

**PART 1 GENERAL**

1.1 SECTION INCLUDES

- .1 Shop drawings and product data
- .2 Samples
- .3 Certificates and transcripts

1.2 RELATED SECTIONS

- .1 Closeout Submittals Section 01 78 00

1.3 ADMINISTRATIVE

- .1 Submit to Contract Administrator submittals listed for review. Submit with reasonable promptness and in orderly sequence so as 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 Work affected by submittal shall not proceed 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 Contract Administrator. 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 shall be considered rejected.
- .6 Verify field measurements and affected adjacent Work are coordinated.
- .7 Contractor's responsibility for errors and omissions in submission is not relieved by Contract Administrator's review of submittals.
- .8 Keep one reviewed copy of each submission on site.

1.4 SHOP DRAWINGS AND PRODUCT DATA

- .1 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 coordinated, regardless of Section under which adjacent items will be supplied and installed. Indicate cross references to design drawings and specifications.
- .2 Allow 7 days for Contract Administrator's review of each shop drawing submission.
- .3 Adjustments made on shop drawings by Contract Administrator are not intended to change Contract Price. If adjustments affect value of Work, state such in writing to Contract Administrator prior to proceeding with Work.
- .4 Make changes in shop drawings as Contract Administrator may require, consistent with Contract Documents. When resubmitting, notify Contract Administrator in writing of any revisions other than those requested.
- .5 Accompany submissions with transmittal letter, 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.

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- .5 Other pertinent data.
  - .6 Submissions shall include:
    - .1 Date and revision dates.
    - .2 Project title and number.
    - .3 Name and address of:
      - .1 Subtrade
      - .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 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 diagrams.
      - .9 Single line and schematic diagrams.
      - .10 Relationship to adjacent Work.
  - .7 After Contract Administrator's review, distribute copies.
  - .8 Submit 6 prints of shop drawings for each requirement requested in specification Sections and as Contract Administrator may reasonably request.
  - .9 Submit 6 hardcopy or electronic copies of product data sheets or brochures for requirements requested in specification Sections and as requested by Contract Administrator where shop drawings will not be prepared due to standardized manufacture of product.
  - .10 Delete information not applicable to the Work.
  - .11 Supplement standard information to provide details applicable to the Work.
  - .12 If upon review by Contract Administrator, 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.
- 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 Contract Administrator's business address as indicated in D3.1

- .3 Notify Contract Administrator in writing, at time of submission of deviations in samples from requirements of Contract Documents.
- .4 Where colour, pattern or texture is criterion, submit full range of samples.
- .5 Adjustments made on samples by Contract Administrator are not intended to change Contract Price. If adjustments affect value of Work, state such in writing to Contract Administrator prior to proceeding with Work.
- .6 Make changes in samples which Contract Administrator 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.

**PART 1            GENERAL**

1.1            SECTION INCLUDES

- .1            Barriers.

1.2            REFERENCES

- .1            Canadian General Standards Board (CGSB)
  - .1            CGSB 1.59-97, Alkyd Exterior Gloss Enamel or latest.
  - .2            CAN/CGSB 1.189-00, Exterior Alkyd Primer for Wood or latest.
- .2            Canadian Standards Association (CSA International)
  - .1            CSA-O121[M1978(R2003), Douglas Fir Plywood or latest.

1.3            INSTALLATION AND REMOVAL

- .1            Provide temporary controls in order to execute Work expeditiously.
- .2            Remove from site all controls after use.

1.4            DUST TIGHT SCREENS

- .1            Provide dust tight screens to localize dust generating activities, and for protection of workers, finished areas of Work and public.
- .2            Maintain and relocate protection until Work is complete.

1.5            ACCESS TO SITE

- .1            Provide and maintain public roads and sidewalks as may be required for access to Work.

1.6            ACCESS WITHIN SITE

- .1            Provide and maintain safe access and circulation of building occupants as required for the office functions to be as normal as possible, during the Construction period.

1.7            FIRE ROUTES

- .1            Maintain safe access to property and within the construction area for safe egress out of the building.

1.8            PROTECTION OF BUILDING FINISHES

- .1            Provide protection for finished and partially finished building finishes and equipment during performance of Work. Provide necessary screens, covers, and hoardings.
- .2            Confirm installation schedule to the Contract Administrator at least 3 days prior to installation.
- .3            Be responsible for damage incurred due to lack of or improper protection.

