

Partie 1 General

1.1 ADMINISTRATIVE

- .1 Submit required documents and samples to Departmental Representative 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 an extension of Contract time and no claim for extension by reason of such default will be allowed.
- .2 Do not proceed with work subject to submittals or mock-ups until submittals are fully reviewed and approved.
- .3 Characteristics shown on shop drawings, product data, samples and mock-ups shall be indicated in metric units (SI).
- .4 Where items or information is not produced in SI Metric units, or where characteristics are not provided in metric units (SI), converted values are acceptable.
- .5 Verify documents before handing them to the Departmental Representative. This preliminary 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 shall be considered rejected.
- .6 Notify Departmental Representative, in writing at time of submission, identifying deviations from requirements of Contract documents stating reasons for deviations.
- .7 Verify field measurements and that affected adjacent work are coordinated.
- .8 Contractor's responsibility for errors and omissions in submission is not relieved by Departmental Representative's review of submittals.
- .9 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Departmental Representative's review.
- .10 Keep one reviewed copy of each submission on site.

1.2 SHOP DRAWINGS AND PRODUCT DATA SHEETS

- .1 The expression "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 at hand.
- .2 Submit drawings stamped and signed by professional engineer registered or licensed in Québec, Canada.
- .3 Shop drawings to 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.

- .4 Allow five (5) days for Departmental Representative's review of each submission.
- .5 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.
- .6 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.
- .7 Accompany submissions with transmittal letter, in duplicate, 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 relevant data.
- .8 Submissions to include:
 - .1 Date and revision dates.
 - .2 Project title and number
 - .3 Contractor's name and address.
 - .1 Subcontractor.
 - .2 Supplier.
 - .3 Manufacturer.
 - .4 Contractor's stamp, signed by Contractor's authorized representative certifying approval of submissions, verification of field measurements and compliance with contract documents.
 - .5 Details of appropriate portions of work as applicable:
 - .1 Materials and fabrication details.
 - .2 Layout, showing dimensions, including identified field dimensions, and clearances.
 - .3 Setting or erection details.
 - .4 Capacities such as power, flow or content.
 - .5 Performance characteristics.
 - .6 Reference standards.
 - .7 Operating weight.
 - .8 Wiring diagrams.
 - .9 Single line and schematic diagrams.
 - .10 Relationship to adjacent work.
- .9 After Departmental Representative's review of shop drawings and data sheets, distribute copies.
- .10 Submit one (1) electronic copy or two (2) hard copies of shop drawings for each requirement requested in specification Sections and as Departmental Representative may reasonably request.

- .11 Submit one (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.
- .12 Submit one (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 accordance with specified requirements.
 - .2 Tests to be carried out within three (3) years of award of contract.
- .13 Submit one (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 one (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 (MSDS) concerning impedances, hazards and safety precautions.
- .15 Submit one (1) electronic copy of Manufacturer's Field Reports for requirements requested in specification Sections and as requested by Departmental Representative.
- .16 Reports of testing and verifications performed by the manufacturer's representative in order to confirm the compliance of products, materials, equipment or systems installed to manufacturer's instructions.
- .17 Supplement standard information to provide details applicable to project.
- .18 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. Where 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.
- .19 The review of shop drawings by PSPC is for sole purpose of ascertaining conformance with general concept.
 - .1 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 requirements of construction and contract documents.
 - .2 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 sub-trades.

1.3 SAMPLING

- .1 The Contractor is responsible for the quality control of his suppliers. The Contractor shall bear the costs related to the characterization of materials incorporated in the structure.
 - .1 The particle sizes of the granular material (quarry run, MG20 and MG-56, clean stone 14-20 and 100-200) will be analyzed by a certified laboratory and delivered to the Departmental Representative at least seven (7) days before placement.
 - .2 The results of testing on stones placed in the structure will be analyzed by a certified laboratory and submitted to the Departmental Representative at least seven (7) days before placement.

1.4 PHOTOGRAPHIC DOCUMENTARY

- .1 Before work inception make a photographic documentary of the site and submit one (1) electronic copy of the digital photographic file. The number of photographs and views are left to the discretion of the Contractor. However, the documentary should fully cover all aspects of the work at hand.
 - .1 The photographic survey may be replaced with a high definition photo documentary in 1080i or equivalent.
- .2 Throughout construction, the Contractor shall take photographs or video of the work in progress. This documentary material to be submitted to the Departmental Representative as the work progresses.
 - .1 At work completion, the Contractor shall submit to the Departmental Representative a copy of all digital photographs and videos taken during construction.

1.5 SURVEY RECORDS

- .1 Make survey records compatible with AutoCAD software at each significant milestone in the project. Survey to be georeferenced to tidal elevation according to the benchmark shown on the drawings and include the following:
 - .1 Elevation and positioning of excavation levels.
 - .2 Elevation and positioning of quarry run placement.
 - .3 Elevation and positioning of each stone protection layer.
 - .4 Elevation and positioning of the deck.
- .2 Surveying to be carried out as work progresses, and submitted to Departmental Representative in electronic format (email, USB flash drive, etc.) no later than 24 h after the survey.

1.6 GANTT CHART

- .1 At the start-up meeting, the Contractor shall submit a Gantt chart prepared by means of a suitable management software. At minimum, the diagram should include a list of tasks to

be performed, the planned start and end dates, any predecessors, all milestones and other information relevant to project status.

- .2 Every Friday no later than 5 pm the Contractor shall provide Departmental Representative with a Gantt chart showing the work schedule for the coming week. It is recommended that updates be sent by email.

1.7 AS-BUILT DRAWING

- .1 The Contractor shall prepare as-built drawings in AutoCAD format and hand them to Departmental Representative at work completion. Drawings to contain the following information:
 - .1 Elevation and positioning of the various elements specified in article 1.5.
 - .2 Elevation, positioning and drawing of all elements affected by change orders in the framework of the project.
 - .3 Elevation, positioning and drawing of all elements identified on the site that were not shown in the original construction plan (e.g., rock, debris, construction vestiges, conduits, electrical wires, contaminated soil, etc.).

Partie 2 Product

2.1 NOT USED

- .1 Not used.

Partie 3 Execution

3.1 NOT USED

- .1 Not used.

END OF SECTION