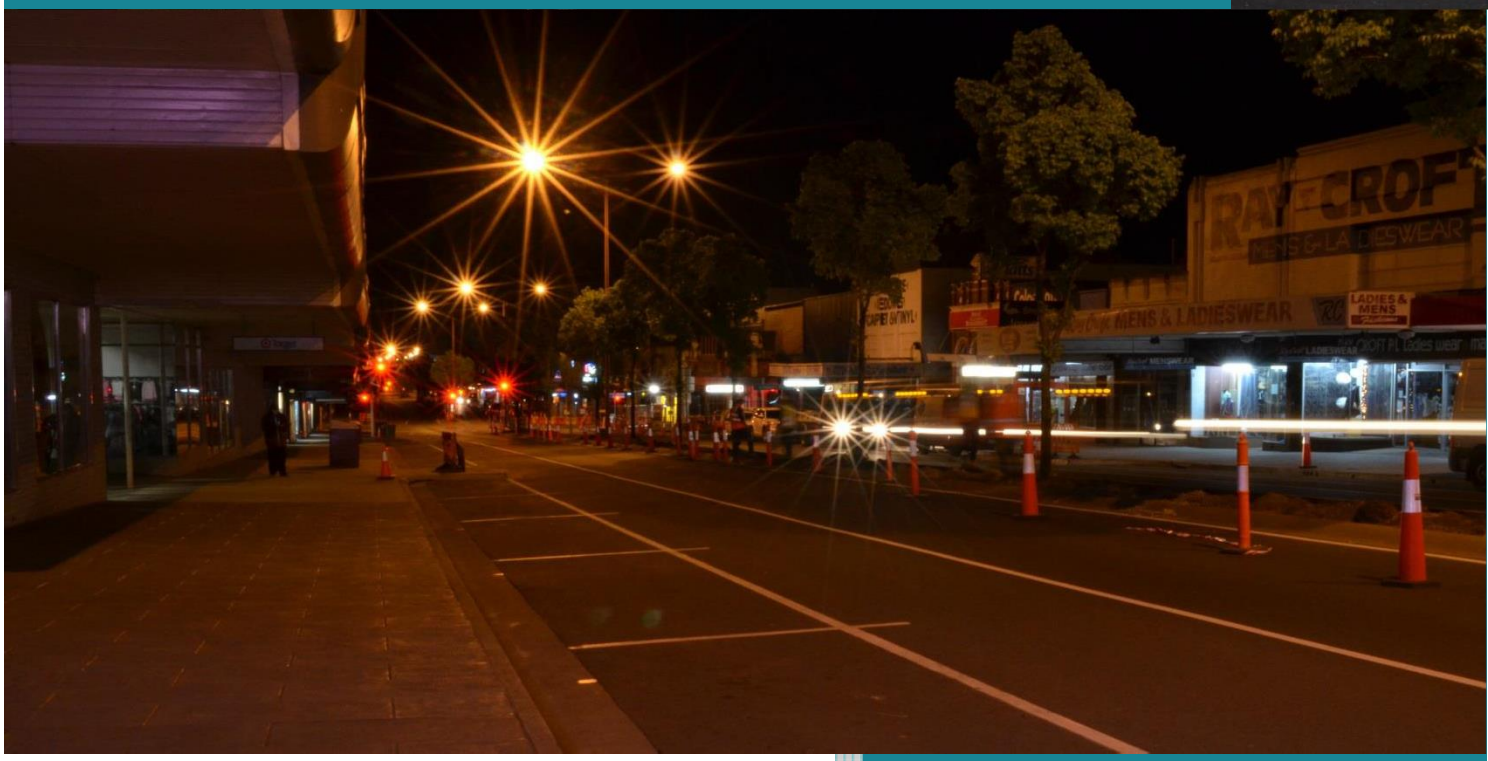
Road Management Plan



Colac Otway Shire

2021

Road Management Plan

GENERAL

Distribution

The General Manager of Environment and Infrastructure shall be responsible for the:

- Control of this Plan,
- Distribution of the Plan, and
- Control and issue of any amendments.

Amendment Register

Issue	Date	Details	Amendment By
Version 1.1	April, 2006	Amendment No. 1	Gary Dolan **General Manager, Infrastructure & Services**
Version 2.0	June, 2009	Amendment No. 2	Neil Allen **General Manager, Infrastructure & Services**
Version 3.0	September, 2013	Amendment No. 3	Adam Lehmann **Acting General Manager, Infrastructure & Services**
Version 4.0	January, 2018	Amendment No. 4	Tony McGann **General Manager, Infrastructure and Leisure Services.**
Version 5.0	June, 2021	Amendment No. 5	Tony McGann **General Manager, Environment and Infrastructure.**

CONTENTS

1 INTRODUCTION

Colac Otway Shire is the road authority for those roads within the municipality for which it accepts management responsibility. Colac Otway Shire exercises its duty of care to the public in a number of ways, including proactive and reactive inspections as well as long-term planning and undertaking repairs and maintenance to the road network that it manages. Colac Otway Shire demonstrates its duty of care through having in place a reasonable regime to:

- Inspect the road network to discover defects that exceed stated intervention levels; and
- Plan and implement repairs to address these defects

Where a defect is found that exceeds a stated intervention level, Council may satisfy its duty of care to road users by taking one or more of the following actions, depending on the circumstances of any particular case:

- Prioritising the condition in a capital works or maintenance program;
- Installing appropriate signs warning of the dangers;
- Closing the road; or
- Repairing the defect to bring it back to below the stated intervention level

2 PURPOSE

The Road Management Plan (referred to hereafter as the 'Plan') sets the relevant standards and policy decisions in relation to the discharge of Council's duties in the performance of its road management functions.

This Plan details the management systems that Council will implement to maintain, upgrade and operate its physical road assets cost-effectively.

Colac Otway Shire through the Plan accomplishes its duties by combining engineering principles with sound business practices and providing tools to facilitate an organised logical approach to decision making.

3 LEGISLATIVE REQUIREMENTS

3.1 Local Government Act 1989 & Local Government Act 2020

During the time that the Plan is being reviewed, the Local Government Act 1989 (hereafter after referred to as the "LGA 1989") is gradually being replaced by the Local Government Act 2020 (hereafter referred to as the "LGA 2020"). The staggered introduction of the LGA 2020 is occurring over the current period up to 1 July 2020.

There are a number of sections of the LGA 1989 that are currently listed as continuing indefinitely.

It is therefore necessary that the transition between the LGA 1989 and LGA 2020 is carefully monitored throughout the life of the Plan in case the transition arrangements change over time.

Where a section of either the LGA 1989 or LGA 2020 is mentioned in the Plan, this is the appropriate current provision that is to be applied to the Plan.

Section 205 of the LGA 1989 is noted as continuing indefinitely and provides for "Councils to have the care and management of certain roads" and that "This section is subject to the Road Management Act 2004".

