ACT Government

TRAFFIC CONTROL DEVICES

MUNICIPAL INFRASTRUCTURE STANDARDS 13

Transport Canberra and
City Services

SEPTEMBER 2021

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1/0				
1/1	N/A	Acknowledgement of Country added		
	1.1.2.2	WHS Act added		
	1.1.2.3	Reference to Attachment B and drafting standard removed		
	1.1.3.1	AS 4049, AS 1158 and AS 60598 added Austroads references consolidated.		
	1.2.2.1	Requirements for Works Approval added		
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	2.5.2.2	Flush medians changed to chevrons at islands and medians and gores changed to traffic islands		
	2.7.1	Priority path network and type of path noted as main determinant in crossing type		
	2.7.2	Reference to the GRSTMAS removed		
	2.9	Reference to MIS 13 removed and AS references specified		
	3.1	Duplicate reference to AS 1742.2 removed		
	3.2	Special sign code to be assigned by TMS added		
	3.3.1, 3.3.2, 3.3.3, 3.3.4	Document restructured with these sections becoming 3.4, 3.5, 3.6 and 3.7		

ACKNOWLEDGEMENT OF COUNTRY

Transport Canberra and City Services (TCCS) acknowledge that Aboriginal people are the Traditional Owners of Australia. We acknowledge and pay respect to the Ngunnawal peoples as the custodians of the land and waters that we live and thrive on today here in the ACT.

TCCS acknowledges that Canberra's cultural and natural heritage was maintained by the Ngunnawal people for many generations before colonial settlement on Australian soil. Aboriginal people's management of the land preserved the natural balance of local plants and animals. This knowledge of the environment in which we live is critical to the protection and restoration of our land today.

It is our responsibility to preserve and encourage Ngunnawal, Aboriginal and Torres Strait Islander cultural integrity. When using this document, consider opportunities to incorporate Ngunnawal, Aboriginal and Torres Strait Islander culture.

CONTENTS

1 TRAFFIC CONTROL DEVICES

1.1 General

1.1.1 Responsibilities

1.1.1.1 Objectives

General: Provide Traffic Control Devices (TCD) for regulatory and warning sign posting road marking and traffic signals to ACT Australian Road Rules and the appropriate Australian Standards.

1.1.1.2 Precedence

Requirement: Where any document except legislation or the *Territory Plan* issued referenced in this Design Standard includes technical requirements that conflict with this Design Standard, consult with the service authority and TCCS for clarification.

1.1.2 Cross references

1.1.2.1 Commonwealth Legislation

The following Commonwealth legislation is relevant to this Standard:

Disability Discrimination Act

1.1.2.2 ACT Legislation

The following ACT legislation is relevant to this Standard:

Road Transport (Safety and Traffic Management) Act

Road Transport (General) Act

Territory Plan

Work Health and Safety Act

1.1.2.3 Design Standards

This Design Standard references the following component standards:

MIS 00 Introduction

MIS 08 Stormwater drainage

MIS 05 Active Travel Facilities Design

MIS 09 Bridges and other related structures.

MIS 12 Guide signs

TCCS Reference Documents

Reference document 6 Requirements for Design Acceptance Submissions

Reference document 11 Drafting requirements for summary drawings

1.1.2.4 Policy and guidelines

Requirement: All traffic control devices in the ACT must be consistent with and not contradict in any way the intent or requirements of the:

Australian Road Rules, Road Transport (Safety and Traffic Management) Regulation

1.1.3 Referenced documents

General: The following documents are incorporated into this Design Standard by reference:

1.1.3.1 Australian Standards

AS 1158 Lighting for roads and public spaces

AS 1742 Manual of Uniform Traffic Control Devices (SET)

AS 1743 Road Signs - Specifications

AS 1744 Standard Alphabets for Road Signs

AS/NZS 1906 Retroreflective materials and devices for road traffic purposes (SET)

AS/NZS 1428 Design for access and mobility (SET)

AS 4113.2 Traffic signal lamps – Lamps for 240V a.c. operation at extra low voltage.

