

## **APPENDIX B : Procedures and Standards, PWGSC**



# PROCEDURES & STANDARDS

## PROFESSIONAL & DESIGN SERVICES

Public Works and Government Services Canada  
Real Property Services  
Atlantic Region

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## 1. INTRODUCTION

### 1.1. PROCEDURES AND STANDARDS

#### 1.1.1. GENERAL

- .1 These PWGSC *Procedures and Standards* (P&S) have been developed to facilitate the development of a rational, well-documented design process and to ensure compliance with federal government standards and Treasury Board directives

#### 1.1.2. HARMONIZATION WITH THE TERMS OF REFERENCE (TOR)

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

### 1.2. PROJECT MANAGEMENT

#### 1.2.1. NATIONAL PROJECT MANAGEMENT SYSTEM

- .1 PWGSC uses the National Project Management System (NPMS) for management of its engineering projects. Refer to the PWGSC NPMS web site for more details.

#### 1.2.2. DESIGN STAGE

- .1 The purpose of this phase is to analyze all project requirements including:
  - .a) Codes, regulations, programming, sustainability, cost, time management and risk to demonstrate a full understanding of the project
  - .b) Prepare a preliminary design that addresses the project objectives and resolves the issues outlined in the scope of work.
  - .c) Provide a detailed review and analysis of the project requirements including all updates and amendments to ensure all requirements are fully integrated
- .2 The approved deliverable will become the formal project work plan and will be utilized throughout the project to guide the delivery.

#### 1.2.3. IMPLEMENTATION STAGE

- .1 The purpose of this phase is to further develop the preliminary design and to deliver the Work.
- .2 The Design Development documents consist of drawings and other documents to describe the scope, quality and cost of the project in sufficient detail to facilitate design approval, confirmation of code compliance, detailed planning of construction and project approval.
- .3 Construction Document Process
  - .a) The purpose of this phase is to translate design development documents into construction drawings and specifications.
  - .b) Drawings and Specifications will be compiled and submitted to PWGSC standards as detailed in this document and in the ToR.
  - .c) Drawings and Specifications to be reviewed and approved by PWGSC and AAFC. Reviews will occur at 66 and 99% completion.
- .4 Construction Contract Administration Process
  - .a) The purpose of this phase is to construct the project, as per the Construction Documents and to deliver the project in compliance with both the ToR. And Contract Documents and to direct and monitor all necessary or requested changes to the scope of work during construction, commissioning and closeout.
  - .b) Resident site services may be required for the purpose of ensuring the presence of the Design Builders representative is on-site to inspect, co-ordinate and monitor the



work; and to provide liaison with the Departmental Representative and other agencies involved in the work.

- .c) Shop Drawings and As-Built Drawings to be reviewed and approved by PWGSC as outlined in the ToR.

#### **1.2.4. COMMISSIONING STAGE**

- .1 “Commissioning” is a quality assurance process, in which the functional requirements of the Owner/occupant and the operational requirements of facility management are tested, verified and proven to function as intended.

#### **1.2.5. CLOSEOUT STAGE**

- .1 The purpose of this phase is to ensure the orderly completion and recording of all aspects of the work during the construction and liaise with the PWGSC and other agencies as appropriate to close out the project.

## **2. PROCEDURES**

### **2.1. PROJECT ADMINISTRATION**

#### **2.1.1. GENERAL REQUIREMENTS FOR ALL PROJECTS**

- .1 The administration requirements outlined in this section are applicable to all PWGSC projects in Atlantic Region, unless otherwise indicated in the TOR.
- .2 “Project Team” refers to key representatives involved in this project.
- .3 All team members must maintain a professional, cordial and collaborative relationship.

#### **2.1.2. LANGUAGE**

- .1 Construction documents must be prepared in English.

