

**PART 1 - GENERAL**

1.1 RELATED SECTIONS

- .1 Section 011500 - Temporary Utilities
- .2 Section 013119 - Project Meetings
- .3 Section 013216 - Construction Progress Schedule – Critical Path Method
- .4 Section 013530 - Health and Safety Requirements
- .5 Section 013543 - Environmental Procedures
- .6 Section 013591 - Historic – Protective Measures
- .7 Section 013595 - Archaeological Procedures
- .8 Section 015200 - Construction Facilities
- .9 Section 015600 - Temporary Barriers and Enclosures
- .10 Section 017100 - Examination and Preparation
- .11 Section 017800 - Closeout Submittals

1.2 REFERENCES

- .1 Canadian Construction Documents Committee (CCDC)
- .2 Public Works Government Services Canada (PWGSC)
  - .1 PWGSC Standard Acquisition Clauses and Conditions (SACC)-ID: R0202D, Title: General Conditions "C", In Effect As Of: May 14, 2004
  - .2 PWGSC - AES Best Practice - Shop Drawing Review Process - December 2002.

1.3 ADMINISTRATIVE

- .1 Submit to Departmental Representative submittals listed for review. Submit promptly and in orderly sequence to not cause delay in Work. Failure to submit in ample time is not considered sufficient reason for extension of Contract Time and no claim for extension by reason of such default will be allowed.
- .2 Do not proceed with Work affected by submittal until review is complete.
- .3 Present shop drawings, product data, samples and mock-ups in SI Metric units.
- .4 Where items or information is not produced in SI Metric units converted values are acceptable.

- .5 Review submittals prior to submission to Departmental Representative. This review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and co-ordinated with requirements of Work and Contract Documents. Submittals not stamped, signed, dated and identified as to specific project will be returned without being examined and considered rejected.
- .6 Notify Departmental Representative, in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for deviations.
- .7 Confirm field measurements and affected adjacent Work are co-ordinated.
- .8 Contractor's responsibility for errors and omissions in submission is not relieved by Departmental Representative review of submittals.
- .9 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Departmental Representative review.
- .10 Keep one reviewed copy of each submission on site.

1.4 SHOP DRAWINGS AND PRODUCT DATA

- .1 The term "shop drawings" means drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which are to be provided by Contractor to illustrate details of a portion of Work.
- .2 Indicate materials, methods of construction and attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for completion of Work. Where articles or equipment attach or connect to other articles or equipment, indicate that such items have been co-ordinated, regardless of Section under which adjacent items will be supplied and installed. Indicate cross references to design drawings and specifications.
- .3 Allow 5 days for Departmental Representative's review of each submission.
- .4 Adjustments made on shop drawings by Departmental Representative are not intended to change Contract Price. If adjustments affect value of Work, state such in writing to Departmental Representative prior to proceeding with Work.
- .5 Make changes in shop drawings as Departmental Representative may require, consistent with Contract Documents. When resubmitting, notify Departmental Representative in writing of revisions other than those requested.

- .6 Accompany submissions with transmittal letter, in duplicates of 2, containing:
  - .1 Date;
  - .2 Project title and number;
  - .3 Contractor's name and address;
  - .4 Identification and quantity of each shop drawing, product data and sample;
  - .5 Other pertinent data.
  
- .7 Submissions include:
  - .1 Date and revision dates
  - .2 Project title and number
  - .3 Name and address of : :
    - .1 Subcontractor;
    - .2 Supplier;
    - .3 Manufacturer;
  
- .8 Contractor's stamp, signed by Contractor's authorized representative certifying approval of submissions, verification of field measurements and compliance with Contract Documents.
  - .1 Details of appropriate portions of Work as applicable:
    - .1 Fabrication;
    - .2 Layout, showing dimensions, including identified field dimensions, and clearances.;
    - .3 Setting or erection details;
    - .4 Capacities;
    - .5 Performance characteristics;
    - .6 Standards;
    - .7 Operating weight;
    - .8 Wiring diagram;
    - .9 Single line and schematic diagrams;
    - .10 .Relationship to adjacent work.
  
