DESIGN STANDARDS
for
URBAN INFRASTRUCTURE

Introduction and Contents
1 PRELIMINARY

This document has been prepared in response to the need to update Guidelines on Engineering and Environmental Practices Roads and Bridges (GEEP R&B), GEEP Public Lighting the Urban Stormwater Design Manual and the ACT Landscape Design Guidelines. The update has been necessitated by several developments over the past few years including:-

- Issue of a number of new and revised National Standards and Guides.
- Wider acceptance of performance based rather than prescriptive codes
- Adoption of an ACT Code for Residential Development
- Adoption of new working procedures and reallocation of responsibilities within the ACT Government.
- Introduction of the Territory Plan

In planning for the revision of these documents, the decision was taken to separate the technical requirements which apply to all works from the procedural requirements which vary dependant on who is carrying out the works.

This introductory chapter also contains the Tables of Contents for all subsequent chapters.

2 INTRODUCTION

These Design Standards are intended for use by professionals involved in the planning, design and construction of Urban Infrastructure in the ACT. They are intended to complement the appropriate National Standards and Guides and a detailed knowledge of those documents is assumed.

Detailed information from established national standards is generally only given where necessary to draw attention to differences between ACT practice and those standards and the reasons for those differences or for the purpose of establishing ACT inputs to the more detailed requirements of the national documents.

3 INTERPRETATION AND USE

3.1 General

These Standards have been drawn up on the basis of “what we want to achieve” rather than “how you must achieve it”. Any solutions presented therefore represent “possible solutions” rather than “best and only solutions”. This is a major difference from the old “Standard Drawing” approach as it does require more creative input from both applicants and approving officers.

It is considered that this “performance” approach allows more imaginative solutions which may incorporate technology which was unknown at the time the standards were drafted.

The old compliance approach could lead to the rejection of a solution which met performance requirements but which did not align exactly with the standard drawings. The necessity for a prescribed solution to be capable of operating in all conditions also led to very conservative designs.

It has been necessary to include some absolute prohibitions which are non negotiable because they present a hazard to public safety and have, in the past, led to large liability claims against the ACT Government. As far as possible however, we have tried to avoid an absolute prohibition and have
given a list of problems which need to be overcome before a particular product or design can be used.

### 3.2 Standard Drawings

The number of Standard Drawings has been reduced compared to what was contained in the documents superseded by these standards. In many cases, there is no equivalent drawing. This does not mean that the old standard drawing is still current. All the old standard drawings have been superseded and are not to be used whether or not there is a direct equivalent new standard. Many of the old standard drawings are no longer relevant because we tend to use the wide range of products which can be bought off the shelf for our projects rather than a “standard” solution. These products include non safety critical items such as bollards as well as critical safety items such as terminal ends for traffic barriers.

In some cases, new Australian Standards include all the drawings which are needed and in other cases, a simple sketch or photograph is sufficient to show the concept without going to the extreme of a Standard Drawing.

Some consultants and contractors have produced their own “Standard Drawings” for particular cases and this can be acceptable as a “standard solution”. However, the existence of a “Standard Drawing”, which is not included in these Design Standards, does NOT mean that it is approved by Territory and Municipal Services for use nor does approval by Territory and Municipal Services of those Drawings for use on a particular project mean that they will be approved for use on any other project.

### 4 SCOPE

The *Design Standards for Urban Infrastructure* document the technical standards applicable to all infrastructure works constructed by, on behalf of, or for ultimate management by the Department of Territory and Municipal Services of the ACT Government.

### 5 PRINCIPLES OF DESIGN FOR URBAN INFRASTRUCTURE

The ACT Government is committed to high quality design and sustainability for developments within the ACT. Designs need to be in harmony not conflict with the environment. This will include a balancing of environmental, social and economic interests in all projects in order to support a healthy prosperous society.

Consistent with a commitment to achieve sustainable living environments in the Australian Capital Territory, high quality landscape development, enhancement and protection should be pursued as an integral part of development of Canberra and its environs.

Generally these standards have been developed on performance rather than prescription so that designers are free to develop innovative solutions to design problems rather than to simply tick the boxes to achieve a standard solution.

In developing a design solution, designers should keep in mind the ACT Government’s policies on sustainable development, reduction of greenhouse gas emissions, tree retention, accessibility, and no waste 2010.

Designers should aim for low maintenance solutions while minimising the whole of life cost of proposals. They should consider community safety aspects as well as road safety aspects of designs. Recycling and reuse of materials and resources such as stormwater are important contributors to sustainable designs.
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