3.2 Road Management Act 2004

This Plan has been prepared in accordance with the Road Management Act, 2004 (referred to hereafter as the "Act").

Pursuant to Section 36 of the Act, the Colac Otway Shire Council is the designated 'Coordinating Road Authority' for municipal roads within the Shire and is responsible for their care and management.

As the Coordinating Road Authority, Council must ensure that if a road is reasonably required for public

use that it is kept open for public use and may, at its discretion, carry out work on the road. Council is under no obligation to do any specific work on any road or footpath other than as specified in the Plan.

3.3 Codes of Practice

Council is guided in the application of the Plan through Codes of Practice, as part of the Act. The codes set out benchmarks of good practice in relation to the road management duties of councils and allow scope for individual councils to set standards and allocate road maintenance priorities according to their particular level of resources.

The following Codes of Practice apply (and can be found on the VicRoads website):

- Road Management Plans
- Operational Responsibility for Public Roads
- Management of Infrastructure in Road Reserves
- Worksite Safety Traffic Management

3.4 Statutory Responsibilities of the Road User

A road user has specific duties in the respect to the use of a public highway, including having regards to the rights of other road users. A road user must also take all due care to avoid causing the risk of damage to a public highway or any infrastructure located in the road reserve.

A person who drives a motor vehicle on a public highway must drive in a safe manner having regard to all the relevant factors including the:

- Standard of construction of the road;
- Prevailing weather conditions;
- Level of visibility;
- Condition of the motor vehicle;
- Traffic conditions;
- Relevant road laws and advisory signs; and
- Physical and mental condition of the driver.

The Road Safety Act 1986 requires other road users (other than those driving a motor vehicle) to use a road in a safe manner, having regard to all the relevant factors. Other obligations of road users are also set out in the Road Safety Act 1986 in regard to relationships with other road users and damage to road infrastructure.

4 COUNCIL OBJECTIVES & POLICIES

The Colac Otway Shire is committed to continual improvement in the way it manages its road network and associated assets. A fundamental component of this task is the maintenance of or the management of the ongoing performance and condition of this infrastructure.

This Plan provides a vision for how Council plans to manage its road network. This vision aims to ensure that the community is provided with a road system that returns optimum economic benefit for the life of the asset while recognising social, safety, environmental and user needs.

This document provides a policy framework to guide Council's management of the road infrastructure under its authority. It defines roles and responsibilities for decision making, outlines the way management requirements should be assessed, and addresses appropriate methodologies for roads-based funding.

A number of Council policies and plans support the road management process, as described below.

4.1 Council Plan

The Council Plan outlines the principles that support Council's commitments and serves as a standard by which community outcomes can be assessed. The Council Plan is a dynamic document which is updated annually to reflect changing priorities and impacts of external factors.

This Plan is consistent with Council's commitment to providing and maintaining infrastructure and assets that meet community needs now and in the future, whilst providing best value to the community. The specific goals of Council's vision are[1]:

- Assets and infrastructure meet community needs;
- Our places are managed for long term sustainability;
- Towns and places are welcoming and attractive;
- Leadership in natural environment through good management practices;
- Delivering our capital works program; and
- Emergency management is coordinated locally and on a regional basis

4.2 Risk Management Policy

The purpose of this policy is to provide a framework for risk management, and to define the responsibilities of staff and management in the risk management process. The Colac Otway Shire is committed to managing risk by logically and systematically identifying, analysing, assessing, treating and monitoring risks that are likely to adversely impact on Council's operations.

For all significant risks associated with Council's road infrastructure appropriately planned actions are determined and implemented. These actions include capital development, maintenance and/or operational enhancement.

4.3 Other Relevant Council Policies

The following Council policies support the road management process and in particular the applicability to the assets described in Section 5.6.6 "Other Assets".

- Asset Management (Council Policy No. 13.4)
- Customer Service (Council Policy No. 2.6)
- Street Tree Management (Council Policy No. 13.6)
- Special Rate and Special Charges (Council Policy No. 11.3)

4.4 Key Stakeholders

A stakeholder represents any groups or individuals having an interest, in this case, the service provided by Council's road network.

The stakeholders in the management of Council's road and other related assets are many and often their needs are wide-ranging. The relevant key stakeholders are:

- Local residents including private car drivers, cyclists, pedestrians, etc.;
- Industrial and commercial operators and other transport services;
- Emergency services;
- Enforcement agencies;
- Primary producers;
- Land developers;
- Other Government Departments;
- Tourists and visitors to the area;
- Utilities as prescribed in section 3 of the Road Management Act 2004; and
- Council as the custodian of the network, including all internal and external support staff.

The community's needs and expectations are becoming more demanding manifested by demands for services that provide better quality, value for money, environmental awareness and relevant value

[1] The current Council Plan is the version titled 2017-2021 (revised 22 July 2020) and may be subject to change with the development of the new Council Plan (due for adoption in 2021).

adding. However, it should be noted that the Act does not require a road authority to upgrade any road to a standard higher than it was originally constructed.

5 PUBLIC ROADS NETWORK

5.1 Municipal Public Roads Register

The Road Management Act 2004 requires Council to keep and maintain a Municipal Public Roads Register, and ancillary areas for which it has the responsibility for managing operational functions.

Public Roads are municipal roads which meet the definition as prescribed under the Road Management Act 2004 and have been determined by Council, acting as a Coordinating Road Authority, to be roads reasonably required for general public use. The definition of a municipal road under the Road Management Act 2004 includes any road within the municipality which is not a State road, including any road which:

- Is a road referred to in section 205 of the Local Government Act 1989, which indicates certain roads for which Council is responsible for care and management;
- Is a road declared by the Department of Transport to be a municipal road under section 14(1)(b) of the Act: and
- Is part of a Crown land reserve under the Crown Land (Reserves) Act 1978 and has the relevant municipal council as the committee of management.

Council's Register of Municipal Public Roads is available for public inspection upon request. This document may be viewed at both the Colac and Apollo Bay Customer Service Centres during normal business hours, or on Council's website.

Assets on municipal public roads that the Colac Otway Shire is responsible for and which this Road Management Plan incorporates include:

- Road surface, pavement, and earth formation;
- Surface drainage systems on the road reserve;
- Signs, guideposts, line marking, barriers, and retaining walls;
- Footpaths and shared pathways;
- Parking areas,
- Other road related infrastructure.

Note: Bridges and major drainage structures are not included in the Plan as they are subject to an annual Level One inspection by an accredited person who may not necessarily be a Council staff member.

A public highway is not a public road for the purposes of the Act unless and until it is registered on Council's Municipal Public Roads Register.

Council reserves the right to review the status of public highways as public roads, should they not appear on its Municipal Public Roads Register. For example, Council may wish to create a new road on an unused road reserve that is not part of a development.

5.1.1 Criteria for Determining Whether a Road is reasonably required for General Public Use

A road is considered a Public Road when Council has made a decision that the road is reasonably required for general public use and hence included in the Municipal Public Road Register.

