

Master Specification

Part RD-DK-C2

Kerbing

September 2024



Government of South Australia
Department for Infrastructure
and Transport

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Document Information

Document Information

K Net Number: 13524212

Document Version: 1

Document Date: 30/09/2024

Document Amendment Record

Version	Change Description	Date
0	Initial issue	31/08/2023
1	Updated cover page	30/09/2024

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RD-DK-C2 Kerbing

1 General

- a) This Master Specification Part specifies the requirements for the installation of kerbing, which includes kerb and gutter, kerb ramps, property crossovers, median kerb, side drains and dish drains. This includes:
- i) the documentation requirements, as set out in section 2;
 - ii) the kerbing responsibilities, as set out in section 3;
 - iii) the materials and properties requirements, as set out in section 4;
 - iv) the profile and dimension requirements, as set out in section 5;
 - v) the preparation and supportive layers for concrete kerb and channel, as set out in section 6;
 - vi) the installation of kerbing requirements, as set out in section 7;
 - vii) the tolerances, as set out in section 8;
 - viii) the surface finish requirements, as set out in section 9;
 - ix) the joint requirements, as set out in section 10; and
 - x) the inspection, sampling and testing requirements, as set out in section 11.
- b) The construction of kerbing must comply with the Reference Documents, including:
- i) AS 2876 Concrete kerbs and channel (gutters) - Manually or machine placed;
 - ii) Department Standard Drawings (available from: https://dit.sa.gov.au/standards/standards_and_guidelines);
 - iii) AS 1379 Specification and supply of concrete;
 - iv) AS 1428.1 Design for access and mobility, Part 1: General requirements for access - New building work;
 - v) AS/NZS 1428.4.1 Design for access and mobility, Part 4.1: Means to assist the orientation of people with vision impairment - Tactile ground surface indicators; and
 - vi) Department Operational Instruction 20.1 Care, Control & Management of Roads (Highways) by the Commissioner of Highways (Section 26 of the Highways Act) (available from: https://dit.sa.gov.au/standards/standards_and_guidelines).

2 Documentation

2.1 Construction Documentation

In addition to the requirements of PC-CN3 “Construction Management”, the Construction Documentation must include details of the nominated curing compound in accordance with section 7.5b).

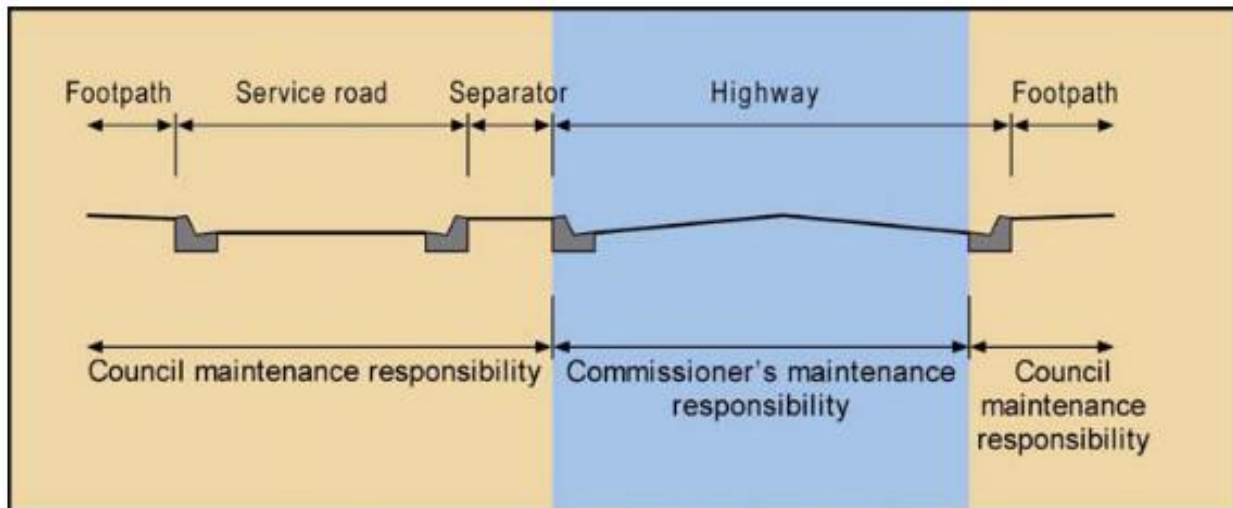
2.2 Quality Management Records

In addition to the requirements of PC-QA1 “Quality Management Requirements” or PC-QA2 “Quality Management Requirements for Major Projects” (as applicable), the Quality Management Records must include the verification requirements and records specified in section 11.

3 Kerbing responsibilities

- a) The responsibility of the Department and council for kerbing on urban and outer urban roadways is detailed in Department Operational Instruction 20.1. The care and control maintenance responsibilities are detailed in Figure RD-DK-C2 3-1.
- b) Any Works or Temporary Works involving installation or modification of existing Third Party kerbing infrastructure (such as private or council kerbing infrastructure) must be undertaken in accordance with the Contract Documents.