AS 2144 Traffic signal lanterns

AS 2276.1 Cables for traffic signal installations – Multicore power cables

AS/NZS 2276.2 Cables for traffic signal installations – Feeder cable for vehicle detectors

AS 2276.3 Cables for traffic signal installations – Loop cable for vehicle detectors

AS 2339 Traffic signal posts and attachments

AS 2353 Pedestrian push-button assemblies AS

2578 Traffic signal controllers

AS 2703 Vehicle loop detector sensors

AS 2979 Traffic signal mast arms

AS 4852.1 Variable message signs - Part 1 Fixed signs

AS 4049.1 Paints and related materials

AS 60598 Luminaires

Austroads

AGRD Austroads Guide to Road Design

AGTM Austroads Guide to Traffic Management (Parts 1-13)

Other publications

GRSTMAS ACT Guidelines for Road Safety and Traffic Management around Schools

RMS TSD RMS Traffic signal design RMS Publication 08-092

1.1.4 Standards

1.1.4.1 General

Design: *AS 1742 (set);* In order of precedence *ACTSD, ACT GRSTMAS, AGTM06, AGTM08, AGTM10.*

Proprietary products: To *TCCS Products previously considered for use list*

1.1.5 Interpretation

1.1.5.1 Abbreviations

TCCS	Territory and Municipal Services Directorate.
ACTSD	ACT Standard Drawings

1.2 Pre-design planning

1.2.1 Planning

1.2.1.1 Standard Details

General: The *ACTSD* provide guidance to designers through typical details. Typical details are a guide only and designers must modify details as appropriate with appropriate engineering judgement to suit individual requirements.

1.2.1.2 Material selection and performance

General: A structurally sound sign is considered to have reached the end of its useful life when it is illegible at night. For road markings the prime factor is the maintenance of appropriate surface friction and reflectivity, particularly during wet and dark conditions.

Requirement: Materials that provide minimum whole of life cost are to be used wherever possible. The prime factor in determining appropriate materials is the visibility and legibility provided by the material in all lighting conditions.

1.2.2 Consultation

1.2.2.1 TCCS and other Authorities

General: Consult with TCCS and other relevant Authorities during the preparation of the design of traffic control devices. For work in the National Land (National Triangle) and Designated Land (major corridor entries to the ACT such as Barton Highway or Federal Highway) a Works Approval is required by the National Capital Authority (NCA)

1.2.2.2 Safety in Design

Requirement: Implement safety in design processes in accordance with the *Work Health and Safety Act*.

2 ROAD PAVEMENT MARKINGS AND RETRO-REFLECTIVE MARKERS

2.1 Lines

General: To *AS 1428.2, AS 1742.9, AS 1742.10, AS 1742.11, AS 1742.13* and *AS 4049.1*

Requirements: Line types for use in the ACT are to conform with *ACTSD-3501* and in various arrangements on roads as detailed in the relevant ACTSD as referred in this Design Standard.

2.2 Retro-reflective raised pavement markers (RRPMS)

Design: RRPMs are used to supplement linemarking for delineation on roads at night, in fog and other inclement weather conditions. RRPMs are to be installed in conjunction with line marking for the line types as shown on *ACTSD-3501* and in various arrangements on roads as detailed in the relevant ACTSD as referred in this Design Standard.

Requirements:

- RRPMs are to be uni-directional or bi-directional and of appropriate colour for the line type or purpose as detailed on *ACTSD-3501*.
- RRPMS are also used to mark services and provide delineation of islands, flush medians, and crossings and are to be arranged as shown on the ACTSD. RRPM colour will vary depending on the side of use of the adjacent traffic lane. RRPM colours and positioning for various applications are detailed as follows:

  - flush median islands and gores - refer to *ACTSD-3502,*
  - traffic islands - refer to *ACTSD-3503*

- RRPM's may be used in some instances to guide traffic or encourage lane conformance in configurations not shown on the ACTSD. This may include installation of RRPM's adjacent to edge lines on curves at intersections to discourage vehicles from cutting into a marked shoulder or bicycle lane. Use of RRPMs in arrangements not shown on the ACTSD can only be implemented with the approval of the Road Authority.

