (where possible) to GC Workplace Standards.



- .1 It is possible upon completion of the Functional Program that less space than is identified in this TOR will be required.
- .3 This Workplace modernization will impact the traditional PCA office accommodation by changing the way people are accommodated at work now and into the future.
 - .1 Job requirements and the remote location create challenges making mobility and working from home difficult, if not impossible.
- .4 The Functional Program is required to determine if the Fort Smith GOCB is a feasible option for consideration for the future of PCA's Fort Smith operations.
- .5 In order to prepare PCA for the concept of modernization and the functional programming, a series of focus group meetings (visioning sessions) with progressively more detailed information and showcasing furniture options and styles of collaboration will be needed for team engagement and transition in working philosophy.
- .6 Input and buy in needs to come from PCA senior management and on down through all levels of the organization to enable each to contribute to the development of effective and innovative operational solutions.
- .7 The approach for this Functional program is to investigate PCA's unique requirements beyond just spatial relations, adjacencies and SPS requirements, and include analysis of departmental hierarchies, and design and furniture interventions.
- .8 Through this Functional Programming, the consultant is to determine the required amount of office and special purpose space required for the in-service date, and to support PCA's future expansion.
- .9 Special considerations and concerns need to be taken into account for any sort of alternative working/office environment in this northern community. Even after the COVID-19 pandemic, PCA does not anticipate implementing a blended work environment as programs require on-site personnel, access to field information, and operational tools specifically on the work-site.

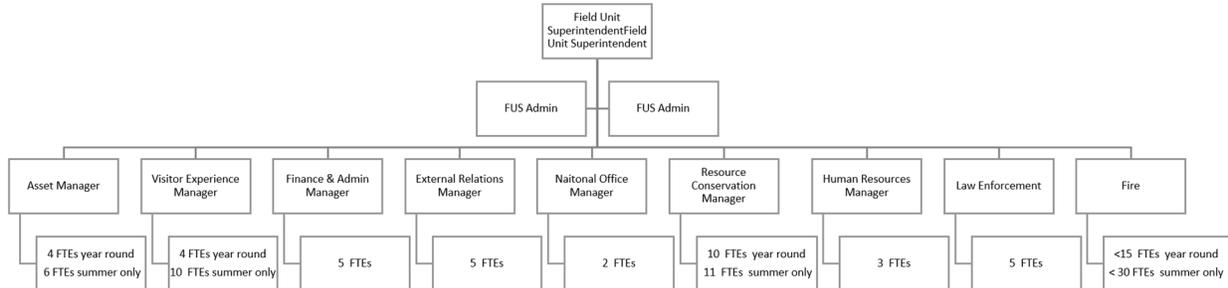
1.2.4 EXISTING CONDITIONS

- .1 The recent establishment of the new northern National Parks resulted in additional resources (FTEs) and requirements associated to this on-going requirement. The current accommodation is at capacity, leaving limited space to meet the office & operational requirements. There are specific requirements for the Regional Field Unit's on-going and growth requirements. There is a requirement to have flexibility in the number of available workstations to account for the fluctuating number of staff during on-peak and off-peak seasons.
- .2 PCA current space total: 897.67 m²u / 1050.12 m²r, Office: 531.63 m²u / 615.30 m²r, SPS (various): 366.09 m²u / 434.83 m²r.
- .3 PCA is requesting an increase to 2335.4 m²u to be allocated as office and SPS for various purposes, and are currently underaccommodated and expanding their operations in Fort Smith. Expansion is required



to meet PCA’s current accommodation needs and planned expansion needs. Currently there are 87 FTEs. By in-service, April 1, 2025 134 FTEs, and 167 FTEs by 2030.

.4 A draft version of the current organizational chart is as follows:



- .5 The existing conditions includes some enhanced security (restricted public access, an alarm system, and CCTV camera monitoring).
- .6 The space has access to a freight elevator and loading dock.
- .7 The northern community and staff face challenges regarding the remote working options which impact their ability to effectively deliver some functions due to inconsistent internet connection and insufficient bandwidth, among other issues.
- .8 PCA has faced a range of space pressures and challenges during peak (summer) season.

1.2.5 ISSUES, OPPORTUNITIES, CHALLENGES AND CONSTRAINTS

- .1 If deemed necessary, the Consultant must obtain security clearances for all the firm's personnel as well as any sub-consultants in order to visit the project site for site reviews, attendance for functional programming meetings, etc. Security clearance checks may include credit checks. For the purpose of this RFP, Site Visit(s) will be determined post-award, if deemed necessary.
- .2 All site visits must be arranged through the Departmental Representative.
- .3 All site visits to take place during normal working hours.
- .4 Gathering of functional requirements from the PCA business lines in order to both implement and contrast against the PWGSC fit-up standards (such as but not limited to support space adjacencies and the application of adjacencies).
- .5 Developing innovative approaches to achieve a modernized workplace by incorporating flexibility, work point and workspace variety that support an array of work activities.
- .6 Assessing and filtering the amount of physical file storage an employee needs to perform their work.
- .7 Changing employee’s perception that:
 - .1 Work can only be done in a workstation,
 - .2 Workspace sizes are an entitlement, and that
 - .3 The workspace is an employee’s personal space.



