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4 FOUNTAINS AND AQUATIC FEATURES

4.1 GENERAL

4.1.1 Scope

- 1 This Part specifies the requirements for specifications for water fountains, waterfalls and other aquatic features.
- 2 Related Sections and parts are as follows:

Section 9	Mechanical and Electrical Work
Section 19	Plumbing Work
Section 20	Drainage Works for Buildings

4.1.2 References

- 1 The following standards are referred to in this Part:
BS 7671.....Requirements for Electrical Installations. IET Wiring Regulations

EN 60598Luminaries

4.1.3 General Requirements

- 1 All items in this Part require approval by the Engineer.
- 2 The Contractor shall submit manufacturer's literature, drawings, samples or mock-up units for items covered in this Part for approval by the Engineer.
- 3 If external work items related to this Part are not specified or otherwise detailed within the Project Documentation, the Contractor shall submit appropriate specifications for approval by the Engineer.

4.2 FOUNTAINS

4.2.1 General Requirements

- 1 Pumps for fountains shall comply with the relevant provisions of Section 9, Mechanical and Electrical Equipment, and Section 19, Plumbing Work.
- 2 Pipework associated with fountains shall comply with the relevant provisions of Section 19, Plumbing Work.
- 3 Electrical works related to fountains shall comply with the relevant provisions of BS 7671 and the requirements of QGEWC.
- 4 Luminaries for fountains shall comply with the relevant provisions of EN 60598-2-18.

4.3 DESIGN CONSIDERATIONS

4.3.1 Provision of Overflow Drain

- 1 All tanks, water holding structures and the like associated with fountains and aquatic features shall include provision for an overflow drain.
- 2 Overflow pipework shall be sized to accommodate flows in excess of the maximum incoming flow where appropriate.

- 3 Pipework associated with overflow drains shall comply with the relevant provisions of Section 20, Drainage for Buildings.

4.3.2 Provision of Drain Down

- 1 All tanks, water holding structures and the like associated with fountains and aquatic features shall include provision for a drain down.
- 2 Pipework associated with drain downs shall comply with the relevant provisions of Section 20, Drainage for Buildings.

4.3.3 Testing of Features Designed to Retain an Aqueous Liquid

- 1 Unless otherwise stated by the Engineer, all structures designed to retain an aqueous liquid shall be tested for watertightness.
- 2 After cleaning, structures designed to retain an aqueous liquid shall be filled with water at a uniform rate. A period of 21 days shall be allowed by the Contractor for stabilisation, after which the water level shall be recorded by approved means at 24 hour intervals for a test period of 7 days. During the test period, the total permissible drop, after allowing for evaporation and rainfall, shall not exceed 10 mm.
- 3 Notwithstanding the satisfactory completion of the above test, any leakage visible on the outside faces of the structure shall be stopped.
- 4 The Contractor is responsible for provision and disposal of water for testing purposes.

END OF PART