#### **2.1.3. MEDIA**

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

#### **2.1.4. PROJECT MANAGEMENT**

- .1 PWGSC administers the project on behalf of Canada and exercises continuing 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 Design Builder, and the AAFC team are to work cooperatively at every stage of the design and construction process in order to assure success.

#### **2.1.5. LINES OF COMMUNICATION**

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

#### **2.1.6. MEETINGS**

- .1 The Departmental Representative will arrange meetings throughout the project, with representatives from:
  - .a) AAFC
  - .b) PWGSC
  - .c) The Design Builder
- .2 Standing agenda items shall include:





- .a) Project Schedule,
- .b) Cost,
- .c) Risk,
- .d) Quality,
- .e) Health and Safety

### **2.1.7. DESIGN BUILDER RESPONSIBILITIES**

- .1 The Design Builder includes the Design Builder staff, sub-consultants, sub-trades and specialists.
- .2 This team must maintain its expertise and continuity for the duration of the project.
- .3 The team must include qualified professionals, with extensive relevant experience, capable of providing all required services.
- .4 Team members may be qualified to provide services in more than one discipline.
  - .a) The Design Builder may expand the team to include additional disciplines.
- .5 The Design Builder is responsible for:
  - .a) Obtaining Departmental Representative acceptance for each project phase before proceeding to the next phase.
  - .b) Accurately communicating design, budget, and scheduling issues to staff, sub-consultants and specialists.
  - .c) Co-ordinating input for the Departmental Representative's Risk Management Plan
  - .d) Co-ordinating the quality assurance process and ensuring that submissions of sub-consultants are complete and signed-off by reviewers;

### **2.1.8. PWGSC RESPONSIBILITIES**

- .1 PWGSC administers the project and exercises continuing control over the project during all phases of development.
- .2 Reviews
  - .a) PWGSC will review the work at various stages and reserves the right to reject unsatisfactory work at any stage.
  - .b) If later reviews show that earlier acceptances must be withdrawn, the Design Builder shall re-design and re-submit at no extra cost.
- .3 Acceptance
  - .a) PWGSC acceptance of submissions from the Design Builder simply indicates that, based on a general review, the material complies with governmental objectives and practices, and meets overall project objectives
  - .b) Acceptance does not relieve the Design Builder of professional responsibility for the work and for compliance with the contract.
- .4 PWGSC Project Management
  - .a) 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 is the Design Builder. The Design Builder is to have a single point of contact for the project direction.
    - .3 Providing authorizations to the Design Builder on various tasks throughout the project.
    - .4 The liaison amongst and between the Design Builder, PWGSC, and AAFC; and manages the internal federal government stakeholders.
- .5 PWGSC Professional & Technical Resources Team
  - .a) Provides professional advice and quality assurance reviews of Design Builder deliverables by Architectural and Engineering professional disciplines.
  - .b) Offers expert technical advice on related project issues, such as functional programming, options analysis, risk management, cost planning, scheduling, contract



interpretation, specifications, terms of reference, commissioning, claims management, project delivery approach and project compliance.

.c) Participates regularly in Meetings during the design phase and may attend (during construction). Conducts field reviews on behalf of the Departmental Representative.

.d) Assembles and coordinates the Resources Team of Architects and Engineers.

### **2.1.9. REVIEW AND APPROVAL BY AUTHORITIES**

.1 The federal government generally defers to provincial and/or municipal authorities or the authority having jurisdiction for specific regulations, standards and inspections but in areas of conflict, the more stringent authority prevails.

.2 This work will be reviewed by AAFC and PWGSC. The Provincial Worker's Compensation Board will also have an active on-site review role during construction; as will, the PWGSC Regional Health and Safety division.

### **2.1.10. TECHNICAL AND FUNCTIONAL REVIEWS**

.1 This includes both PWGSC and AAFC team's technical and functional reviews. Some technical reviews will be by PWGSC retained consultants – such as a Fire Engineer.

.2 These reviews ensure technical and functional quality assurance;

.3 Submissions will be reviewed at the completion of specific phases.