2.3 Ceramic pavement markers (CPMS)

Requirement: CPMs are no longer used in the ACT and are not to be replaced. Use of the appropriate linemarking as shown on *ACTSD-3501* is to be implemented to replace existing CPMs whenever maintenance or new work is undertaken.

2.4 Linemarking in carparks

General: Parking lines are generally white except yellow is used to facilitate identification of special zones and may be used in off street carparks with a light background e.g. light grey concrete, refer to **Special Zones** for details.

Requirement: Line marking for on and off-street parking is to be in accordance with *AS 2890* with linetypes as shown on *ACTSD-3501.*

2.5 Pavement messages

2.5.1 Messages

Design: Pavement message words and arrangements are to be in accordance with *AS 1742.2, ACTSD-3520 to 3521* and *ACTSD-3523.*

Requirements:

> For messages installed on roads with speed zone of 80km/h or less markings are to be 3000mm high unless approved by the Road Authority or otherwise detailed.

> The following pavement messages may be used in the ACT in addition to those in *AS 1742.2*. With the exception of the FORM ONE LANE message the messages should only be used in special circumstances e.g. poor sight distance and may only be used with approval by the Road Authority:

- END
- FORM ONE LANE (refer to *ACTSD-3521* for details and arrangements)
- GIVE WAY
- KEEP CLEAR
- LANE
- ONLY
- PED X
- SCHOOL
- SCHOOL X
- SLOW
- STOP

2.5.2 Symbols

2.5.2.1 Arrows

Design: Arrows are to be installed for guidance on the pavement at intersections or trapped lanes and in advance of lane changes. Marking of arrows is not required when vehicle movements are permitted by regulations. Arrows are also installed on the pavement in association with cycle facilities.

Requirements:

> Arrows in advance of intersections are to be in accordance with those shown on *ACTSD-3520* and positioned as follows:

- Traffic signals - Refer *ACTSD-3540.*
- Roundabouts - Refer *ACTSD-3541*.

> Arrows in advance of lane change or trapped lanes are to be installed in accordance with those shown on *ACTSD-3520.*

2.5.2.2 Walking and cycling facilities arrows and symbols

Design: Walking and cycling symbols for use on roads and paths are to be in accordance those shown on *ACTSD-3522 to 3524.*

Requirements: Refer to *MIS05 Active Travel Facilities Design* for and *ACTSD-0500* series for detail on the use of walking and cycling arrows and symbols on roads and paths.

A new suite of design components for active travel associated with the principal community cycling routes (CBR routes) has been developed and details for signposting of these routes are provided in ACTSD - 0575

Chevrons and diagonal markings

Design: Diagonal markings and chevrons are applied to areas of pavement which are not generally intended for use by moving vehicles, Diagonal markings are used where all traffic must pass to one side (normally the left) of the marking and chevrons are used where traffic may pass to either side of the marking travelling in the same direction.

Requirements:

- Chevrons at islands and medians - refer to *ACTSD-3502* for details.
- Traffic islands- refer to *ACTSD-3503* for details.
- Refuge islands - refer to *ACTSD-3504* for details.

2.5.3 White gore paint

Design: White gore paint (waterborne paint with glass beads) is to be applied to all island noses facing approaching traffic and pedestrian islands under certain circumstances.

Requirements:

- White gore paint is to be applied on the radius between tangent points of all traffic and pedestrian island noses facing traffic. Refer to *ACTSD-3502* for details.
- For triangular traffic islands with kerb lengths less than 5.0m in length the full length of kerbs are to have white gore paint applied.
- For pedestrian islands and refuges with kerb lengths less than 10m in length the full length of kerbs are to have white gore paint applied.

