

**RETURN BIDS TO:  
RETOURNER LES SOUMISSIONS À:**  
**Bid Receiving Public Works and Government  
Services Canada/Réception des soumissions Travaux  
publics et Services gouvernementaux Canada**  
**800 Burrard Street, Room 219**  
**800, rue Burrard, pièce 219**  
**Vancouver, B.C.**  
**Vancouver**  
**British Columbia**  
**V6Z 0B9**  
**Bid Fax: (604) 775-9381**

## REQUEST FOR PROPOSAL DEMANDE DE PROPOSITION

**Proposal To: Public Works and Government  
Services Canada**

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

**Proposition aux: Travaux Publics et Services  
Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

**Comments - Commentaires**

<b>Title - Sujet</b> Electrical Engineering Services		
<b>Solicitation No. - N° de l'invitation</b> F1700-140440/A	<b>Date</b> 2014-10-23	
<b>Client Reference No. - N° de référence du client</b> F1700-140440		
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$TPV-015-7356		
<b>File No. - N° de dossier</b> TPV-4-37146 (015)	<b>CCC No./N° CCC - FMS No./N° VME</b>	
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2014-12-04</b>		<b>Time Zone</b> <b>Fuseau horaire</b> Pacific Standard Time PST
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>		
<b>Address Enquiries to: - Adresser toutes questions à:</b> Chan (TPV), Scarlett		<b>Buyer Id - Id de l'acheteur</b> tpv015
<b>Telephone No. - N° de téléphone</b> (604) 775-9382 ( )		<b>FAX No. - N° de FAX</b> (604) 775-6633
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> DFO - Conuma River Hatchery - West Coast of Vancouver Island, BC		

**Instructions: See Herein**

**Instructions: Voir aux présentes**

**Vendor/Firm Name and Address**

**Raison sociale et adresse du  
fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**

Public Works and Government Services Canada - Pacific  
Region

800 Burrard Street, Room 219

800, rue Burrard, pièce 219

Vancouver, B.C.

V6Z 0B9

British C

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

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**TECHNICAL ENVELOPE LABEL**

NOTE TO Tenderers: Use the mailing label below and affix it securely to the outside of the envelope or package containing your tender. For revisions to tenders submitted by facsimile (fax # (604) 775-9381), use this sheet as the cover sheet. Always ensure your company name, return address, tender number and closing date appear legibly on the outside of your bid submission.

**REAL PROPERTY CONTRACTING  
Public Works & Government Services Canada  
Room 219 - 800 Burrard Street  
Vancouver, BC V6Z 0B9**

**Solicitation No. : F1700-140440/A  
RFP Closing Date & Time: December 4, 2014 at 2:00 PM PST  
Project Description: Conuma River Hatchery, B.C.  
Electrical Engineering Services**

**Technical Component  
SC**

AVIS AUX SOUMISSIONNAIRES : Veuillez utiliser l'étiquette d'adresse ci-dessous et bien l'affixer à l'extérieur de l'enveloppe ou du paquet renfermant votre offre. Dans le cas de modifications à des offres soumises par télécopieur (fax : (604) 775-9381), servez-vous de la feuille comme page couverture. Assurez-vous de toujours inscrire lisiblement le nom de votre compagnie, l'adresse de retour, le numéro de l'offre et la date limite sur l'extérieur de votre offre.

**Marchés immobiliers  
Travaux publics et Services gouvernementaux Canada  
800, rue Burrard, bureau 219  
Vancouver (C.-B.) V6Z 0B9**

**Offre n°: F1700-140440/A  
Date et heure limites de réception des soumissions: au 4 décembre 2014 à 14h00  
Demande de proposition: Écloserie de la rivière Conuma, Colombie-Britannique  
Services de génie électrique**

**Technique composant  
SC**

**COST ENVELOPE LABEL**

NOTE TO Tenderers: Use the mailing label below and affix it securely to the outside of the envelope or package containing your tender. For revisions to tenders submitted by facsimile (fax # (604) 775-9381), use this sheet as the cover sheet. Always ensure your company name, return address, tender number and closing date appear legibly on the outside of your bid submission.

**REAL PROPERTY CONTRACTING  
Public Works & Government Services Canada  
Room 219 - 800 Burrard Street  
Vancouver, BC V6Z 0B9**

**Solicitation No. : F1700-140440/A  
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Electrical Engineering Services**

**Cost Component  
SC**

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**Marchés immobiliers  
Travaux publics et Services gouvernementaux Canada  
800, rue Burrard, bureau 219  
Vancouver (C.-B.) V6Z 0B9**

**Offre n°: F1700-140440/A  
Date et heure limites de reception des soumissions: au 4 decembre 2014 à 14h00  
Demande de proposition:Écloserie de la rivière Conuma, Colombie-Britannique  
Services de génie électrique**

**composant de coût  
SC**

## REQUEST FOR PROPOSAL (RFP)

### TABLE OF CONTENTS

The following is intended to clarify the general structure of the whole document.

#### Front Page

#### Supplementary Instructions to Proponents (SI)

- SI1 Introduction
- SI2 Proposal Documents
- SI3 Questions or request for clarifications
- SI4 Canada's Trade Agreements
- SI5 CERTIFICATIONS**
- SI6 Web Sites

#### Terms, Conditions and Clauses

- Agreement
- Supplementary Conditions (SC)
- Agreement Particulars

#### Submission Requirements and Evaluation (SRE)

#### Project Brief

- Description of Project (PD)
- Description of Services - Required Services (RS)

#### Team Identification Format (Appendix A)

#### Declaration/Certifications Form (Appendix B)

#### Price Proposal Form (Appendix C)

#### Doing Business with PWGSC – Reference Document (Appendix D)

#### Reference Drawings (Appendix E)

## **SUPPLEMENTARY INSTRUCTIONS TO PROPONENTS (SI)**

### **SI1 INTRODUCTION**

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

### **SI2 PROPOSAL DOCUMENTS**

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

All instructions, general terms, conditions and clauses identified in the RFP by number, date and title, are set out in the Standard Acquisition Clauses and Conditions Manual (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

2. The following are the proposal documents:
  - (a) Supplementary Instructions to Proponents (SI);  
R1410T (2014-09-25), General Instructions (GI) – Architectural and/or Engineering Services – Request for Proposal;  
Submission Requirements and Evaluation (SRE);
  - (b) the general terms, conditions and clauses, as amended, identified in the Agreement clause;
  - (c) Project Brief / Terms of Reference;

- (d) *the document entitled "Doing Business with PWGSC";*
- (e) *Reference Drawings;*
- (f) any amendment to the solicitation document issued prior to the date set for receipt of proposals; and
- (g) the proposal, Declaration/Certifications Form and Price Proposal Form.

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

### **SI3 QUESTIONS OR REQUEST FOR CLARIFICATION**

Questions or requests for clarification during the solicitation period must be submitted in writing to the Contracting Authority named on the RFP - Page 1 as early as possible. Enquiries should be received no later than seven (7) working days prior to the closing date identified on the front page of the Request for Proposal. Enquiries received after that date may not be answered prior to the closing date of the solicitation.

### **SI4 CANADA'S TRADE AGREEMENTS**

This procurement is subject to the provisions of the North American Free Trade Agreement (NAFTA), and the Agreement on Internal Trade (AIT).

### **SI5 CERTIFICATIONS**

#### **1. Integrity Provisions - Associated Information**

By submitting a proposal, the Proponent certifies that the Proponent and its Affiliates are in compliance with the provisions as stated in Section GI1 Integrity Provisions - Proposal of R1410T (2014-09-25) General Instructions (GI) – Architectural and/or Engineering Services – Request for Proposal. The associated information required within the Integrity Provisions will assist Canada in confirming that the certifications are true.

#### **2. Federal Contractors Program for Employment Equity - Proposal Certification**

By submitting a proposal, the Proponent certifies that the Proponent, and any of the Proponent's members if the Proponent is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited

**Eligibility to Bid" list**

([http://www.labour.gc.ca/eng/standards\\_equity/eq/emp/fcp/list/inelig.shtml](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)) available from **Employment and Social Development Canada (ESDC) - Labour's website.**

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

**SI6 - WEBSITES**

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

**Employment Equity Act**

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

**Federal Contractors Program (FCP)**

[http://www.labour.gc.ca/eng/standards\\_equity/eq/emp/fcp/index.shtml](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/index.shtml)

**Certificate of Commitment to Implement Employment Equity form LAB 1168**

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

**Code of Conduct for Procurement**

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

**Consent to a Criminal Record Verification (PWGSC-TPSGC 229 form)**

<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/formulaires-forms-eng.html>

**Lobbying Act**

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

**Contracts Canada**

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

**Supplier Registration Information**

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

**Consultant Performance Evaluation Report Form**

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

**Canadian economic sanctions**

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

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CCC No./N° CCC - FMS No./N° VME

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National Joint Council (NJC) Travel Directive  
<http://www.njc-cnm.gc.ca/directive/travel-voyage/index-eng.php>



## TERMS, CONDITIONS AND CLAUSES

### AGREEMENT

1. The Consultant understands and agrees that upon acceptance of the offer by Canada, a binding Agreement shall be formed between Canada and the Consultant and the documents forming the Agreement shall be the following:
  - (a) the Front Page and this Agreement clause;
  - (b) the General Terms, Conditions and Clauses, as amended, identified as:
    - R1210D (2014-09-25), General Condition (GC) 1 - General Provisions – Architectural and/or Engineering Services
    - R1215D (2014-06-26), General Condition (GC) 2 - Administration of the Contract
    - R1220D (2011-05-16), General Condition (GC) 3 - Consultant Services
    - R1225D (2012-07-16), General Condition (GC) 4 - Intellectual Property
    - R1230D (2012-07-16), General Condition (GC) 5 - Terms of Payment
    - R1235D (2011-05-16), General Condition (GC) 6 - Changes
    - R1240D (2011-05-16), General Condition (GC) 7 - Taking the Services Out of the Consultant's Hands, Suspension or Termination
    - R1245D (2012-07-16), General Condition (GC) 8 - Dispute Resolution
    - R1250D (2012-07-16)
    - General Condition (GC) 9 - Indemnification and Insurance
    - Supplementary Conditions
    - Agreement Particulars
  - (c) Project Brief / Terms of Reference;
  - (d) *the document entitled "Doing Business with PWGSC";*
  - (e) *Reference Drawings;*
  - (f) any amendment to the solicitation document incorporated in the Agreement before the date of the Agreement;
  - (g) the proposal, the Declaration/Certifications Form and the Price Proposal Form.
2. The documents identified above by title, number and date are hereby incorporated by reference into and form part of this Agreement, as though expressly set out herein, subject to any other express terms and conditions herein contained.

The documents identified above by title, number and date are set out in the Standard Acquisition Clauses and Conditions (SACC) Manual, issued by Public Works and Government Services Canada (PWGSC). The SACC Manual is available on the PWGSC Web site: <https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>

3. If there is a discrepancy between the wording of any documents that appear on the following list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.
- (a) any amendment or variation in the Agreement that is made in accordance with the terms and conditions of the Agreement;
  - (b) any amendment to the solicitation document incorporated in the Agreement before the date of the Agreement;
  - (c) this Agreement clause;
  - (d) Supplementary Conditions;
  - (e) General Terms, Conditions and Clauses;
  - (f) Agreement Particulars;
  - (g) Project Brief / Terms of Reference;
  - (h) *the document entitled "Doing Business with PWGSC";*
  - (i) *Reference Drawings*
  - (j) the proposal.

Solicitation No. - N° de l'invitation  
F1700-140440/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur  
tpv015

Client Ref. No. - N° de réf. du client  
F1700-140440

File No. - N° du dossier  
TPV-4-37146

CCC No./N° CCC - FMS No./N° VME

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## **SUPPLEMENTARY CONDITIONS (SC)**

### **SC1 SUPPLEMENTARY CONDITIONS**

There are no supplementary conditions which apply to the Agreement.

Solicitation No. - N° de l'invitation  
F1700-140440/A

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## **AGREEMENT PARTICULARS**

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

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F1700-140440/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur  
tpv015

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## **SUBMISSION REQUIREMENTS AND EVALUATION**

- SRE 1 General Information
- SRE 2 Proposal Requirements
- SRE 3 Submission Requirements and Evaluation
- SRE 4 Price of Services
- SRE 5 Total Score
- SRE 6 Submission Requirements - Checklist

## **SUBMISSION REQUIREMENTS AND EVALUATION**

### **SRE 1 GENERAL INFORMATION**

#### **1.1 Reference to the Selection Procedure**

An 'Overview of the Selection Procedure' can be found in R1410T General Instructions to Proponents (GI3).

#### **1.2 Calculation of Total Score**

For this project the Total Score will be established as follows:

Technical Rating x 70%	=	Technical Score (Points)
<u>Price Rating x 30%</u>	=	<u>Price Score (Points)</u>
Total Score	=	Max. 100 Points

### **SRE 2 PROPOSAL REQUIREMENTS**

#### **2.1 Requirement for Proposal Format**

The following proposal format information should be implemented when preparing the proposal.

- Submit one (1) bound original plus [three (3)] bound copies of the proposal
- Paper size should be - 216mm x 279mm (8.5" x 11")
- Minimum font size - 11 point Times or equal
- Minimum margins - 12 mm left, right, top, and bottom
- Double-sided submissions are preferred
- One (1) 'page' means one side of a 216mm x 279mm (8.5" x 11") sheet of paper
- 279mm x 432 mm (11" x 17") fold-out sheets for spreadsheets, organization charts etc. will be counted as two pages.
- The order of the proposals should follow the order established in the Request for Proposal SRE section

#### **2.2 Specific Requirements for Proposal Format**

The maximum number of pages (including text and graphics) to be submitted for the Rated Requirements under SRE 3.2 is [twenty (20)] pages.