## **2.2. PROJECT DELIVERY**

### **2.2.1. GENERAL REQUIREMENTS**

.1 The project delivery requirements outlined in this section are applicable to the design and construction of all PWGSC projects in Atlantic Region.

.2 The Design Builder team shall provide fully integrated and coordinated professional and design services for the delivery of a project, in accordance with the requirements in the ToR and as contained herein.

.3 The Design Builder must:

.a) Obtain written authorization from the Departmental Representative before proceeding from one phase of work to the next phase.

.b) Coordinate all services with the Departmental Representative.

.c) Deliver each project utilizing best practices in support of AAFC's team needs, respecting the approved financial budget, schedule, scope, and quality objectives.

.d) Establish a cohesive functional partnership and open communication between all members of the project delivery team and stakeholders throughout all phases of the project life,

.e) Ensure that the Design Builder team has an in-depth understanding and collective 'buy-in' of the project requirements, scope, budget and scheduling objectives. Works constructively to build a collaborative and cooperative team approach with knowledgeable and timely input and contribution by all project team members, including representatives from PWGSC and AAFC teams.

.f) Conduct rigorous quality assurance reviews during the design and construction phases, including the application of value engineering principles.

.g) Provide a written response to all PWGSC comments included in Quality Assurance reviews conducted throughout the design and construct of the project.

.h) Develop a rigorous quality management plan in order to respond to and correct, in a timely and effective manner, all issues as they occur,

.i) If any alterations are required during the development of the design, or during construct analyse the impact on all project components and resubmit for approval before proceeding further,

.j) Establish and maintain a change control procedure for scope changes that is in keeping with PWGSC's NPMS.





- .k) Ensure that an experienced Project Architect or Project Engineer is assigned to the project, who shall be responsible for the production, coordination and delivery of all design and construction documents for all project disciplines,
- .l) Prepare a continuous risk identification and management program employing effective methodologies to ensure construction safety as well as claims avoidance,
- .m) Provide continuous and comprehensive documentation of the project at all stages of the project implementation,
- .n) Ensure continuity of key personnel and maintain a dedicated working team for the life of the project.

## **2.3. SCHEDULE MANAGEMENT**

### **2.3.1. PROJECT SCHEDULE**

- .1 A Detailed Project Schedule ensures adequate Time Management planning and control of the project.
- .2 Project Schedules are used as a guide for the planning, design and implementation phases of the project, as well as to communicate to the project team when activities are to happen.
- .3 When building a Project Schedule, the Design Builder must consider:
  - .a) The level of detail required for control and reporting;
  - .b) The reporting cycle shall be monthly, unless otherwise identified in the Terms of Reference
  - .c) The nomenclature and coding structure for naming of scheduled activities, which must be submitted to the Departmental Representative for acceptance.

### **2.3.2. MILESTONES**

- .1 The Major Milestones are standard Deliverables and Control Points within NPMS and are required in all schedule development.
- .2 These Milestones will be used in Time Management Reporting within PWGS.
- .3 Milestones may also be external constraints such as the completion of an activity, exterior to the project, affecting the project.

## **2.4. RISK MANAGEMENT**

### **2.4.1. RISK FACTORS**

- .1 Probability, impact, overall risk, risk response, and risk allowance are to be determined for each item listed below:

### **2.4.2. PROJECT SCOPE DELIVERY**

- .1 Delivery of Specified Requirement:
  - .a) Accuracy of client requirements in terms of cost/schedule/performance/quality and ability to interface with existing site.
  - .b) Conflicting client priorities
  - .c) Low level of client knowledge
  - .d) Completeness of client requirements in terms of cost/ schedule / performance / quality and ability to interface with existing environment
  - .e) Restricted working conditions
  - .f) Opportunities for changes / positive impact
  - .g) Low involvement of user groups in scope of definition
  - .h) Interface with existing systems
  - .i) Restricted working conditions
  - .j) Operational needs AAFC.