When deciding on which roads should be included or not included on the Register the very broad test is 'is the road reasonably required for general public use? This test can be refined into more specific criteria that will provide a fair, consistent and justifiable guide for Council when deciding on which areas need to be added to the Register.

For a road to "be reasonably required for general public use", consideration should be given, but not necessarily limited to the following:

- The number and nature of separately owned and occupied properties abutting onto the road or requiring the road for access purposes;

- Whether the properties which abut the road or require the road for access purposes have alternative access rights;
- Whether the road connects into, and forms part of, the wider network of Public Roads;
- Whether the road contains assets owned and managed by public service authorities (gas, electricity, telecommunications, sewerage, water); and
- Whether the road is safe for public access (no horizontal or vertical alignment issues, existing pavement, suitable drainage, no large trees or obstacles restricting vision).

5.1.2 Maintenance Standards

All roads in the Municipal Public Road Register including footpaths and bridges will be maintained to a standard as specified in this Plan.

5.1.3 Funding of Public Road Works

Council is not obliged to undertake any works on roads that are not registered as Public Roads. With regards to a private street scheme, whereby the road is constructed as part of a Special Charge project, it is assumed that as soon as the road is handed over to Council after the Defects Liability Period, the road is then added to the Register of Public Roads.

Developers generally fund the construction of new infrastructure e.g. roads, footpaths, drainage, etc. as part of new subdivision developments. This leads to an expansion in Council's asset portfolio for which it is responsible.

The Colac Otway Shire assumes responsibility of public highways created though expansion at registration of subdivision, providing that all infrastructure is constructed to meet Council's minimum specifications.

5.2 Sealing of Unsealed Roads

Council has developed a process for the assessment of whether a road should be sealed or unsealed.

5.2.1 Traffic volume criteria

- Unsealed roads that carry in excess of 250 vehicles per day will be automatically referred to the long-term Capital Improvement Program for prioritisation for sealing in accordance with the Capital Works Evaluation Guidelines.
- Unsealed roads that carry less than 100 vehicles per day will generally not be considered for sealing unless there is a contribution from adjacent landowners in accordance with the Special Rates and Charges Scheme provisions.
- Unsealed roads that carry between 100 and 250 vehicles per day must meet at least 5 of the following criteria before being considered for sealing unless there is a contribution from adjacent landowners in accordance with the Special Rates and Charges Scheme provisions:
  - Casualty crash 5 year history
  - Longitudinal gradient in excess of 5%
  - Heavy vehicles percentage in excess of 15%
  - School bus route
  - Development density greater than 50 houses per kilometre
  - Average house setback less than 20m from road reserve (dust problems)
  - Reactive maintenance more than 3 times per annum

5.2.2 Other criteria

The following criteria may also be used to determine the justification of whether a road should be sealed or left unsealed.

- Links to existing sealed roads
- Road hierarchy classification
- Planning Scheme and future development potential Infrastructure Services

- Traffic generators
- Customer request history
- Road condition and maintenance costs
- Road geometry and road safety
- Roadside vegetation and biodiversity

5.3 Road Discontinuance

Council may, in accordance with Section 12 of the Act, discontinue a public highway or part of a public highway via a notice published in the Government Gazette.

If a road or part of a public road is discontinued, Council must specify all details in its register of public roads.

5.4 Road Naming and Renaming

Where a road (including footpath or bridge) is required to be named or renamed, either Schedule 10 of the LGA 1989 (whilst in force) or Section 11(7) of the LGA 2020 may be used.

5.5 Road Hierarchy

Colac Otway Shire is a unique municipality with major topographical, climatic and geological differences within the shire that have a direct impact on the ability of Council to provide a suitable road network. If Council is to provide a sustainable road network system, its Road Classification system must take into account these differences. A Classification system and Hierarchy was adopted as part of this Plan.

The Austroads Guide to Traffic Management – Part A – Network Management Strategies, Colac Otway Planning Scheme, Victorian Grants Commission and VicRoads definitions were reviewed for applicability to the Urban and Rural areas of the Colac Otway Shire.

The classification system adopted is as follows:

- Primary Roads
- Secondary Roads
- Minor Roads
- Other Roads – Fire Access Track etc.

These are detailed in Section 5.5.1.

The road hierarchy is applied to the defects shown in Appendix A Maintenance Performance Criteria.

5.5.1 Local Road Classification

The classification system detailed below takes into consideration the above key issues and establishes a clear distinction between each classification.

Road Network

Hierarchy Identifier	Name	Explanatory Notes	Road Surface
P	Primary	• Direct linkage between significant population centres and major traffic generators and supplementary to arterial road system within the municipality • High heavy vehicle count • Access to major industries and tourism nodes • Generally >250 vpd	Usually a sealed surface
S	Secondary	• Carry moderate volumes of traffic and provide access by linking local areas to primary and arterial roads. • Also provide links between the various minor roads. • Cater for, but may restrain, service and heavy vehicles. • Minimum two clear traffic lanes • Generally 100-250vpd	May be either sealed or unsealed surface
M	Minor	• Carry only local traffic • Primary function is to provide property access • Medium usage access to rural properties generating regular and consistent vehicle usage.. • Rural bus route minimum standard • In the case of access to a single property with a residence, the road will only be maintained to the closest boundary of that property, • Occasional usage property access routes • Maintained infrequently (less than annual) • Generally <100vpd	May be either sealed or gravel surface, in some cases just formed or natural surface

OR	Other Roads - Fire Access Track (No Primary Access to Residential Property)	• Perform a very low order public access function • Specific purpose access tracks not intended for general access • Provide only occasional access to non-residential property. • Single vehicle access and low speed. • Dry weather road only. All year-round access is not guaranteed • Fire Tracks or emergency access points only maintained by Council where Council has agreed to do so as a community emergency service and they are listed in the Municipal Fire Prevention Strategy	May be gravel surface, formed or natural surface.

Footpath Network

Hierarchy Identifier	Name	Explanatory Notes	Footpath Surface
P	Primary	Primary footpaths provide connectivity to the most popular destinations, including shopping precincts, community facilities, education facilities and schools, medical facilities, sporting facilities, transport hubs, etc. Primary footpaths have a width of at least 1.5 metres. Shared paths are 2.5m wide as per Austroads Standards and are classified as Primary for intervention level and target response time purposes.	Concrete or other approved equivalent surface
L	Local	Local footpaths provide public pedestrian access between residences and primary footpath network as well as linkages between property frontages in residential areas.	Concrete or other approved equivalent surface. "Equivalent" means an all-weather hard surface compliant with *AS1428.1-2009 Design for access and mobility, Part 1: General requirements for access - New building work*

5.6 Demarcation of Responsibility

Council is responsible for the majority of the roads within the municipality. These are known as Local Roads and are listed on Council's Register of Municipal Public Roads.

