

Design and Construction Note 201.00

Drainage Design

Introduction to Drainage Design

Reviewed: 16/08/2018

01 - Introduction to Drainage Design

01.1 Introduction

The planning, design and implementation of stormwater design must integrate the different components of stormwater management, including but not limited to the water quality and quantity. The stormwater drainage system must:

- a) prevent or minimise adverse social, environmental, and flooding impacts on the city's waterways, overland flow, paths and constructed drainage networks.
- b) achieve acceptable level of stormwater runoff quantity and quality by applying total water cycle management and water sensitive urban design.

Urban stormwater drainage system and planned designed and constructed in accordance with the current edition of the following:

- 1) City of Perth Policy on Stormwater Drainage Connections (Appendix)
- 2) City of Perth Guidelines for better management of Urban Stormwater for Commercial Properties (Appendix)
- 3) City of Perth Guidelines for better management of Urban Stormwater for Residential Properties (Appendix)
- 4) Australian Rainfall and Runoff (ARR-1997)
- 5) Stormwater Management Manual for Western Australia (WA 2004-2007)
- 6) AustRoads Part 5: Drainage Design (AustRoads 2010)

These guidelines have been prepared to assist in the design of stormwater drainage systems within the City of Perth. The Guidelines are provided so that uniformity of standards and practices are maintained in the design of the municipal drainage systems.

The City may consider alternate storm water management options suitable for the built environment, provided they comply with the Stormwater Management Manual for Western Australia (Integrated Water Cycle Management)

01.2 - Asset Management Plan

To maintain the performance of all new and existing stormwater infrastructure, it is required to undergo ongoing maintenance. All proposals regarding new stormwater infrastructure should consider the stormwater systems ability to meet design objectives and the maintenance needs over the length of its design life.

Prior to Asset Handover the new drainage infrastructure must undergo an inspection using CCTV and the results provided to the City of Perth.