### **2.4.3. SITE/ASSET ACTUAL CONDITIONS**

- .1 Actual Physical Environment:
  - .a) Availability/accuracy of as built documentation and existing condition reports



- .b) Time of year
- .c) Ongoing Farm operation
- .d) Presence of hazardous materials – *none to AAFC's knowledge*
- .e) Availability/access to site/Security
- .f) Presence of other contractors on site
- .g) Climate (winter/fall conditions, rain, wind, water levels)

## 2.5. WASTE MANAGEMENT

### 2.5.1. GENERAL

- .1 The Design Builder must implement a solid waste management program.
- .2 Added labour costs can be recuperated and waste management costs savings can be achieved through reduced tipping fees, avoided haulage costs, and the sale of reusable and recyclable materials.

## 2.6. COMMISSIONING

### 2.6.1. GENERAL

- .1 Commissioning is not a replacement for good design and construction practices. It requires coordinated efforts on the part of all parties involved in the Project.
- .2 The “commissioning phase” is the transition stage between the implementation and operation phases of the PWGSC NPMS referred to in Section 2.1.
- .3 “Commissioning” is a quality assurance process, in which the functional requirements of AAFC and the operational requirements of facility management are proven to function as intended.
- .4 The “commissioning process” is a planned program of quality management and information transfer that extends through all phases of the project’s development and delivery, up to and including the warranty period.
- .5 The process consists of a series of checks and balances to ensure that the work is designed, installed and proven to operate as intended.

### 2.6.2. MAIN COMPONENTS

- .1 Commissioning has two main components, functional and operational.
  - .a) The functional component deals with:
    - .1 Security, health (indoor air quality) and occupant safety;
    - .2 Comfort (temperature, relative humidity, ventilation, air flow patterns, air purity and well being);
    - .3 Cost-effectiveness of design and
    - .4 Systems and equipment supporting AAFC’s functional requirements
  - .b) The operational component deals with:
    - .5 Operation and Maintenance (O&M) issues; e.g., design review with a particular concern for the operation and maintenance of the systems today and in the future, when repairs are required;
    - .6 Performance evaluation of systems and equipment;
    - .7 Accessibility to O&M Documentation and
    - .8 Review of the training plan against the current needs now and in the future.

## 3 STANDARDS

### 3.1 TECHNICAL DOCUMENTS

#### 3.1.1. PURPOSE

- .1 This section provides direction and standards for the preparation of submissions to PWGSC during all the various stages of project delivery.



## **3.2 CONSTRUCTION DOCUMENTS**

### **3.2.1 PURPOSE**

- .1 This section provides direction in the preparation of construction contract documents (namely specifications, drawings and addenda) for PWGSC.
- .2 Drawings, specifications and addenda must be complete and clear, in order that any contractor could prepare a bid without guesswork. Standard practice for the preparation of construction contract documents requires that:

### **3.2.2 PRINCIPLES FOR PWGSC CONTRACT DOCUMENTS**

- .1 PWGSC's contract documents are based on common public procurement principles.
- .2 PWGSC does not use Canadian Construction Document Committee (CCDC) documents.
- .3 The construction contract and the terms and conditions are prepared and issued by PWGSC, along with all other related bidding and contractual documents.

### **3.2.3 QUALITY ASSURANCE**

- .1 Design Builders are required to undertake their own quality control process and must review, correct and coordinate (between disciplines) their documents before issuing them to PWGSC.

### **3.2.4 SPECIFICATIONS**

- .1 In preparing project specifications, the Design Builder must use the current edition of the National Master Specification (NMS) in accordance with the "NMS User's Guide". Noting, that within the TOR some Sections have been included for the Design-Builder's use.

### **3.2.5 DRAWINGS**

- .1 Computer Aided Design & Drafting (CADD) Drawings shall be in accordance with PWGSC National CADD Standards and CSA B78.3.