The Register of Municipal Public Roads and associated maps define the roads for which Council has operational duties as a road authority. Operational functions, for the purposes of this road management plan, relate to the establishment of standards for the construction, inspection, maintenance and repair of road infrastructure.

Various infrastructure assets, for which Council has no management responsibility, may exist in the road network within the municipality. These assets are owned and managed by service authorities, individuals and other statutory bodies.

The Plan does not apply in the case of non-road infrastructure as defined in Section 3 "Definitions" of the Act.

5.6.1 Department of Transport

The Department of Transport is the coordinating road authority for the declared arterial road network within the municipality pursuant to Section 36 of the Act. Section 37 of the Act sets out those parts of the arterial road network for which Council is the responsible road authority, across urban and rural areas.

Arterial roads located in the Colac Otway Shire are as follows:

Route No.	Road Name	Route No.	Road Name
C159	Beech Forrest-Lavers Hill Road	C161	Gellibrand River Road
C159	Beech Forrest-Mount Sabine Road	C147	Grassy Vale Road
C119	Birregurra Road	B100	Great Ocean Road
C152	Birregurra-Deans Marsh Road	B140	Hamilton Highway
C119	Birregurra-Forrest Road	C163	Irrewillipe Road
C157	Cape Otway Lighthouse Road	C156	Lavers Hill-Cobden Road
C146	Colac-Ballarat Road	A1	Princes Highway (West)
C161	Colac-Carlisle Road	C119	Skenes Creek Road
C154	Colac-Forrest Road	C163	Timboon-Colac Road
C155	Colac-Lavers Hill Road	C159	Turtons Track
C155	Corangamite Lake Road	C152	Warncoort-Birregurra Road
C119	Forrest-Apollo Bay Road		

In the situation where the public road is an arterial road within an urban area, the Department of Transport is the Coordinating Road Authority, excepting the following instances where Council has responsibility for all local components of the road system. These are:

- Service road traffic lanes and shoulders
- Pathways outside of through carriageways and central medians

- Indented parking bays and any other part of the roadway located 'kerb to kerb' that could not be made available for through traffic (being located either on the side of the road, in the outer separator or in the central median), and adjacent kerb and channel
- Drainage pits that are in the road reserve
- Off road bicycle paths within the road reserve
- Road markings for all parking bays, plus road markings on service roads
- Local signage including street name signs, local direction signs, parking signs for the control of stopping or parking, and advance warning (but not advance direction) signs on municipal roads
- Tactile Ground Surface Indicators (TGSIs) in footpaths and kerb ramps and at bus stops (except at central medians), and
- Pedestrian fencing outside of central medians, and fences, barriers etc. and vegetation in the central median

(An urban area is defined in section 3 of the *Road Management Act 2004*).

In the situation where the public road is an arterial road outside an urban area, the Department of Transport is the Coordinating Road Authority; however Council is responsible for service roads, off road bicycle paths within the road reserve, pathways, associated local signage, and underground drainage that is part of a municipal drainage scheme.

For definition of the limits of responsibility between VicRoads and Council, where local roads intersect with arterial roads in an urban and rural environment, refer to the Code of Practice for Operational Responsibility for Public Roads.

5.6.2 Department of Environment, Land, Water & Planning

Within the municipality, a number of Crown Land roads exist in areas such as parks and forests, for which Department of Environment, Land, Water & Planning (DELWP) or Parks Victoria has management responsibility. In cases where such roads are maintained by Council, either in part or whole, to provide access to a resident(s), a memorandum of understanding should exist between the Council and the relevant authority.

5.6.3 Adjoining Municipalities

The Act requires that a road authority be responsible for the operational functions of a road. In the instance of boundary roads with other municipalities, the responsibility is allocated according to an agreement between each municipality.

5.6.4 Rail Operators

The *Rail Safety Act 2006* requires rail operators and road managers to identify and assess risks that may arise from operations at certain interfaces (i.e. rail crossings), and seek to enter into safety interface agreements to manage those risks.

Within the Colac Otway Shire, V/Line and VicTrack, as rail operators, are generally responsible for installing and maintaining all infrastructure located at rail crossings (e.g. crossing position signs together with other signs, barriers, gates, flashing lights, etc.).

Council is generally responsible for the erection and maintenance of advance warning signs and all pavement markings associated with the approaches to rail crossings on municipal roads.

Council is responsible for road maintenance up to 3 metres from the nearest rail track on the approach to a level crossing.

5.6.5 Service Authorities

Many utility agencies utilise a road for their infrastructure. Non-road infrastructure within the road reserve is the responsibility of the person or body that is responsible for the provision, installation, maintenance, or operation of that particular asset.

A listing of typical utility assets found within a road reserve, and the relevant management authority is given below.

Asset Type	Management Responsibility
Street Lights	Powercor
Telecommunication infrastructure assets	Telstra, Optus and NBN
Gas infrastructure assets	Tenix Gas and SP Ausnet
Water & Sewerage infrastructure assets	Barwon Water and Wannon Water
Electricity infrastructure assets	Powercor
Traffic Signal Installations	Department of Transport
Rail Crossings	V/Line and VicTrack

Assets or services within a municipal public road for which Council is not responsible for include gas pipes, water and sewerage pipes, cables, electricity poles, bus shelters, public telephones, and mail boxes.

5.6.6 Other Assets

In relation to provision of access from adjoining properties, there are a number of assets within a road reserve for which Council has no obligation to construct or maintain. Assets of these types are described as Non-Road Infrastructure and include the following:

5.6.6.1 Vehicle Crossings

Generally, in urban areas, the adjoining property owner is responsible for maintaining the portion of a vehicle crossing (i.e. driveway) located between the carriageway and the abutting footpath. Where there is no footpath, the property owner is responsible for that part of the driveway which extends from carriageway to the fence line. This also applies to vehicle crossings located in rural areas where the property owner is responsible for all of that part of the driveway between the edge of the road shoulder and the fence line.

The construction of a vehicle crossing and ongoing maintenance is to be carried out to meet Council's requirements. The property owner is also responsible for the maintenance of the immediate surrounds impacted on by the vehicle crossing to ensure that it is in a safe condition. This includes the conduit under the vehicle crossing if it was installed by the property owner.

The respective zones of maintenance responsibility for urban and rural roads are shown in *Figures 1, 2 and 3* below.

