



# Road Landscape Manual

Edition 2

# Road Landscape Manual

A Guide to the Planning, Design,  
Operation and Maintenance of Road  
Landscape Infrastructure

**2nd Edition, June 2013**

Prepared and issued by the  
Engineering & Technology Branch

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## Amendment Register

Issue / Rev No.	Reference Section	Description of Revision	Authorised By	Date
1	Road Landscape Manual	First Edition	Engineering & Technology Branch	1997
2	Road Landscape Manual	Second Edition	Engineering & Technology Branch	2013

## **Foreword**

The Road Landscape Manual (2nd Edition) provides guidance on the planning, design, operation and maintenance of landscape infrastructure in urban and rural environments for the Department of Transport and Main Roads, Queensland.

The landscape is an important element in the road environment and therefore must be considered in all planning, design, construction and maintenance projects. The appropriate design, implementation and management of landscape treatments are vital to user safety, longevity of the asset and protection of the environment. This demands a holistic and multi-disciplinary approach to planning and design activities to determine an appropriate outcome and whole of life cost acceptable to the community.

The information within this manual is sufficient to undertake normal daily work. Competent planners, designers and engineers shall apply the requirements within this document in an intelligent way. However, it is expected that when situations arise that cannot be resolved using the guide, the subject will be examined in more detail using relevant experts. Non-compliance with the requirements and intent of this manual must be considered a design exception and will require appropriate technical certification and approval by the Department of Transport and Main Roads, Queensland.

Julie Mitchell

**Chief Engineer**

**Engineering and Technology**


**June 2013**

## Important Information


The requirements of this document represent Technical Policy of the department and contain Technical Standards. Compliance with the department's Technical Standards is mandatory for all applications for the design, construction, maintenance and operation of road transport infrastructure in Queensland by or on behalf of the State of Queensland.

This Manual is a living document and will be revised and updated on a continuing basis as new information and techniques become available. The process will be enhanced and kept relevant and useful to users if the users continue to make appropriate contributions to the Manual. Feedback is therefore essential to the continued relevance of the document. Please send your comments and suggestions to the feedback email given below.

Approved by:

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General Manager (PD&O)

*Endorsed how much  
the update 7/9/11*  
  
*22/9/11*  
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Date

## **Acknowledgements**

The Content Owners of this new edition wish to acknowledge the effort of the various authors (both internal and external to the department) and members of steering committees involved with the first releases. Much of their work exists in this edition.

Key technical authors / contributors to the development of this edition are: Mr Michael Ostdick, Mr Julian Butler, Mrs Rani Ponomarenko, Mr Gavin Taylor, Mr Vincent Hsu, Mrs Andrea Jakobs and Mr Hayden Green. The Content Owners also acknowledge the departments Road Design Section who contributed to the development of this edition.

The on-going development and maintenance of the manual is the responsibility of the Road Design Section of Engineering & Technology Branch.

Manual content will be reviewed / updated / re-released as required, to reflect any changes to legislation, departmental policy and user feedback that impacts manual content.

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Listed below is an overall table of all sections of the manual. A more detailed table of contents is provided at the commencement of each of the four main parts.

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# Overview

June 2013

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## Overview Amendments – June 2013

### Revision Register

Issue / Revision No	Reference Section	Description of Revision	Authorised by	Date
1	-	Initial Release of 2nd Edition of Manual	Steering Committee	Jun 2013

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# Overview

## 1 Purpose of this Manual

The Road Landscape Manual provides guidance on the asset management processes required for transport infrastructure projects within Queensland. These processes include concept and detailed design, implementation and maintenance of landscape and urban design components of transport infrastructure.

The primary focus of this Manual is the integration of landscape and urban design components into the transport corridor. Integration is achieved by conserving, protecting and enhancing the diverse communities through which these transport systems pass. This Manual identifies and defines common landscape architecture and urban design practices to achieve integration.