2.6 Special zones

2.6.1 Bus stops

Design: Bus stops are to be marked with message and lines as detailed on *ACTSD-3510.*

Requirements:

- The marked bus stop length is dependent on the required bus storage and likelihood of vehicles regularly parking on the approach to the bus stop. If vehicles are likely to be regularly parked on the approach to the bus stop then the obstructed approach dimension should be used. Refer to *ACTSD-3510* for design details.
- Bus stops are to be marked within the road pavement or through construction of laybys (preferably concrete) in consultation with the Road Authority.
- Bus stops are to be staggered when installed on the road pavement with the stagger arrangement dependant on the road type and width, taper length, sightlines and location of intersections, paths, driveways and other street furniture. Due to sight distance at pedestrians crossing facilities, bus stops should not be placed immediately downstream of the adjacent bus stop unless the stopped bus fully prevents cars from passing e.g. when adjacent to a refuge island.
- The requirement for a layby, shelter and seating and the types to be provided are to be agreed with the Road Authority. The layby detailed on *ACTSD-3510* is suitable for use on roads with speed limits of 60Km/h. Laybys on higher speed roads are to be designed in accordance with *AGRD03* Ensure that buses entering and exiting any lay-by type do not cross the road dividing line.
- Due to sight distance requirements bus stops should not be placed immediately upstream of pedestrian crossing facilities unless the stopped bus fully prevents cars from passing e.g. when adjacent to a refuge island. The refuge island shall be of sufficient length that it is clearly visible to oncoming motorists and will discourage drivers from passing to the right of the island.

2.6.2 Accessible parking zones

Design: Accessible Parking zones for users with a disability are to be marked with symbols and lines as detailed on *ACTSD-3511*. Refer to *AS 2890* for kerb ramp requirements.

Requirements:

- Angle accessible parking shall be avoided unless absolutely necessary and shall be designed to the approval of the Road Authority.

2.6.3 Loading zones

Design: Loading zones are to be marked with message and lines as detailed on *ACTSD-3511*

Requirements:

- The width of loading zones should allow for the most common goods vehicle likely at the particular location, they should generally be a minimum of 2.5m wide, 3.0m desirable.
- Line markings are to be yellow LLM.

2.6.4 Taxi ranks

Design: Taxi ranks are to be marked with message and lines as detailed on *ACTSD-3511*

Requirements:

- The width of taxi ranks should provide for taxis to position as close to the kerb as possible, they should generally be 2.3m wide.
- Line markings are to be yellow LLM.

2.6.5 Keep clear

Design: Keep clear zones are marked within traffic lanes at intersections to allow passage of vehicles access into or through the intersection when there is queued traffic. Keep clear zones to be marked with message and lines as detailed on *ACTSD-3520.*

Requirements:

- Length to be as agreed with the Road Authority and is to allow continued use of intersections that may be obstructed by queuing traffic. This may include marking to allow crossing traffic or vehicles to turn into the traffic lane from terminating or crossing streets.
- Line markings are to be yellow LLM.

2.6.6 School zones

Design: There are generally no pavement markings associated with school zones. Measures such as dragon teeth or 40 speed zone pavement patches may be installed in response to particular issues in retrofit at specific school sites only with the approval of the Road Authority.

Requirements:

- Any pavement markings approved by the Road Authority for installation in retrofit at specific school sites are to be marked in accordance with relevant NSW RMS specifications.

2.7 Crossings

2.7.1 Pedestrian crossings

Design: Pedestrian crossings (Zebra) are to be marked and signage installed as detailed on *ACTSD-3530.* For pedestrian crossings on raised platforms (Wombat crossings) refer to *ACTSD-3531.* The warrant for installing a pedestrian crossing (Zebra) is to be in accordance with *ACTSD-3530* unless the crossing is associated with a school then the warrant is to be assessed with reference to GRSTMAS.