- .8 Employing an efficient and integrated approach with key stakeholders such as, but not limited to Security and Technologies Information Management (IT). PCA to facilitate an alignment between the needs of the modernized workplace with the tools needed to successfully implement the initiative.
- .9 For the purpose of this TOR, for all aspects of the workplace modernization, the consultant shall work closely with the project team, to ensure appropriate material is communicated throughout.

1.3 SUMMARY OF WORK

1.3.1 GENERAL SUMMARY

- .1 PCA require a review of space to determine and gain efficiencies within their current location. PCA has a goal to remake their space more efficiently, to maximize the utilization of space, furniture and technology capabilities to best suit their unique operations.
- .2 Provide Functional Programming services which:
 - .1 Support PCA through engagement of all organizational levels, to work through resistance to acceptance and massage out the essence of how the department can function most effectively in a new and modernized work environment.
 - .2 Investigate and discover all physical elements required for the functional and operational needs of each branch and space.
 - .3 Determine audio-visual, high density storage, and any other special purpose requirements.
 - .4 Identify any resistance or challenges to the new and modernized work environment.
 - .5 Some requirements are identified in the items below, and others will need to be obtained through interviews with PCA Representatives:
 - .1 Off-season regional office population: 70-73 people. High season office population: 94-112 people. Additional office population: 22. Maximum office population expected: 134. Growth of up to 33 additional staff.
 - .2 Emergency Facilities: Incident-collective action response room/ radio room & radio equipment plotter with adequate ventilation. Space requires adjacent, private washroom. 12 ongoing staff and up to 30 FTE during peak season.
 - .3 Law Enforcement: Law enforcement has need for specific space which needs to meet RCMP law enforcement standards.
 - .4 Lockers/ Showers: Field staff to use. Per standard allocation for required size.
 - .5 Fire team will need access 24/7 for fire response during fire season. Law enforcement require access 24/7 year round. Visitor experience have various needs throughout the year. September to May public access required from 8:30 to 17:00, June to August public access required from 8:30 to



18:00, 7 days a week. Space is used as and when needed, including for community evening meetings with stakeholders, indigenous partners, and the general public.

- .6 Emergency response staff need to be located on the same floor in one contiguous space.
- .7 General public access is required for community engagement.

1.3.2 INFORMATION GATHERING AND RECOMMENDATIONS:

- .1 Incorporate the end-state vision, principles and approved standards into the information gathering process and workplace recommendations. The method must demonstrate the application of the key elements of workplace modernization.
- .2 Assist the PCA project team to further define the modernization workplace expectations by researching, surveying/questioning and analyzing end-users essential requirements along with the objectives, vision and design principles of workplace renewal.
- .3 Use the information gathered from PCA end-users and management representatives to prepare a comprehensive report, including space data sheets, cost analysis and presentation.
- .4 Provide recommendations and supporting documentation for the purpose of obtaining upper management approval on a modernized workplace.
 - .1 Recommendations should include but not be limited to the analysis of the pros and cons, security, telecommunication, space utilization, user requirements and best value.
- .5 Prepare presentation materials and support during presentations and information sessions,
- .6 Engage stakeholder groups in the Workplace Renewal Initiatives (Workplace modernization initiative),
- .7 Build a cohesive team approach that is transparent and informative to encourage a positive relationship between the end-users and the project team.
- .8 Support the project team in assisting end-user workgroups and teams talk about their workplace of the future by:
 - .1 Creating awareness about different work styles
 - .2 Linking work functions and activities to work spaces
 - .3 Seeing new ways of working

1.3.3 FUNCTIONAL PROGRAMMING:

- .1 Document requirements to create a modernized workplace environment, looking beyond the traditional accommodations and patterns of working, and looking forward to the way people work both now and into the future.
- .2 Identify requirements for optimal effectiveness of general office, support space and special purpose space considering culture, and issues, constraints and challenges;



- .3 Document compliance and non-compliance with the Government of Canada Workplace Fit-up Standards, in consultation with PSPC and Parks Canada Agency staff;
- .4 Progressively synthesize and consolidate findings throughout the Functional Program Project and reporting.