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

- Covering letter

- Consultant Team Identification (Appendix A)
- Declaration/Certifications Form (Appendix B)
- Code of Conduct Certifications
- Front page of the RFP
- Front page of revision(s) to the RFP
- Price Proposal Form (Appendix C)

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

## **SRE 3 SUBMISSION REQUIREMENTS AND EVALUATION**

### **3.1 MANDATORY REQUIREMENTS**

Failure to meet the mandatory requirements will render the proposal as non-responsive and no further evaluation will be carried out.

#### **3.1.1 Licensing, Certification or Authorization**

The proponent shall be an Electrical Engineer, licensed, or eligible to be licensed, certified or otherwise authorized to provide the necessary professional services to the full extent that may be required by provincial law in the province of British Columbia.

#### **3.1.2 Consultant Team Identification**

The consultant team to be identified must include the following:

Proponent (prime consultant) – Electrical Engineer  
Key Sub-consultants / Specialists – Civil Engineer

Information required - name of firm, key personnel to be assigned to the project. For the prime consultant indicate current license and/or how you intend to meet the provincial or territorial licensing requirements. In the case of a joint venture identify the existing or proposed legal form of the joint venture (refer to R1410T General Instructions to Proponents, GI9 Limitation of Submissions).

An example of an acceptable format (typical) for submission of the team identification information is provided in Appendix A.

#### **3.1.3 Declaration/Certifications Form**

Proponents must complete, sign and submit the following:

- Appendix B, Declaration/Certifications Form as required.

### **3.1.4 Integrity Provisions - Associated Information**

Proponents who are incorporated, including those submitting proposals as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Proponent. Proponents submitting proposals as sole proprietorship, including those submitting proposals as a joint venture, must provide the name of the owner. Proponents submitting proposals as societies, firms, or partnerships do not need to provide lists of names. If the required names have not been received by the time the evaluation of proposals is completed, Canada will inform the Proponent of a time frame within which to provide the information. Failure to provide the names within the time frame specified will render the bid non-responsive. Providing the required names is a mandatory requirement for contract award.

## **3.2 RATED REQUIREMENTS**

### **3.2.1 Achievements of Proponent on Projects**

Describe the Proponent's accomplishments, achievements and experience as prime consultant on projects.

Select a **minimum** of three (3) projects undertaken within the last five (5) years. Joint venture submissions are not to exceed the maximum number of projects. Only the first 3 projects listed in sequence will receive consideration and any others will receive none as though not included.

#### Information that should be supplied:

- clearly indicate how this project is comparable/relevant to the requested project.
- brief project description and intent. Narratives should include a discussion of design philosophy / approach to meet the intent, design challenges and resolutions.
- budget control and management - i.e. contract price & final construction cost - explain variation
- project schedule control and management - i.e. initial schedule and revised schedule - explain variation
- client references - name, address, phone and fax of client contact at working level - references may be checked
- names of key personnel responsible for project delivery
- awards received



The Proponent (as defined in R1410T General Instructions to Proponents, GI2 Definitions) must possess the knowledge on the above projects. Past project experience from entities other than the Proponent will not be considered in the evaluation unless these entities form part of a joint venture Proponent.

Please indicate those projects which were carried out in joint venture and the responsibilities of each of the involved entities in each project.

### **3.2.2 Achievements of Key Sub-consultants and Specialists on Projects**

Describe the accomplishments, achievements and experience either as prime consultant or in a sub-consultant capacity on projects. If the Proponent proposes to provide multi-disciplinary services which might otherwise be performed by a sub-consultant, this should be reflected here.

Select a **minimum** of three (3) projects undertaken within the last five (5) years per key sub consultant or specialist. Only the first 3 projects listed in sequence (per key subconsultant or specialist) will receive consideration and any others will receive none as though not included.

#### Information that should be supplied:

- clearly indicate how this project is comparable/relevant to the requested project.
- brief project description and intent. Narratives should include a discussion of design philosophy / approach to meet the intent, design challenges and resolutions.
- budget control and management
- project schedule control and management
- client references - name, address, phone and fax of client contact at working level - references may be checked
- names of key personnel responsible for project delivery
- awards received

### **3.2.3 Achievements of Key Personnel on Projects**

Describe the experience and performance of key personnel to be assigned to this project regardless of their past association with the current proponent firm. This is the opportunity to emphasize the strengths of the individuals on the team, to recognize their past responsibilities, commitments and achievements.

#### Information that should be supplied for each key personnel:

- professional accreditation
- accomplishments/achievements/awards

- relevant experience, expertise, number of years experience
- role, responsibility and degree of involvement of individual in past projects

### **3.2.4 Understanding of the Project:**

The proponent should demonstrate understanding of the goals of the project, the functional/technical requirements, the constraints and the issues that will shape the end product.

#### Information that should be supplied:

- The functional and technical requirements
- Broader goals (federal image, sustainable development, sensitivities)
- Significant issues, challenges and constraints
- Project schedule and cost. Review schedule and cost information and assess risk management elements that may affect the project
- The Client User's philosophies and values

### **3.2.5 Scope of Services:**

The proponent should demonstrate capability to perform the services and meet project challenges and to provide a plan of action.

#### Information that should be supplied:

- Scope of Services - detailed list of services
- Work Plan - detailed breakdown of work tasks and deliverables
- Project schedule - proposed major milestone schedule
- Risk management strategy

### **3.2.6 Management of Services:**

The Proponent should describe how he /she proposes to perform the services and meet the constraints; how the services will be managed to ensure continuing and consistent control as well as production and communication efficiency; how the team will be organized and how it will fit in the existing structure of the firms; to describe how the team will be managed. The proponent is also to identify sub-consultant disciplines and specialists required to complete the consultant team.

If the Proponent proposes to provide multi-disciplinary services which might otherwise be performed by a sub-consultant, this should be reflected here.

#### Information that should be supplied:

- Confirm the makeup of the full project team including the names of the consultant sub-consultants and specialists personnel and their role on the project.
- Organization chart with position titles and names (Consultant team). Joint Venture business plan, team structure and responsibilities, if applicable
- What back-up will be committed
- Profiles of the key positions (specific assignments and responsibilities)
- Outline of an action plan of the services with implementation strategies and sequence of main activities
- Reporting relationships
- Communication strategies
- Response time: demonstrate how the response time requirements will be met

### 3.2.7 Design Philosophy / Approach / Methodology

The proponent should elaborate on aspects of the project considered to be a major challenge which will illustrate design philosophy / approach / methodology. This is the opportunity for the Proponent to state the overall design philosophy of the team as well as their approach of resolving design issues and in particular to focus on the unique aspects of the current project.

#### Information that should be supplied:

- Design Philosophy / Approach / Methodology
- Describe the major challenges and how your team approach will be applied to those particular challenges.

### 3.3 EVALUATION AND RATING

In the first instance, price envelopes will remain sealed and only the technical components of the proposals which are responsive will be reviewed, evaluated and rated by a DFO Evaluation Board in accordance with the following to establish Technical Ratings:

Criterion	Weight Factor	Rating	Weighted Rating
Achievements of Proponent	2.0	0 - 10	0 - 20
Achievements of Key Sub-consultants / Specialists	1.0	0 - 10	0 - 10
Achievements of Key Personnel on Projects	2.0	0 - 10	0 - 20
Understanding of the Project	1.5	0 - 10	0 - 15
Scope of Services	1.0	0 - 10	0 - 10
Management of Services	1.0	0 - 10	0 - 10

Design Philosophy / Approach / Methodology	1.5	0 - 10	0 - 15
Technical Rating	10.0		0 - 100

### Generic Evaluation Table

DFO Evaluation Board members will evaluate the strengths and weaknesses of the Proponent's response to the evaluation criteria and will rate each criterion with even numbers (0, 2, 4, 6, 8 or 10) using the generic evaluation table below:

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

	Extremely poor, insufficient to meet performance requirements	Little capability to meet performance requirements	Acceptable capability, should ensure adequate results	Satisfactory capability, should ensure effective results	Superior capability, should ensure very effective results
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To be considered further, proponents **must** achieve a minimum Technical Rating of sixty (60) points out of the hundred (100) points available as specified above.

**No further consideration will be given to proponents not achieving the pass mark of sixty (60) points.**

#### **SRE 4 PRICE OF SERVICES**

All price proposal envelopes corresponding to responsive proposals which have achieved the pass mark of sixty (60) points will be opened upon completion of the technical evaluation. An average price is determined by adding all the price proposals together and dividing the total by the number of price proposals being opened.

All price proposals which are greater than twenty-five percent (25%) above the average price will be set aside and receive no further consideration.

The remaining price proposals are rated as follows:

- A. The lowest price proposal receives a Price Rating of 100
- B. The second, third, fourth and fifth lowest prices receive Price Ratings of 80, 60, 40, and 20 respectively. All other price proposals receive a Price Rating of 0.
- C. On the rare occasions where two (or more) price proposals are identical, the matching price proposals receive the same rating and the corresponding number of following ratings are skipped.

The Price Rating is multiplied by the applicable percentage to establish the Price Score.

#### **SRE 5 TOTAL SCORE**

Total Scores will be established in accordance with the following:

Rating	Possible Range	% of Total Score	Score (Points)
Technical Rating	0 - 100	70	0 - 70
Price Rating	0 - 100	30	0 - 30
Total Score		100	0 - 100

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The Proponent receiving the highest Total Score is the first entity that the Evaluation Board will recommend for the provision of the required services. In the case of a tie, the proponent submitting the lower price for the services will be selected.

## **SRE 6 SUBMISSION REQUIREMENTS - CHECKLIST**

The following list of documents and forms is provided with the intention of assisting the Proponent in ensuring a complete submission. The Proponent is responsible for meeting all submission requirements.

Please follow detailed instructions in R1410T General Instructions to Proponents, GI16 Submission of Proposal. Proponents may choose to introduce their submissions with a cover letter.

Team Identification - see typical format in Appendix A

Declaration/Certifications Form - completed and signed - form provided in Appendix B

Integrity Provisions - Associated Information - list of directors/owners

Proposal - one (1) original plus three (3) copies

Front page of RFP

Front page(s) of any solicitation amendment

In a separate envelope:

Price Proposal Form - one (1) completed and submitted in a separate envelope

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## **PROJECT BRIEF**

### **Description of Project**

- PD 1 Project Information
- PD 2 Project Identification
- PD 3 Project Background
- PD 4 Existing Documentation
- PD 5 Program
- PD 6 Project Objectives
- PD 7 Consultant Services

### **Description of Services**

- PA 1 Project Administration

### **Required Services**

- RS 1 Design Development

## DESCRIPTION OF PROJECT

### PD 1 PROJECT INFORMATION

Public Works and Government Services Canada (PWGSC), on behalf of Fisheries and Oceans Canada (DFO), intends to retain an electrical engineering firm for the provision of the services required for this project.

#### 1.1 DFO Project Title:

Fisheries and Oceans Canada  
Conuma River Hatchery  
Engineering Consulting Service for Installation of Transformers

#### 1.2 Location of the Project:

The Conuma Hatchery is located at the head of Tlupana Inlet, off Nootka Sound on the West Coast of Vancouver Island, British Columbia. The hatchery is located approximately 45 minutes from the Village of Gold River. Access is via Highway 28 from Campbell River to Gold River, then 38 km along Head Bay Forestry Road towards Tahsis.

#### 1.3 Client / User:

Fisheries and Oceans Canada (DFO)

#### 1.4 DFO Project Manager:

Mr. Michael Liang, P. Eng  
Senior Project Engineer  
Fisheries & Oceans Canada  
Real Property, Safety, and Security

### PD 2 PROJECT IDENTIFICATION

#### 2.1 Description

Fisheries and Oceans Canada (DFO) is upgrading the power supply at Conuma River Salmon Hatchery. The existing service transformer at the Conuma River Hatchery is due for replacement. Due to the unavailability of a direct replacement transformer, Fisheries and Oceans Canada requires tender drawings and specifications outlining the electrical and civil upgrades required for the installation of two new electrical transformers which are currently in storage awaiting installation.



## **2.2 Schedule**

- .1 This service contract will run until March 31<sup>st</sup>, 2016.
- .2 The Consultant will commence work of Task #1 to #5 immediately after contract award.
- .3 The final drawings (IFT set) and specifications (National Masters Specifications) must be accepted by DFO on or before February 27<sup>th</sup>, 2015.
- .4 The consultant will work on Task #6 and #7 from March 1<sup>st</sup> to June 14<sup>th</sup>, 2015.
- .5 The construction work window for the installation of the (2) transformers at the Conuma River Hatchery will be from June 01<sup>st</sup> to August 31<sup>st</sup>, 2015, the period of the lowest power consumption. The consultant must be available at this time to perform Task #7 to #11.
- .6 The Consultant shall work according to the schedule of installation submitted by the selected contractor to complete the installation of transformers as stated in Task #7 to #11.

## **PD 3 PROJECT BACKGROUND**

- .1 In the early 2000's Empac Engineering Ltd. and Kerr Wood Leidal Associates Ltd completed a preliminary design. However, due to funding constraints, the project never entered the construction phase.

DFO would like to replace the existing 300kVA – 138kV/600V, 40 years old transformer with a 4000kVA – 138kV/25kV transformer and a 500kVA – 25kV/600V transformer. Both of the transformers have been procured by DFO at this time. DFO requires the appropriate 'Issued for Tender' drawings and specifications from a qualified engineering firm.

- .2 The new electrical design will consist of the installation of two new electrical transformers which will replace the existing transformer. The new transformers are oil filled and composition of the oil is such that it is detrimental to the environment in the event of a spill. The proposed design must provide support for the transformers while also providing a subterranean detention area for the oil in the event of an oil leak.

- .3 The new foundation to support the new transformers must have the capacity to contain any oil spills from both the new transformers.