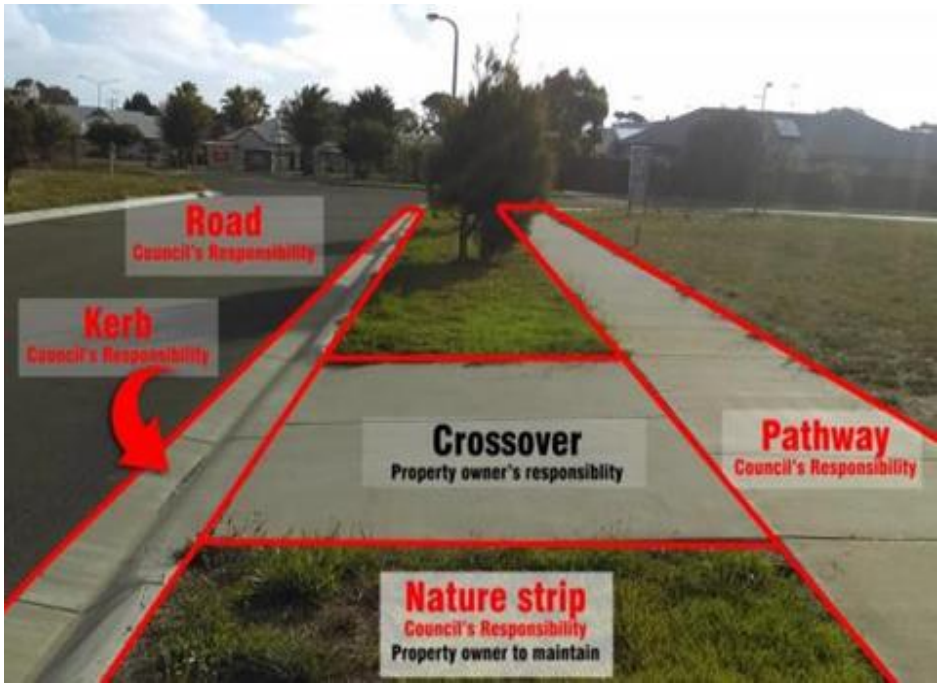
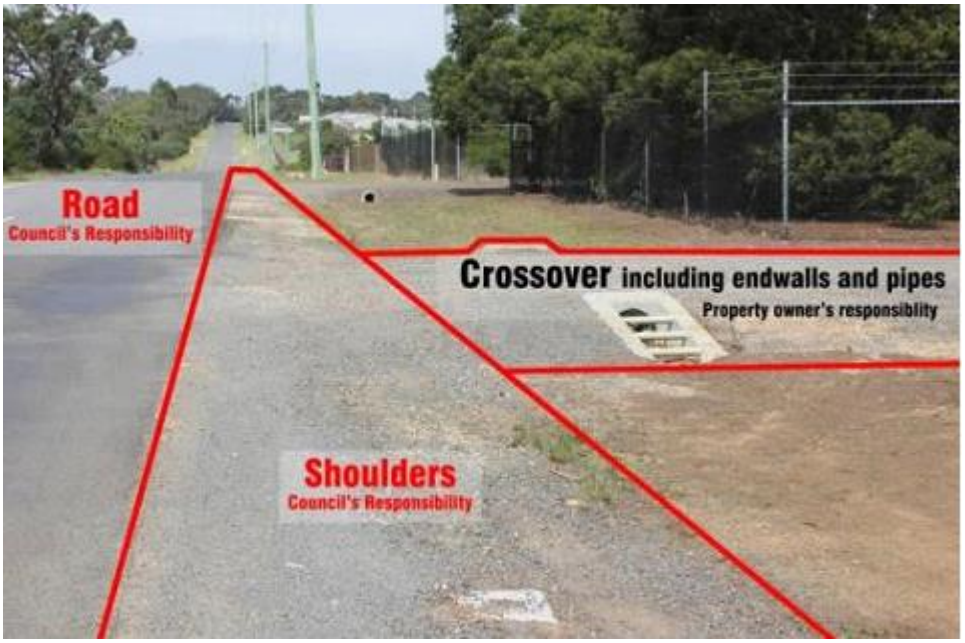


Figure 1 – Zones of Responsibility – Urban Street

Figure 2 – Zones of Responsibility – Rural Road with Paved Entrance



5.6.6.1 Roadside Assets

Nature strips and infill areas are those residual areas between the edge of road or back of kerb and the property boundary not occupied by a footpath or vehicle crossing. These are normally sown to grass and may contain other features such as street trees and utility poles and underground services.

Section 107 of the Act specifically excludes responsibility for a road authority to inspect, maintain or repair roadside areas. Council will only undertake urgent works on a nature strip where there is an unreasonable safety risk reported by a customer and confirmed via a reactive Council inspection, or identified through programmed inspections of nearby/adjacent road related assets

Responsibility for maintenance of the nature strip areas is generally left to the abutting property owner as part of the presentation of their property and general appearance of the local streetscape.

Service authorities are required to reinstate any disturbed nature strip areas to a condition which existed prior to any excavation works in relation to the installation or maintenance of their infrastructure.

Street trees within the road reserve are managed by Council, however an abutting owner has the responsibility to keep a road or footpath clear of vegetation growing from their property. Council may direct the property owner to trim any overhanging branches under provisions of its Local Laws.

Council's Street Tree Management Policy provides guidance on the responsibility of landowners in respect of vegetation growing on their property or having been planted on the road reserve by them.

Council's Local Law No.2 enables Council to enforce the requirements of the policy and this section of the Plan on the landowner.

5.6.6.2 Property Stormwater Drains

Property stormwater drains are constructed within the road reserve from the property boundary to a discharge outlet in the kerb, table drain or connected directly to Council's underground drainage system. Property drainage lines directly benefit the property and as such are the responsibility of the owner of the property being served to construct and maintain.

5.6.6.3 Stock Underpasses

A stock underpass is generally a box culvert type structure constructed for the purpose of providing a safe under road crossing and is constructed at the cost of the landowner.

A landowner that constructs a stock underpass on a local road must first seek the permission of Council and sign a section 173 Agreement (Planning and Environment Act 1987) with Council that includes requirements for the landowner to maintain the structure. A stock underpass shall be designed in accordance with all relevant VicRoads Guidelines, Australian Standards, and other applicable design codes.

Council has a responsibility to maintain the road pavement areas, seal markings and guideposts across the stock underpass. Responsibility for the maintenance of the structure, including attachments such as guardrail, stock lanes, fencing and stock underpass drainage remains with the landowner for the duration of the agreement.

Regardless of maintenance obligations, Council has a duty of care to ensure that that these assets are in a condition safe to the general community as per the requirements of Council's Installation and Use of Stock Underpass Guidelines that are part of this Plan, refer Appendix B.

5.6.6.4 Cattle Grids

A cattle grid is a type of obstacle used to prevent livestock from passing along a road which penetrates the fencing surrounding an enclosed piece of land.

The landowner benefiting from the use of a cattle grid is required to enter into a section 121 Agreement (Road Management Act 2004) for the construction, maintenance, repair, and insurance of the cattle grid. This agreement defines the roles and responsibilities of both Council and the landowners for the ongoing management of the cattle grid.

Cattle grids located on municipal roads are to be inspected and maintained in accordance with Council's Installation and Usage of Cattle Grids Guidelines that are part of this Plan, refer Appendix C.

5.6.6.5 Fire Access Tracks

Designated fire access tracks throughout the Colac Otway Shire are specific purpose access tracks, not intended for general access and provide only occasional access to non-residential property.