1.4 OBJECTIVES

1.4.1 GENERAL GOALS

- .1 To provide a high level of operational efficiency to allow each team member to function with flexibility, focus and high performance in the delivery of their services in support of Canada's National Parks.
- .2 To establish PCA user specific requirements and determine the best approach to implement a modernized office space adherent to GCWorkplace standards and guidelines.
- .3 To create a modern open work environment with natural light, views, supporting mental health, wellbeing and sustainability. Supports a diverse activity-based workspace (or work points) to help enhance performance through;
 - .1 Determining the required number of enclosed spaces, meeting rooms and boardrooms.
 - .2 Maximizing space utilization with a combination of/ratio of workstations to employees and additional work points outside of traditional assigned workspaces.
 - .3 Laying out unassigned and assigned work points in a variety of sizes, furniture types and configuration supporting diverse activities.
 - .4 Creating variability in spaces and activity based work points emphasising mobility, inspiring creativity and innovation, and supporting comfort and productivity for individual and collaborative work.
 - .5 Aligning support spaces which equally support special purpose space functions.
- .4 Use technology, tools and systems that are efficient and cost effective, allowing opportunities for freedom and mobility so employees can work wherever and however they can be most productive such as through;
 - .1 Information Management; quick, easy, intuitive access to corporate information using electronic filing systems.
 - .2 Easy and seamless access to digital tools and information including WIFI, and supporting audio visual technology in meeting spaces, collaborative spaces.
 - .3 Allowing for greater collaboration, productivity and engagement away from the desk.
 - .4 Reducing reliance on paper and paper storage through screen size and configuration that enables the use of technology.



- .5 Create a collaborative workplace environment to support organizational success through;
 - .1 Increasing flexibility to work anywhere, anytime while maintaining security and responsiveness, and incorporating technologies to support the modernized workplace.
 - .2 Deploying a simplified and sustainable approach to office allocation.
 - .3 Supporting employee wellness and productivity.

1.4.2 PROJECT DELIVERY

- .1 Provide fully integrated and coordinated professional services for the delivery of a project in accordance with the requirements in the TOR and as contained herein.
- .2 Coordinate all services with the Departmental Representative.
- .3 Establish a cohesive functional partnership and open communication between all members of the project delivery team throughout the project.
- .4 Maintain continuity of key personnel and a dedicated working team for the life of the project.
- .5 Deliver the project to be within:
 - .1 The Project Milestones in this TOR.
- .6 Implement a Collaborative Project Delivery (CPD) process and culture of open communication and trust.
- .7 Conduct Quality Assurance reviews during the Project Milestones.

1.5 SUMMARY OF SERVICES AND SPECIALTIES

1.5.1 GENERAL SERVICES

- .1 Provide a full consulting team including the following consultant services and specialties:
 - .1 Professional/Registered Architectural Services:
 - .1 Must have significant experience in functional programming in accordance with the Canadian Handbook of Practice for Architects, or equal,
 - .2 Interior Design Services:
 - .1 Professional Interior Designer NCIDQ, Licensed and/ or Registered Interior Designer, where applicable,
 - .2 Must have significant knowledge of furniture solutions to create flexible modern offices.
 - .3 Cost Estimating specialist;
 - .1 Certified by the Canadian Institute of Quantity Surveyors.

1.6 SCHEDULE

1.6.1 GENERAL

- .1 Deliver the project in accordance with the project milestone listing identified below.
- .2 Prepare a Project Schedule in accordance with the milestone list.



- .3 The Consultant may elect to continue to work on the project during reviews but will not be reimbursed for changes resulting from the reviews.

1.6.2 ANTICIPATED MILESTONE DATES

Project Phase	Target Milestone Completion Date	Number of Days/ Weeks
Consultant Contract Award	April 15, 2022	
Project Start-Up Meeting/ Visioning Session 1	April 22, 2022	1 Week
Focus Group Meetings; Information Gathering with Unit Management Representative(s)		3 Weeks
All Staff Survey Complete	May 13, 2022	
75% Submission - Functional Program	June 03, 2022	3 Weeks
PSPC Quality Assurance Review	June 17, 2022	2 Weeks
Visioning Session 2/ Town Hall User Groups	June 24, 2022	1 Week
100% Submission - Functional Program	July 08, 2022	2 Weeks
PSPC Review/ Final Approval	July 22, 2022	2 Weeks
Final Report Complete/ Project Close-out	July 29, 2022	1 Week

1.7 EXISTING DOCUMENTATION

1.7.1 AVAILABLE FOR THE CONSULTANT

- .1 Limited as-built drawings for the Fort Smith GOCB will be available at the start of the project.
- .2 GC Workplace Fit-up Standards & Design Tool kits.
 - .1 GCWorkplace Design Guide.
 - .2 GC Design Survey Report Template.
 - .3 GCWorkplace Space Planning Workbook.
 - .4 GCWorkplace Interior Design Resources: [GCworkplace Interior Design Resource Centre : GCcollab](#)

1.7.2 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.



2 REQUIRED SERVICES

2.1 GENERAL REQUIREMENTS

2.1.1 SERVICES

- .1 Functional Programming,
- .2 Cost Management

2.2 PROJECT REVIEW AND ACCEPTANCE

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 PWGSC;
 - .2 Parks Canada Agency for functional requirements and project review.

