## June 2017

## General

Where referred to VicRoads Technical Services (or Consulting) or VicRoads Principal Advisor Geotech Pavements & Materials for consultation replace with Manager Asset Management, Department of State Growth.

The Department of State Growth Project Manager shall provide the minimum Polished Stone Values (PSV) for bituminous surfacings. Ignore any reference to minimum PSV values for bituminous surfacings stated in VicRoads Code of Practices and other standard documents.

## RC 500.00 Source Rock Investigations

### Clause 5

Replace 'Polished Stone Values are specified for Class A sealing aggregate and …..' with 'Polished Stone Values are specified for all sealing aggregate and …..'

## RC 500.01 Registration of Bituminous Mix Designs

Nil

## RC 500.02 Registration of Crushed Rock Mix Designs

### Table 1

In the description of Class 1 material, delete the words 'It has a minimum plasticity index requirement and'.

### Table 7 - Crushed Rock Requirements

For Class 1 material amend the Plasticity Index (range) to read '0 - 6'.

## RC 500.03 Management of Quarry Reference Specimens

Nil

## RC 500.05 Acceptance of Field Compaction

Nil

## RC 500.09 Testing of Aggregates for Sprayed Bituminous Surfacings

Nil

## RC 500.11 Surveillance of Materials, Testing and Compaction

Nil

## RC 500.16 Selection of Test Methods for Testing if Materials and Work

Nil

## RC 500.20 Assignment of CBR and Percent Swell to Earthworks Fill and Pavement Materials

Nil

## RC 500.22 Selection and Design of Pavements and Surfacings

### General

Include an additional clause 'All pavement and surfacing treatment selections shall be approved by Asset Management Branch.'

### General

Guidance on the intended application of pavement materials:

Class 1 material – base course on higher traffic roads (Design Traffic over 7 x 106 DESA’s)

Class 2 material - base course on moderate and lower traffic roads (Design Traffic less than 7 x 106 DESA’s)

Class 3 material – subbase 1 layer, with a 40mm mix (all traffic volumes)

Class 4 material – subbase 2 layer, with a 40mm or 50mm mix (all traffic volumes)

Note that while VicRoads does allow the use of Class 3 materials as a base layer, referral to Manager Asset Management for approval is required where this application is proposed for use on a State Growth project. If it were to be specified for use as a base, a 20mm mix would be nominated.

### Clause 8.1,

Replace Table 8.1 with ‘The pavement design period shall be 20 years for all road types/ classifications.’

### Clause 9.2.1(a)

All sprayed seals must specify a minimum PSV. The Department of State Growth will nominate the minimum PSV.

### Clauses 10.2.2, 10.2.3, 10.2.4

Replace the nominal 30mm thick of size 10mm asphalt with ‘a 40mm thick layer of size 14 mm asphalt surfacing shall be selected ….’

### Clause 11.11

Amend clause to read 'A WMAPT of 20° for Hobart shall be applied unless alternative site-specific data is available.'

### Appendix A

Replace Appendix A with site specific Average Annual Rainfall, based on the most recent standard 30 year climatology data, available from [http:/www.bom.gov.au/climate/averages/maps.shtml](http://www.bom.gov.au/climate/averages/maps.shtml)

### Appendix B

Replace Appendix B with the following:

Design Traffic

The AADT and heavy vehicle content is available across the Department of State Growth-managed State Road network. For some sites, more detailed traffic data is available. In the absence of more detailed, site-specific information, the design shall assume that:

All heavy vehicles travel in the outside lane on multi-lane roads;

Direction Factor of 0.5 (i.e. traffic is divided equally between the PD and CD direction);

The number of heavy vehicle axle groups per heavy vehicle (NHVAG) shall be 2.8 for rural roads and 2.5 for urban roads;

The traffic load distribution (TLD) for granular pavements with a thin bituminous surfacing shall be 0.9 ESA’s per HVAG for rural roads and 0.7 ESA’s per HVAG for urban roads;

Annual traffic growth rate 2%.

Note: The 2% growth rate is intended to cover both the growth in the number of heavy vehicles over time but also the growth in ESA’s per heavy vehicle.

Designers shall establish if more detailed traffic data exists for the site or is required to be collected, particularly where a sensitivity analysis highlights a need. In the event that weigh-in-motion information is available, this shall be used to determine the direction factor, the number of heavy vehicle axle groups per heavy vehicle and the traffic load distribution.

For new pavements, the pavement design shall be based on the traffic lane with the highest Design Traffic. This design shall be applied across the full carriageway width including the shoulders. For strengthening of a multi-lane road, different treatments for each lane may be considered, in which case the Design Traffic should be calculated for each lane.

Design Traffic Calculations for Temporary Pavements

For temporary pavements with a design period of less than five years, the design traffic shall be calculated using a 20 year design period with zero traffic growth rate, using the maximum daily heavy vehicle volume.

### Appendix C

Further to Appendix C, all seal treatments are to be confirmed with Asset Management Branch.

### Appendix D

Guidance on the use of asphalt types is provided:

Commonly used asphalt types:

Mix designations N – general wearing surface (typically size14 mm mix) and other maintenance treatments (size 7/10/14 mm mixes). C170 binder.

Mix designations H – heavy duty wearing surface (typically size14 mm mix). C320 binder.

All asphalt surfacings must specify a minimum PSV. The Department of State Growth will nominate the minimum PSV.

Less frequent use:

Mix designations SI – typical structural mix for asphalt pavements, noting that asphalt pavements are not commonly used in Tasmania (typically size 20 mm mix). C320 binder.

Specialty mixes that are rarely used:

Mix designations V – primarily for very heavily trafficked intersections (typically size14 mm mix). C320 binder.

Mix designations L, HG, HP, SF, SP, SG and SS

### Appendix E

Amend to include the following note:

'The Asphalt Characteristics outlined in Append E shall be used as a guide only. Designers shall take into account local conditions and products. For structural design, Designers shall consult with Manager Asset Management prior to assigning asphalt characteristics.'

## RC 500.23 Lime Stabilised Earthworks Materials – Available Lime, Assigned CBR and Swell

Nil