Requirements:

- In retrofit where raised platforms are on a pedestrian desire line a pedestrian crossing may be installed without reference to a warrant. Alternatively if the platform is not installed on an obviouspedestrian desire line, landscaping or other measures to prevent pedestrian access shall be installed. The priority path network and type of path is a main determent of the type of crossing (refer to ACTSD 0500 series Walking and Cycling from ATIPT)
- In estate development raised platforms that are to be marked as pedestrian crossings shall be designed to allow pedestrians to cross on an even gradient without traversing a gutter tray. The priority path network and type of path is a main determent of the type of crossing (refer to ACTSD 0500 series Walking and Cycling from ATIPT)
- Zigzag linemarking may be installed on approaches to pedestrian crossings with poor sight lines such as on a curved road alignment. This treatment can only be installed with the approval of the Road Authority. The approved zigzag is to be marked in accordance with the relevant NSW RMS specifications.

2.7.2 Childrens crossings

Design: Children's crossings, where warranted, are generally to be located within school zones in the ACT. Refer to *ACTSD-3530* for linemarking and signage details.

2.8 Special markings

2.8.1 Kerb mounted house numbering

General: Where required house numbers are to be marked on the kerb near the driveway using road marking materials.

Requirement:

- Numbers are to be at least 75mm high, white or yellow in colour and applied using a stencil onto a black background that is at least 120mm square.
- The number is to be positioned at least 25mm from the top of the kerb and within 1 metre of the driveway on the side which most clearly indicates the numbered property.

Alternatives: Other methods of application for numbers may be submitted for approval by the Road Authority. Use of any mechanical fixings such as screws or rivets is not permitted.

2.8.2 Hydrant marking

General: To assist emergency services to locate fire hydrants, bi-directional blue reflective pavement markers are to be placed adjacent to the centreline of the road and level with the hydrant in accordance with the Water Authority requirements as outlined below.

Requirement:

- The marker should be offset from the centreline towards the side of the road on which the hydrant is located.
- If there is no marked centreline at the marker location, a single bi-directional white marker can be placed on the centreline adjacent to the blue marker.

2.9 Vertical deflection devices

Design: Vertical displacement devices may be required when the existing road geometry does not sufficiently calm traffic to a safe speed. Devices shall be located clear of driveways to ensure bottoming of vehicles does not occur.

Requirement: Refer to *AGTM08* for guidance. Devices shall be lit to Australian Standard lighting requirements (*AS 1158* and *AS 60598*).

2.9.1 Raised pavement platforms

Design: Concrete raised pavement platforms should be used in estate development where enhanced pedestrian crossing safety or speed reduction is required. In retrofit areas concrete or asphaltic concrete raised pavement platforms may be used with the approval of the Road Authority. Consideration shall be given to the impact of the platform on overland flow drainage paths. Under special circumstances and with the approval of the Road Authority, raised pavement platforms in retrofit areas may be permitted on arterial roads subject to the requirements of *Vic Roads Road Design Note 03-07* being met.

Raised platforms shall not be installed at pedestrian desire lines unless they are provided with a Pedestrian (Zebra) crossing - refer to **Pedestrian crossings**.

Requirements: Raised pavement platforms shall be provided with reflective piano keys. Raised pavement platforms are detailed on *ACTSD-3531 to 3533.*

2.9.2 Asphaltic concrete humps

Design: Asphaltic concrete speed humps shall only be used in retrofit with the approval of the Road Authority. For maintenance reasons they are preferred in lieu of rubber speed cushions.

Requirement: Asphaltic concrete speed humps shall be provided with reflective piano keys. Consideration shall be given to the impact of the hump on overland flow drainage paths. Asphaltic concrete speed humps are detailed on *ACTSD-3533.*

2.9.3 Rubber speed cushions

Design: Rubber speed cushions shall only be used in retrofit with the approval of the Road Authority. Unless approved otherwise by the Road Authority the existing asphaltic concrete surface shall be replaced with new 100mm thick asphaltic concrete to prevent premature pavement failure and a strong bond between the epoxy fixed anchors and road pavement.