2.2.3 QUALITY ASSURANCE REVIEWS, ACCEPTANCE AND PRESENTATIONS

- .1 PWGSC Review:
 - .1 The purpose of this review is Quality Assurance;
 - .2 Submission of documents shall be in the following format: reports, drawings, and presentations;
 - .3 Submissions will be reviewed at key milestones during the Functional programming;
 - .4 For each review provide one submission (i.e. electronic copies of documents in pdf format) plus any follow-up submissions.
- .2 At each stage:
 - .1 Review submissions to be posted on AutoDesk BIM 360 or FTP site in searchable PDF format;
 - .2 Expected turnaround time for reviews is 10 working days;
 - .3 The consultant team will receive review comments in the form of an editable MS Word document or MS Excel document;
 - .4 The consultant shall provide a single coordinated written response to the comments within 2 weeks of receiving review comments;
 - .5 The purpose of this review is information and awareness for PWGSC and not quality control for the Consultants. The Consultant Team must employ their own quality control program and remain fully responsible for the design and services provided.



2.3 COST MANAGEMENT SERVICE

2.3.1 GENERAL

- .1 Include the following cost management services in addition to the cost estimating requirements of the Doing Business with PWGSC Manual:
 - .1 Class D cost estimate based on findings of the Functional Program. Cost Estimate shall be in UNIFORMAT II ASTM E1557 Standard.

2.4 FUNCTIONAL PROGRAMMING SERVICE

2.4.1 GENERAL

- .1 The Functional Programming Report will be utilized as the benchmark project control document to monitor progress of the project.
- .2 Functional Programming is comprised of the following activities:
 - .1 Assess existing site and conditions;
 - .2 Review all existing documents and reports, and;
 - .3 Confirm and document functional requirements through information gathered in visioning sessions, surveys, focus groups, presentations, town halls etc.
 - .4 Developing furniture concepts to meet the functional program work points.

2.4.2 SCOPE AND ACTIVITIES

- .1 Participate in meetings, prepare minutes and decision logs.
- .2 Visit the project site, if deemed necessary by the Departmental Representative, and analyse site conditions.
- .3 Review and analyse:
 - .1 Existing reports, documents and material related to the project, including the functional requirements, and all other requirements identified in this TOR;
- .4 Analyse and confirm:
 - .1 Project specific goals and objectives;
 - .2 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;
 - .3 All existing information relating to this project;
 - .4 Systems and infrastructure that may impact final design objectives;
 - .5 Requirements for multi-media, security, and IT system strategies.
 - .6 All additional information that will be required to deliver the project;
 - .7 Any conflicts that will need to be addressed with respect to scope, quality, schedule, and cost;
- .5 Report on adjustments to final budgets, risk conflicts, and schedule, including allowances for reviews and approvals.



- .6 Meet with the User Departments to develop the functional requirements.
- .7 Prepare agenda and focus/visioning presentation materials, online survey formats/questionnaires, presentation boards/samples of, to facilitate on site assessments and meetings to facilitate the User Department's functional space requirements and operational/service requirements:
 - .1 Develop and document for User Department approval the relationship and adjacencies of all functional areas.
 - .2 Identify resistance areas and technology readiness. to move into GC Workplace accommodations, and
 - .3 Provide educational material.
 - .4 Review and incorporate requirements set out in the need, scope of work and objectives statements in Part 1 of this TOR.
- .8 Prepare a complete list of all functional needs clearly describing all space requirements including:
 - .1 Area requirements for each individual functional space type;
 - .2 Useable areas for each function;
 - .3 Total useable area requirements for this project, and;
 - .4 A description of work activity within each space.
- .9 Provide a summary of each functional space type including:
 - .1 Common spaces;
 - .2 Equipment spaces;
 - .3 Support spaces, and;
 - .4 Furniture required for support space or functional spaces.
 - .5 Other Special Purpose Spaces (SPS) required by the User Department.
- .10 Provide a summary of the number (and type) of staff for each space.
- .11 Provide a description of the technical requirements for Architectural, including:
 - .1 Required operational and service infrastructure;
 - .1 Identify all Structural, Mechanical and Electrical systems to support the project program,
 - .2 Identify all security, acoustic and special fire separation requirements, and;
 - .2 Identify all Audio Visual and IT requirements;
- .12 Presentations to include high level visuals, including 3D images or renderings.
- .13 Provide recommendations on furniture to suit PCA staff operational preferences and functional requirements.
- .14 Identify major equipment and millwork that would affect the space requirements.
- .15 Review and define the User Department's storage requirements:
 - .1 Size, locations and furnishings/equipment.



- .16 Prepare an estimate of the costs:
 - .1 Prepare, based on the Functional Program, a budgetary summary of design items/components and estimated cost breakdown, and;
 - .2 Include a Class 'D' construction and soft cost estimate in the compiled Functional Program document.
- .17 Based upon the approved draft Functional Program, develop, for acceptance by the Departmental Representative and User Department, the following:
 - .1 Spatial relationship diagrams to indicate adjacency requirements between each of the spaces and groups of spaces, minimum of 2 options based on surveys and;
 - .2 Block plans (3 optional layouts):
 - .1 Showing the location of each functional component, and;
 - .2 To determine reasonable net to gross area ratios for the total building addition (including service spaces).
 - .3 Determine reasonable work points and samples of furniture for each common group or component
- .18 Refer to Definitions for Functional Program in Section 4.2.11. This project is anticipated to be a 'Level 2'.