### **3.2.6 ADDENDA**

- .1 Format
  - .a) Prepare addenda in keeping with PWGSC drawing and specification format and with Appendix 'D'.
  - .b) No signature type information is to appear.
  - .c) Every page of the addendum (including attachments) must be numbered consecutively.
  - .d) All pages must have the PWGSC project number and the appropriate addendum number.
  - .e) Sketches shall appear in the PWGSC format, stamped and signed.
  - .f) No Design Builder information (name, address, phone #, consultant project # etc.) may appear in the addendum or its attachments (except on sketches).
- .2 Content
  - .a) Each item should refer to an existing paragraph of the specification or note/detail on the drawings.

### **3.2.7 SUBMISSIONS**

- .1 For each construction document submission, the Design Builder shall provide:
  - .a) A completed and signed Checklist for the Submission of Construction Documents (See Appendix 'B')
  - .b) Original specification; printed one side on 216 mm x 280 mm white bond paper.
  - .c) Index, as per Appendix 'C'
  - .d) Reproducible original drawings and specifications; sealed and signed by the design authority.
  - .e) Addenda (if required), as per Appendix 'D';
- .2 Electronic Documents:



- .a) Consultants shall provide an electronic true copy of the final documents (specifications and drawings) in an editable format; as well, as a copy in a 'pdf' format.

### 3.3 SPECIFICATIONS

#### 3.3.1 NATIONAL MASTER SPECIFICATION (NMS)

- .1 The Design Builder retains overriding responsibility for content and shall edit, amend and supplement the NMS sections as deemed necessary to produce an appropriate project specification, free of conflict and ambiguity.

#### 3.3.2 SPECIFICATION ORGANIZATION

- .1 Narrow scope sections describing single units of work are preferred for more complex work; however, broad scope sections may be more suitable for less complex work.  
.2 Include specification sections contained within the TOR.  
.3 Note: Design Builder name is not to be indicated in the specifications.

#### 3.3.3 STANDARDS

- .1 As referenced in NMS, the standards may not be up to date, it is the responsibility of the Design Builder to ensure that the project specification uses the latest applicable edition of all references quoted.  
.2 Canadian standards should be used wherever possible.

#### 3.3.4 HEALTH AND SAFETY AND SECURITY

- .1 Confirm with the Project Manager to determine if there are any requirements beyond those stated in the TOR.

### 3.4 DRAWINGS

#### 3.4.1 SPECIFICATION NOTES

- .1 No specification type notes are to appear on any drawing.

#### 3.4.2 INFORMATION TO BE INCLUDED

- .1 Drawings must show the quantity and configuration of the project, the dimensions and details of how it is to be constructed.  
.2 The scope of work should be clearly detailed and elements not in contract should be eliminated or kept to an absolute minimum.  
.3 Follow generally accepted drawing conventions, understandable by the construction trades, and in accordance with PWGSC publications.  
.4 Drawings as per Appendix 'A, B, and C'..

#### 3.4.3 DRAWING NUMBERS

- .1 Number drawings in sets according to the type of drawing and the discipline involved as below.

Discipline	Drawing
Demolition	D1, D2, ...
Architectural	A1, A2, ...
Civil	C1, C2, ...
Mechanical	M1, M2, ...
Electrical	E1, E2, ...
Structural	S1, S2, ...

#### 3.4.4 NORTH POINTS

- .1 On all plans include a north point.  
.2 Orient all plans in the same direction for easy cross-referencing.  
.3 Wherever possible, lay out plans so that the north point is at the top of the sheet.

