The City of Brandon Standard Construction Specifications January 2000 Division 1 Section 01600 Page 1 of 5

### MATERIAL AND EQUIPMENT

#### PART 1 GENERAL

1.01 OTHER CONTRACT DOCUMENTS

The General Conditions of the Contract, General Requirements and Supplemental Conditions attached hereto shall apply to and be a part of this Section

1.02 DESCRIPTION OF WORK

The Work described herein are the requirements for the supply, storage and substitution of Products, materials and equipment Specified for incorporation into the Work.

1.03 RELATED WORK

Section 01300 Submittals

**PART 2 PRODUCTS** 

None required

#### PART 3 EXECUTION

3.01 STANDARDS

All material, Products or equipment shall meet or exceed the reference standard stated in the Contract Documents. All material, Products or equipment required to be CSA approved shall carry the CSA label or CSA testing laboratory listing. All material, Products or equipment required to be fire rated shall carry the ULC label or ULC testing laboratory listing.

Material, Product and equipment shall be of the specified design and quality, performing to published ratings and for which replacement parts are readily available and unless otherwise indicated in the Contract Documents shall be of uniformity of manufacturer for any particular or like material, Product or item of equipment.

Defective, damaged, irregular, factory seconds or inferior material, Product, or equipment whenever identified, will be rejected, regardless of previous inspections. The Contractor shall promptly remove and replace defective material, Product, or equipment at his own expense and be responsible for all delays and costs caused by a rejection.

Division 1 Section 01600 Page 2 of 5

## MATERIAL AND EQUIPMENT

If requested by the Engineer, the Contractor shall obtain from the manufacturer of a material, Product or equipment specified by a standard prescriptive or performance specification, an independent testing laboratory report, stating the material, Product or equipment meets or exceeds the requirements of the specification.

# 3.02 MANUFACTURER'S DIRECTIONS

Unless otherwise specified, the Contractor shall install, erect, and maintain all material, Product and equipment in strict accordance with the manufacturer's latest printed instructions and shall not rely on labels or enclosures provided with Products, but shall obtain written instruction directly from the manufacturer. The Contractor shall promptly notify the Engineer, in writing, of any conflict between the Contract Documents and a manufacturer's instructions.

Labels, trademarks and nameplates on material, Product and equipment are not acceptable in permanent locations except where required for operating instructions or when located in mechanical or electrical rooms.

## 3.03 AVAILABILITY OF PRODUCTS

The Contractor shall review product requirements and shall coordinate the delivery of all material, Product and equipment, regardless of supplier, to ensure availability for incorporation into the Work, but shall not deliver materials unduly long before they are needed or in excessive amounts.

When requested by the Engineer, the Contractor shall provide evidence of orders placed for material, Product or equipment, with copies of acknowledgement of orders and confirmation of delivery dates. Delivery of all material shall be scheduled so that the Work progresses continuously.

### 3.04 SUBSTITUTES

Material, Product, equipment, procedures and methods which are specified by their proprietary names, or by make, model, trade name or catalogue reference, shall form the basis for the Specifications and the Contract Documents. No substitute for these Products will be permitted without the Engineer's written approval and no other action on the part of the City will constitute an approval.

Division 1 Section 01600 Page 3 of 5

## MATERIAL AND EQUIPMENT

If a material, Product or item of equipment specified is not available or delivery would unduly delay completion of the Work, the Contractor shall propose a substitution or other remedial action in sufficient time to prevent a delay in the performance of the Work. If a proposal is not given to the Engineer, the Engineer reserves the right to substitute a more readily available material, Product or item of equipment, at no additional cost to the City, in order to prevent a delay in the completion of the Work.

A request for a substitute or alternative material, Product, item of equipment, procedure or method shall be submitted to the Engineer as described in Section 01300 Submittals and shall include sufficient information and details to enable the Engineer to determine the acceptability of the material, Product, equipment, procedure as a substitute. The request shall identify any and all changes required in the Work, and all changes to any other work which would become necessary to accommodate the requested substitute, and any anticipated cost or time savings. Further, the request shall certify that the substitute will adequately perform the functions called for by the general design, is equal in standard and meets the Specifications in all respects, is suited the same use and capable of performing the same function as that specified and can be incorporated into the Work strictly in accordance with the Schedule of Work.