2.4.3 FUNCTIONAL PROGRAMMING MEETINGS

- .1 Arrange and facilitate two (2) Visioning Sessions with all Key Stakeholders. Arrange for Focus Group meetings with the individual User Groups; depending on similarities between groups, a minimum of one (1) meeting per User Group to a maximum of nine (9) User Groups, via MS Teams or tele conference throughout the information gathering for functional programming;
 - .1 Introduce the functional programming process, stages and required arrangements and authorities, and;
 - .2 Participate in a site tour, if deemed necessary by the Departmental Representative; review PCA provided departmental information (and photographs) to understand the occupancy and operational requirements, office support areas, Special Purpose Space needs and layouts, and project related requirements.
- .2 Arrange and facilitate follow up sessions during Functional Programming Services as required.

2.4.4 DELIVERABLES

- .1 75% Draft Functional Program Report documenting the Functional Programming scope and activities.
 - .1 Revise as required.
 - .2 Provide one (1) electronic PDF copy on BIM 360 or FTP electronic transfer.



- .2 100% Functional Programming Report documenting the "Scope and Activities" and associated progressive deliverables including Furniture and Functional Programming report.
 - .1 The Furniture report is to list suggested types of furniture that would meet the end user client's needs. This furniture can then be used in the next stage of the project.
 - .2 Revise as required.
 - .3 Provide one (1) electronic PDF copy on BIM 360 or FTP site electronic transfer.
- .3 Final Functional Programming and Furniture Recommendation Report
 - .1 Revised as required addressing comments from 100% Quality Assurance review and from User Department.



3 PROJECT ADMINISTRATION

3.1 GENERAL REQUIREMENTS

- .1 The administration requirements outlined in this section are applicable to all PWGSC projects in the Western Region, unless otherwise indicated in the TOR.
- .2 All team members must maintain a professional, cordial and collaborative relationship.

3.2 LANGUAGE

- .1 All documents must be prepared in English.

3.3 MEDIA

- .1 The Consultant shall not respond to any media inquiry.
- .2 Direct all media requests to the Departmental Representative.

3.4 PROJECT MANAGEMENT

3.4.1 GENERAL

- .1 PWGSC administers the project on behalf of Canada and exercises continual control over the project during all phases of development.
- .2 This project is to be organized, managed and implemented in a collaborative manner.
- .3 The PWGSC project management team, the Consultant, and the User Department teams are to work cooperatively at every stage of the Pre-Design process in order to assure the creation of a successful and meaningful work.
- .4 Under the leadership of the PWGSC Departmental Representative, all team members are responsible for establishing and maintaining a professional and cordial relationship.

3.5 LINES OF COMMUNICATION

- .1 All communications will be through the Departmental Representative, unless directed otherwise.
 - .1 This includes formal contact between the Consultant, the PWGSC Project Team and the User Department.
- .2 Direct communication between members of the PWGSC Project Team on routine matters may be required for resolution of technical issues.
 - .1 However, this shall not alter project scope, budget or schedules, unless confirmed in writing by the Departmental Representative.

3.6 MEETINGS

3.6.1 GENERAL

- .1 The Departmental Representative will arrange meetings as required throughout the project, with representatives from:
 - .1 The User Department;
 - .2 PWGSC;
 - .3 The Consultant team, and;



- .2 Standing agenda items shall include:
 - .1 Project Schedule;
 - .2 Cost;
 - .3 Risk;
 - .4 Quality, and;
- .3 Project Start-up Meeting:
 - .1 Shall be arranged and facilitated by the Departmental Representative, and;

3.7 CONSULTANT RESPONSIBILITIES

- .1 The Consultant Team includes the Consultant's staff, sub-consultants and specialists.
 - .1 This team must maintain valid expertise for the duration of the project;
 - .2 The team must include qualified registered architectural professional and licensed interior designer with extensive relevant experience and who are capable of providing all required services;
 - .3 Team members may be qualified to provide services in more than one discipline, and;
 - .4 The Consultant may expand the team to include additional disciplines.
- .2 The Consultant is responsible for:
 - .1 Obtaining Departmental Representative acceptance for each project phase before proceeding to the next phase;
 - .2 Accurately communicating design, budget, and scheduling issues to staff, sub-consultants and specialists;
 - .3 Coordinating the quality assurance process and ensuring that submissions of sub-consultants are complete and signed-off.

3.8 PWGSC RESPONSIBILITIES

3.8.1 ADMINISTRATION

- .1 PWGSC administers the project and exercises continual control over the project during all phases of development.
- .2 The following administrative requirements apply during all phases of the project delivery.