**PART 1        GENERAL**

**1.1            PROJECT CLEANLINESS**

- .1        Maintain Work in tidy condition, free from accumulation of waste products and debris, other than that caused by City of Winnipeg or other Contractors.
- .2        Remove waste materials from site at regularly scheduled times or dispose of as directed by Contract Administrator. Do not burn waste materials on site.
- .3        Clear snow and ice from access to building, bank/pile snow in designated areas only.
- .4        Make arrangements with and obtain permits from the City of Winnipeg having jurisdiction for disposal of waste and debris.
- .5        Provide on-site dump containers for collection of waste materials and debris.
- .6        Provide and use clearly marked separate bins for recycling.
- .7        Remove waste material and debris from site and deposit in waste container at end of each working day.
- .8        Store volatile waste in covered metal containers, and remove from premises at end of each working day.
- .9        Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.
- .10       Schedule cleaning operations so that resulting dust, debris and other contaminants will not fall on wet, newly painted surfaces nor contaminate building systems.

**1.2            FINAL CLEANING**

- .1        When Work is Substantially Performed, remove surplus products, tools, and machinery and equipment not required for performance of remaining Work. Remove waste materials from site at regularly scheduled times or dispose of as directed by Contract Administrator
- .2        Inspect finishes, fitments and equipment and ensure specified workmanship and operation.
- .3        Broom clean and wash exterior walks, steps and surfaces; rake clean other surfaces of grounds.
- .4        Remove dirt and other disfiguration from exterior surfaces.
- .5        Clean and sweep roofs, gutters, areaways, and sunken wells.
- .6        Sweep and wash clean paved areas.
- .7        Clean roofs, downspouts, and drainage systems.
- .8        Remove debris and surplus materials from crawl areas and other accessible concealed spaces.

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- .1 As-built drawings, samples, and specifications.
- .2 Equipment and systems.
- .3 Product data, materials and finishes, and related information.
- .4 Operation and maintenance data.
- .5 Spare parts, special tools and maintenance materials.
- .6 Warranties
- .7 Final Building Location Certificate.

**1.2 DRAFT SUBMISSION**

- .1 Prior to or immediately following the Date of Substantial Performance, submit one hard draft copy of all required Operating and Maintenance manuals and one hard copy of all required as-built drawings, plus one digital copy on a CD, for review by the Contract Administrator. All data to be provided in hard copy and digital format – scan all hard copy documents.
- .2 Upon return of the draft copies with the Contract Administrator's review comments, the Contractor shall revise the content as requested for submittal of the final copies.

**1.3 OPERATION & MAINTENANCE BINDER FORMAT**

- .1 Organize all data in the form of an instructional manual.
- .2 Each binder shall be hard covered vinyl with a chrome metal spine and 3 'D' rings.
- .3 Cover: Identify each binder with a typewritten cover page clearly labelled as 'Project Record Documents', along with the Project Title, Project number, Date, and related discipline/subject matter of contents. When multiple binders are used, correlate data into related consistent groupings. Identify contents of each binder on spine.
- .4 Arrange the content by systems, under the same Section numbers as the Specification, and coordinate the sequence with a Table of Contents.
- .5 Provide a tabbed fly-leaf for each separate product and/or system, with typewritten description of product, system, and major component parts of equipment.
- .6 Accompanying drawings: provide these with reinforced punched holes and tabs. Bind in with the text and fold larger drawings to the same size of the text pages.

**1.4 OPERATION & MAINTENANCE MANUAL CONTENTS - EACH VOLUME**

- .1 Table of Contents page, clearly label the following:
  - .1 Project Title, Project Number, Date of submission
  - .2 Important contact companies involved in the project (City of Winnipeg, Contract Administrators, and Contractors) including the contact people, their addresses and telephone numbers.
  - .3 A complete schedule of products and systems, indexed by Section name and number.