## **PD 4 EXISTING DOCUMENTATION**

### **4.1 Existing Documentation - available for all proponents**

Reference Drawings

32-18-90 – SITE LAYOUT, SINGLE LINE DIAGRAM (ORIGINAL 1979)

32-18-91 – 138KV SUBSTATION LAYOUT AND GROUNDING (1979)

32-18-92 – 138KV SUBSTATION SECTIONS (1979)

32-18-192 – SITE PLAN AND SYMBOL LEGEND (PROPOSED)

32-18-193 – SINGLE LINE DIAGRAM

### **4.2 Access to documentation for Proponents**

The documents are attached in Appendix E

### **4.3 Existing Documentation - to be made available for successful Proponent**

DFO will supply as built information of two transformers and photos of existing transformer to selected consultant after contract award.

## **PD 5 PROGRAM and methodology**

Submit a proposed methodology including but not limited to the following:

- .1 Review all available related documentation
- .2 Identify/specify all relevant standards or codes
- .3 Assess any physical limitations associated with design
- .4 Outline design philosophy and any assumptions used in developing the design or the cost estimates.
- .5 A complete project schedule outlining milestone dates for the preliminary design and final design
- .6 Identify all required resources/design staff and experiences.

## **PD 6 PROJECT OBJECTIVES**

- .1 The current system employs a single transformer to step down from 138kV directly to 600V. Due to the unavailability of a direct replacement transformer, Fisheries and Oceans Canada purchased a 4000kVA 138kV/25kV transformer and a 500kVA 25kV/600V transformer which are currently in storage awaiting installation. DFO requires tender drawings and specifications outlining the electrical and civil upgrades required for the installation of two new electrical transformers.
- .2 The purpose of this request for proposal is to obtain a qualified company that can design, specify, recommend and/or review the installation of transformers based on best engineering and environmental practices and applicable standards and regulations.

### **6.1 Quality**

#### **6.1.1 Design Principles - General**

The Department expects the Consultant to maintain a high standard of engineering design, based upon recognized contemporary design principles. All design elements, planning, architectural, engineering and landscaping, must be fully co-ordinated, and consistent in adherence to good design principles.]

The level of quality is to be consistent with current building codes and standards.

The project is to be implemented in an environmentally responsible manner.

### **6.2 Sustainable Development**

Not applicable.

### **6.3 Waste Management**

Not applicable.

### **6.4 Code Compliance**

Codes, regulations, by laws and decisions of "authorities having jurisdiction" will be observed. In cases of overlap, the most stringent will apply. The Consultant shall identify other jurisdictions appropriate to the project.

### **6.5 Risk Management**

A risk management strategy is crucial for the Department of Fisheries & Oceans Canada (DFO) Project Management and integrates project planning into

procurement planning. All the stakeholders of a project will be an integral part of the risk management strategy, culminating in an integrated product team. Specific services required for project delivery are outlined in Required Services.

## **6.6 Health and Safety**

The Department of Fisheries and Oceans Canada (DFO), recognizes the responsibility to ensure the health and safety of all persons on Crown construction projects and the entitlement of both federal employees and private sector workers to the full protection afforded them by occupational health and safety regulations.

In keeping with the responsibility and in order to enhance health and safety protection for all individuals on federal construction sites, DFO will voluntarily comply with the applicable provincial/territorial construction health and safety acts and regulations, in addition to the related Canada Occupational Safety and Health Regulations.

## **PD 7 CONSULTANT SERVICES**

The consultant team for this project must be capable of providing the electrical and civil engineering services.

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## DESCRIPTION OF SERVICES

### PA 1 PROJECT ADMINISTRATION

#### INTENT

The following administrative requirements apply during all phases of project delivery.

#### 1.1 DFO Project Management

The Project Manager assigned to the project is the Departmental Representative.

The Project Manager is the Departmental officer directly concerned with the project and responsible for its progress. The Project Manager is the liaison between the Consultant, Public Works and Government Services Canada and the Client Departments.

DFO administers the project and exercises continuing control over the Consultant's work during all phases of development. Unless directed otherwise by the Project Manager, the Consultant obtains all Federal requirements and approvals necessary for the work.

##### 1.1.1 Roles and Responsibilities

The following identifies DFO's and the Consultant's roles and responsibilities relating to this project:

#### .1 DFO

- DFO will assign a primary contact;
- Provide access to all related documents;
- Providing and arranging access to the facilities, as required;
- Ongoing communication during the process; and
- Acceptance and sign-off on deliverables.

#### .2 Consultant

- Meet with DFO representatives to provide project progress and updates;
- Provide project progress and update meeting minutes within three days of such meetings;
- Work in consultation with DFO staff in developing the drawings and specifications;
- Review all requests from the selected contractor and an appropriate response; and

- 
- Aid in the construction completion process as stated in the deliverables.
  - It will be the responsibility of the Consultant to visit the site prior to Submission of Tenders and make themselves thoroughly acquainted with conditions at the site and to make whatever inquiries are necessary to familiarize themselves with all conditions likely to affect the work.

## **1.2 General Project Deliverables**

Where deliverables and submissions include summaries, reports, drawings, plans or schedules, six (6) hard copies shall be provided plus one (1) copy shall be provided in electronic format unless otherwise specified. Specifications will be in "Word" format and the Drawings will be in "AutoCad" Format

## **1.3 Lines of Communication**

Unless otherwise arranged with Project Manager, the Consultant shall communicate with the Project Manager only. There shall be no direct official contact between client departments and the Consultant.

During construction tender call, Public Works and Government Services Canada conducts all correspondence with bidders and makes the contract award.

## **1.4 Media**

The consultant shall not respond to requests for project related information or questions from the media. Such inquiries are to be directed to the Project Manager.

## **1.5 Meetings**

The Project Manager shall arrange meetings throughout the entire project development period, for all members of project team, including representatives from:

- Department of Fisheries and Oceans
- Consultants

The Consultant shall attend the meetings, record the issues and decisions and prepare and distribute minutes within 72 hours of the meeting.

## **1.6 Project Response Time**

It is a requirement of this project that the key personnel of the successful proponent and sub consultant or specialist firms be personally available to attend meeting or respond to inquiries within 3 days.

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## REQUIRED SERVICES

### RS 1 DESIGN DEVELOPMENT

#### 1.1 INTENT

The Design Development documents consist of drawings and other documents to describe the size and character of the entire project as to architectural, structural, mechanical and electrical systems, materials and such other elements as may be appropriate.

#### 1.2 GENERAL

The existing design philosophy prepared by Empac Engineering Ltd and Kerr Wood Leidalin Associates Ltd 2002 is still appropriate for this application but it needs to be modified to account for changes to the electrical design and also to ensure it is consistent with current design codes.

Final signed and sealed design drawings by a registered Professional Engineer of BC and specifications are needed for public tendering of the construction works.

The Consultant is responsible for the following tasks:

##### **Task 1 – Project Initiation**

The Consultant will participate in a conference call with DFO representatives to review the current scope of the design and scheduling. The Consultant is to provide minutes for the meeting as well as confirmation of the required information in order to proceed. The Consultant must contact, consult and work with BC Hydro representative to make sure the design is in compliance with their standards and regulations.

##### **Task 2 – Review and Clarify Information**

The Consultant is to review the weights and loading of the purchased equipment to ensure that the owner-supplied equipment is suitable prior to proceeding for electrical and foundation design. The foundation design criteria will be as described in Section 1.2.3 of this document.

##### **Task 3 – Review Original Design**

Review and confirm that the original design drawings outlined in Section 1.9 of this document are compatible with the updated transformer loading information. Complete and submit a calculation package showing the loading for electrical and civil engineering design.

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#### **Task 4 – Update Design Drawings**

Update all the design drawings and provide to DFO for review. Once DFO approval is obtained, release the drawings for the tendering process.

#### **Task 5 – Tender Submissions**

Provide DFO with the construction specifications (National Master Specifications) and drawings with detailed construction cost estimate required for a PWGSC tendering process. The drawings must be signed and sealed by a Professional Engineer registered in the Province of BC.

#### **Task 6 – Tender Period**

Aid the DFO representative with addendums and responses to contractors during the PWGSC tendering process. Review the final tender amounts and discuss with the DFO representative and make recommendation to award construction contract.

#### **Task 7 – Pre-Construction Meeting**

Attend an on-site pre-construction meeting with the selected contractor.

#### **Task 8 – During Construction**

Review any request for information (RFIs), Project Change Request or Contemplated Change Request (PCR or CCR) and review any quotations regarding said changes.

#### **Task 9 – Construction Meeting**

Attend two on-site meetings to review contractor progress (in addition to Task #10 and #11).

#### **Task 10 – Substantial Walkthrough**

Upon receipt of a substantial completion request from the selected contractor, the consultant will review the construction to date, determine if substantial completion has been achieved, and prepare a deficiency list outlining the required task prior to the issuing of Final Completion. The deficiency list will also estimate the cost of all the remaining tasks.

#### **Task 11 – Final Walkthrough**

The Consultant will review to confirm that the previous task list has been completed. When it has been determined that all the required work has been completed, the Consultant will sign the PWGSC form stating that the project is complete.

### **1.3 DELIVERABLES:**

- .1 Prepare and submit meeting minutes from the kick-off meeting and any other meetings deemed necessary during the design phase.



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- .2 "Tender-ready" drawings and specifications in PWGSC accepted format (National Master Specifications). Specifications to be in "Word" format and drawings to be in "ACAD" format.
  - .3 "Issued-for-Construction" drawings for the selected contractor.
  - .4 Substantial completion review and pricing.
  - .5 Final completion sign-off

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## APPENDIX A - TEAM IDENTIFICATION FORMAT

For details on this format, please see SRE in the Request for Proposal.

The prime consultant and other members of the Consultant Team shall be, or eligible to be, licensed, certified or otherwise authorized to provide the necessary professional services to the full extent that may be required by provincial or territorial law.

### I. Prime Consultant (Proponent – Electrical Engineer):

Firm or Joint Venture Name: .....

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Key Individuals and provincial professional licensing status and/or professional accreditation:

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### II. Key Sub Consultants / Specialists:

#### Civil Engineer

Firm Name: .....

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Key Individuals and provincial professional licensing status and/or professional accreditation:

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## APPENDIX B - DECLARATION/CERTIFICATIONS FORM

**Project Title:**

**Name of Proponent:**

**Street Address:**

**Mailing Address:**

**Telephone Number: (    )**

**Fax Number: (    )**

**E-Mail:**

**Procurement Business Number:**

<b>Type of Organization:</b>  _____ Sole Proprietorship  _____ Partnership  _____ Corporation  _____ Joint Venture	<b>Size of Organization:</b>  Number of Employees _____  Graduate Architects / Professional Engineers _____  Other Professionals _____  Technical Support _____  Other _____
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## **APPENDIX B - DECLARATION/CERTIFICATIONS FORM (CONT'D)**

### **Former Public Servant (FPS) - Certification**

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

### **Definitions**

For the purposes of this clause,

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

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

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

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

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## APPENDIX B - DECLARATION/CERTIFICATIONS FORM (CONT'D)

*Royal Canadian Mounted Police Superannuation Act, R.S., 1985, c.R-11, the Members of Parliament Retiring Allowances Act, R.S., 1985, c.M-5, and that portion of pension payable to the Canada Pension Plan Act, R.S., 1985, c.C-8.*

### Former Public Servant in Receipt of a Pension

As per the above definitions, is the Proponent a FPS in receipt of a pension?

YES ( ) NO ( )

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

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

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

### Work Force Adjustment Directive

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

If so, the Proponent must provide the following information:

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

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

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## **APPENDIX B - DECLARATION/CERTIFICATIONS FORM (CONT'D)**

**COMPLETE LIST OF EACH INDIVIDUALS WHO ARE CURRENTLY DIRECTORS AND OR OWNER  
OF THE PROPONENT**

***NOTE TO PROPONENTS: WRITE DIRECTOR'S AND OR OWNERS URNAMES AND GIVEN NAMES***

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## APPENDIX B - DECLARATION/CERTIFICATIONS FORM (CONT'D)

### Name of Proponent:

#### DECLARATION:

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

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

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

Telephone Number: (    ) \_\_\_\_\_ Fax Number: (    ) \_\_\_\_\_

E-mail: \_\_\_\_\_

This Appendix "B" should be completed and submitted with the proposal, but may be submitted afterwards as follows: if Appendix "B" is not completed and submitted with the proposal, the Contracting Authority will inform the Proponent of a time frame within which to provide the information. Failure to comply with the request of the Contracting Authority and to provide the certifications within the time frame provided will render the proposal non-responsive.

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## APPENDIX C - PRICE PROPOSAL FORM

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

PROPOSERS SHALL NOT ALTER THIS FORM

**Project Title:**

**Name of Proponent:**

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**The following will form part of the evaluation process:**

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### REQUIRED SERVICES

**Fixed Fee** (R1230D (2012-07-16), GC 5 - Terms of Payment)

Required Services	Fixed Fee
Task 1: Project Initiation	\$
Task 2: Review and Clarify Information	\$
Task 3: Review Original Design	\$
Task 4: Update Design Drawings	\$
Task 5: Tender Submissions	\$
Task 6: Tender Period	\$
Task 7: Pre-Construction Meeting	\$
Task 8: During Construction	\$
Task 9: Construction Meeting	\$
Task 10: Substantial Walkthrough	\$
Task 11: Final Walkthrough	\$



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## APPENDIX C - PRICE PROPOSAL FORM (CONT'D)

### MAXIMUM FIXED FEES

\$.....

### DISBURSEMENTS

**At cost without allowance for mark-up or profit, supported by invoices/receipts - see clause R1230D (2012-07-16), GC 5 - Terms of Payment, section GC5.12 Disbursements:**

Canada may accept or reject any of the following fees, disbursements and/or hourly rates. Canada reserves the right to negotiate on these fees, disbursements and/or hourly rates.

