

**Drafting and Design Presentation Standards Manual
Volume 1 - Foreword**

January 2013

First published 1978	as <i>Drafting References</i> .
Second edition 1987	Part additions to <i>Drafting References</i> .
Third edition 2006	Published by Queensland Department of Transport and Main Roads, Brisbane, Australia. Part reprinted with corrections 2010 & 2011.

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Revision Register

Issue/ Rev No.	Reference Section	Description of Revision	Authorised By	Date
1	-	First Issue	Steering Committee	January 2006
2		Updated to reflect current Transport and Main Roads policies and standards	Don Hicks	February 2010
3		Update to Reflect copyright and GILF requirements		February 2011
4		Update to Volume 1, Chapter 1 to reflect current departmental practice	Owen Arndt	January 2013

Contents

1 Foreword..... Error! Bookmark not defined.

2 Approved by2

3 Important information3

4 Philosophy of the Drafting and Design Presentation Standards Manual3

5 Acknowledgements4

1 Foreword

This Drafting and Design Presentation Standards Manual provides guidance for designers and construction personnel in the standards and guidelines (examples) for the presentation of road infrastructure projects covering the full preconstruction and construction delivery processes for the Department of Transport and Main Roads, Queensland.

In developing this manual particular attention has been given to the management of quality in the planning, design and construction of road infrastructure projects. This manual has been produced by the Road Design unit of Engineering & Technology Branch in consultation with representatives from other E&T units, Program Delivery & Operations, and the construction industry. It also sets the policy and standards for presenting the design to provide an agreed and consistent interface with the construction industry. Its purpose is:

- to provide the rules for presenting the design at any stage of the design development process to ensure outputs are fit for their intended purpose
- to ensure the construction is in accordance with "the design" through the supply of appropriate construction information.

This manual is a living document and will be revised and updated on a continuing basis as new information and techniques become available. The process will be enhanced and kept relevant and useful to users if the users continue to make appropriate contributions to the manual. Feedback is therefore essential to the continued relevance of the document.

Officers responsible for the design and its presentation for construction purposes shall seek to improve the quality of design together with its interface with the construction process by adhering to the standards and practices contained in this manual.

Non-compliance with the requirements and intent of this manual must be considered a design exception and will require appropriate technical certification and approval by Department of Transport and Main Roads, Queensland.


Julie Mitchell

Chief Engineer


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Date

2 Approved by


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3 Important information

The requirements of this document represent Technical Policy of the department and contain Technical Standards. Compliance with the department's Technical Standards is mandatory for all applications for the design, construction, maintenance and operation of road transport infrastructure in Queensland by or on behalf of the State of Queensland.

This document will be reviewed from time to time as the need arises and in response to improvement suggestions by users.

4 Philosophy of the Drafting and Design Presentation Standards Manual

This manual specifies the Transport and Main Roads corporate requirements for the delivery presentation requirements of projects of all sizes and complexities. It includes paper based details (drawings) and electronic details (electronic project model). It is a modern and holistic approach to road infrastructure project preconstruction and construction delivery support methods. Appropriate recognition is made of the different roles between corporate requirements and service delivery (construction contractor) needs.

The manual is designed to support project development and delivery through the stages of concept planning, design detailing, project approval, tendering, construction, as constructed (drawings/electronic model) and archival by:

- specifying the drafting standards
- specifying the presentation requirements.

The manual provides presentation examples that adequately show:

- drawing layouts and arrangements (drawing readability)
- design intent (purpose of the design)
- design detailing (what is required to be constructed).

Due to the different methods/techniques (e.g. Manual, Computer Aided Design and Drafting software) that may be used in the drawing preparation process, minor variations may be appropriate on how detail is actually presented. This must not be confused with the need to comply with the specified drafting and design presentation standards.

Research has shown that poor design and documentation is significantly increasing the costs of projects. The "Drafting and Design Presentation Standards Manual" is aimed at improving the quality of design and documentation by ensuring appropriate standards are developed and implemented. Compliance will reduce rework, design changes, claims for extras, and requests for extensions of time.

Perceived benefits are:

- achievement of outcomes
- satisfied client
- satisfied contractor.

It is intended that users should rely on their own skill and judgement when applying these standards to particular issues.

5 Acknowledgements

The Content Owners of this edition wish to acknowledge the effort of the various authors (both internal and external to the department) and members of steering committees involved with the previous releases. Much of their work exists in this edition.

The on-going development and maintenance of the manual is the responsibility of the Road Design Unit of Engineering & Technology Branch.

Manual content will be reviewed / updated / re-released as required, to reflect any changes to legislation, departmental policy and user feedback that impacts manual content.