3.8.2 REVIEWS

- .1 PWGSC will review the work at various stages and reserves the right to reject unsatisfactory work at any stage.
- .2 If later reviews show that earlier acceptances must be withdrawn, the Consultant shall redo and re-submit at no extra cost.

3.8.3 ACCEPTANCE

- .1 PWGSC acceptance of submissions from the Consultant simply indicates that - based on a general review - the material complies with governmental objectives and practices, and meets overall project objectives.



- .2 Acceptance does not relieve the Consultant of professional responsibility for the work or compliance with the contract.

3.8.4 PWGSC PROJECT MANAGEMENT

- .1 The Project Manager assigned to the project is the Departmental Representative.
- .2 The Departmental Representative is directly responsible for:
 - .1 The progress and administration of the project, on behalf of PWGSC;
 - .2 Day-to-day project management and is the Consultant's single point of contact for project direction, and;
 - .3 Providing authorizations to the Consultant on various tasks throughout the project.

3.8.5 PWGSC ARCHITECTURE AND ENGINEERING CENTRE OF EXPERTISE (AECOE)

- .1 Provides advisory services and quality assurance reviews of consultant deliverables.
- .2 Participates regularly in project milestones and may attend meetings as and when required.
- .3 Provides a Design Manager for the project who will coordinate the services of AECOE.

3.9 USER DEPARTMENT RESPONSIBILITIES

3.9.1 USER DEPARTMENT PROJECT LEADER

- .1 Is accountable for the expenditure of public funds and delivery of the project in accordance with the terms accepted by the Treasury Board.
- .2 Reports to the senior User Department executive management.
- .3 Will play several critical roles for the successful implementation of the project, including:
 - .1 Coordination of the quality, timing and completeness of information and decisions relating to issues related to the functional performance of the facility.

3.10 TECHNICAL REPORTS

- .1 Technical Reports are official government documents, which are used to support an application for approval or to obtain authorization or acceptance. Technical Reports must:
 - .1 Be complete, clear and professional in appearance and organization, with proper reference to related parts and contents in the report;
 - .2 Clearly outline the intent, objectives, process, results and recommendations;
 - .3 Present the flow of information and conclusions in a logical, easy to follow sequence;
 - .4 Be in written narrative, graphic, model (traditional and/or computer generated), and photographic format, which can be web enabled;
 - .5 Ensure that all pages are numbered in sequence, and;



- .6 Be printed double-sided, if hard copies are produced.
- .2 Standard practice for the organization of technical reports include:
 - .1 A cover page, clearly indicating the nature of the report, the date, the PWGSC project number and who prepared the report;
 - .2 A Table of Contents;
 - .3 An Executive Summary;
 - .4 The body of the report is to be structured such that the reader can easily review the document and locate, respond to and/or reference related information contained elsewhere in the report easily;
 - .5 Appendices are to be used for lengthy segments of the report, supplementary and supporting information and/or for separate related documents.
- .3 The report content must:
 - .1 Ensure that the executive summary is a true condensed version of the report following the identical structure, including only key points and results/recommendations requiring review and/or approval;
 - .2 Use a proper numbering system (preferably legal numbering), for ease of reference and cross-reference;
 - .1 The use of 'bullet points' are to be avoided.
 - .3 Use proper grammar, including using complete sentences, in order to ensure clarity, avoid ambiguity;
 - .1 The use of undefined technical terms, industry jargon and cryptic phrases are to be avoided.
 - .4 Be written as efficiently as possible, with only essential information included in the body of the report and supporting information in an appendix if needed.



4 DEFINITIONS

4.1 PURPOSE

4.1.1 DOCUMENT DEFINITIONS:

- .1 Definition of words and phrases in the Terms of Reference (TOR), and *Doing Business with PWGSC – Documentation and Deliverables Manual* to:
 - .1 Expand the detail associated with the services and deliverables addressed in the above Documents, and;
 - .2 Ensure a clear understanding of the project scope, procedures, and Quality performance requirements.

4.2 DEFINITIONS

4.2.1 ACCEPTANCE

- .1 A formal action taken by an assigned person with authority (contractual or otherwise) to declare that some aspect of the project are permitted to proceed.

4.2.2 BASIS OF ESTIMATE (BOE)

- .1 A "living" document throughout the project design and project life cycle.
- .2 Provides a framework for progress monitoring and reporting.
- .3 Prepared and updated to facilitate the understanding, assessment and validation of the estimated value breakdowns, independent of any other supporting documentation.
- .4 Includes:
 - .1 Level of consensus between concurrent/third party estimates;
 - .2 Estimate methodology;
 - .3 Basis of pricing - cost data sources, and allowances;
 - .4 Description of information obtained and used in the estimate including the date received;
 - .5 Notable assumptions, exclusions and inclusions;
 - .6 Listing of items/issues carrying notable risks;
 - .7 Opportunities, and any deviations from standard practices;
 - .8 Record of pertinent communications and agreements that have been made between the estimator and other project stakeholders;
 - .9 Major changes relative to previous estimates;
 - .10 Significant market events that may have an effect on the costs, and;
 - .11 Estimate reconciliation.