Should the proposed substitution be accepted either in part or in whole, the Contractor shall assume full responsibility and costs for design or Drawing changes, coordinating, modifying and integrating the work affected by the substitution into the permanent Work and the work of Other Contractors.

3.05 STORAGE AND HANDLING

The Contractor shall store and handle all material, Product, and equipment in accordance with the manufacturer's written instructions protected from the action of the elements and in a secure manner satisfactory to the Engineer. The Contractor shall store, material, Product, and equipment unopened in the original and undamaged condition with the manufacturer's seals and labels intact. Packaging or bundling shall not be removed until the Product is required in the Work. Storage of

Division 1 Section 01600 Page 4 of 5

## MATERIAL AND EQUIPMENT

material, Product, and equipment shall be on the Site only, unless otherwise agreed to by the Engineer. If material, Product, or equipment is stored off the Site, it shall be insured and stored in a bonded warehouse, satisfactory to the Engineer. The Contractor shall be responsible for the additional handling and transportation of the material, Product and equipment required to deliver the stored items to the Site. Material, Product or equipment damaged in shipment or in storage shall be removed from the Site, and not incorporated into the Work.

3.06 MATERIAL, PLANT AND REAL PROPERTY SUPPLIED BY THE CITY Materials to be supplied by the City shall be delivered to the nearest storage site or the Site at any time. Where material has been delivered prior to the awarding of the Contract, the Contractor and the Engineer shall visit the location where the material is stored and take such inventory as is required for the Contractor to assume responsibility for the material. The Contractor shall give the Engineer at least fourteen (14) calendar days notice prior to the date of requirement of those materials to be supplied by the City which have not been previously delivered.

The Contractor shall be responsible for the acceptance, at the point of delivery, of any damaged material, unless prior to acceptance, the Engineer gives the Contractor a written release from all responsibility in accepting such material. The Contractor shall, in advance of receipt of shipment of materials, provide adequate and proper storage facilities and, on receipt of such shipment, he shall promptly place the materials in storage, except when they are to be incorporated forthwith in the Work. The Contractor shall be liable for any offloading, demurrage or storage charges on shipments of materials for the Work after the awarding of the Contract. The Contractor shall be liable for all rentals, or other charges for handling, hauling or storing materials ordered for the Work, unless stated otherwise in the Contract Documents.

The Contractor shall not use any material, Plant or real property referred to above except for the purpose of performing the Contract.

The Contractor shall keep such records of all material, Plant and real property referred to above as the Engineer from time to time requires and shall satisfy the Engineer, when requested

Division 1 Section 01600 Page 5 of 5

### MATERIAL AND EQUIPMENT

that such material, Plant and real property are at the place and in the condition in which they ought to be.

The Contractor is liable to the City for any loss of or damage to material, Plant or real property that is supplied or placed in the care, custody and control of the Contractor by the City for use in the Work, wether or not that loss or damage is attributable to causes beyond the Contractor's control. The Contractor is not liable to the City for any loss or damage to material, Plant or real property referred to above, if that loss or damage results from and is directly attributable to reasonable wear and tear.

If the Contractor fails to make good any loss or damage for which he is liable within a reasonable time after being required to do so by the Engineer, the Engineer may cause the loss or damage to be made good at the Contractor's expense, and the Contractor shall thereupon be liable to the City for the cost thereof and shall, on demand, pay to the City an amount equal to that cost.

3.07 MATERIAL PLANT AND REAL PROPERTY OF THE **CITY** 

All material and Plant and the interest of the Contractor in all real property, licences, powers and privileges purchased, used PROPERTY BECOME or consumed by the Contractor for the Work shall, after the time of their purchase, use or consumption be the property of the City for the purposes of the Work and they shall continue to be the property of the City and in the case of material, until the Engineer indicates that he is satisfied that it will not be required for the work, and in the case of Plant, real property, licenses, powers and privileges, until the Engineer indicates he is satisfied the interest vested in the City therein is no longer required for the purposes of the Work.

3.08 CONSTRUCTION **EQUIPMENT AND PLANT** 

The Contractor shall maintain all construction equipment and plant in good operating order. If requested by the Engineer, the Contractor shall provide evidence that the construction equipment and Plant are adequate to manufacture, transport, place and finish the Work to a quality and production rates required by the Schedule of the Work.

**END OF SECTION**