(specify and enter limit)

.....

\$.....

.....

\$.....

.....

\$.....

### MAXIMUM AMOUNT FOR DISBURSEMENTS

\$.....

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### TOTAL COST OF SERVICES FOR PROPOSAL EVALUATION PURPOSES

Total Fee for Required Services

\$.....

Disbursement Costs

\$.....

Total Evaluated Fee

\$.....

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Buyer ID - Id de l'acheteur  
tpv015

Client Ref. No. - N° de réf. du client  
F1700-140440

File No. - N° du dossier  
TPV-4-37146

CCC No./N° CCC - FMS No./N° VME

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## APPENDIX C - PRICE PROPOSAL FORM (CONT'D)

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**The following will NOT form part of the evaluation process**

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### THE FOLLOWING HOURLY RATES MAY BE USED FOR FUTURE CONTRACT AMENDMENTS

#### Principals

Name	\$ per hour
.....	\$.....
.....	\$ .....
.....	\$ .....
.....	\$ .....
.....	\$.....
.....	\$ .....

#### Staff

Name / Position	\$ per hour
.....	\$.....
.....	\$ .....
.....	\$ .....
.....	\$ .....
.....	\$.....
.....	\$ .....

**END OF PRICE PROPOSAL FORM**

# **DOING BUSINESS WITH PWGSC – PACIFIC REGION**

## **Guide for Architectural and Engineering Consultants**

**November 2012**

**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA  
PACIFIC REGION  
REAL PROPERTY BRANCH  
PROFESSIONAL AND TECHNICAL SERVICES**

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**APPENDIX 1** – Quality Management System (QMS)

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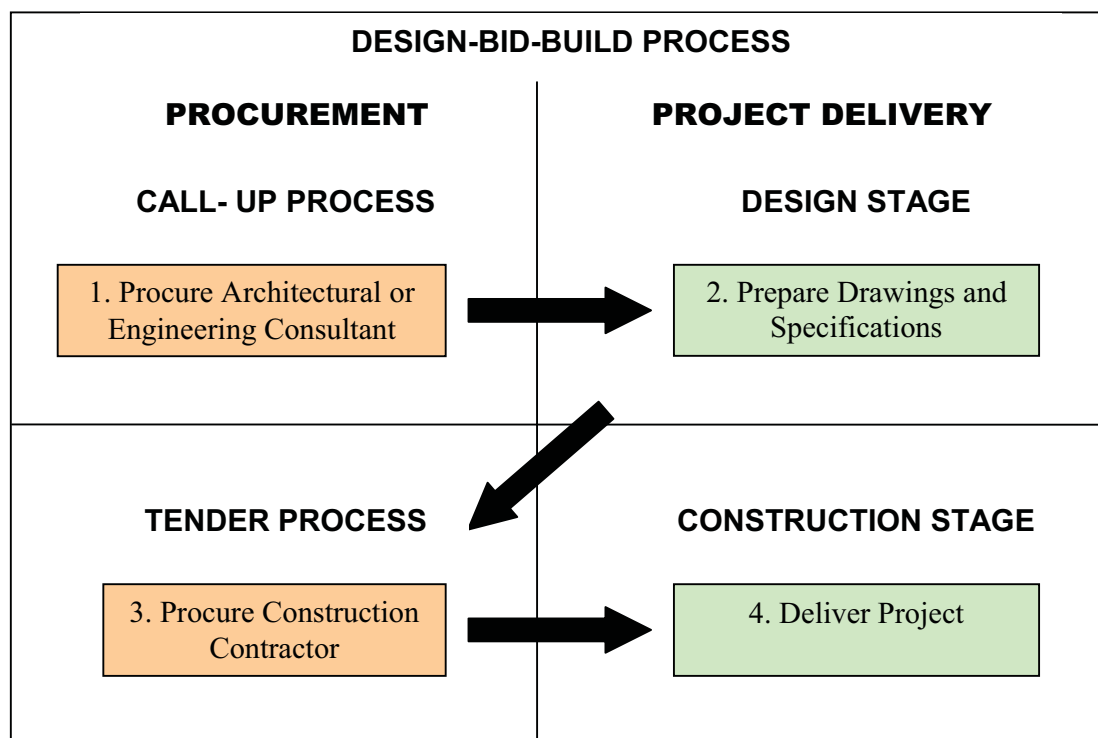
## I. PURPOSE OF GUIDE

The purpose of this Guide is twofold:

1. To provide guidance to architectural and engineering consultants (“consultants”) on **how to work with PWGSC’s** project managers, architects, engineers and other technical staff during a project.
2. To assist consultants and PWGSC staff to **prepare construction contract documents** (i.e. specifications and drawings). These documents are typically used in PWGSC’s tendering process for acquiring design or construction services.

This document provides guidance, including by identifying some of the mandatory requirements of PWGSC. By taking the time to understand and follow this Guide, you will know better what is expected of you. You will also have fewer deficiencies identified during PWGSC reviews resulting in faster turnarounds and greater efficiencies. Your cooperation will also help ensure consistency, accuracy, safety, security, effectiveness, and value for money.

This Guide has been designed primarily for a design–bid–build scenario which is a common procurement approach used by PWGSC. A simplified graphical illustration of the process is shown below.



## II. DESIGN MANAGEMENT / QUALITY MANAGEMENT

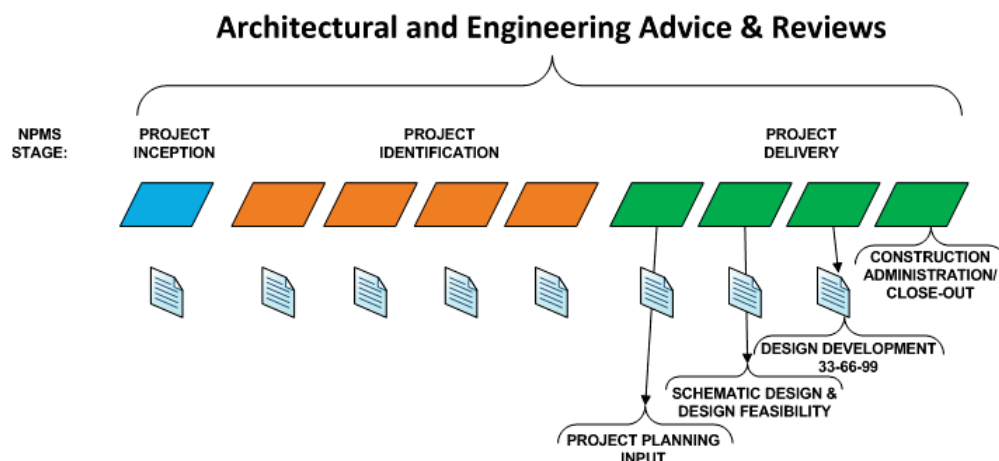
### A. PWGSC's Design Management Process

The Design Management process is an efficient and seamless flow of integrated activities performed by PWGSC's Architectural and Engineering Services (AES) staff and external consultants. It is important to understand that the design is the responsibility of the consultant. The process is aimed at assuring *that the design, procurement, and delivery of a project meet client requirements.*

The process is embedded in the prescribed protocols of the department's Quality Management System (QMS) (see Appendix 1) and works in parallel to the consultant's quality assurance program. Design Management activities and deliverables are guided by Standing Offers, the Royal Architectural Institute of Canada's Canadian Handbook of Practice (CHOP), and standards of the Architectural Institute of BC and of the Association of Professional Engineers and Geoscientists of BC.

The PWGSC Strategic Design Advisor (SDA)<sup>1</sup>, with assistance from the Design Manager (DM) and Design Team, supports the Project Manager (PM) and external client from the early project inception stage through to construction and commissioning (see Appendix 2 for a diagram of the National Project Management System) with advice, guidance, milestone reviews, and options with regard to design, technical aspects, project risk, best practices, financial matters, scheduling and project delivery.

Among PWGSC staff, A&E Reviews are usually referred to as "functional reviews" whereas reviews done by consultants on their own work are referred to as "technical reviews."



<sup>1</sup> The SDA role is currently being carried out by Design Managers until the SDA role is approved by Executive and incorporated into PWGSC processes.

The desired outcomes of Architectural and Engineering Advice & Reviews include the following, among other design parameters affecting the project:

- A clear design vision and objectives are formulated up-front
- The design meets the client's current and evolving needs
- The design is complete, taking into account all relevant factors as reflected in the Design Brief and Project Brief
- The design aligns with the schedule, budget and risk management plans
- The design packaging is consistent with plans for how to deliver the construction (e.g. Public-Private Partnership, design-bid-build, Construction Management, design-build, etc.)
- The design intent is accurately reflected in Requests For Proposals and statement of Required Services for consultants
- The design will enable a logical work program for construction delivery
- The design takes into account best practices and appropriate technologies
- The design meets federal government requirements, policies, and regulations
- The design meets the requirements and regulations of all levels of government having jurisdiction
- The design will result in a built environment that functions as intended
- Quality assurance has been applied to the design process internally and by the consultants

In the project delivery stage, the SDA oversees functional programming, schematic design and design feasibility, and design development. A&E Reviews are performed at project milestones/gates as defined and agreed in the project plan by the Project Manager and the SDA (e.g. at the conclusion of functional design, schematic design and design feasibility, and design development (33%/66%/99% phases).

In the construction documentation phase, an A&E Review includes the following:

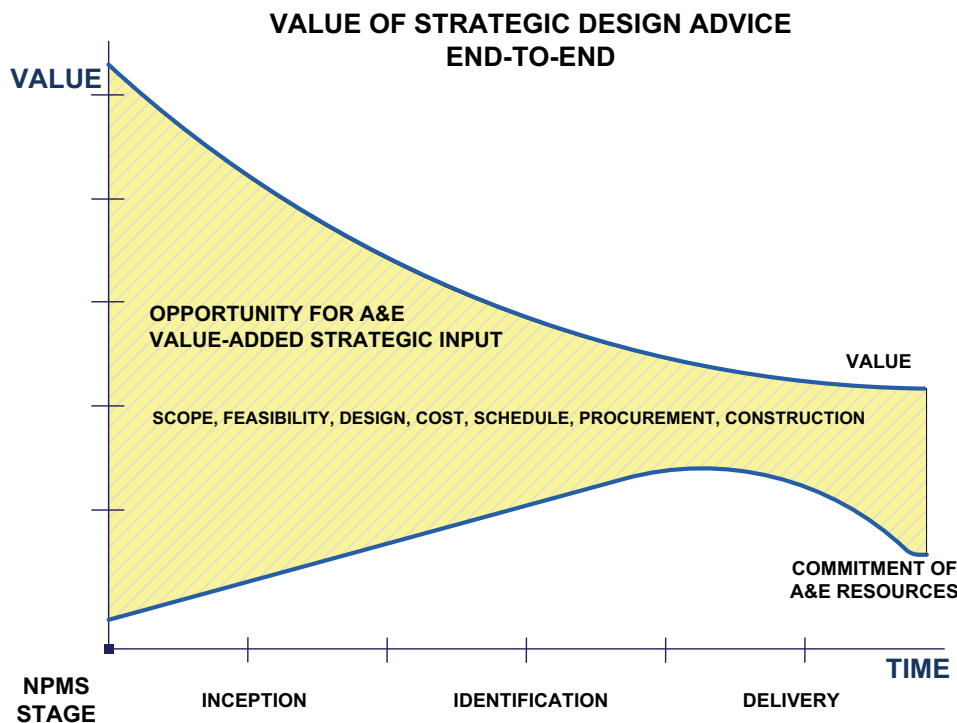
- The scope of work is clear and well-defined in the documentation
- The design is constructible
- Construction contract documents are consistent with the statement of Required Services and are correct and complete
- 33%/66%/99% drawings are defined and delivered as per the description of Required Services, the Standing Offer (if applicable), and professional industry standards (i.e. Architectural Institute of BC, Royal Architectural Institute of Canada's Doc. 6 and Canadian Handbook of Practice, Association of Professional Engineers & Geoscientists of BC)
- Materials are properly specified; building sciences best practices are incorporated; sustainability targets are met

- Quality Assurance is included in a project's specifications and all project contracts
- Specifications use the current edition of the six digit format Canadian National Master Construction Specification (NMS)
- Reference is made to the most current edition of the applicable standards
- Applicable national, provincial and local codes and regulations are specified

The SDA is responsible for obtaining and coordinating review comments from PWGSC and client staff and for communicating them to the consultant. The consultant must provide a written response to all milestone review comments. A template form used for the A&E Review is provided in Appendix 3.

During construction, AES monitors that construction is being executed as per the design intent as set out in construction documents and as per the project timeline/schedule. AES also has a role in construction administration (e.g. site meetings/reviews, change orders, RFI, shop drawings, etc).

The amount of effort that is invested in A&E Advice & Review depends to a great extent on the project. More complex or large projects benefit more from involvement by AES, while simpler projects require less time. As a rule, the greater the design management effort that is invested at the early stages of a project, the greater is the value added in the form of innovative solutions and fewer problems down the line.





## ***B. The Consultant's Responsibility for Quality***

As well as having to deliver in accordance with the contract for their work, consultants are expected to comply with the requirements of the Department and with the regulations of their professional association. Every consultant is subject to a regulatory body or association which outlines the quality assurance requirements; for example, the Royal Architectural Institute of Canada's Canadian Handbook of Practice, AIBC Practice Bulletins, and the Association of Professional Engineers and Geoscientists of BC bylaws. Consultants are to use their seal/stamp in accordance with the rules of their professional association.