The Manual aims to ensure that all transport infrastructure projects are designed and built in accordance with Departmental standards. These standards aim to achieve:

- a context sensitive design response that integrates and balances safety, aesthetics, community, economic and environmental values
- design solutions which promote sustainability and public amenity
- high quality and consistent landscape and urban design outcomes through the incorporation of design principles and objectives
- consistent practice, processes and standards for landscape and urban design through all project management phases
- design criteria, considerations and measures that enable transparent decision-making on technical issues
- application of environmentally friendly, sustainable and cost effective maintenance procedures without compromising safety
- efficiency in the maintenance of assets through an inclusive approach to corridor planning and management.

## 2 Who Should Use this Manual

This Manual targets design professionals actively involved in the concept and detailed design, implementation and maintenance of transport infrastructure. By establishing and implementing measures, minimum design criteria and technical requirements, the Department aims to manage public expectations and produce high quality, consistent outcomes.

This Manual is the Department's primary technical reference for professionals engaged in the planning and design of landscape and urban design assets for transport infrastructure.

### 3 Responsibilities of the Department

The Department has several responsibilities to fulfil and balance in relation to the assessment, planning, design and management (Figure O-1). These are:

- Legal requirements
- Corporate obligations
- Safety
- Aesthetics
- Environmental
- Community
- Economic.

Through the application of the processes identified in this Manual, these responsibilities will be addressed.

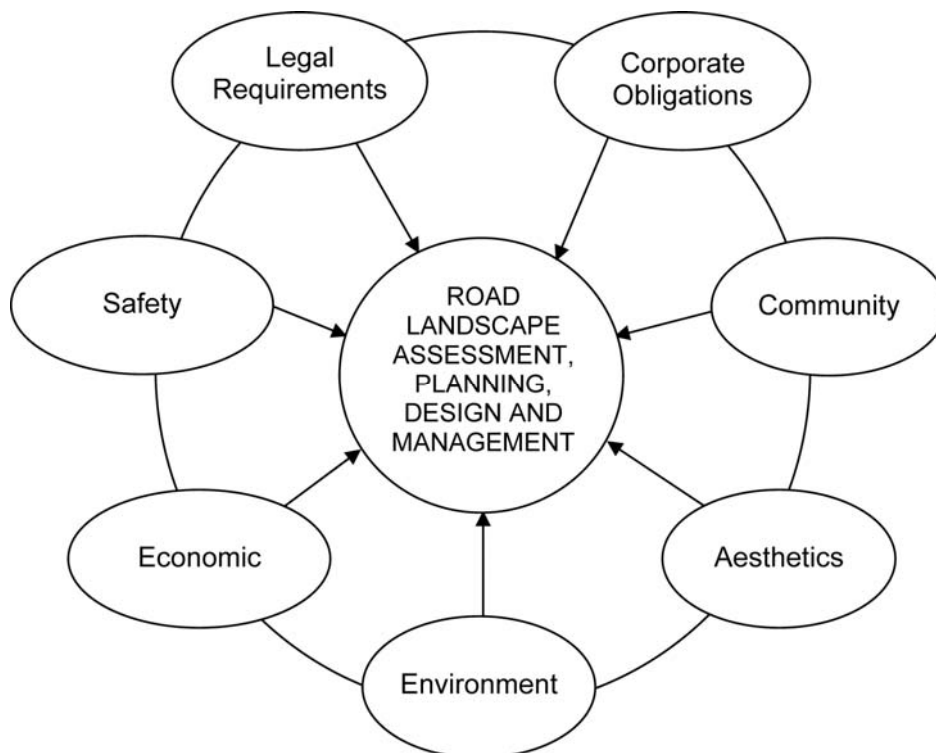


Figure O-1: The Department's responsibilities and relationship to the road landscape.

## 4 Relationship to Departmental Processes

Transport management throughout Australia is structured at three levels and involves input from Federal, State and Local Government Authorities with assistance from other agencies, conservation and community groups (Figure O-2).