Requirement: Speed cushions shall be provided with reflective piano keys. Unless approved otherwise by the Road Authority speed cushions shall have the following geometric requirements:

- Provide 1.1m gap from kerb face to edge of cushion to allow cycles to bypass.
- Speed cushions shall be 75mm high and 2.0m long.
- Speed cushions on bus routes shall be 1.9m wide.
- Speed cushions shall be 1.9m wide or may be wider on non bus routes
- Gaps between speed cushions shall not exceed 1.1m.
- Gaps between speed cushions shall be located so that drivers are unlikely to cross the centreline to straddle the gaps between cushions

3 SIGNS

3.1 Regulatory and warning signs

Design: To *AS 1742.1, AS 1742.2, AS 1742.4, AS 1742.9, AS 1742.10, AS 1742.11, AS 1742.13,AS 1743, AS 1744, AS 1906.1*

Design guidance: *AGTM06*, and *AGTM10*

Requirements:

- Signage vertical and lateral positioning is to conform to *ACTSD-3601.*
- Support assemblies are to be as detailed on *ACTSD-3602.*
- Post sizes and footings are to be in accordance with details on *ACTSD-3630.*

3.2 ACT parking signs

General: **Appendix A** details all the sign identifiers and messages currently approved for use in the ACT together with the identifiers used on previous approved sign lists. These signs are pictorially depicted on *ACTSD-3701 to 3714* and a list of signs in numerical order is available on the Road Authority website.

Size: To simplify maintenance signs are to be 300 mm wide by 450 mm deep wherever possible. Signs with longer messages may be enlarged to 600 mm deep.

Requirement:

- Superseded signs are not permitted for use in new installations. Superseded signs may be used for maintenance when the required replacement of signs is minimal only with the approval of the Road Authority.
- The use of signs bearing different messages may be approved in special circumstances. These signs must be identified as “special” on the Traffic Control Device drawings for the project and a pictorial representation of the sign will be required on the drawings submitted for approval. Justification must be supplied for the use of special messages. The unique code will be assigned by TCCS - Traffic Management and Safety (TMS).

3.3 School speed zone sign assembly

Design: School zones in the ACT operate continuously between 8am and 4pm and details of the sign assembly (Sign No. R4-8(ACT)) required to define a school zone is shown on *ACTSD-3610.*

Requirement: Refer to GRSTMAS for guidance in appropriately locating the ACT school zone sign assembly and the appropriate use of A and B size signs.

3.4 Street name plates

Design: Street name signs are guide signs. Refer to *MIS 12 Guide signs* for design details.

Requirements: Street name plate assemblies are detailed on *ACTSD-3620*.

3.5 Guide signs

Design: Refer to *MIS 12 Guide signs*.

3.6 Ticket parking, three for free, park and ride signs

Design: For the purposes of sign colour, signs advising motorists of the operational aspects of ticket parking areas are considered to be service signs. These signs should include those which delimit the ticket parking area. The signs for use in the ACT are shown on *ACTSD-3720 to 3735* and *3750.*

Requirement:

- Colours: Signs including Park and Ride and Three for Free signs included within a ticket parking area are to have white lettering on a blue background.
- Signs are to indicate the location of ticket machines and list the costs and conditions of parking.

Exception: Park and Ride signs with regulatory effect in areas other than ticket parking areas are to be red on white.

3.7 Temporary traffic management signage

Design: *AS 1742.3*

General: The preparation and approval of Temporary Traffic Management (TTM) is the responsibility of the contractor undertaking the works. For projects where the management of traffic is considered critical to the safe movement of traffic and public around or through the construction site, then TTM concept plan should be prepared for the guidance only of tenderers. The contractor is to use the TTM concept plan in preparation of the plans submitted to the Road Authority for approval. All TTMs should be endorsed by the Superintendent prior to submission for approval by the Road Authority.