Prime consultants are required to have their own parallel quality assurance program. You are expected to comply with the requirements of ISO 9001:2008 – Quality management systems – Requirements, published by the International Organization for Standardization (ISO) specifically on the following clauses:

- 4.1 General requirements
- 4.2.3 Control of documents
- 4.2.4 Control of records
- 5.2 Customer focus
- 7.2 Customer-related processes
- 7.3 Design and development
- 7.4 Purchasing
- 8.2 Monitoring and measurement
- 8.3 Control of nonconforming product
- 8.5.1 Continual Improvement
- 8.5.2 Corrective Action
- 8.5.3 Preventive Action

We do not require that the consultant be registered to ISO 9001; however, your quality management system must address the above requirements appropriate to the scope of work.

PWGSC will not serve as the consultant's quality assurance program for any discipline including, architectural, civil, structural, electrical, mechanical, etc. For example, PWGSC is not responsible for checking a structural engineering consultant's design details or calculations as this important aspect of quality and safety is addressed by a separate protocol under the respective regulatory body's bylaws, such as those of the Association of Professional Engineers and Geoscientists of BC (see <http://www.apeg.bc.ca/resource/publications/governancepolicies/documents/bylaws.pdf>). Obtaining an independent structural review, as per APEGBC, is the external consultant's own responsibility.

PWGSC's review processes are not intended to serve as an independent review process for consultants. Do not expect PWGSC to check your work.

PWGSC will at random request audits of the consultants' quality management processes over the length of a project:

### ***C. Application Notes – Three Scenarios:***

#### **SCENARIO #1 – Consultant Does the Design**

In this scenario, AES engages an external consultant to do the design and to prepare contract drawings and specifications for tender for construction. An SDA is responsible for leading the Architectural and Engineering Review process. Consultants involved are responsible for the design and for quality control of their own work in accordance with the requirements of their governing professional body. Professional consultants sign and seal the drawings and specifications.

#### **SCENARIO #2 – AES Does the Design**

In this scenario, AES is responsible for the design and staff prepare the contract drawings and specifications. This scenario is relatively rare. An SDA (a licensed in BC architect or engineer), through the A&E Advice & Review, is responsible for overseeing and guiding the design process. An internal team, under the guidance and supervision of the SDA, prepares the contract drawings and specifications. Independent third party AES staff are assigned to conduct peer reviews of the work of the internal design team. The SDA signs off on the completeness of the documentation.

#### **SCENARIO #3 – AES and Consultant Jointly do the Design**

In this scenario, AES collaborates with a consultant to jointly do the design and prepare contract drawings and specifications. Both Scenario #1 and #2 apply to each of the collaborative parties for their respective scope. Scope and responsibilities (architect/engineer of record, responsibility for sealing/signing for assignment) are agreed to by both parties and outlined in the contract.

### III. WORKING WITH PWGSC

#### A. *The Consultant's Role*

As an external architectural or engineering consultant, we may ask you to take on any number of lead or supporting roles on a project. You may be involved in pre-design, design, construction, commissioning or close-out as per the contract for your work which sets out the Required Services. If your contract is a call-up under a Standing Offer Arrangement (SOA), then all the SOA requirements apply by reference.

**Pre-design** – We may engage consultants to undertake specific, pre-design tasks during the project inception or project identification stages. By being involved early in projects, AES working with their architectural or engineering consultants can foster innovative solutions. The consultant's tasks will support AES in providing advice, guidance, and options with regard to design, technical aspects, project risk, best practices, financial matters, scheduling and project delivery. For example, we may ask you to prepare a Functional Program or to write a Design Brief.

**Design Development** – During the project delivery stage, we typically ask a consultant to manage and coordinate a design team of internal and/or external disciplines developing specifications and drawings. The coordinating consultant, someone who is expert in the primary technical discipline of the work, is responsible for the design and for assembling all design and construction contract documents unless instructed otherwise. The coordinating consultant is usually an architect but could be a consultant in another discipline.

**Construction** – You may be engaged as a Project Architect or Project Engineer. Depending on the role definition, we typically expect you to be the lead (not PWGSC) in the day-to-day liaison with the general contractor, in reinforcing the project's technical requirements, in sorting out issues and challenges as they arise, and other tasks as set out in the Terms of Reference (TOR). You will be expected to deal with all contractor Requests for Information (RFI) by preparing On Site Instructions (SI) and/or Contemplated Change Notices (CCN) as may be required; and to prepare Change Orders (CO) when required. These are all to be done using the PWGSC forms (see Appendix 6 for links).

**Commissioning** – We may specify that a consultant manage the commissioning process.

**Close out** - At this point, the consultant will prepare the final as-built drawings for submission to the PM/SDA for review and approval.

The main players in a typical project and their roles are described in the table below. Use the terms for these roles on a consistent basis in any documents you prepare for PWGSC.

PROJECT ROLES	
<b>Technical Authority</b>	A PWGSC staff person who is identified in a Standing Offer for design and technical expertise and is responsible for the management of that Standing Offer.
<b>Contracting Authority</b>	The Contracting Authority is the PWGSC group responsible for administering the tender call and the contract. In the Pacific Region, it is the Acquisitions Unit, Real Property Contracting ("RPC").
<b>Departmental Representative</b>	The Departmental Representative is defined as the PWGSC person that exercises the roles and attributes of Canada with respect to the contract. In the Pacific Region, the Departmental Representative is usually the Project Manager. <b>Do not use the terms "owner," "engineer," or "client" when referring to PWGSC's representative.</b>
<b>Project Leader (PL)</b>	The client's (i.e. the other government department) representative for the project.
<b>Project Manager (PM)</b>	A PWGSC Project Manager is assigned to every project. He/she provides overall leadership and direction for the project team and develops the Project Charter and Project Plan. The Project Manager has overall responsibility for project scope, budget, schedule, quality and documentation. He/she may out-task project management activities to an external consultant but must retain signing authority pursuant to the Financial Administration Act.
<b>Strategic Design Advisor (SDA)</b>	A PWGSC staff person who is responsible to the PWGSC Project Manager and client for overall leadership and direction of a multi-disciplinary design team that provides strategic design input, oversees reviews, and delivers construction contract documents to the Project Manager. The SDA supports the PM and external client during project inception, project identification and project delivery stages. The SDA may also act as the Design Manager depending on the project's size and complexity.
<b>Design Manager (DM)</b>	The Design Manager is a PWGSC staff person responsible to the Strategic Design Advisor for day-to-day design management of the project from feasibility phases to completion.
<b>Design Team</b>	PWGSC professional and technical staff from various disciplines (e.g. mechanical, electrical, structural, civil, specifications, health & safety) assigned to the team to assist the Design Manager in the design management of the project.

PROJECT ROLES	
<b>Consultant</b>	An external architectural or engineering consultant that may take on any number of lead or supporting roles on a project as per the contract for the work which sets out the Required Services.
<b>Contractor</b>	Construction contractors use the drawings and specifications prepared by consultants to prepare a bid for construction and construct the works if they are the successful bidder.

## ***B. Required Services***

When executing a specific project, you must refer to the content in this Guide in conjunction with the description of Required Services (RS) in your contract. The Required Services describe the project-specific requirements while this Guide sets out PWGSC's requirements that are common to all projects. In the case of a conflict, the contract terms and statement of Required Services in your contract override this Guide.

Any proposed changes to your scope of work are to be discussed with the Departmental Representative but any resulting changes can only be authorized by a contract amendment.

## ***C. Proposed Scope of Work***

In your fee proposal, specify your deliverables (refer to descriptions of the Required Services, Terms, and Structure) together with cost breakdowns and promised delivery dates. Outline the team members, their hourly rates, and number of hours by person for every phase of the project.

You are required to submit a schedule for your work that we can use as a benchmark for assessing your progress and for billing. Include a project schedule in MS Project or Excel format outlining the major design and construction phases and subtasks/phases. Progress against your schedule is to be confirmed and reported monthly. Any adjustments/deviations to/from the schedule require submission of changes and written approval from the Strategic Design Advisor/Design Manager and Project Manager.

Before proceeding from one phase to the next (i.e. schematic design, 33%, 66%, 99% design, tender etc.), the consultant must seek approval from the SDA. The SDA, in turn, obtains written authorization from the PM indicating that a particular phase is complete.

Any changes to your project team must be done in accordance with General Conditions 23: Changes to the Consultant Team.

PWGSC requires effective time management to ensure that projects are planned, scheduled, monitored and controlled in a systematic manner towards timely completion of the planning, design and construction activities. Construction

documentation submitted at the 33%/66%/99% stages is a tangible indicator of project progress. Documentation that does not meet requirements will be returned to the consultant for revision. The consultant will be responsible for any schedule delays of their own making.

The SDA/Design Manager, in communication with the Project Manager, is responsible for monitoring the prime consultant's progress and performance.

#### ***D. PWGSC Roadmaps***

PWGSC has a well-defined National Project Management System (NPMS) <http://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/index-eng.html> and a Quality Management System (QMS) as described in the Appendices. Note that this QMS applies to the Pacific Region of PWGSC. We encourage you to become familiar with these systems so that you have context for your work.

#### ***E. Project Monitoring and Control (Design, Schedule and Cost)***

(Reserved)

#### ***F. Preparing Construction Cost Estimates***

PWGSC uses four classes of cost estimates: Classes A, B, C, and D <http://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/bi-rp/conn-know/couts-cost/definition-eng.html>. We require a Class A estimate prior to issuing tender-ready documents. The Class A estimate is generally expected to be within 5% to 10% of the actual contract award price for new construction. Tendering risks (e.g. cost overruns, delays, etc.) should be considered with financial implications calculated accordingly. The services of a professional estimator or quantity surveyor are often required and, if appropriate, you should include them in your project team. The cost estimate needs to clearly identify the cost for each technical discipline, e.g. civil, structural, mechanical, electrical, etc. Consultants are responsible for aligning the project construction cost with the cost estimate and design at each of the project phases, as per terms of the Required Services.

#### ***G. Construction Administration***

(Reserved)

#### ***H. Site Visits during Construction***

We require the prime consultant to sign off on progress claims from the construction contractor. We expect the prime consultant to know the construction's progress which means the prime and the sub-consultants on the

team must make regular site visits. For large or complex projects, the Terms of Reference may require the prime consultant to have an office on-site.

### ***I. Project Commissioning and Close-Out***

(Reserved)

### ***J. Invoicing***

The format and content of your invoices must be consistent with your contract, the requirements of the relevant Standing Offer (if applicable), and your fee proposal. Quote the project number and name, as well as the call-up number (if applicable) and contract number. See sample invoice in Appendix 4.

The invoice amount should be calculated as per your contract (i.e. hourly or percent complete for fixed fee contracts). Hourly tracking of team members is required and is to be provided if requested to support progress claims or project audits.

Make your invoices to the attention of the PWGSC Project Manager with a copy of the invoice to the project's SDA/Design Manager. The SDA/Design Manager will verify that the work was done as contracted. PWGSC will not pay an invoice until staff verify that the work was done as contracted; for example, in the case of design documentation, staff will verify that the work is indeed 33%/66%/99% complete before recommending an invoice for payment.

### ***K. Consultant Evaluation***

PWGSC evaluates the performance of consultants using the Consultant Performance Evaluation Performance Report Form (CPERF). We assess quality of design, quality of results, project management, time planning and schedule control, and cost planning and control. <http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/2913-1-eng.html>



## IV. PREPARING CONSTRUCTION CONTRACT DOCUMENTS

This section sets out requirements for preparing construction contract documents, which include specifications, drawings, addenda, contemplated change notices, and other documentation. You can find web links to related information and PWGSC forms in Appendix 6. Review the documents that you prepare against the requirements set out below.

### A. *General*

#### 1. **Defining the Contractor's Scope of Work**

You are responsible for ensuring that the scope of work described in the construction contract documents is clear and well-defined and reflects the government's vision for the project. Your documents must be accurate, complete, and enable the contractor to properly price the work. Poorly defined scope of work can result in extra meetings, change orders, increased costs, delays, and an overall adverse impact on the project. Your construction contract documents must be free of loop holes or inconsistencies that could be exploited by contractors. Note that any change in the scope of work must be approved by PWGSC's Project Manager.

#### 2. **Knowledge of Site Conditions**

Because PWGSC does not specify mandatory site visits by the contractor as part of the tendering process, you cannot assume that contractors will visit the site to fill information gaps. The onus is on you to completely describe the scope of work in the documents. It is important that you visit the site to note on-site conditions and constraints. **Do not use notations such as "verify on site," "as instructed," or "to be determined on site by the departmental representative" as this promotes inaccurate bids and inflated prices.** You must not rely on as-built documentation to deal with information gaps. Such conditions are to be resolved and agreed to by the SDA, Project Manager, and consultant.

#### 3. **PWGSC Contracting Principles**

As a Federal Government department, PWGSC is bound to uphold certain principles for the public interest; e.g. a transparent contracting practices to ensure accountability. The requirement to uphold these principles means that PWGSC must ensure compliance with many government rules pertaining to the procurement of design and construction services. Hence, the Department uses contracting procedures that are different from those used in the private sector.

Here is a list of some of the ways in which PWGSC's requirements differ:



- PWGSC has a unique set of contractual terms and conditions drawn from the department's Standard Acquisition Clauses and Conditions (SACC) Manual: <http://ccua-sacc.tpsgc-pwgsc.gc.ca/pub/acho-eng.jsp>
- PWGSC does not use the Canadian Construction Document Committee (CCDC) or the Canadian Construction Association or British Columbia Construction Association standards or guides
- PWGSC does not specify mandatory site visits by the contractor as part of the tendering process so you must completely describe the scope of work
- Use of National Master Specification and PWGSC Pacific Region abridged specifications, as well as PWGSC documentation and forms (see Appendix 6)
- The construction contract documents that you prepare for tender are considered "final for construction" versus the private sector where documents prepared for tender may require a subsequent "issued for construction" edition

#### **4. Contractual Items**

A PWGSC tender package for construction contractors includes documents that cover contract items such as payments, warranties, pricing, taxes, and bid security. You are not to repeat in the specifications and drawings any contractual items that are already addressed in the other documents in the tender package.