- .9 After Departmental Representative's review, distribute copies.
  
- .10 Submit (1) electronic copy of shop drawings for each requirement requested in specification Sections and as Departmental Representative may reasonably request.
  
- .11 Submit (1) electronic copy of product data sheets or brochures for requirements requested in specification Sections and as requested by Departmental Representative where shop drawings will not be prepared due to standardized manufacture of product.

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- .12 Submit (1) electronic copy of test reports for requirements requested in specification Sections and as requested by Departmental Representative.
    - .1 Report signed by authorized official of testing laboratory that material, product or system identical to material, product or system to be provided has been tested in accord with specified requirements.
    - .2 Testing must have been within (3) years of date of contract award for project.
  
  - .13 Submit (1) electronic copy of certificates for requirements requested in specification Sections and as requested by Departmental Representative.
    - .1 Statements printed on manufacturer's letterhead and signed by responsible officials of manufacturer of product, system or material attesting that product, system or material meets specification requirements.
    - .2 Certificates must be dated after award of project contract complete with project name.
  
  - .14 Submit (1) electronic copy of manufacturers instructions for requirements requested in specification Sections and as requested by Departmental Representative.
    - .1 Pre-printed material describing installation of product, system or material, including special notices and Material Safety Data Sheets concerning impedances, hazards and safety precautions.
  
  - .15 Submit (1) electronic copy of Manufacturer's Field Reports for requirements requested in specification Sections and as requested by Departmental Representative.
    - .1 Documentation of the testing and verification actions taken by manufacturer's representative to confirm compliance with manufacturer's standards or instructions.
  
  - .16 Submit (1) electronic copy of Operation and Maintenance Data for requirements requested in specification Sections and as requested by Departmental Representative.
  
  - .17 Delete information not applicable to project.
  
  - .18 Supplement standard information to provide details applicable to project
  
  - .19 If upon review by Departmental Representative, no errors or omissions are discovered or if only minor corrections are made, copies will be returned and fabrication and installation of Work may proceed. If shop drawings are rejected, noted copy will be returned and resubmission of corrected shop drawings, through same

procedure indicated above, must be performed before fabrication and installation of Work may proceed.

- .20 Review of shop drawings in accordance with AES Best Practice - Shop Drawing Review Process. Review of shop drawings is for sole purpose of ascertaining conformance with general concept. This review shall not mean that PWGSC approves detail design inherent in shop drawings, responsibility for which shall remain with Contractor submitting same, and such review shall not relieve Contractor of responsibility for errors or omissions in shop drawings or of responsibility for meeting all requirements of construction and Contract Documents. Without restricting generality of foregoing, Contractor is responsible for dimensions to be confirmed and correlated at job site, for information that pertains solely to fabrication processes or to techniques of construction and installation and for co-ordination of Work of all sub-trades.

#### 1.5 SAMPLES

- .1 Submit for review samples in duplicate as requested in respective specification Sections. Label samples with origin and intended use.
- .2 Deliver samples prepaid to Departmental Representative's address.
- .3 Notify Departmental Representative in writing, at time of submission of deviations in samples from requirements of Contract Documents.
- .4 Where colour, pattern or texture is a criteria, submit full range of samples.
- .5 Adjustments made on samples by Departmental Representative are not intended to change Contract Price. If adjustments affect value of Work, state such in writing to Departmental Representative prior to proceeding with Work.
- .6 Make changes in samples which Departmental Representative may require, consistent with Contract Documents.
- .7 Reviewed and accepted samples will become standard of workmanship and material against which installed Work will be verified.

#### 1.6 MOCK-UPS

- .1 Erect mock-ups in accordance with specifications

**PART 2 - PRODUCTS**

NOT USED

**PART 3 - EXECUTION**

NOT USED

**\*\*\* END OF SECTION \*\*\***