## APPENDICES

## APPENDIX A TYPICAL PWGSC DRAWING

### Typical PWGSC Drawing Prototype

Available from PWGSC in the following sizes:

### Prototype de dessin typique de TPSCG

Disponible par TPSGC dans les tailles suivantes :

**B1 - 707mm x 1000mm (most commonly used / le plus généralement utilisé)**

**A0 - 841mm x 1189mm (rarely used / rarement utilisé)**

**A1 - 594mm x 841mm (preferred use / utilisation préférée)**

11 x 17" - 279.4mm x 431.8mm

8.5"x11" - 215.9mm x 279.4mm

PW65C Signature  
Signature de TP56C

**Firm Consultant Logo**  
**Logo Provided by Consultant**

**Sub-Component Layout**  
 (Top) Placing the Component

Security Designation (minimum 2.Omm high text)  
Designation de sécurité (texte élevé de minimum 2.Omm)

Metric Designation (minimum 2.0mm high text)  
Désignation métrique (texte élevé de minimum 2.0mm)

**Electric Drawing**  
All Drawings by EDD Systems

Revision History (minimum 1.75mm high text)  
Histoire de révision (texte élevé de minimum 1.75mm)

Project Title (minimum 25mm high text)

**Titre du projet (texte élevé de minimum 2.5mm)**

Project Address (minimum 2,000 characters)


Drawing Title (minimum 2.5mm high text)

de dessin (texte élevé de minimum 2.5mm)

**Project Information (minimum 2.0mm high text)**  
L'information de projet (texte élevé de minimum 2.0mm)

Project / Drawing Number (minimum 2.5mm high text)  
Project/nombre de dessin (texte élevé de minimum 2.5mm)

Canada Wordmark (minimum 3.0mm high text)  
le Canada Wordmark (minimum 3.0mm high text)

**Plan / Section / Detail Title**  
**A** Title of Plan/Section/Detail  
**B C** Scale / Enlarge 1:50  
  
 (minimum 2.0mm high text / texte élevé de minimum 2.0mm)  
 (minimum 2.0mm high text / texte élevé de minimum 2.0mm)  
 Graphical Bar Scale on all drawings (minimum 2.0mm high text)  
 Echelle graphique de barre sur tous les dessins (texte élevé de minimum 2.0mm)

Project / Drawing Number (minimum 2.5mm high text)  
 Project/nombre de dessin (texte élevé de minimum 2.5mm)  
 Canada Wordmark (minimum 3.0mm high text)  
 le Canada Wordmark (minimum 3.0mm high text)

Canada



## APPENDIX B SAMPLE CHECKLISTS

### B.1 CHECKLIST FOR SUBMISSION OF CONSTRUCTION DOCUMENTS

#### B1.1 TITLE BLOCK

<b>Project Title:</b>		<b>Date:</b>	
<b>Project Location:</b>		<b>Project Number:</b>	
<b>Consultant's Name:</b>		<b>Contract Number:</b>	
<b>PWGSC PM:</b>	<b>Review Stage:</b>		
	60%	99%	100%

#### B1.2 SPECIFICATIONS

Item	Verified by:	Comments:	Action by:
<b>1 SPECIFICATIONS:</b>			
<b>.1 National Master Specifications</b>			
.1a The current edition of the NMS has been used.			
<b>.2 Specification Organization</b>			
.2a Each Section starts on a new page and the Project Number, Section Title, Section Number and Page Number show on each page.			
<b>.3 Dimensions</b>			
.3a Dimensions are provided in metric only.			
<b>.4 Standards</b>			
.4a The latest edition of all references quoted is used.			
<b>.5 Specifications Materials</b>			
.5a The method of specifying materials uses recognized standards.			
<b>.6 Index</b>			
.6a The index shows a complete list of plans and specification sections with the correct number of pages and correct drawing titles and section names.			
<b>.7 Regional Guide Specifications</b>			
.7a General Instructions are included (Section 01 00 10 in the NCA).			





<b>.8 Health and Safety</b>			
.8a Section 01 35 29 - Health and Safety Requirements is included.			
<b>.9 Subsurface Investigation Reports</b>			
.9a Subsurface Investigation Reports are included in Division 31.			
<b>.10 Quality Issues</b>			
.10a There are no specification clauses with square brackets "[ ]" or lines "___" indicating that the document is incomplete or missing information.			