#### **5. Administrative Simplicity**

Ensure that construction contract documents are written in a manner that simplifies PWGSC's administration of the contract as much as possible, while still being effective; e.g. number of meetings to attend, communication protocols, reporting requirements, etc.

#### **6. Bidding Format**

For the majority of construction projects, PWGSC requires bidders to submit a single price. Unless requested by the Project Manager, do not use options, alternative prices, conditional clauses, or anything that modifies the offer as it will make the contractor's bid non-compliant.

**Single Lump Sum** - For a single lump sum contract, you do not need to provide a bid form (it is provided by the Contracting Authority), nor do you need measurement for payment clauses in the specifications.

**Unit Price** - Unit price contracts are used when the quantity can only be estimated, e.g. earth work. When using this method, give an estimated quantity for bid purposes.

**Combined Price** – Combined price contracts have a mix of both lump sum and unit price items.

Use the following wording:

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

Ensure there is a clear statement of how the measurement will be made.

A Unit Price Table designates the work to which a unit price arrangement applies.

- (a) The price per unit and the estimated total price must be entered for each item listed
- (b) Work included in each item is as described in the referenced specification section

UNIT PRICE TABLE					
Item	Class of Labour, Plant or Material	Unit of Measurement	Estimated Quantity	Price per Unit, HST extra	Extended Amount Price, HST extra
<b>TOTAL ESTIMATED QUANTITY</b> <b>Transfer amount to subparagraph (1)(b) of BA03</b>					

## 7. Cash Allowances

Use cash allowances only under exceptional circumstances, where no other method of specifying is appropriate. You must assist the Project Manager to obtain the Contracting Authority's approval to use cash allowances in the specifications, in which case you could use *Section 01 21 00 – Allowances* of the NMS to specify the criteria. Use of cash allowances is almost never approved.

## 8. Professional's Signature and Seal

Drawings and specifications are to be signed and sealed by the Professional Architect and Professional Engineer at the tender issue stage. Additional sets of signed/sealed drawings and specifications and BC Building Code schedules may be requested as needed for building permit submissions to the local authority having jurisdiction.

## 9. Permits

PWGSC asks for permits as if the work is being done in the private sector. Also, be aware of PWGSC's Good Neighbour Policy:

<http://www.tpsgc-pwgsc.gc.ca/biens-property/cndns-eng.html>. The consultant will prepare the required documentation for obtaining approvals and permits from the applicable local authority on behalf of PWGSC. Confer with the PM to determine whether the consultant or contractor will submit the documentation to the local authority on behalf of PWGSC or whether PWGSC will take the further action. If the former, the consultant or the contractor will submit a documentation set(s) to the local authority and provide a documentation set(s) to PWGSC for the department's records. PWGSC, through the contractor, will pay for the permit application costs. PM/SDA/DM and consultant to confer to clarify any project specific adjustments to the above process.

## B. SPECIFICATIONS

### 1. National Master Specifications

For the 33% milestone submission, include project specifications. **Confer with PWGSC's Strategic Design Advisor on the appropriate Specification Index and Outline Specification for the project.**

Specifications are to be based on the current edition of the six digit format Canadian National Master Construction Specification (NMS) in accordance with the *NMS User's Guide* (<http://www.tpsgc-pwgsc.gc.ca/biens-property/ddn-nms/index-eng.html>). The NMS is jointly produced by Construction Specifications Canada (CSC) and the Construction Specifications Institute (CSI) in the USA.

PWGSC's Pacific Region, like other regional units across the country, has its own abridged specification sections, which reflect the unique requirements of the federal, provincial and regional authorities having jurisdiction. However, the regional specification index may not always be appropriate for large or complex projects in which case the National Master Specification is better.

You are responsible for tailoring fully developed Division 01 specifications, in consultation with the Project Manager. You shall edit, amend and supplement specifications derived from the NMS as deemed necessary and produce a project specification that is free from conflict and ambiguity.

You must fully develop the three Division 01 specification sections that are common to all projects (see below), as well as identify and develop other sections that apply to the project in question in consultation with the Project Manager:

- **General Instructions** (Section 01 11 55) – This section covers a wide range of activities such as security, environmental protection, fencing, quality

assurance, etc., that must be considered and included in the specifications as appropriate.

- **Health and Safety Requirements** (Section 01 35 33). - The Government of Canada as a whole takes all matters of Construction and Occupational Health and Safety (OH&S) very seriously. Compliance with Federal and Provincial OH&S legislation and regulations is mandatory. Use of the Pacific Region Master Template NMS Section 013533 Health and Safety Requirements, as revised from time to time, is mandatory. Discuss the health and safety requirements with the Project Manager at the beginning of the work and request a copy of the Pacific Region Master Template.
- **Commissioning** (Section 01 91 00) – Commissioning is required for all projects, although its extent is determined by the size and complexity of the project. Discuss the commissioning requirement with the Project Manager at the beginning of the work and request a copy of the most current PWGSC Commissioning Manual (CP.1).

PWGSC-prepared specifications are to use the Construction Specifications Canada full page format, whereas consultants may use either the full page or the two column format.

Narrow scope sections of the NMS describing single units of work are preferred for more complex work, whereas, broad scope sections may be more suitable for simpler work. For example, for complex concrete work, separate sections for formwork, reinforcing steel, and concrete is preferred (i.e. “narrow” scope). Whereas for simpler work, a single section for concrete which includes formwork, reinforcing steel and concrete is preferred (i.e. “broad” scope).

## 2. Specifying Materials

Except for special circumstances, specifying brand names and model numbers is against departmental policy in order to avoid partiality. The method of specifying shall be by one or more of the prescriptive method, reference to recognized standards, and specification by a non-restrictive, non-trade name performance specification.

Where no standards exist and where a suitable non-restrictive, non-trade name prescriptive or performance specification cannot be developed because of complexity, you may specify by Acceptable Product or Minimum Standards. Discuss this situation in advance with the PWGSC Project Manager.

In this case, either list all trade names and model numbers of materials acceptable for the purpose as follows:

1. ABC Co. Model [\_\_\_\_],
2. DEF Co. Model [\_\_\_\_],
3. GHI Co. Model [\_\_\_\_],

Or, after describing the products, specify the name of a product as minimum acceptable product when the description alone or performance specifications would not be adequate. A statement must be added that the product specified as minimum standard does not exclude any other products. The specifications for the specified product will be used as the base for minimum acceptable standards during the shop drawings review. All products must meet or exceed the minimum standards.

You must use the phrase “acceptable products.” Do not use “standard of acceptance,” “approved products” or other similar phrases. Also, do not use “or equal” or “equivalent to.”

Sole sourcing for materials and work can be used for proprietary systems (i.e. fire alarm systems, EMCS systems). You must substantiate and/or justify sole sourcing and obtain approval from the Project Manager.

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

“Designated Contractor

*.1 Hire the services of [ ] to do the work of this section.”*

Wording for the sole source of EMCS systems should be in Part 1 as:

“Designated Contractor

*.1 Hire the services of [ ] or its authorized representative to complete the work of all EMCS sections.”*

*and in Part 2 as “Materials*

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

“Acceptable materials

*.1 The only acceptable materials are [ ].”*

If an acceptable product must be used, according to PWGSC General Conditions, the contractor must provide the specified product.

Do not use the term “Acceptable Manufacturers” as this has been deemed to restrict competition and does not ensure the actual material or product will be acceptable. A list of words and phrases to avoid is included in the NMS User’s Guide.

### **3. Prescriptive vs. Performance Specification**

(Reserved)

#### **4. Standards**

As directed by the Division 01 specification index, make reference to the most current edition of the applicable standards, noting the exact title. Examples of recognized standards are those of the Canadian Gas Association (CGA), Canadian General Standards Board (CGSB), Canadian Standards Association (CSA), or Underwriters Laboratories of Canada (ULC). Recognized standards are also published by trade associations such as the Canadian Roofing Contractors' Association (CRCA) or the Terrazzo, Tile & Marble Association of Canada (TTMAC). Canadian standards should be used wherever possible. *NMS Section 01 42 00 – References* provides web site addresses for standards organizations.

#### **5. National, Provincial and Local Codes and Regulations**

Always use or specify the applicable national, provincial, and local codes and regulations with a clause that states *“the most stringent will apply.”* It's PWGSC policy to follow and apply the most stringent of the national, provincial and local codes.

For building projects that house Federal Government employees or people in institutions under Federal Government Administration including prisoners, patients, students, etc. the Authority having jurisdiction over the design of these projects is the Fire Protection Engineering Services Branch of Labour Canada.

This department is similar to a municipal government building department and reviews all projects within its jurisdiction for building code compliance to all Federal Government standards. It is the prime consultant's responsibility, with the help of the Design Manager, to engage this department for project reviews at the 33%/66%/99% stages. The Labour Canada contact is:

Manager, Fire Protection Engineering Services, Northwest Pacific Region

Tel: (604) 666-0403

Fax: (604) 666-6206

Email: [dan.jacob@hrsdc-rhdsc.gc.ca](mailto:dan.jacob@hrsdc-rhdsc.gc.ca)

[http://www.hrsdc.gc.ca/en/labour/fire\\_protection/index.shtml](http://www.hrsdc.gc.ca/en/labour/fire_protection/index.shtml)

#### **6. Specialty Engineer**

When particular inspections or approvals are required (e.g. gluelam, seismic restraints, structural steel), identify that they must be done by a Professional Engineer/Architect registered in British Columbia or in the relevant jurisdiction. This Professional is responsible for the components designed or installed by the contractor and who signs and seals shop drawings and other documents.

#### **7. As-Built Documentation**

In the specifications, ensure you've defined the approach for preparing and reviewing as-built drawings. They are to be prepared by the contractor and reviewed and translated to the electronic drawings by the consultant. Identify for

the Project Manager any differences between the contractor's as-built drawings and the consultant's as-built drawings.

Assemble, finalize, and submit to the PWGSC Project Manager and SDA the as-built drawings and specifications electronically periodically when change orders, Requests for Information, and other changes occur, rather than wait until the end of the project. Submit the final as-built drawings and specifications in dwg format and pdf format on CD as per the statement of Required Services.

### **C. DRAWINGS**

- √ Follow generally accepted drawing conventions understandable by the construction trades.
- √ Drawings should show the quantities and configuration of the project, the project dimensions, and graphic details of how the project is to be constructed. Drawings should not describe the quality of the work.
- √ Follow PWGSC National CADD Standard as adapted to Pacific Region. Important standards are the ones pertaining to layering, title blocks, drawing size and achieving consistency across the documentation set. See the PWGSC National CADD Standard: <http://www.tpsqc-pwgsc.gc.ca/biens-property/cdao-cadd/index-eng.html>
- √ Consult with the Strategic Design Advisor/Design Manager to confirm the selection and use of CADD platform/tools that may be required for a particular project type or procurement method (i.e. version, platform, BIM, energy modeling, 3D rendering etc.).
- √ Make all drawings a uniform standard size in accordance with the PWGSC National CADD Standard. Ask the PWGSC Strategic Design Advisor/Design Manager for a paper space template and pick a size.

Appendix 5 contains a PWGSC Style Guide for Construction Contract Documents.

### **D. Documentation Submission**

For construction contract documents:

#### **What to Submit**

- ☐ Index to Specifications and Drawings
- ☐ Specifications -
  - Include a description of all units and estimated quantities for unit price table
  - Include a list of significant trades including costs
- ☐ Drawings
- ☐ Addenda (if required)

- ☐ BC Building Code Schedules A, B1, B2 and C (for construction phase)

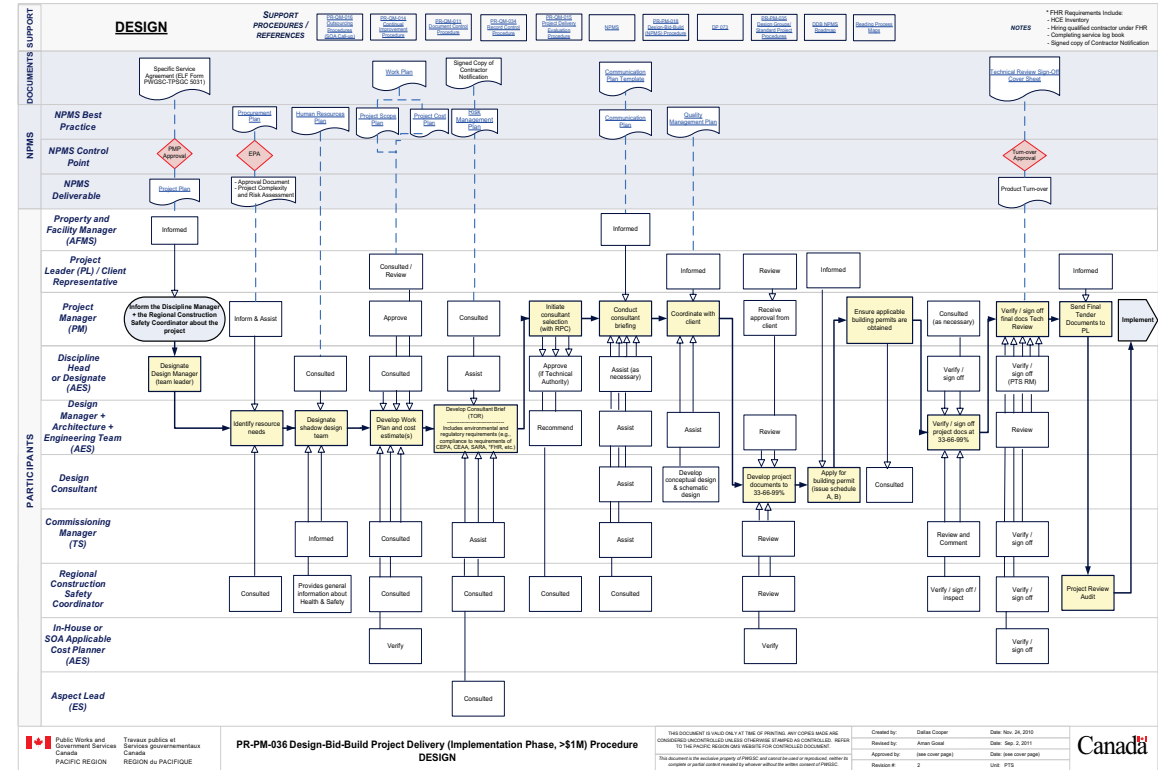
### **Submission Format**

- ☐ Confirm the intended recipients of your documents and obtain their name, email address and courier address.
- ☐ Unless otherwise indicated in the statement of Required Services for a specific project, at the required review and tender stages, submit your work in paper format (PWGSC is considering requiring submissions in electronic format in the future).
- ☐ Use your seal/stamp in accordance with the rules of your professional association. You do not need to stamp or seal at the 33% and 66% stages.
- ☐ If at any time you create electronic pdf documents, always use software conversions (rather than scanning) to improve functionality.
- ☐ In the design phase, you may be required to send paper copies to multiple offices, with a transmittal record to the PWGSC Strategic Design Advisor. In this case, print the specification pages one-sided on 216 mm x 280 mm white bond paper. Staple or otherwise bind drawings and specifications into sets. Where presentations exceed twenty sheets of drawings, you may bind the drawings for each discipline separately for convenience and ease of handling.
- ☐ At review stages and at the completion of the construction project, submit the final specifications in pdf format and original and as-built drawings in electronic pdf and dwg formats for record keeping purposes. Include any change orders and change of work documents. Submit a separate pdf and dwg file for each drawing.