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- .2 For each product, system. or Section, list the names, addresses and telephone numbers of all Subcontractors and Suppliers involved, including a local source of supplies and replacement parts.
  - .3 Product Data: mark each sheet to clearly identify specific products and component parts, and data applicable to installation; delete information not applicable.
  - .4 Drawings: supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams.
- 1.5 KEEPING OF AS-BUILT DRAWINGS AND SAMPLES
- .1 As-Built drawings (Architectural, Structural, Mechanical, and Electrical): The Contractor shall submit 1 set of accurate and legible marked-up red line drawings to the Contract Administrator. In addition to requirements in General Conditions, maintain one "Project Record" copy, clearly labelled, at the site of the following:
    - .1 Contract Drawing set.
    - .2 Specifications.
    - .3 Addenda.
    - .4 Change Orders and other modifications to the Contract.
    - .5 Reviewed shop drawings, product data, and samples.
    - .6 Field test records.
    - .7 Inspection certificates.
    - .8 Manufacturer's certificates.
  - .2 Label these documents and file in Section numbers to match the listings on the Table of Contents for the project manuals. Clearly label each document "PROJECT RECORD" in neat, large, printed letters.
  - .3 Securely store these Project Record documents and samples in the field office in clean, dry, and legible condition, separate from other documents used for construction. Do not use project record documents for construction purposes.
  - .4 Keep record documents and samples available for viewing by the Contract Administrator.
- 1.6 RECORDING ACTUAL SITE CONDITIONS
- .1 The Contractor shall record any and all site information, revisions, and discoveries directly onto the "Project Record" drawing set, in a timely and accurate way. **Record information concurrently with the construction progress** and do not conceal Work until required information is recorded.
  - .2 Use felt tip marking pens of separate colours to indicate major systems.
  - .3 As-built drawings: legibly record each item to reflect the actual construction, including:
    - .1 Measured depths of elements of foundation in relation to finish first floor datum.
    - .2 Measured locations of internal utilities and other items, as referenced to visible and accessible features of construction.
    - .3 Field changes of dimensions and/or details.
    - .4 Changes from approved Change Orders.
    - .5 Additional details and Supplemental Instructions.
    - .6 References to related shop drawings and modifications.
  - .4 Specifications: legibly record each item to reflect the actual construction, including:
    - .1 Manufacturer, trade name, and catalogue number of each product actually installed, particularly optional items and substitute items.
    - .2 Changes made by Addenda and Change Orders.

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- .5 O & M binders: maintain and file manufacturer's data, certifications, and field test records as required by individual specifications sections.
- 1.7 MATERIALS AND FINISHES
- .1 Building Products, Applied Materials, and Finishes: include product data, with catalogue number, size, composition, and colour and texture designations. Provide information for re-ordering custom manufactured products.
  - .2 Instructions for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
  - .3 Moisture-protection and weather-exposed Products: include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
  - .4 Additional Requirements as specified in individual specifications Sections.
- 1.8 SPARE PARTS, SPECIAL TOOLS, AND MAINTENANCE MATERIALS
- .1 Provide these items in quantities as specified in individual specification Sections. Ensure these items are new, undamaged, operational, and of the same quality and manufacture as those specified and provided in the Work. Any substandard products shall be replaced at the Contractor's expense.
  - .2 Receive and catalogue all required items. Submit a signed and dated inventory listing to the Contract Administrator that these items have been received in good condition by the City of Winnipeg.
- 1.9 STORAGE, HANDLING AND PROTECTION
- .1 Store spare parts, maintenance materials, and special tools in a manner to prevent damage or deterioration. Store components subject to damage from weather in weatherproof enclosures and store paints and freezable materials in a heated and ventilated room.
  - .2 Store items in original and undamaged condition with manufacturer's seal and labels intact.
  - .3 Deliver to the site, place, and store in locations directed by the Contract Administrator.
  - .4 Remove and replace any damaged products at Contractor's own expense, to the satisfaction of the Contract Administrator.



1.10 WARRANTIES

- .1 Separate each warranty with index tab sheets keyed to Table of Contents listing.
- .2 List subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.
- .3 Obtain warranties to the requirements as specified in each Section, and in duplicate from applicable Subcontractors, Suppliers, and Manufacturers, within ten days after completion of the applicable item of work.
- .4 Except for items put into use with City of Winnipeg's permission, leave date of beginning of time of warranty until the Date of Substantial Performance is determined.
- .5 Verify that documents are in proper form, contain full information, are signed, dated, and notarized.
- .6 Safely retain warranties until they are organized into the Project manual binders and submitted.