4.2.3 BUDGET

- .1 Developed using Cost Estimates and the Project Schedule.
- .2 Provides a view of how much the project is estimated to cost both in total and periodic terms.



- .3 Determines the cost performance baseline for use in cost management variance analysis such as, determining earned performance value.
- .4 Is aligned with funding limits to ensure funding availability/appropriation.
- .5 Also refer to - Estimated Construction Cost definition.

4.2.4 "CANADA", "CROWN"/"HER MAJESTY"

- .1 Her Majesty the Queen in right of Canada.

4.2.5 CONCEPT

- .1 Activity Based Working (ABW) is a concept which recognizes that through the course of any day, people engage in many different activities and that they need different types of work settings to accommodate these activities.

4.2.6 CONSTRUCTION COST ESTIMATE

- .1 Refer to the *Doing Business with PWGSC Manual*, Section 3 - Cost Estimates for further Construction Cost Estimate details.
- .2 Construction Cost Estimate as compared to the Budget – see Definition.
- .3 In all cases, include Basis of Estimate (BOE) – see Definition.

4.2.7 CONSTANT DOLLAR ESTIMATE

- .1 This is an estimate expressed in terms of the dollars of a particular base fiscal year.
- .2 It includes no provisions for inflation.
- .3 Cash Flow over a number of fiscal years may also be expressed in constant dollars of the base year including no allowance for inflation in the calculation of costs.
 - .1 For Current Dollar Estimates – see Definitions;



4.2.8 CONSULTANT TEAM

- .1 An architectural or engineering firm and their sub-consultants (the Design Consultant), professionals and advisors with whom PWGSC has contracted to provide other services on this project.

4.2.9 DEPARTMENTAL REPRESENTATIVE (DR)

- .1 The person designated in the Contract, or by written notice to the Contractor/Consultant, to act as the Departmental Representative for the purposes of being a Contract entity.

4.2.10 ESTIMATED CONSTRUCTION COST

- .1 The Budget identified in the TOR or subsequently in writing by the Departmental Representative:
 - .1 Also stated as "Construction Cost Estimate" or "Construction Cost Limit".

4.2.11 FUNCTIONAL PROGRAM

- .1 May be included in the RFP or may be a Functional Programming deliverable stating the end state functional and operational goals.
 - .1 The term "functional programming" is only one component of a "Programming" service which may also include technical programming, master schedules and program requirement cost estimates.
- .2 Defines the design problem by determining the details for achieving the goals. Goals may include, but are not limited to, design considerations regarding:
 - .1 Architecture: Area needs, adjacencies, circulation, acoustics, health and safety, personal forecasts, user characteristics, organizational structure, budget and costs and project schedule;
 - .2 Furniture concepts to meet the functional program work points.
- .3 One of Three Program Levels of effort are use based on complexity and risk:
 - .1 Level 1 Program is used for small, relatively simple or repetitive types of projects where the standard requirements are well understood, includes;
 - .1 A summary of required useable spaces, along with net areas and general notes outlining specific space requirements;
 - .2 The approximate gross useable area required to accommodate the program;
 - .3 A description, in general terms, of the relationships between spaces and groups of spaces, in sufficient detail to commence the Schematic Design Stage;
 - .2 Level 2 Program is used for larger projects with some degree of complexity, includes;
 - .1 A summary of required useable spaces, along with net areas;



- .2 An outline of specific technical and functional requirements for each space;
- .3 The approximate gross area required to accommodate the programme, determined by developing component diagrams;
- .4 Relationship diagrams indicating adjacencies and flow patterns between spaces and groups of spaces, and;
- .3 Level 3 Program is used for major projects and projects with a high degree of complexity, includes;
 - .1 A qualitative (functional) and quantitative (net area and gross area) description of all required spaces;
 - .2 Detailed Programme Areas including;
 - .1 Net useable area requirements for each space;
 - .2 Component Gross area requirements for all component groups, and;
 - .3 Gross Area Summary needed to accommodate the programme;
 - .3 An outline of specific Technical Requirements, indicating general Architectural, Structural, Mechanical, Electrical and Security systems applicable to the entire building and/or to each similar space types;
 - .4 Room / Space Data Sheets, indicating specific requirements for each space type not covered in the technical requirements;
 - .5 Space Concept Plans, associated with each Space Data Sheet, indicating all fixed equipment and any special features;
 - .6 Component (Group or Department) concept planning diagrams indicating required relationships between all spaces in each component group;
 - .7 Component Relationship Diagrams, indicating relationships between all component groups;
 - .8 A Demonstration plan (to scale) to confirm that:
 - .1 Net to gross area ratios are reasonable; and
 - .2 Component group relationships can reasonably be achieved either within the established gross building area for new buildings or within the limitations of the building floor plate(s) for existing buildings.