### **PWGSC shall provide**

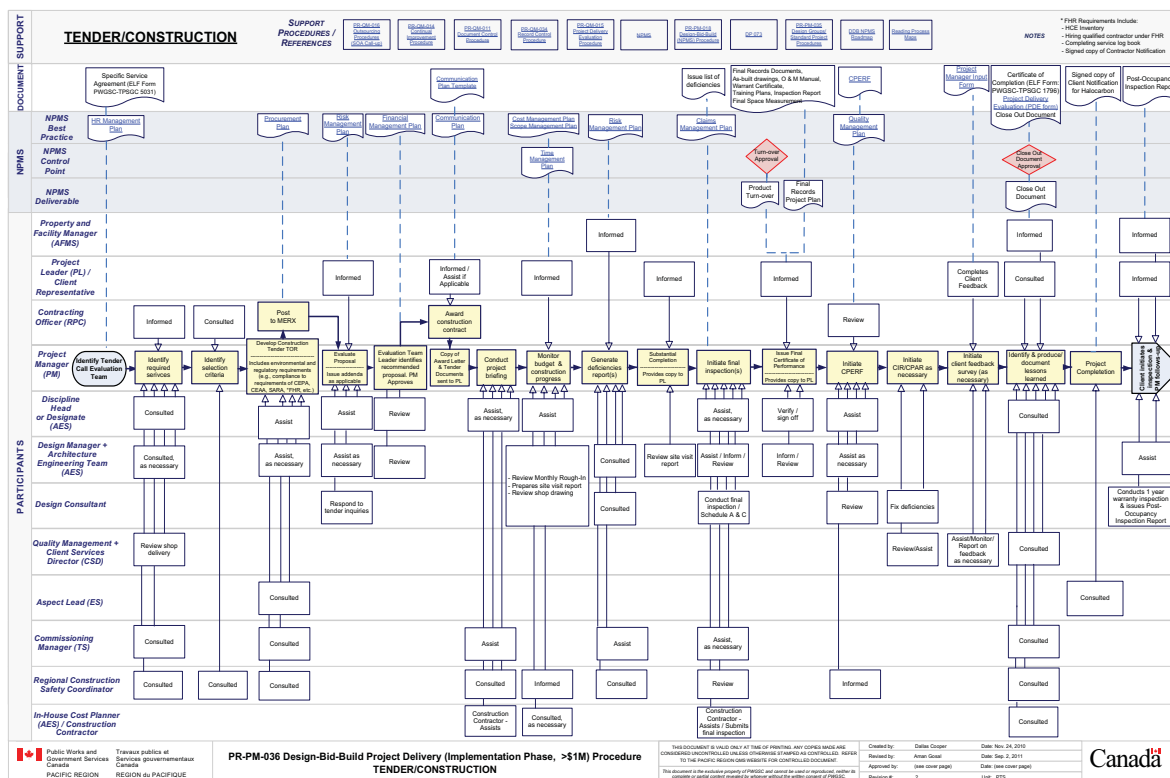
- √ Front and back cover
- √ Special addenda
- √ Instructions to tenderers
- √ Tender form
- √ Standard construction contract documents





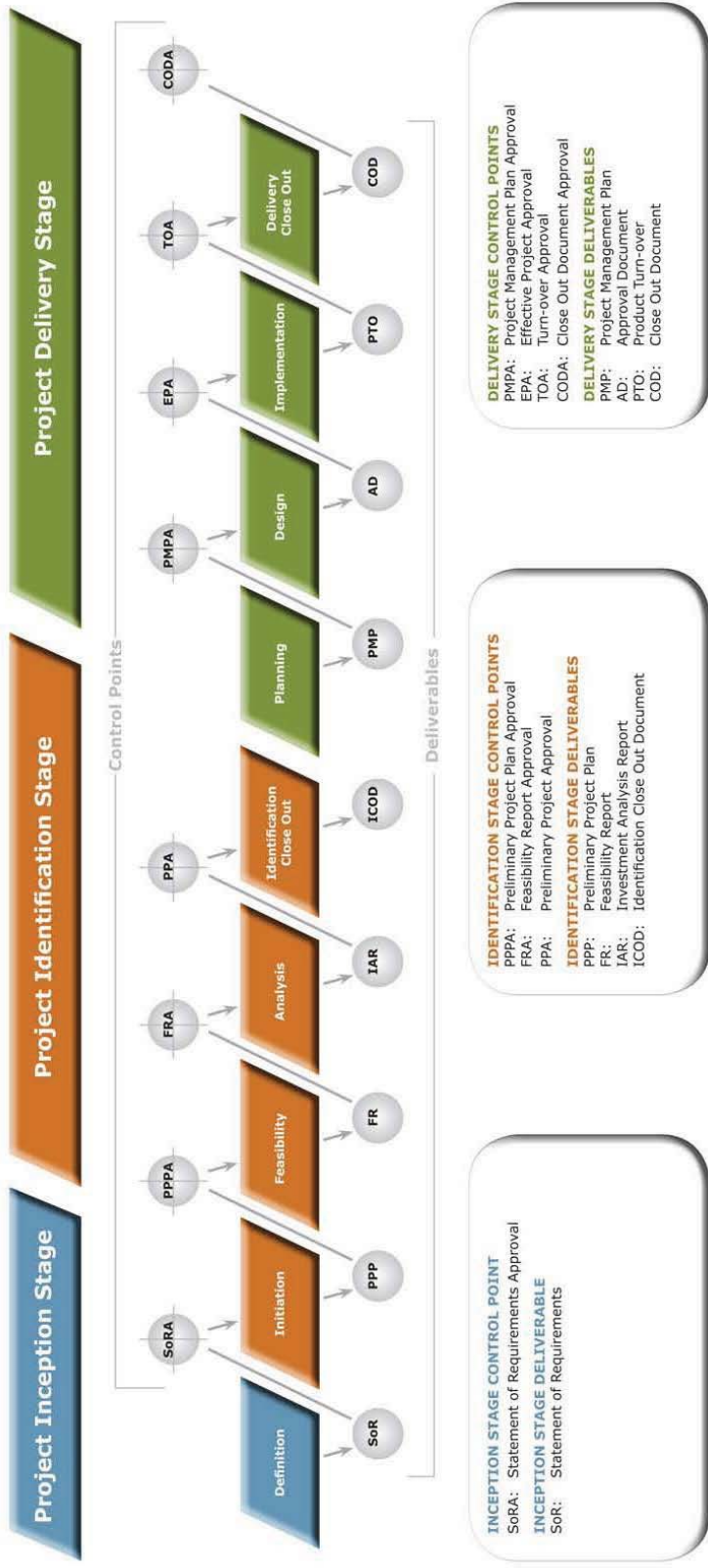
<sup>2</sup> For reference only. Contact the Design Manager for the most recent version. See the PDF version for more detail.

## APPENDIX 1 – QUALITY MANAGEMENT SYSTEM (QMS) (Continuation)



## APPENDIX 2: NATIONAL PROJECT MANAGEMENT SYSTEM (NPMS)

### PWGSC National Project Management System (NPMS)



## APPENDIX 3 – TEMPLATE FOR PWGSC's ARCHITECTURAL & ENGINEERING REVIEWS<sup>3</sup>

[illegible]

<sup>1</sup> The designer is required to respond to all items noted herein. In addition to subsequent modifications made to the design documents and re-submitted for review, provide a summary in the same format as this review for each item such as "changed as noted," or "clarifications made" or other alternatives offered. This form is applicable for use for both internal/external projects.

<sup>3</sup> For reference only. Contact the Design Manager for the most recent version of this form. The form name "PWGSC Technical Review" is being considered for revision via QMS.

## **APPENDIX 4 – SAMPLE INVOICE**

(Reserved)

## APPENDIX 5 – PWGSC-PACIFIC STYLE GUIDE FOR CONSTRUCTION CONTRACT DOCUMENTS

This style guide is intended for construction contract documentation at the 33%/66%/99% and tender stages. This guide is updated regularly. Refer to the Required Services in your contract and to the Project Manager and Strategic Design Advisor for any additional or updated requirements.

### ☒ Language

- ☐ Use the imperative voice instead of the passive voice wherever possible:
  - Examples of imperative voice: Install new panel on east wall; Remove all existing wiring.
  - Examples of passive voice: New panel will be installed on east wall; Existing wiring to be removed.

All instructions in the tender package are aimed at the contractor so avoid use of the word “contractor” wherever possible. Use of the imperative voice eliminates the need for any reference to a contractor.

### ☒ Technical Package

- ☐ Include the PWGSC Project Number (which is the same as the Work Breakdown Structure Element in PWGSC’s SIGMA financial system) on all specifications, drawings, and reports. Here is an example of the format for a project number: R.012345.001
- ☐ Use the required format for the index page and obtain the template from the Strategic Design Advisor
- ☐ List all sections and pages of the specifications and all drawings in the index
- ☐ Ensure titles of all appendices are listed on the index page, with each appendix having a unique title
- ☐ Ensure the names used in the index match the specification section, drawing names, and appendix names
- ☐ Ensure the page count for each listed item in the index matches the actual number of pages
- ☐ Use ISO date formatting: YYYY-MM-DD, e.g. 2010-10-02 meaning the 2<sup>nd</sup> day of October, 2010
- ☐ Use only metric dimensions on all specifications and drawings (no imperial dimensions). Always use industry-standard metric dimensions, for example, 53mm electrical conduit instead of 50mm (2” conduit)
- ☐ Use the same font style throughout the package, including documents from different disciplines

- ☐ Use black font on white paper for drawings and specifications unless colour would assist clarity in which case obtain the Strategic Design Advisor's approval
- ☐ Where schedules occupy entire sheets, locate them next to the drawing sheets or at the back of each set of drawings for convenient reference. See *CGSB 33-GP-7 Architectural Drawing Practices* for guidelines on schedule arrangements.

#### ☒ **Company References**

- ☐ Without specific authority from the PWGSC Project Manager, do not include references to any phone numbers, personal names, web sites, email addresses, street addresses or similar coordinates of suppliers, manufacturers, contractors or consultants
- ☐ Include your consulting firm's logo/name on all drawings below PWGSC's name at the upper right hand corner of the drawing
- ☐ You can place your consulting firm's project number near the lower right corner of drawings or on the cover page of your document

#### ☒ **Specifications**

- ☐ Follow the specification notes in the NMS
- ☐ You are responsible for including all pertinent sections of the NMS (see the section on Specifications)
- ☐ Write a brief description of the work and number of weeks allocated for its completion on the first page of the Division 01 sections
- ☐ Ensure a specification section exists for all elements of work included in the drawings
- ☐ Ensure the specification headers comply with PWGSC's format (confer with PWGSC's Strategic Design Advisor)
- ☐ Include the Project Name in the specification header for each specification section.
- ☐ Start with Division 01 Sections and start each Section on a new page
- ☐ Check the specification index to ensure that the correct specification section numbers are listed
- ☐ When making cross references, for example a specification section refers to another section, ensure the references exist and the correct numbers are used
- ☐ Erase all brackets of NMS specification choices not used for the project
- ☐ Include the Section Title, six digit Section Number, and specification date, along with the Project Number, on each page of the specifications

- ☐ Put a page number on all pages in the specifications (including appendices, photo pages, etc), except for drawings

## ☒ **Drawings**

- ☐ **Do not put specifications on drawings** unless permission has been granted by the Strategic Design Advisor in advance. Such permission is not usually granted.
- ☐ Insert a unique drawing number and sheet number on every drawing
- ☐ Number drawings in sets according to the type of drawing and the discipline involved in accordance with the PWGSC National CADD Standard
- ☐ Comply with National Building Code requirements for design notes on all drawings (these are not the same as specification notes)
- ☐ Explanatory notes on drawings are expected
- ☐ Include a North Arrow on all floor and site drawings, as well as a set of benchmark locations to help the contractor to properly lay out the works
- ☐ Wherever possible, lay out drawings so that the north point is at the top of the sheet
- ☐ Orient all drawings in the same direction for easy cross-referencing
- ☐ If you are assuming a certain floor elevation (e.g. 100.00 m), then provide a cross reference to tie it back to existing site elevations
- ☐ Include a scale bar on all drawings except sketches
- ☐ Include the names of PWGSC's Project Manager, Regional Manager of Architectural and Engineering Services, and other relevant staff in the title block. Ask PWGSC's Strategic Design Advisor for the names of the staff to include.
- ☐ Each submission to PWGSC is to be identified as a specific revision
- ☐ If extensive use of symbols, abbreviations, references, etc., provide a legend on the front sheet of each set of drawings or, in large sets of drawings, immediately after the title sheet and index sheets

## ☒ **Addenda**

- ☐ See the PWGSC Project Manager for the most current addendum template
- ☐ Ensure addenda items refer to an existing specification paragraph or drawing note
- ☐ Number consecutively every page of the addenda, including attachments
- ☐ Put the PWGSC Project Number and appropriate addendum number on every page



- ☐ Use the PWGSC National CADD Standard for any sketches
- ☐ Stamp and sign sketches

## APPENDIX 6 – SELECTED REFERENCES AND FORMS

This appendix has PWGSC web site links to relevant information and forms.  
Contact the PWGSC Project Manager for other forms not listed below.