These are maintained by Council where Council has agreed to do so as a community emergency service under the Municipal Fire Prevention Plan.

They are specifically catered for under the Hierarchy Identifier "OR – Other Roads – Fire Access Tracks etc." in Section 5.5.1.

5.6.6.6 Unmade Road Reserves & Upgrading Roads Adjacent to Development

There are many road reserves within the shire which are currently unmade. These road reserves, by definition, are unmade or natural surface roads. In some cases, these roads may be graded periodically as fire access tracks or for other purposes. For the purposes of Council's Road Management Plan, these roads are also considered to be unmade roads by virtue that they have not been fully developed

by Council or built by others to meet Council's Standards. In other cases, unmade road reserves may be totally untouched and unused.

There are also many roads within the municipal area which are categorised as 'lower category' roads (e.g. Minor Road and Other Road) in accordance with Council's local road hierarchy. Roads of this nature are generally made to a very low standard and are graded periodically consistent with Council's standards.

Where a request is received or a development application is lodged, which requires the construction of an unmade road reserve or for the upgrade of an existing 'lower category' road to a 'higher category', Council will give consideration for the work to be carried out provided that the developer or proponent is prepared to meet the full cost of construction.

All construction will be carried out to Council's specification, Council will then undertake to maintain the road thereafter, should it be deemed to be a public road.

6 INSPECTION STANDARDS AND SERVICE LEVELS

There are two main components of the Council's inspection programs, these are:

- Proactive Routine Inspections – programmed routine inspections to identify defects that exceed the stated intervention levels for repair; and
- Reactive Inspections – inspections carried out following reports by the public of defects they identify. These inspections are to determine if the reported defect exceeds the stated intervention levels requiring repair or where an emergency response is required.

6.1 Strategies for Planning Maintenance Work

A systematically planned approach is undertaken to ensure maintenance is effective. This includes the implementation of a maintenance strategy for key asset types, such as pavements, bridges, drainage, and other road related infrastructure.

For a particular asset type, the maintenance strategy includes the following considerations:

- A sound Asset Management Policy as a basis for planning all maintenance activity on that asset type;
- Consideration at both the design and constructions phases in order to reduce potential maintenance problems and in-service costs;
- A maintenance management system, including:
  - A current inventory for the asset type in question (e.g. pavements, signs, bridges, etc);
  - A regime of asset inspections to satisfy adopted schedules;
  - An effective asset condition and inspection recording system to produce informed decisions with regard to maintenance requirements; and
  - Maintenance performance criteria for the road network with consideration of community expectations.

6.2 Maintenance Policies

Council's maintenance policies for specific asset types are based upon the following principles:

- Road infrastructure assets being maintained to ensure that their whole-of-life performance is maximized, having regard to safety, community benefits, environmental and funding considerations,
- A collaborative approach taken to improve the performance and reduce maintenance costs of Council's road assets through teamwork by the Infrastructure and Services Units,
- A systematic, efficient and sustainable approach to maintenance management and work practices utilizing best practice,
- Regular planned inspections of Council's assets undertaken to identify and monitor their overall condition over time, and

- Accessible information systems implemented for inventory control, condition identification of selected assets, and recording of inspections, service requests and all actions relating to maintenance activities.

6.3 Prioritizing Works

Maintenance activities are objectively planned in order to achieve cost and operational efficiencies. The works program and schedule is based on seasonal/annual events and routine servicing.

The most effective maintenance is based on forecasting a need and scheduling the available and proper resources and corrective actions at the appropriate time to achieve best results.

6.4 Maintenance Records

Accurate data is collected in order to make reliable judgments in relation to future network maintenance needs which consider funding requirements. Council's maintenance records are computer-based for ease of transfer, communication, and analysis.

6.5 Asset Inspections

In order for Council to carry out effective planning and competent management of its road infrastructure, both in a strategic and operational sense, it is essential to collect maintenance-related information through disciplined and regular inspections of the whole of the network.

Council's inspection activities can be grouped into the following categories based on definition and purpose:

- Routine Inspections;
- Condition Inspections
- Reactive Inspections; and
- Incident Inspections.

6.5.1 Routine Inspections

Inspections undertaken in accordance with the formal inspection schedule to determine if road asset complies with the levels of service as specified by the Maintenance Performance Criteria. Identified defects are rated against the stated intervention levels of the asset. These performance criteria indicate the need for remedial action.

A record of each street/road is completed detailing the name of the inspector, the inspection date, time, road name/asset description and report of any defects found that exceed the stated intervention level as defined by Council's Maintenance Performance Criteria.

6.5.2 Condition Inspections

Condition inspections are undertaken specifically to identify deficiencies in the various components of the road infrastructure that if untreated, are likely to adversely affect network values and operational lifespan. The deficiencies may well impact on short-term serviceability as well as the ability of the component to continue to perform at the level of service for the duration of its intended useful life.

The condition inspection process must also meet the requirements for accounting regulations and asset management. Regular or periodic assessment, measurement and interpretation of the resulting condition data is required so as to determine the need for any preventive or remedial action and is used in the development of relevant programs of rehabilitation or renewal works.

It is important to note that condition inspections are not intended to identify individual defects as this is done by way of the Routine and Request inspections.

The table in Section 6.6 details the type and frequency of programmed and reactive inspections undertaken by Council in relation to its road infrastructure assets.

6.5.3 Reactive Inspections

A maintenance request is any request to undertake maintenance on an infrastructure asset. Customers or users of the asset generally make these requests. To provide the highest level of service, Council's objective in relation to maintenance requests is to inspect and prioritise the work requests within the timeframes as specified.

Upon record of a request for maintenance or report of a defect received from the public, Council Officers or Councillors, an inspection will be carried out by an appropriately experienced Council Officer within *5 business days* for all roads and footpaths. As with routine inspections, any recorded defects beyond the stated intervention level for that particular asset will be prioritized and rectified to satisfy established response times.

If works identified are beyond what is considered maintenance, then the project will be referred to and be considered for inclusion in Council's Capital Investment Program. Council reviews projects for its Capital Investment Program annually, in conjunction with its budget planning process.

If the works exceed the stated intervention level, the defects must be fixed in a temporary manner to ensure that the environment is safe for road users.

6.6 Inspection Performance Criteria

Asset Class	Hierarchy	Routine Inspections
Road Network (includes sealed and unsealed roads and any roadside vegetation)	Primary	4 months
	Secondary	8 months
	Minor	12 months
	Urban Primary & Secondary	Night Inspection - Once per year
Footpath	Primary	12 months
	Local	12 months
Kerb & Channel	All Road Categories (where applicable)	12 months
Bridges (not included in Maintenance Performance Criteria in Appendix A)	All Road Categories	12 months - Level 1 Inspection (Basic visual inspection
Road Safety Devices	Guard Rail	As per frequency for road category
	Traffic Management Devices	As per frequency for road category
	Signs & Other Road Safety Devices	As per frequency for road category
	Urban Vegetation	As per frequency for footpath category

6.7 Levels of service

The foundation of the Road Management Plan includes setting of appropriate and reasonable standards as they relate to maintenance and construction of road assets.

