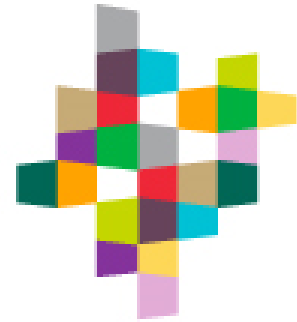


QPRC



**QUEANBEYAN PALERANG
REGIONAL COUNCIL**

**HANDBOOK OF DRAFTING
STANDARDS FOR ENGINEERING
DESIGN DRAWINGS AND WORK
AS EXECUTED DRAWINGS**

VERSION 1 – DECEMBER 2018

**HANDBOOK OF DRAFTING STANDARDS FOR ENGINEERING DESIGN DRAWINGS
AND WORK AS EXECUTED DRAWINGS**

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1.0 SCOPE

1. This Handbook sets out the requirements for the preparation and submission of civil engineering design drawings and work-as-executed drawings to Queanbeyan Palerang Regional Council. The requirements shall be applicable to all drafting work whether undertaken by Council, the Developer, the Developer's Project Manager, Consultant or a Sub-consultant.
2. This Handbook shall apply to all CAD plans that are to be submitted to Queanbeyan Palerang Regional Council, including, but not limited to, engineering design plans associated with development applications, work-as-executed plans and out sourced design plans.
3. The requirements of the Engineering Design Specification are a prerequisite to the requirements provided in this document.

2.0 OBJECTIVE

1. The intent of this Handbook is to stipulate a standardised system for all civil engineering design plans submitted to Queanbeyan Palerang Regional Council.
2. The information shown on the drawings shall be logically collected as block attributes saved on discrete layers. Collecting asset attributes as block attributes will assist Council to maintain an up to date asset management system.
3. This document does not negate the requirement to submit detailed engineering drawings as per construction and project processes.

3.0 REFERENCE DOCUMENTS

Council Specification

Engineering Development Design Specification DQS – Quality Assurance of Design

Australian Standards

- AS 1100 - Technical Drawing – General Principles
- AS 1101 - Graphic Symbols For General Engineering
- AS 3883-1991 - Computer Graphics-Computer Aided Design (CAD)-Guide for Structuring of computer graphic information
- AS 13567-1999 – Technical Product Documentation-Organizing and naming of layers for CAD

ISO 128 – Technical Drawings – General principles of presentation

ISO 129 – Technical Drawings – Dimensioning – General Principals, definitions, methods of

execution and special indications.

ISO/TR 10127 – Computer-Aided Design (CAD) Technique – Use of computers for the preparation of construction drawings

4.0 BACKGROUND INFORMATION

The Queanbeyan Palerang Regional Council has developed a DWG template which has preloaded layers and blocks with attributes. These preloaded blocks should be in the stipulated layers. The WAE template is available in the Autocad 2012 format or earlier versions and will be provided to existing QPRC specification users and new users. .

Refer to **Table: A** of appendices for the list of layers and blocks and the layers they belong to. The mandatory block attributes and data type is also listed in Table C. The validation process undertaken by Council's asset management team will not accept blocks to be in different layers. The drawings may be returned if the WAE blocks are not in the specified layers.

Table D in the appendices refers to look-up values for some WAE block attributes. Block attributes that have numbers as data should be correct to two decimals. The look-up values should be typed in as specified in Table: D. Strict adherence to the format and spelling of look-up values is expected, the validation process will not accept otherwise. The drawings may be returned if the block attributes are not in the correct format.

Generally blocks should be inserted when there is a change in attribute value. However, for pipelines, blocks should be inserted between every node. Please refer to **Table: F** to understand the frequency at which the blocks should be inserted.

5.0 GENERAL DRAFTING REQUIREMENTS

1. The model shall be drawn at 1:1 scale with 1 drawing unit equal to 1 meter.
2. Coordinate systems shall be maintained right throughout the drawings. All works shall be provided on the MGA coordinate system zone 55 (GDA 94) within the model space. I.e. Orientation to north and at true scale. Plans must not be scaled to the coordinate system.
3. The adopted datum for all plans shall be Australian Height Datum (AHD).
4. Drawings shall contain a legend.
5. Elevation should be set to 0,0.
6. Line types, dimensions, hatching, fonts, plotting and pen tables are not standardized at this time.
7. Apart from the layers and blocks there is no standardization for layers at this time. However care must be taken to ensure data is placed in appropriate layers.
8. A1 and A4 are standard plotting sizes. Layouts for each paper size must be specified.
9. Drawings may be zipped on completion using AutoCAD's E-transmit option to include all Dim Styles, Text styles, plot styles, X-refs etc.

ANNEXURE

QPRC Attribute Template User Manual is appended as a PDF document. Revisions of the manual will be provided to users as updates occur.