

5	STRUCTURES RELATED TO DRAINAGE WORK.....	2
5.1	GENERAL.....	2
5.1.1	Scope	2
5.1.2	References	2
5.1.3	Concrete Work.....	2
5.1.4	Pipes built into structures.....	2
5.2	CONSTRUCTION OF MANHOLES, CHAMBERS AND SOAKAWAYS.....	2
5.2.1	General.....	2
5.2.2	Soakaways	2
5.3	PRECAST CONCRETE MANHOLES	3
5.3.1	General.....	3
5.3.2	Jointing of Precast Manholes	3
5.4	TESTING OF STRUCTURES RELATED TO DRAINAGE WORK	3
5.4.1	General.....	3

ARAB ENGINEERING BUREAU

5 STRUCTURES RELATED TO DRAINAGE WORK

5.1 GENERAL

5.1.1 Scope

- 1 This Part specifies the requirements for the construction of manholes, chambers and soakaways for drainage works.
- 2 Related Section and Parts are as follows:

This Section

Part 1 General
Part 3 External Drainage Works
Part 6 Commissioning of Systems

Section 5	Concrete
Section 6	Roadworks
Section 8	Sewerage

5.1.2 References

- 1 The following standards are referred to in this Part:

PWA Developer's Drainage Guide

5.1.3 Concrete Work

- 1 Concrete for manholes, chambers and soakaways shall comply with the relevant provisions of Section 5, Concrete.

5.1.4 Pipes built into structures.

- 1 Where pipes are built into concrete, they shall be rigidly secured in position to prevent movement and shall be free from external coatings which might adversely affect the bond.

5.2 CONSTRUCTION OF MANHOLES, CHAMBERS AND SOAKAWAYS

5.2.1 General

- 1 The construction of manholes and chambers for drainage works for foul sewage and surface water sewage shall comply with the relevant provisions of the following:

- (a) Section 8 of this Specification, Sewerage
- (b) PWA - Developer's Drainage Guide

5.2.2 Soakaways

- 1 Soakaways for surface water sewage shall comply with the relevant provisions of Section 6, Roadworks, except as amended in this Part.

- 2 Soakaways shall not be constructed closer than 5 m from a building or in a position where the ground below foundations is likely to be affected.
- 3 Precast concrete soakaways shall be dry jointed.

5.3 PRECAST CONCRETE MANHOLES

5.3.1 General

- 1 Precast concrete manholes shall comply with the relevant provisions of the PWA, except as amended in this Part.

5.3.2 Jointing of Precast Manholes

- 1 The jointing material for precast manholes shall be mortar or a proprietary bitumen or resin mastic sealant, with the concrete surfaces primed with an appropriate sealant. The jointing material which is extruded inside the manhole shall be trimmed off and joints pointed on completion.
- 2 Units which bed onto bases shall be manufactured so that imposed vertical loads are transmitted directly via the full wall thickness of the unit.
- 3 For joints between units and the underside of slabs, joint profiles shall be capable of withstanding applied loadings from such slabs. Spigot ended sections shall only be used where the soffit of the slab is recessed to receive them.

5.4 TESTING OF STRUCTURES RELATED TO DRAINAGE WORK

5.4.1 General

- 1 Testing of structures related to drainage work shall be done in accordance with the relevant provisions of Part 6 of this Section.

END OF PART