Council has established maintenance and construction performance criteria that are equitable, sustainable and reflect the requirements for management of its road assets.

The defined levels of service have regard to:

- Community needs and aspirations;
- Industry standards;
- The need to provide a safe and efficient road network; and
- The Council's and its community's ability to fund such standards.

The implementation of an equitable road classification system also enables the community to readily identify the road system and have clear expectations as to the standard of construction and maintenance of the road system.

6.8 Community Consultation

An important objective of this Plan is to match the level of service provided by Council's road infrastructure with the expectations of its community given financial, technical and legislative constraints.

Council, as a continued improvement process, will measure and review both its capacity to deliver road services and actual performance of its road network against a number of key outcome areas. These are:

- Annual Community Satisfaction Survey Outcomes (Council Plan – Performance Indicators),
- Levels of expenditure and funding gaps,
- Analysis of Customer requests and responses (currently MERIT), and
- Ongoing development of Council Policies.

Community input into service delivery needs to be considered against its willingness to fund a desired level of service. It is also important that any decision to adopt any changes to the defined maintenance and construction performance criteria is in the best interest of the overall community.

7 EXCEPTIONAL CIRCUMSTANCES

Council, under a normal operating environment, will make every endeavour to deliver all aspects of its Road Management Plan.

However, in the event of natural disasters and other events including, but not limited to, fires, floods, droughts or similar, together with human factors, such as a lack of Council staff or suitably qualified Contractors, because of section 83 of the Victorian Wrongs Act 1958, as amended, Council reserves the right to suspend compliance with its Road Management Plan.

In the event that the CEO of Council, has to, pursuant to section 83 of the above Act, consider the limited financial resources of Council and its other conflicting priorities, meaning the standards Council's Plan cannot be met, the General Manager Environment and Infrastructure will be advised in writing that some, or all, of the services delivered under the Plan are to be suspended until further notice.

Once the events beyond the control of Council have abated, or if the events have partly abated, Council's CEO will provide direction to the General Manager Infrastructure and Leisure Services as to which aspects of Council's Plan are to be reactivated and when.

8 COORDINATION OF WORKS

The primary purpose of a public highway is for use by the public for transport. The provision of utility infrastructure is to be managed in such a way so as to minimise, as far as reasonably practicable, interference with a road's primary purpose. In particular:

- Ensure that risks to the safety and property of road users and the public are minimised;
- Minimise any damage to roads and related infrastructure;
- Minimise disruption to road users; and
- Require that roads and related infrastructure be reinstated by utility and service providers to a condition as near as practicable to their prior condition.

8.1 Road Openings

For private individuals, upon completion of a Non-Utility Minor Works within Municipal Road Reserves Application Form and payment of the appropriate fee, Council's consent to works is generally issued.

Council's consent to works allows contractors to perform civil works in a road reserve or make a connection to a drain, water main, gas, sewer or telecommunications service, or construct a vehicle crossing.

The issue of consent signifies to Council that the proponent undertakes to comply with the relevant conditions of Council's general conditions of consent. These conditions also relate to all temporary and permanent reinstatement works.

Council Officers inspect the works after four weeks from the date of proposed opening to ensure that reinstatement works have been completed adequately and that the area of works has not exceeded that as indicated on the application for consent.

Council requires that road crossings be bored rather than opened trenched unless consent is granted and a satisfactory length of pavement is reconstructed.

8.2 Service Authorities

Service Authorities are required under the relevant legislation to provide Council with prior notification of planned works before commencement. Works are usually completed under the service authority's powers related to the respective Act relevant to the utility. This usually negates the requirement for the service authority to seek a 'Works on Road' permit from Council, however Council requires that the completed work reinstates the site to an equal or better state than existed prior to the works.

Council may make comment, in writing, regarding the impact of the proposed works on native vegetation, Council assets, safety and location. For Service Authorities, no Road Opening Permit is required for works; however a consent notice is issued providing Council with a record of the works.

Where Council is not satisfied with some aspects of the proposal outlined in the notice, it may provide consent to the works proceeding, subject to the utility/service provider complying with certain conditions. These conditions may involve:

- Management of traffic,
- Timing of works to minimise disruption to road users, and
- Timing and quality of reinstatement, etc.

In such cases Council will provide advice to the utility/service provider that it consents to the proposed works subject to certain conditions.

9 PLAN IMPROVEMENT & MONITORING

The Act requires that Council's Road Management Plan be formally reviewed at prescribed intervals. However, it is proposed that Council review the performance of its Plan more frequently as part of the continuous improvement process being applied to Council activities. This is particularly relevant where the Local Government Act 2020 is gradually replacing the requirements of the Local Government Act 1989.

Improvements to work processes and practices, utilization of plant and other resources will be identified from time to time and implemented where possible or referred to the next Plan review.

9.1 Reviewing the Road Management Plan.

The Road Management (general) Regulations 2016 (Vic) requires councils to review their Road Management Plan within 6 months of a Council general election or by 30 June following an election whichever comes latest.

Council elections occur every 4 years which is a suitable review period.

Any revised plan will be subject to the consultation and approval processes as detailed in Part 3 of the Road Management (general) Regulations 2016.

9.2 Performance Measures

The following performance measures have been adopted to provide an indication of the levels of service meet community requirements in terms of satisfaction of delivery.

Performance Measure	Target
Routine inspections completed as per schedule	100% as specified
Response times for remedial work as assessed against Council's Maintenance Performance Criteria	90% as specified

10 REFERENCES

- Local Government Act 1989
- Local Government Act 2020
- Road Management Act 2004
- Road Safety Act 1986
- Road Management (General) Regulations 2016
- Road Management (Works and Infrastructure) Regulations 2015
- Register of Municipal Roads
- Colac Otway Shire Council Plan
- Strategic Resource Plan
- Transportation Asset Management Plan
- Bridge Asset Management Plan
- Asset Management Policy
- Risk Management Policy
- Customer Service Policy
- Closure of Unused Government Roads, Licensing of an Unused Road or Water Frontage Policy
- Installation and Use of Stock Underpasses Policy
- Street Tree Management Policy
- Installation and usage of Cattle Grids Policy
- Special Rate and Special Charges Policy
- Local Law No.2
- Infrastructure Design Manual
- Code of practice No S201- Road management Plan.
- Code of practice No S117-Management of infrastructure in road reserves.
- Code of Practice No S 351-Worksite safety traffic management.
- Code of Practice No S 174-Operational responsibilities for public roads.
- ARRB Unsealed roads manual 2009.