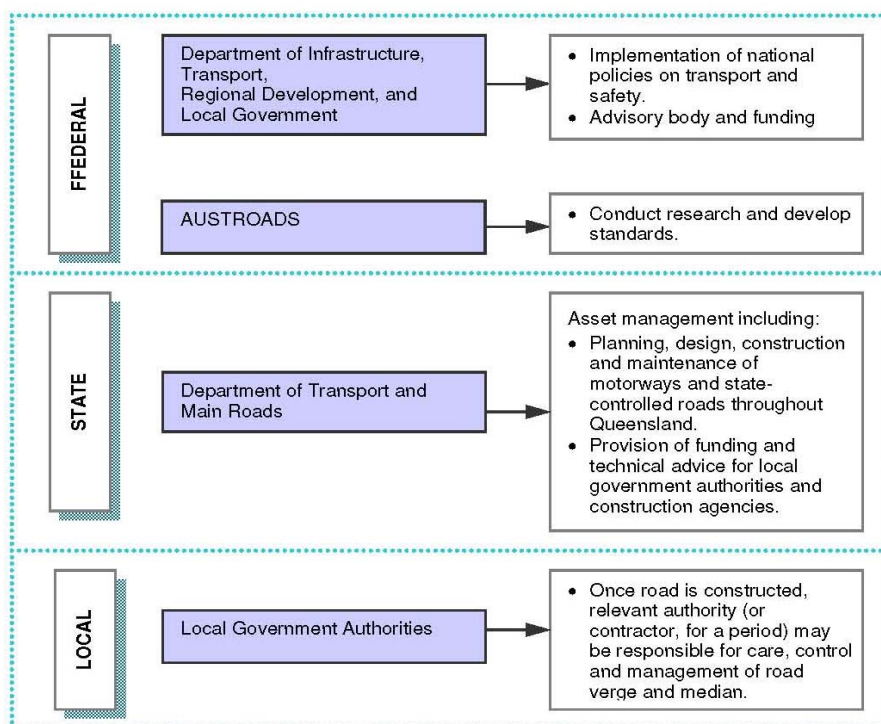


Figure O-2: Transport infrastructure managers in Australia.

This Manual focuses on the processes and roles of those involved in state transport management. Within Queensland, the responsibility for concept and detailed design, implementation and maintenance of transport infrastructure rests with the regional offices.

## 5 Feedback

Feedback on the content of this Manual may be sent to the Department's Landscape Architecture and Urban Design Unit at this email address: [info\\_LAUD@tmr.qld.gov.au](mailto:info_LAUD@tmr.qld.gov.au) or [mr.techdocs@tmr.qld.gov.au](mailto:mr.techdocs@tmr.qld.gov.au)

## 6 Document Control

Users may obtain an electronic copy of Departmental Manuals by accessing [www.tmr.qld.gov.au](http://www.tmr.qld.gov.au). Versions available on-line are the most current and up to date version available for use.

# Guide to Using the Manual

June 2013

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# Guide to Using the Manual

## 1 Purpose of this Manual Structure

This Manual is structured in four parts which reflects the progression in transport infrastructure management from concept and detailed design through to implementation and maintenance.

**Part A** addresses landscape and urban design principles, policy, asset management and design theory. It introduces the principles of integration and sustainability that link to whole of government strategies, legislation and initiatives. Minimum levels of service are established for the asset management of the network to inform design and maintenance outcomes. Contemporary design theory provides a basis for understanding the application of design principles.

**Part B** provides guidance on the processes that commence in the conceptual design and subsequent phases. This includes the landscape architect and urban design brief and scope of services. Guidance is provided for the level of design service required for small, relatively simple projects through to the large and complex. The community engagement and landscape assessment processes are outlined. The assessment process considers impacts and mitigation strategy development unique to the project and alternatives.

**Part C** provides an overview of the design process and detailed design development. Alternative methods and means of obtaining the desired outcome are discussed. Specific design criteria and considerations, minimum technical requirements are established for the most common components and situations likely to be encountered. This part includes a detailed discussion of how to achieve the strategic objectives of aesthetics, safety, environment, community and economics.

