

## **SECTION 13 12 23.13 – WATER FEATURE**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### **1.2 SUMMARY**

- A. Section includes furnishing and installing interior water wall fountain equipment.

#### **1.3 RELATED WORK**

- A. Related Work of Other Sections:
  - 1. Section 01 73 29 – Cutting and Patching.
  - 2. Section 03 30 00 – Cast-In-Place Concrete: Coordination of floor drain with concrete.
  - 3. Division 22 – Plumbing: Water supply, floor drain, and wastewater piping.
  - 4. Division 26 – Electrical: Electrical power to pumps, lights and controls.

#### **1.4 SUBMITTALS**

- A. Product Data: Submit Manufacturer's printed product data, specifications, standard details, installation instructions, use limitations and recommendations for each piece of equipment, system and material used.
- B. Shop Drawings: Provide large scale shop drawings for fabrication, installation and erection of all parts of work. Provide plans, elevations and details of anchorages, connections and accessory items. Provide wiring diagrams and installation templates for work installed by others. Show all interfaces and relationships to work of other trades.
- C. Product Schedule: For fountain equipment.
- D. Operation and Maintenance Data: For fountain equipment to include in operation and maintenance manuals.

#### **1.5 QUALITY ASSURANCE**

- A. Source: Provide water feature equipment from a single qualified manufacturer to ensure a single source of responsibility for the interrelated components.
- B. Controller: The controller shall comply with the National Electrical Code (NEC) and Underwriters Laboratory (UL) standards and shall be labeled where required by code. Control enclosures shall be NEMA rated for service and application.
- C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- D. Preinstallation Conference: Conduct conference at Project site.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials and products in unopened, factory labeled packages. Store and handle in strict compliance with manufacturer's instructions and recommendations. Store under cover and protect from weather damage.
- B. Sequence deliveries to avoid delays and minimize on-site storage.

## 1.7 WARRANTY

- A. Special Warranty: The manufacturer shall warrant all materials and workmanship related to the stainless steel frame and stainless steel upper and lower tanks supplied under the work of this specification section to be free of defects for a period of 25 years. The manufacturer shall guarantee the repair or replacement of all other items (pumps, bacterial control system and RO) found defective during a period of one year following the date of final acceptance. Ordinary wear and defects resulting from improper care and maintenance are excluded.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Basis of Design Manufacturer: Subject to compliance with requirements, provide water wall fountain equipment (option 3) produced by Slate In Design, Inc., Calgary, Alberta, (Tel) 877-507-5283, or equivalent approved by Architect.

### 2.2 MATERIALS

- A. T304 stainless steel sheet of gauges specified – cold rolled and stretcher leveled, free from buckle, scale, scratches, and surface imperfections, conforming to ASTM A240, with all exposed surfaces polished to a No. 4 brushed satin finish
  - 1. Lower water storage basin and removable lid – 14 gauge.
  - 2. Leveling mechanism components - 11 gauge
  - 3. Tower side posts and upper valance – 16 gauge
  - 4. Upper water spill reservoir – 14 gauge
  - 5. Perforated baffles – 18 gauge
- B. Water Wall Components:
  - 1. Submersible Pumps: Provide manufacturers standard, in size and quantity required to provide complete surface coverage of water feature face.
  - 2. Flow Control Valves: Provide Schedule 80 PVC gate valves in accessible location within lower water storage basin.
  - 3. Provide 1 ½" stainless steel drain coupling with Schedule 80 PVC stand pipe.
  - 4. Provide manufacturers standard automatic fill system.
  - 5. Provide manufacturers standard reverse osmosis water purification system.
  - 6. Provide manufacturers standard Ultra Violet bacteria control system.
  - 7. Provide a powder coated, anti-microbial coating applied to upper and lower tanks to prevent bacterial growth. The anti-microbial compound shall be inorganic, and shall have ionic silver as its active ingredient, encapsulated in a zeolite matrix that provides

continuous, controlled release. Anti-microbial must meet the following NSF and ASTM specifications: NSF 61, NSF Std. 2, ASTM 3363-92A, ASTM 3359-97, ASTM B117-97, ASTM D523-89

### **2.3 FABRICATION, GENERAL**

- A. Form ornamental metal to required shapes and sizes, with true lines and angles. Provide components in gauges indicated, but not less than that needed for secure structural support.
- B. Provided necessary lugs and brackets to assemble units and to attach to other work. Use concealed fasteners.
- C. Fully weld lower water storage basin and upper spill reservoir, grind and polish all exposed surfaces to a No. 4 brushed satin finish.
- D. Fully assemble and test units in factory prior to delivery to project site.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- A. Examine substrates, supports and conditions under which water wall work is to be performed and notify Contractor in writing of conditions detrimental to the proper completion of the work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### **3.2 INSTALLATION**

- A. Provide anchoring devices and fasteners where necessary for securing water features and components to in-place construction.
- B. Set products accurately in location, alignment, and elevation: measured from established lines and levels.
- C. Do not cut or abrade finishes that cannot be completely restored in the field. Return items with such finishes to the factory for required repairs/replacement.
- D. Provide protective coverings for protection during shipment and installation. Replace protective coverings after installation and testing. Remove coverings only when there is no possibility of damage from other trades working in same location

### **3.3 CLEANING**

- A. Clean exposed surfaces using manufacturer's recommended materials and methods. Remove and replace items which cannot be successfully cleaned.

### **3.4 TESTING**

- A. Test all equipment for compliance with specified requirements and that the water feature components are in proper working order:

1. Pressure test water service piping for leaks or other defects.
2. Test electrical circuits, feeders and equipment.

**3.5 DEMONSTRATION**

- A. Instruct owners designated operation and maintenance personnel in the operation, adjustment, and maintenance of water features and accessory components.
- B. Provide operations and maintenance manual.
- C. Provide contact name and phone number for service and parts.

**END OF SECTION 13 12 23.13**