### B1.3 DRAWINGS

Item	Verified by:	Comments:	Action By:
<b>2 DRAWINGS:</b>			
<b>.1 Title Blocks</b>			
.1a The PWGSC title block is used.			
<b>.2 Dimensions</b>			
.2a Dimensions are provided in metric only.			
<b>.3 Specification Notes</b>			
.3a There is no specification type notes.			
<b>.4 Information to be included</b>			
.4a The project quantity and configuration, dimensions and construction details are included.			
.4b References to future work and elements not in contract do not appear or are kept to an absolute minimum and clearly marked.			

### B1.4 DESIGN BUILDERS DECLARATION

I confirm that the plans and specifications have been thoroughly reviewed and that the items listed above have been addressed or incorporated. I acknowledge and accept that by signing certifying that all items noted above have been addressed, should it be found during the implementation of the project, that the items above were not properly addressed, my firm will be responsible to resolve all related issues at my firm's expense and may receive an unsatisfactory performance evaluation which could have an impact on my firm's ability to obtain work from PWGSC in the future.



<b>Consultant's Representative:</b>	
<b>Firm name:</b>	
<b>Signature:</b>	
<b>Date:</b>	



## **B.2 CHECKLIST FOR CONSTRUCTION DRAWINGS & ADDENDA**

### **B2.1 INTENT**

- .1 This checklist is provided to address common issues that arise during PWGSC reviews.
- .2 It does not eliminate the need for a technical review.

### **B2.2 DRAWINGS**

#### **DRAWINGS**

- |   |                          |
|---|--------------------------|
| All dimensions/sizes are provided in metric (no dual dimensioning is permitted).        | <input type="checkbox"/> |
| PWGSC standard title block has been used  | <input type="checkbox"/> |
| Architectural and Department Representative drawings have been stamped and signed       | <input type="checkbox"/> |
| Trade names do not appear on the drawings (confirm)                                     | <input type="checkbox"/> |
| Specifications type notes appear in the specification and not on the drawings (confirm) | <input type="checkbox"/> |

### **B2.3 ADDENDA**

#### **ADDENDA**

- |  |                          |
|--|--------------------------|
| Addenda is in the correct PWGSC format (see Appendix C)                                | <input type="checkbox"/> |
| Items refer to an existing specification paragraph or drawing note (confirm)           | <input type="checkbox"/> |
| All pages have been numbered and PWGSC can determine if they have a completed document | <input type="checkbox"/> |
| All dimensions/sizes are provided in metric (no dual dimensioning is permitted).       | <input type="checkbox"/> |
| Signature block is not included (confirm)  | <input type="checkbox"/> |



## APPENDIX C SAMPLE OF INDEX

### C.1 SAMPLE OF INDEX FOR DRAWINGS & SPECIFICATIONS

#### C1.1 DRAWINGS

- .1 List all Drawings by number and title.

#### C1.2 SPECIFICATIONS

- .1 List all Divisions, Sections (by number and title) and number of pages.

Project No: \_\_\_\_\_

Index  
Page 1 of xx

### DRAWINGS AND SPECIFICATIONS

#### DRAWINGS:

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

#### SPECIFICATIONS:

<u>DIVISION</u>	<u>SECTION</u>	<u>NO. OF PAGES</u>
DIVISION 01	01 00 10 - General Instructions.....	.....XX
	01 14 25 - Designated Substances Report.....	.....XX
	01 35 30 - Health and Safety.....	.....XX
DIVISION 23	23 xx xx	.....XX
DIVISION 26	26 xx xx	.....XX



## APPENDIX D SAMPLE OF ADDENDUM

### D.1 SAMPLE OF ADDENDUM FORMAT

#### D1.1 DRAWINGS

- .1 Indicate drawing number and title, then list changes or indicate revision number and date, and re-issue drawing with addendum.