Acquisitions:

<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/formulaires-forms-eng.html>

Change Order:

<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/610-eng.html>

Construction Contract Administration Forms:

See your PWGSC Project Manager

Contemplated Change Notice:

<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/611-eng.html>

Legal Nature of Consultant's Role for Architectural and Engineering Contracts:

<http://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/bi-rp/conn-know/approv-procure/manuelga-pmmanual-6-eng.html>

Managing Construction Contract Changes:

See your PWGSC Project Manager

NMS Specification Standards

<http://www.tpsgc-pwgsc.gc.ca/biens-property/ddn-nms/index-eng.html>

NPMS

<http://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/index-eng.html>

On Site Instruction:

<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/599-eng.html>

PWGSC National CADD Standard:

<http://www.tpsgc-pwgsc.gc.ca/biens-property/cdao-cadd/index-eng.html>

Pre-Construction Start-up Meeting:

See your PWGSC Project Manager

Shop Drawings Review Process:

<http://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/bi-rp/conn-know/qualite-quality/atelier-shop-eng.html>

Specification Brief:

<http://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/bi-rp/conn-know/qualite-quality/apercu-overview-eng.html>

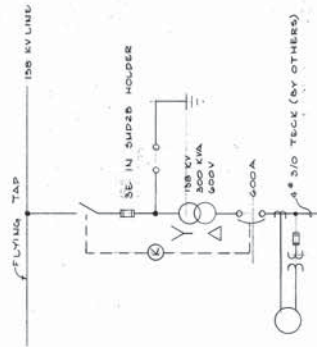
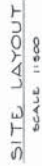
Standard Acquisition Clauses and Conditions (SACC)

<http://ccua-sacc.tpsgc-pwgsc.gc.ca/pub/acho-eng.jsp>

Tenant Fit-Up Standards

<http://www.tpsgc-pwgsc.gc.ca/biens-property/amng-ftp/index-eng.html>

ITEM	QTY	DESCRIPTION
1	LOT	SUB-ASSEMBLED ALUMINUM LATTICE COLUMN'S AND GREESE.
2	2	GALVANIZED WELDED STEEL ANGLE BASE'S 6W QUSET'S.
3	6	ANCHOR BOLT 6W NUT
4	LOT	MOUNTING BOLT FOR EQUIPMENT AND STRUCTURE
5	3	1/2" DIA. "U" BOLT 6W NUTS AND LOCKWASHERS
6	3	SETS OF STRAIN EXTENSION 30" LONG
7	3	TOWER EYE'S
8	1	10KV GROUND, 5 POLE CENTER BREAK GROUP OPERATED SWITCH, CABLE MOUNTED DEVICE AND INTERLOCK ADAPTOR, CABLE INSULATORS
9	1	SWITCH TERMINALS FOR 4 HOLE NEMA TO 250VCM STR CU.
10	3	SWITCH TERMINALS FOR 4 HOLE NEMA TO 250VCM STR CU.
11	3	INTERLOCK 6W DUST COVER
12	1	120KV INTERMEDIATE CLASS LIGHTNING ARRESTORS, COB #9R20
13	3	120KV FUSE MOUNTS AND HOLDERS. S/C SUB 2B
14	3	120KV SAUP 6 SPEED FUSE REFILLS
15	3	FUSE TERMINAL FOR 2 HOLE NEMA TO 250 VCM STR. CU.
16	3	FUSE CAUTION SIGN
17	1	250 VCM STR. COPPER
18	AS REQ	2/0 STRANDED COPPER
19	3	"U" GROUND CLAMP FOR 2/0 STRANDED COPPER (EVERY 4FT APPROX.)
20	20	SINGLE GROOVE GROUND CONNECTOR FOR 2/0 STR. COPPER
21	11	BOULDERLESS GROUND CONNECTOR FOR 2/0 STR. CU
22	1	DEEY BALLS GROUND CONNECTOR FOR 2/0 STR. CU
23	18	STEAM CLAMPS
24	3	INCOMING LINES - 250VCM ACSE - BY A.C. HYDRO
25	3	TRANSFORMER, 3 PHASE, 10KV/30KV
26	1	RED TYPE TRANSFORMER STUD CONNECTORS FOR 1/2"-12 TO UNIVERSAL
27	1	"U" BOLT FOR 1 1/2" IPS LIGHTNING MAST GROUND
28	2	1 1/2" DIA. X 15'-0" LONG STRUCTURAL IPS USED AS LIGHTNING MAST
29	2	DOUBLE GROOVE GROUND CONNECTOR FOR 2/0 CU
30	2	GROUND ROD
31	3	THREATIT WELD
32	4	GROUND CONDUCTOR
33	4	FENCE
34	1	GRADIENT CONTROL MAT
35	1	SECONDARY BREAKER & METERING CABINET
36	1	



### SINGLE LINE DIAGRAM

EMCO ENGINEERING LTD.

DEPARTMENT OF FISHERIES AND OCEANS  
SALMONID ENHANCEMENT PROGRAM

CONILMA RIVER HATCHERY

DATE \_\_\_\_\_

OCT. 1979

DRAWING NUMBER

32-18-90

REVISION

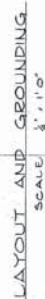
REVISIONS

NO.	DATE
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NOTES

## REFERENCE DRAWINGS

200



EMCO ENGINEERING LTD.

DEPARTMENT OF FISHERIES AND OCEANS  
SALMONID ENHANCEMENT PROGRAM

SCALE  
1/4" = 1'-0"

DATE	1/4 - 1 - 0
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OCT. 1979  
DRAWING NUMBER

33-1831-23

10-20	10-20
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DESIGNED  
R. R.

E. R.

CHECKED  
R.R.

### RECOMMENDATIONS

## ADMINISTRATIVE

### CONCLUSIONS

## REVISIONS

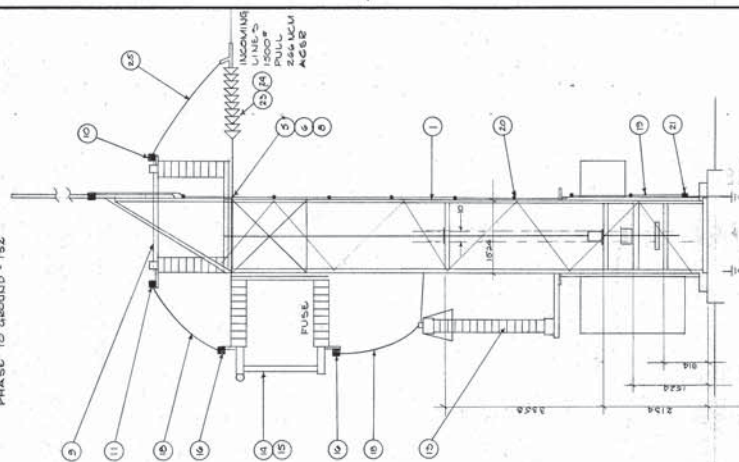
NO.	DATE
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NOTES

## REFERENCE DRAWINGS

DWG. NO.	
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SECTION C-C

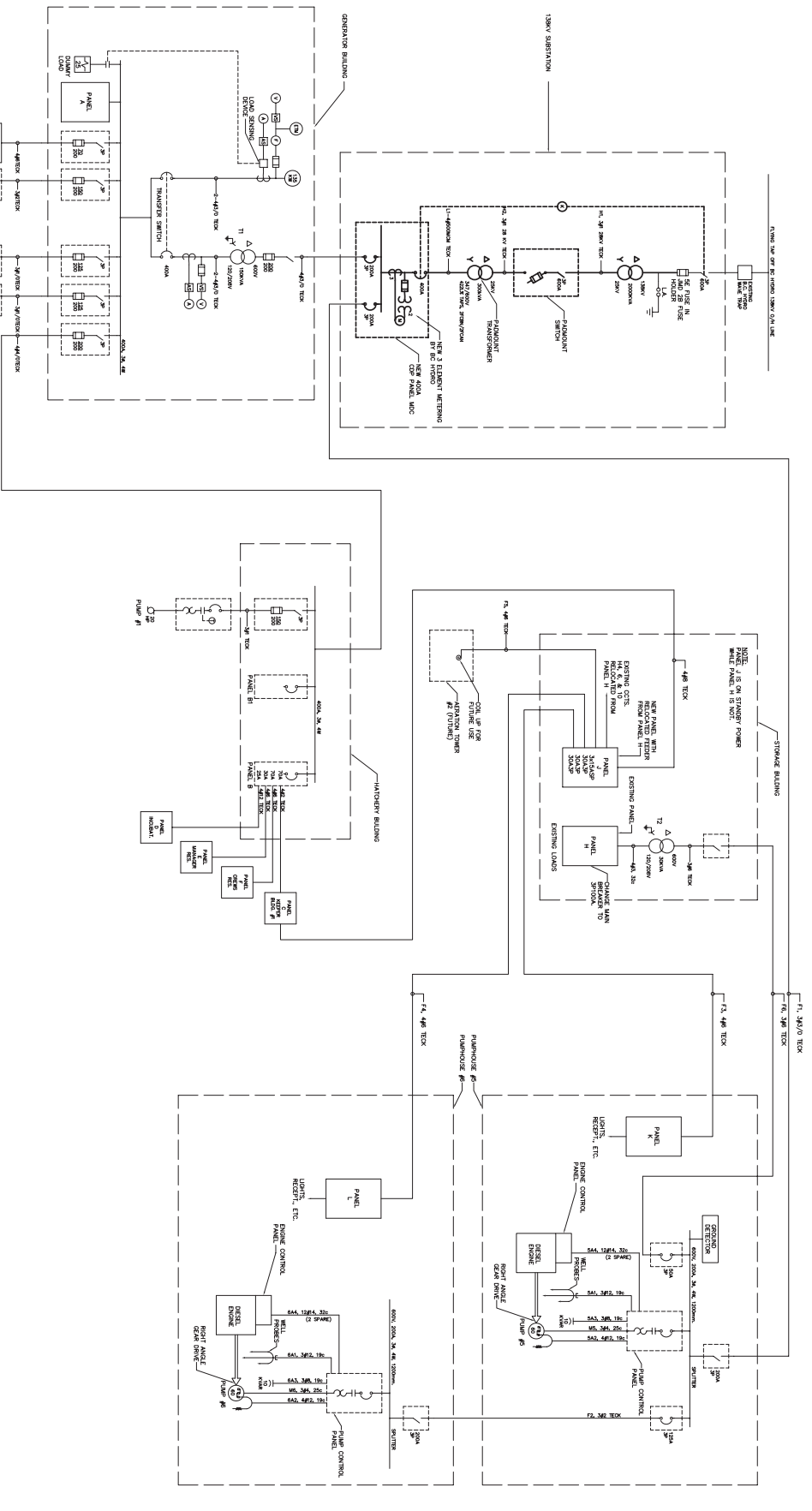
CONUMA RIVER HATCHERY	SCALE 1/4" = 1'-0"
CONTRACT NO. 3	DATE OCT. 1979
138 K.V. SUBSTATION	DRAWING NUM. 32-18-
SECTIONS	REVISION

DWG. NO.	REFERENCE DRAWINGS	NOTES	NO.	DATE	REVISIONS	APPROVED
						DESIGNED P.R. CHECKED E.R. CONFERRED P.R. RECOMMENDED ... APPROVED



	POLE OVER WIRE
	NEW POLE
	EXISTING POLE
	GROUND ROD
<hr/>	
	GROUND CONDUCTOR
<hr/>	
	NEW WORK OR EQUIPMENT SHOWN DARK
<hr/>	
	NEW UNDERGROUND DUCT ROUTE OR NEW CONDUIT BELOW FLOOR SLAB
<hr/>	
	EXISTING WORK & EQUIPMENT SHOWN LIGHT

1:200	
DATE	MARCH 2002
DRAWING NUMBER	32-18-192
REVISION	2



- NOTES:
1. NEW EQUIPMENT SHOWN DARK.
  2. EXISTING EQUIPMENT SHOWN LIGHT.

<div> <b>FISHERIES AND OCEANS CANADA</b>          REAL PROPERTY AND TECHNICAL SUPPORT BRANCH       </div>		<div> <b>EMCO ENGINEERING LTD.</b>          CONSULTING ENGINEERS       </div>		<div>         DESIGNED FOR: <b>CONUMA RIVER HATCHERY</b>          DRAWN BY: <b>CONTRACT</b>          CHECKED BY: <b>SUBSTATION UPGRADE</b>          RECOMMENDED BY: <b>SINGLE LINE DIAGRAM</b>          APPROVED BY:       </div>		<div>         SCALE: <b>NONE</b>          DATE: <b>MARCH 2002</b>          DRAWING NUMBER: <b>32-18-193</b>          REVISION: <b>1</b> </div>	
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			1	27MAY02	FOR REVIEW		