4 TRAFFIC SIGNALS

Design: To *AS 1428.4.1, AS 1742.14, AS 4113.2, AS 2144, AS 2276.1 to AS 2276.3, AS 2339, AS 2353, AS 2578,AS 2703, AS 2979* and *RMS TSD.*

Design guidance: AGRD4A, AGTM06, AGTM09, AGTM10 and linemarking and signage to be installed in accordance with *ACTSD-3540.*

Requirements:

- Cable and loop layout including numbering to be installed in accordance with *ACTSD-3901* with modifications to suit local site conditions as approved by the Road Authority.
- Hardware is to be installed in accordance with *ACTSD-3902* with the layout and numbering of signal pedestals, signal groups, pedestrian signal groups and detector loops as detailed.
- Installation of loop detectors is to be in accordance with *ACTSD-3911*
- Pedestals and push button details and locations are to comply with *ACTSD-3912.*
- The traffic controller housing footing including conduit alignments and locations are to comply with *ACTSD-3913.*
- Positioning and details of jointing boxes and layout of conduits between pedestals and jointing boxes are to comply with *ACTSD-3914.*
- Outreach joint use columns including footings are to comply with *ACTSD-3915.*

5 INTELLIGENT TRAFFIC SYSTEMS (ITS)

5.1 Variable speed zone signage

Design: Variable speed zone signs shall be located in conjunction with the Road Authority with guidance from *RMS Technical Direction TDT 2014/006.*

Requirements:

- Specific requirements to be provided by the Road Authority to address the location and purpose of the installation.
- Signs are to be of the type and installed to comply with *RITS006.*

5.2 Variable message boards (fixed)

Design: To *AS 4852.1* with guidance on signage design, location and placement from *RMS Technical Direction TDT 2005/02b.*

Requirements:

- Specific requirements to be provided by the Road Authority to address the location and purpose of the installation.
- Signs are to be of the type and installed to comply with *RITS001.*
- Road functionality including width of traffic and bicycle lanes must not be altered or compromised during the installation of Variable Message Boards (VMBs)

6 MATERIALS

6.1 Sign blades

6.1.1 Regulatory signs

Design: Regulatory signs are to be fabricated using reflective materials.

Requirements:

- refer *MITS 14 Road Signs*

6.1.2 Parking and information signs

Design: Class 100 sheeting is permitted for use on parking signs.

6.2 Sign supports

Design: Where the risk of damage to signage from traffic is high or the sign is in a paved surface (e.g. concrete, asphalt, segmental pavers) sign supports that allow rapid and economic replacement of a sign and/or support (e.g. aluminium sign socket system) are to be used. The protection and temporary traffic management that may be required to safely replace damaged signs and / or supports is to be considered in the selection of an appropriate signage stem for each location.

Timber supports for signs are not permitted. Timber can deteriorate rapidly in the ground leading to unexpected collapse with a potential to cause injury and property damage.

Requirements:

- All sign supports exposed to risk of damage from traffic are to be designed to be frangible or located behind appropriate safety barriers or outside the clear zone.
- Frangible post systems are to be in accordance with the *Design Guide for Roadside Signs, Queensland Department of Transport and Main Roads* or other approved proprietary post systems e.g. Signfix fluted aluminium poles.
- Sign poles and footings are to be designed with use of standard pole types as detailed on *ACTSD-3630.*

6.3 Road pavement markings

6.3.1 Longitudinal markings

Acceptable materials:

- Waterborne pavement marking paint with glass beads.
- Thermoplastic with glass beads.
- Two component cold applied material with glass beads and anti-skid material.
- Retroreflective raised pavement markers (RRPM).

Requirements:

- Thermoplastic when used longitudinally adjacent to on-road cycling facilities shall be specified with a thickness less than 4mm to prevent cyclist falls caused by “tram lining”.
- Retroreflective raised pavement markers should not be placed in front of driveways or pedestrian desire lines whenever possible.

6.3.2 Transverse lines and other markings

Acceptable materials:

- Waterborne pavement marking paint with glass beads and anti-skid material.
- Thermoplastic with glass beads and anti-skid material.
- Two component cold applied material with glass beads and anti-skid material.
- Waterborne paint with glass beads (White gore) to mark island noses and kerbs facing traffic as specified in this Design Standard
- Retroreflective raised pavement markers (RRPM).

7 DOCUMENTATION

Requirements:

All Traffic Control Device drawings shall be submitted for approval through the ProjectWise Portal.

ACT Government

Transport Canberra and City Services

SEPTEMBER 2021