#### D1.2 SPECIFICATIONS

- .1 Indicate section number and title.
- .2 List all changes (i.e. delete, add or change) by article or paragraph

<b>Project Title:</b>	<b>Addendum No:</b>
<b>Project Location:</b>	<b>Project Number:</b>
<b>Design Builders Name:</b>	<b>Date:</b>
<b>The following changes in the construction documents are effective immediately.</b>	
<b>Drawings</b>	
1 A1 Architectural	
<b>Specifications</b>	
1 Section 01 00 10 - General Instructions	
.1 Delete article (xx) entirely.	
.2 Refer to paragraph (xx) and change ...	
2 Section 23 05 00 - Common Work Results - Mechanical	
.1 Add new article (x) as follows:	



## APPENDIX E DEFINITIONS

### E.1 TERMINOLOGY

TERMS	DESCRIPTION
As-builts/Record Drawings	See Record Drawings
Client	A term that refers to the client, the client department or user department
DB – Design Builder	Refers to the organization or team who is responsible for the design, supply, installation and construction of the project.
Departmental Representative	The person designated in the contract, or by written notice to the Consultant or Contractor, to act for PWGSC for the purposes of the contract. It can also be a person designated in writing by the Departmental Representative to act on his/her behalf. In most cases, the PWGSC Project Manager is the Departmental Representative
Final Certificate of Completion	A document issued by the Project Manager after the final inspection by the Project Acceptance Board. The final payment to the Contractor by PWGSC is based on the final certificate of completion
Final Inspection	The inspection performed by the Project Acceptance Board after project completion and after correction of deficiencies identified during Interim Inspection
High risk	A project (or element of a project) may be assessed as high risk if one or more hazards exist in a significant way and, unless mitigated, would result in probable failure to achieve project objectives
Impact	<p>The result of the occurrence of an event on the project either positive or negative (i.e. a schedule delay as a result of late delivery of a piece of equipment may have a high negative impact on a project; increased access to a construction site due to early departure of occupants in an office space may have positive impact on a project).</p> <p>The Impact of individual Risk Events can be qualified as low, medium, high or quantified in terms of time, cost (immediate cost or in-service cost (O&amp;M)) or performance.</p>
Interim Certificate of Completion	The certificates issued by Project manager following the Interim Inspection. Interim payment to the Contractor by PWGSC is based on the interim certificates. This payment takes place of a regular progress claim.
Interim Inspection	The inspection performed by the Project Acceptance Board after substantial completion of the project. A list of deficiencies is prepared, and subject to the Contractor's agreement to correct these, the Project Manager accepts the work and prepares the interim certificates
Low risk	A project (or element of a project) should be assessed as low risk if hazards do not exist or have been reduced to the point where routine project management control should be capable of preventing any negative effect on the attainment of project objectives





Medium risk	A project (or element of a project) may be assessed as medium risk if some hazards exist but have been mitigated to the point that allocated resources and focused risk management planning should prevent significant negative effect on the attainment of project objectives
National Project Management System	The system used by PWGSC for management of its projects. It replaces the earlier Project Delivery System (PDS).
Probability	The likelihood that an event will occur (i.e. Low, Medium, High)
Record drawings	Drawings used to record field deviations, dimensional data, and changes or deviations from the 'Construction Document-Issued for Construction'. They indicate the work as 'actually' installed. They are also called as-builts
Request for Proposal	The document used for requesting consultant services. It includes the Terms of Reference as well as other contracting documents
Risk management	The art and science of identifying, analysing, and responding to risk factors throughout the life of a project and in the best interests of its objectives
Risk Event	A discrete occurrence that may affect the project for better or worse (i.e. late delivery of a piece of equipment is a "risk event" that may cause a schedule delay)
Terms of Reference	A document prepared by PWGSC when requesting Consultant services, which forms part of the Tender and is also included in the Consultant Agreement with PWGSC.