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INTRODUCTION

This Bridge Manual sets out the criteria for the design of new structures and evaluation of existing structures. It covers those carrying road and/or pedestrian traffic, in which the main supporting members are of reinforced or prestressed concrete, structural steel, timber or aluminium, utilising beam or arch action, and spanning up to 100 m. It includes the design of culverts. It does not include cable supported structures, nor bridges subject to railway loadings.

It has been written as a performance specification, and methods have only been specified where they are considered essential to achieving a satisfactory design.

This edition supersedes the following previously published documents:

- 1933: "Road Bridges: Loads and Allowable Stresses", Public Works Department.
- 1943: "Highway Bridge Design Loadings and Tentative Preliminary Code", Technical Memorandum No.8, Public Works Department.
- 1956: "Bridge Manual", Ministry of Works.
- 1971, 1972, 1973, 1978: "Highway Bridge Design Brief", CDP 701, Ministry of Works and Development.
- 1973: "Bridge Classification and Deck Grading for Overweight Permits", CDP 703, Ministry of Works and Development.
- 1974: "Posting Weight Limits for Highway Bridges", CDP 704, Ministry of Works and Development.
- 1984: "Bridge Deck Widths and Side Protection", CDP 710, Ministry of Works and Development.
- 1989: "Bridge Manual", National Roads Board.
- 1991: "Bridge Manual : Design and Evaluation", (Draft for comment), Transit New Zealand.
- 1994, 2000: "Bridge Manual", Transit New Zealand

This edition incorporates major amendments to Sections 1, and a new clause 2.6. The manual has also been reformatted to facilitate future web based publication.

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Section 5 contains text, figures and tables from NZS 4203:1992(4) with or without modification. The main items adopted are Clause 5.2.1, Figures 5.2 (a), (b), and (c), Figure 5.3, and Figure 5.5 (replotted). Reprinted with permission of Standards New Zealand.

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Appendix B contains text, figures and tables taken from the Draft Austroads Bridge Design Code. Reprinted with the permission of Vic Roads and Austroads Inc.

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