4.2.12 MASTER SCHEDULE (MASTER PROJECT SCHEDULE)

- .1 Refer to the Doing Business with PWGSC Manual.

4.2.13 PARTNERING SESSION WORKSHOP(S)

- .1 Workshop(s), by the Departmental Representative, as Lead, which includes the Project Team and other stakeholders.
- .2 Within the Workshop various members will be required to Lead specific Workshop deliverables as agreed upon by consensus.



- .3 Other topics include the:
 - .1 Role and responsibilities matrix;
 - .2 Rules of engagement;
 - .3 Communication plan;
 - .4 Project status, goals, objectives, elements, scope, funding, and preliminary schedule;
 - .5 Deliverables plan;
 - .6 Measures of percentage complete and delivered;
 - .7 Issues tracking and documentation systems;
 - .8 Project risks and the initial risk management plan;
 - .9 Review of existing available documentation and project site conditions;
 - .10 Schedule of biweekly (or as otherwise determined by the Departmental Representative) project and milestone meetings; and
 - .11 Communication and document control plan.

4.2.14 PROJECT MILESTONES

- .1 PWGSC uses the National Project Management System (NPMS) for management and delivery of its real property projects to align with the Federal Government's review and approval processes and corresponding Required Service (RS) associated with Project Milestones described in the TOR:
- .2 Pre-Design (PD)
 - .1 The Design Consultant Required Service includes activities such as:
 - .1 Analyse the Departmental Representative's information as may be presented at the time of Solicitation and the Project Start-up meeting; and
 - .2 Confirm, that based on the provided information, the Design Consultant is prepared to proceed with the Design Contract with regards to schedule, construction cost estimate, scope of work and quality;
 - .1 Prior to proceeding with the design, the Design Consultant and the Departmental Representative may discuss additional services from the Consultant or Specialty Consultants, and
 - .2 The TOR may pre-establish additional services, such as providing,
 - .1 OPR, and,
 - .2 Programming,
 - .3 Pre-Design documentation become the project delivery guiding documents, utilized throughout the project life cycle.
 - .2 Final Deliverable:
 - .1 Pre-Design Report.



- .3 Progressive Deliverables, such as:
 - .1 Functional Program, furniture assessment; and
 - .2 Response to PWGSC QA reviews.

4.2.15 PROJECT TEAM

- .1 Typically includes entities, such as:
 - .1 Departmental Representative,
 - .2 Consultant;
 - .3 Independent third parties also in contract with PWGSC, and;
 - .4 User Department and Operational personnel.

4.2.16 QUALITY

- .1 The degree to which the Work meets or exceeds the Project requirements and expectations.

4.2.17 QUALITY ASSURANCE (QA) REVIEWS

- .1 PWGSC QA Reviews are an advisory service to the Project Team and stakeholders where respective submission/deliverable accountabilities remain in effect as per contractual conditions or other forms of commitment.
 - .1 Design Consultant remains professionally accountable for the design validation and verification required of the Project Milestone submissions during the project life cycle.
- .2 QA Reviews, supported by commentary, conclude with a risk assessment associated with Quality of design and documentation deliverables, and include:
 - .1 Parameters to confirm at the onset of a review whether deliverables are appropriately scoped and detailed with respect to current Project Milestones or phase/progressive submissions.
- .3 QA Reviews focus on Quality Indicators (QI) parameters associated with Design Quality Indicators (DQI) and Quality Deliverable Indicators (QDI).
- .4 Design Quality Indicators (DQI):
 - .1 3 Aspects of DQI:
 - .1 Functionality – design utility;
 - .2 Build Quality – design performance, and;
 - .3 Impact – project contextual interactivity (such as cultural, market, environmental conditions/factors):
 - .1 Project impact on context, and vice versa;
 - .2 Context impact on project.
 - .2 Each DQI Aspect is considered against Good Design Protocols, such as;
 - .1 Creativity and Technical Competence;
 - .2 Functional Suitability;
 - .3 Whole-of-Life Performance;
 - .4 Health, Safety and Security;
 - .5 Inspiring and Attractive;



- .6 Appropriate Innovation, and;
- .7 Sustainable and Enduring.
- .3 As each DQI Aspect is considered against Good Design Protocols, each Aspect is also assessed against the same Characteristics such as:
 - .1 Conceptual Integrity;
 - .2 Functionality;
 - .3 Operability;
 - .4 Constructability;
 - .5 Biddability, and;
 - .6 Claims Prevention.
- .5 Quality Deliverable Indicators (QDI):
 - .1 Focus on documentation delivery.
 - .1 Submitted documentation is assessed against 6 characteristics:
 - .1 Clarity;
 - .2 Completeness;
 - .3 Compliance;
 - .4 Consistency;
 - .5 Correctness, and;
 - .6 Decision Traceability.

4.2.18 WORK

- .1 Refer to Contract Documents: General Conditions (GCs).

----- END -----