**Part D** provides guidance on construction and operations for transport infrastructure projects.

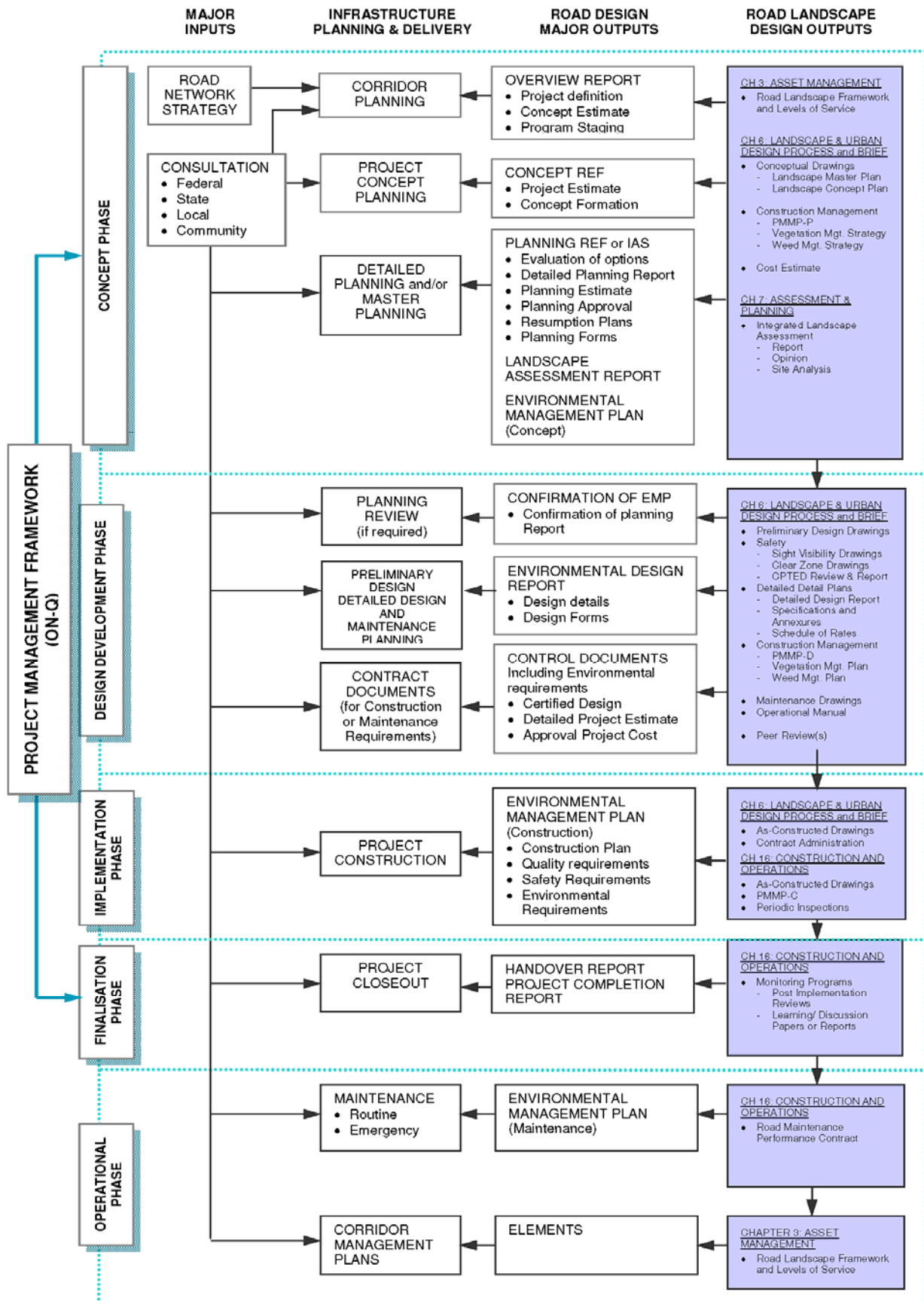


Figure G-1: Design process and relationships.

## 2 Manual Precedence

The Road Planning & Design Manual - A Guide to Queensland Practice takes precedence over this Manual. For the current version of this Manual, refer to [www.tmr.qld.gov.au](http://www.tmr.qld.gov.au)

Other technical Manuals that take precedence over this Manual include:

- *Environmental Management System* - for legislative requirements
- *Fauna Sensitive Road Design* - for fauna movement devices
- *Road Drainage Design* - for drainage devices
- *Road Traffic Noise: Code of Practice* - for noise attenuation barriers
- *Manual of Uniform Traffic Control Devices* - for traffic management and regulatory signage.