# **SECTION 1**

# INTRODUCTION

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# **1.0 INTRODUCTION**

### 1.01 GENERAL

Pavement markings and other delineation devices on the road surface and adjacent to the roadway contribute to the overall operational efficiency of a roadway.

Pavement marking can increase traffic capacity, improve safety and contribute to the orderly use of design paths by drivers, particularly at critical points in the road system. Pavement markings are also used to supplement some of the traffic signs included in PART I of this manual.

Roadside markings and delineation devices assist drivers in their assessment of changes in the road alignment, particularly at night. Roadside markings also highlight the position of features within the road system that may be geometrically substandard or constitute a hazard to the motorist.

Uniform pavement and roadside markings are just as important as uniform signing. When marking motorways and other roads which have to cater for large traffic volumes and high speed manoeuvres it is necessary to use additional markings that have greater impact than those used on other roads lower in the roading hierarchy.

All markings used on or alongside roads, with the exception of pavement markings at fire hydrants, shall be authorised by the road controlling authority and should be maintained in good condition to remain effective.

Paint used for pavement marking on state highways shall meet the requirements of Transit New Zealand Specifications M/7 and M/7 Notes and shall be applied to the road surface as per Transit New Zealand specifications P/12 and P/12 Notes.

Thermoplastic used for pavement marking on state highways shall meet the requirements of Transit New Zealand Specifications M/20 and M/20 Notes and shall be applied to the road surface as per Transit New Zealand specifications P/12 and P/12 Notes.

Raised pavement markers on state highways shall meet the requirements of Transit New Zealand Specifications M/12 and M/12 Notes and shall be applied to the road surface as per Transit New Zealand specifications P/14(P) and P/14 Notes.

Local road controlling authorities may approve specifications for pavement markings different from those listed above.

NOTE: The use of reflectorised marking material is particularly specified for some markings in this manual. Where reflectorised material has not been specified, the road controlling authority may still apply reflectorised material at its own discretion. It is recommended that reflectorsised materials are appropriate for use when delineating for longitudinal lines such as lane lines or edge lines. Reflectorised lateral lines and markings have little reflective benefit.

#### 1.02 NON INTERSECTION PAVEMENT MARKINGS

SECTION 2: NON INTERSECTION PAVEMENT MARKINGS provides guidelines for mid block pavement markings used to define vehicle paths on the road surface.

Pavement marking guidelines are also provided for:

- cycle lanes,
- parking and no-stopping areas,
- shoulder markings,
- passing lanes, and
- flush medians.

#### 1.03 INTERSECTION PAVEMENT MARKINGS

SECTION 3: INTERSECTION PAVEMENT MARKINGS provides guidelines for pavement markings used to define vehicle paths on the road surface on the approaches and through typical intersection types and controls.

Pavement marking guidelines are also provided for:

- lane arrows to promote correct traffic lane usage,
- limit lines,
- continuity lines,
- auxiliary lanes, and
- flush medians and islands at intersections.

#### 1.04 MISCELLANEOUS PAVEMENT MARKINGS

SECTION 4: MISCELLANEOUS PAVEMENT MARKINGS provides guidelines for pavement markings used to define vehicle paths on the road surface on the approaches and through various standard situations not covered in the preceding sections.

Pavement marking guidelines are provided for:

- pedestrian crossings,
- railway level crossings, and
- one-lane bridges.

Details are also provided for the layout of:

- letters for word messages,
- raised pavement markers, and
- fire hydrant marking.

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### 1.05 DELINEATION AND HAZARD MARKINGS

SECTION 5: DELINEATION AND HAZARD MARKINGS provides guidelines that can be used for roadside markings and delineation devices. These are devices which can be considered in two broad categories:

- those that are self supporting and are used to define the roadway alignment, particularly at night but also in other conditions where visibility may be limited, and
- those that are fixed, painted or marked on dangerous obstacles in the vicinity of the roadway.

## 1.06 MOTORWAY PAVEMENT MARKINGS

SECTION 6: MOTORWAY PAVEMENT MARKINGS was withdrawn in June 2004.

It has been replaced by SECTION 12: MARKINGS AND DELINEATION of the new MANUAL OF SIGNS AND MARKINGS - PART III: MOTORWAYS AND EXPRESSWAYS (MOTSAM 3). The details given in this section of MOTSAM 3 also apply to roads that are similar in appearance to motorways and expressways and, in the public's perception, function as such.