

Drafting and Design Presentation Standards Volume 2: Road Design Concept and Development Presentation

Foreword

March 2024



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Feedback

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Foreword

The *Drafting and Design Presentation Standards Manual* (DDPSM) provides guidance in the use of the department's drawing presentation standards for the design and delivery of road infrastructure projects. It covers the full preconstruction and construction delivery processes for the department.

The purpose of *Drafting and Design Presentation Standards Manual* Volume 2 is to display examples of road development project drawings, in a format that is to be provided to the client and construction staff to enable them to progress with their activities. This volume covers the requirements for presenting road design drawings throughout different concept and development phase stages, as well as covering presentation requirements for specific details and design elements of the different technical fields or disciplines (for example, roads, drainage, pavement, road lighting, traffic signals, landscaping and so on). Drawings for the various fields and disciplines share many common conventions, whilst also having some field specific conventions. Each technical discipline requires its particular drafting presentation format such as specific typical details, tables, plan layouts, cross sections, among others.

Designers are required to prepare a product that can vary from concept plans for public consultation to a complete set of drawings and job documentation for the delivery of road infrastructure projects. Regardless of the type of drawing being produced, accuracy and clarity are fundamental requirements.

Road design development drawings are divided into two preconstruction phase stages:

- concept phase drawings, and
- development phase drawings.

Note that all drawings (unless deemed otherwise by a RPEQ) produced in the concept phase and development phase are considered Professional Engineering Services and are to be supervised and certified by an appropriately qualified RPEQ.

Concept phase drawings provide project information on a broad high-level scale, generally for community consultation and planning purposes. Concept phase drawings and related documentation include:

- options analysis, business case
- community consultation, newsletters, public displays, and
- report style drawings and sketches.

Development phase drawings use the outcomes from the concept phase to develop drawings and related documentation for tendering, construction and maintenance of road infrastructure assets, in two phase steps:

- preliminary design, and
- detailed design.

These design phase stages often overlap and complement each other.

Generic and actual registered Plan Room example drawings shown in this manual are presented to assist and guide designers, drafters, and engineers in the presentation of concept phase and development phase drawings. The figures and examples shown are for presentation purposes only and any project related, or historical information shown may be conceptual, a product of optioneering, or superseded." To avoid identification, personal and corporate information including names, signatures and company logos have either been blurred or removed. If the inclusion of such content better demonstrates presentation format, generic names and identifiers have been used for this purpose.

The examples may not reflect present design standards (for example, title blocks, issue identifiers, the use of radii rather than K values on vertical curves; or the use of Parish and County rather than using Locality and Local Government Authority). These details have been included for ease of reference, to illustrate typical solutions, and to show the required standard of drafting presentation. For each individual project, each drawing should be drawn specifically for the agreed requirements and to suit site conditions and construction methods.

For each project, the following manuals and guidelines may be referenced when preparing the concept and development phase designs and drawings. It is not a comprehensive list as Transport and Main Roads may have published a number of additional manuals – refer to the department's Technical Publications at https://www.tmr.qld.gov.au/business-industry/technical-standards-publications for all current publications:

- Road Planning and Design Manual (2nd edition)
- Queensland Guide to Traffic Management
- Queensland Guide to Road Safety
- Queensland Road Safety Technical User Volumes (QRSTUV): Guide to Speed Management
- Geotechnical Design Standard Minimum Requirements
- Pavement Design Supplement
- Pavement Rehabilitation Manual
- Manual of Uniform Traffic Control Devices (MUTCD)
- AS 1742 Manual of Uniform Traffic Control Devices
- Environmental Processes Manual
- Road Landscape Manual
- Transport Noise Management Code of Practice Volume 1 Road Traffic Noise
- Drafting and Design Presentation Standards Volume 1 Drafting and Design Presentation Standards
- Drafting and Design Presentation Standards Volume 3 Structural Drafting Standards
- Design Criteria for Bridges and Other Structures
- Traffic and Road Use Management Manual (TRUM)
- Soil Management Manual

For Austroads guidance please see <u>https://austroads.com.au/publications</u> for all current publications:

- Austroads Guide to Road Design
- Austroads Guide to Traffic Management
- Austroads Guide to Road Safety
- Austroads Guide to Pavement Technology

For further information, or feedback, regarding *Drafting and Design Presentation Standards Manual* – Volume 2: *Road Design Development Presentation* please contact <u>tmr.techdocs@tmr.qld.gov.au</u>.

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