Figure RD-DK-C2 3-1 Pavement and kerbing responsibilities



4 Materials and properties

- a) Materials and properties of concrete for kerbing must comply with clauses 4 and 5 of AS 2876 Concrete kerbs and channel (gutters) - Manually or machine placed.
- b) Unless specified otherwise, the minimum strength grade concrete for kerbing must be N20 and comply with ST-SC-S1 "Normal Class Concrete".
- c) Where slipform concrete is used, the Contractor is responsible for ensuring that the concrete has properties suitable for use with the machinery.

5 Profiles and dimensions

Profiles must be in accordance with the Department Standard Drawings.

6 Preparation and supportive layers for concrete kerb and channel

Preparation and supportive layers for concrete kerb and channel must be in accordance with AS 2876 Concrete kerbs and channel (gutters) - Manually or machine placed.

7 Installation of kerbing

7.1 Kerb and gutter and median kerb

- a) If required, allowance must be made to accommodate the kerb and gutter within the pavement.
- b) Slipform formwork may be used for the construction of kerb and gutter using a kerbing machine capable of providing satisfactory compaction of the extruded kerb.

- c) Water sensitive urban design (WSUD) features integrated within the kerbing must be in accordance with the Design Documentation.

7.2 Property crossovers

- a) Unless specified otherwise, the length of a crossover must be the greater dimension of:
 - i) 3.0 m;
 - ii) the width to match an existing driveway at the property boundary; or
 - iii) as shown on the Design Documentation.
- b) Where Works involve modification or replacement of existing council crossovers, council standard vehicle crossover details may apply with respect to cross over lengths and cross-sectional profile.
- c) Allowance must be made to accommodate reinforced property crossovers within the pavement.
- d) The exact length and location of the property crossover that provides access to an existing driveway are to be confirmed on site in consultation with the Principal and where appropriate, the property owner.

7.3 Kerb ramps

- a) Kerb ramps must be in accordance with the Department Standard Drawings.
- b) Kerb ramps must be constructed in a single concrete pour (without a construction joint between the ramp and gutter).
- c) Kerb ramps must include tactile ground surface indicators complying with AS/NZS 1428.4.1 Design for access and mobility, Part 4.1: Means to assist the orientation of people with vision impairment — Tactile ground surface indicators.

7.4 Spoon (dish) drains

- a) Spoon (dish) drains must be in accordance with the Department Standard Drawings.
- b) The Contractor must ensure that the design of the pavement profile allows for dish drains to sit on the road base material.

7.5 Curing

- a) The finished concrete kerbing must be immediately sprayed with an accepted curing compound at a uniform application rate in accordance with the manufacturer's specifications.
- b) The Contractor must nominate the curing compound to be used as part of the Construction Documentation.

7.6 Backfill

- a) Backfill of kerb and gutter must be undertaken prior to loading the roadside face of kerb and gutter in accordance with the Design Documentation.
- b) Backfill to kerbing must be completed prior to placing base against the kerbing.

7.7 Property drainage connections

Existing stormwater connections from private properties must be maintained during construction activities and reinstated in new kerbing.

8 Tolerances

Tolerances must be in accordance with AS 2876 Concrete kerbs and channel (gutters) - Manually or machine placed.

9 Surface finish

Surface finish must be in accordance with AS 2876 Concrete kerbs and channel (gutters) - Manually or machine placed.

10 Joints

- a) Joints in kerbing must be in accordance with AS 2876 Concrete kerbs and channel (gutters) - Manually or machine placed.
- b) For median kerb Type 1 - 4a, polyethylene inserts must be placed at 200 m intervals and at every change in horizontal direction. Polyethylene inserts must be 50 mm thick closed cell polyethylene (as available from BIY Construction Supplies, Wingfield or equivalent approved).

11 Inspection, sampling and testing

- a) Inspection, sampling and testing must be in accordance with AS 2876 Concrete kerbs and channel (gutters) - Manually or machine placed.
- b) The Contractor must supply written verification as part of the Quality Management Records that the requirements in Table RD-DK-C2 11-1 have been complied with.

Table RD-DK-C2 11-1 Verification requirements

Property	Test procedure	Test frequency	Acceptable Limits
Variation in cross-sectional dimensions	As specified in PC-SI1 "Site Surveys"	As specified in PC-SI1 "Site Surveys"	Within ± 3 mm of specified dimension
Variation from specified levels (except for median kerb Type 1)	As specified in PC-SI1 "Site Surveys"	As specified in PC-SI1 "Site Surveys"	Within ± 5 mm of specified level; and invert level is free draining and does not result in water ponding.
Misplacement from specified position	As specified in PC-SI1 "Site Surveys"	As specified in PC-SI1 "Site Surveys"	Within ± 20 mm of specified position
Permissible surface irregularities under a 3 m straight edge	As specified in PC-SI1 "Site Surveys"	As required	Less than ± 3 mm