DEFECTS RESPONSE CODES

Response Code	Target Response Time	Action, Response & Control
2D	Within **2 business days** of defect identification by Council having exceeded stated intervention level	Repair or adopt temporary measure within defined target response time
1W	Within **1 week** of defect identification by Council having exceeded stated intervention level	Repair or adopt temporary measure within defined target response time
2W	Within **2 weeks** of defect identification by Council having exceeded stated intervention level	Repair or adopt temporary measure within defined target response time
3W	Within **3 weeks** of defect identification by Council having exceeded stated intervention level	Repair or adopt temporary measure within defined target response time
1M	Within **1 month** of defect identification by Council having exceeded stated intervention level	Repair or adopt temporary measure within defined target response time
2M	Within **2 months** of defect identification by Council having exceeded stated intervention level	Repair or adopt temporary measure within defined target response time
3M	Within **3 months** of defect identification by Council having exceeded stated intervention level	Repair or adopt temporary measure within defined target response time
PW	Programmed Works - Long term maintenance works program (3-5 years) Developed on a priority basis having regard to available resources and annual budget limitations.	
N/A	Not Applicable	
*	Appropriate response within **1 working day** if any hazard/defect identified or reported that presents an immediate risk to the health and safety of the public and/or road/footpath users. #	

Note – Where, because of the nature of the repair, availability of resources required or existing workload, it is not possible to rectify a defect within its prescribed response time, appropriate temporary measures are to be provided until necessary repairs can be completed.

An appropriate temporary measure may include, but is not limited to –

- Provision of warning signage,
- Traffic control action,
- Diversion of traffic around the site,
- Lane closure,
- Restriction of use of road by vehicles of a certain size (e.g. Load limit), or
- Temporary Road Closure.

An intermediate response of this type is to manage any risk associated with a particular defect until further remedial action may be undertaken.

MAINTENANCE PERFORMANCE CRITERIA

DEFECT	DEFINITION/DESCRIPTION	INTERVENTION LEVEL	TARGET RESPONSE TIMES			
			Primary	Secondary	Minor	Other
SEALED ROADWAY MAINTENANCE						
Minor Patching						
Potholes	Surface patching of potholes in travelled way using bituminous and other appropriate materials to restore riding surface to a smooth condition.	Repair when pothole exceeds 50mm in depth and 300mm in diameter.	2W*	3W*	1M*	N/A
Seal Edge Breaks & Drop Offs	Repair of fretting along edge of seal to maintain correct overall pavement width.	Repair when edge break exceeds 100mm from the average existing seal width, or when drop off of pavement exceeds 75mm measured over a 20m length.	2W*	3W*	1M*	N/A
Stripped Seals	Loss of aggregate from a seal which can become sticky in hot weather and slippery when wet or frosty.	Emergency treatment where wearing course becomes hazardous to traffic, particularly on horizontal curves or approaches to intersections, or not waterproof. Other areas to be considered within annual reseal program	PW*	PW*	PW*	N/A
Bleeding Surface	Surfaces resulting from too much bitumen on the surface, which becomes 'sticky' in hot weather, and often slippery in wet or frosty weather.		PW*	PW*	PW*	N/A
Slick Surfaces	Slick, fatty or smooth surfaces resulting from loss of aggregate or the wearing down of the aggregate with age, accompanied by an upward movement of bitumen to form a hard, smooth surface with little grip to motor tyres in wet weather.		PW*	PW*	PW*	N/A
Surface Waving or Shoving	Surface waving or shoving is caused by traffic shoving on unstable bitumen mixtures, resulting in shallow waves and hollows. Surface patching and regulation of adjacent surface irregularities <5sqm	When rutting depression holds water or exceeds 75mm under a 3m straight edge longitudinally.	2W*	3W*	1M*	N/A

DEFECT	DEFINITION/DESCRIPTION	INTERVENTION LEVEL	TARGET RESPONSE TIMES			
			Primary	Secondary	Minor	Other
Deformation or Heaving and Depressions	Depressions in the traffic lanes, with bulging of the surface outside the wheel tracks. Surface patching and regulation of adjacent surface irregularities	When depression holds water or mounding exceeds 75mm under a 3m straight edge longitudinally	2W*	3W*	1M*	N/A
Aggregate*, dirt, or debris at critical locations	When accumulation of debris of more than 50mm depth for over 5 lineal metres of wheel path.	Sweeping/cleaning of pavement surface including; intersections, kerb & channel, etc *__Note__ – Removal of access resealing aggregate or excess asphalt after spraying/laying is the responsibility of the relevant contractor under direction of the Services and Operations Department	2D*	1W*	1M*	N/A
UNSEALED ROADWAY MAINTENANCE						
Potholes-	The application of gravel or appropriate material to potholes exceeding 300mm in diameter and 65mm in depth where moisture content is unsuitable for regular grading.	Repair when pothole exceeds 65mm in depth and 300mm in diameter.	2W*	3W*	1M*	6M
Corrugations, rutting of pavement	Treatment to reduce corrugations, potholes, and rutting to maintain shape and crossfall of unsealed roadways and road shoulders and restore trafficable surface condition.	Road surface, scoured, potholed, rutted, corrugated to depth of 65mm over 30% of any 1km length of road. Treatment may include spot gravelling with appropriate materials. ***Note** - Grading of unsealed roads will only take place when moisture content of pavement materials is sufficient to maintain cohesiveness of soil aggregates.	N/A	N/A	2 per year*	12 months

DEFECT	DEFINITION/DESCRIPTION	INTERVENTION LEVEL	TARGET RESPONSE TIMES			
			Primary	Secondary	Minor	Other
Shoulders - potholes, rutting, holding water	Unsupported drop from pavement > 100mm measured over a 20m length. Insufficient shoulder material to maintain shoulder at pavement levels, over 40% of road length.	The regular grader maintenance of unsealed shoulders in accordance with the appropriate intervention levels, including spot gravelling to avoid pavement drop off, reworking existing materials to remove shoulder surface irregularities and maintain shoulder shape *__Note__ - Grading of unsealed shoulders will only take place when moisture content of materials is sufficient to maintain cohesiveness of soil aggregates.	2W	3W	1M	6M
ROAD RELATED INFRASTRUCTURE						
Damaged or illegible signs including Statutory and Warning Signs. (excluding rail crossing signs)	The minor repair, re- erection, straightening, and cleaning of signs and sole purpose supports. **Note:** Council usually holds a limited range and number of signs in stock. If a sign must be ordered, the date of the order and date of receipt of the sign must be recorded. The Target Response Time may be altered to allow for the time lag involved	▪ Straighten sign support when it becomes noticeable that it is not vertical. ▪ Replace when damage renders either the sign or support ineffective. ▪ Clean/ replace the sign face when: – There is a noticeable accumulation of dirt. – Graffiti covers more than 10% of sign or message on sign is defaced ▪ Replace missing or if incorrect sign is in place. ▪ Replace if sign is illegible at 150m under low beam or in daylight	1W	1W	1W	1W
Signs – Rail Crossing Warning Signs (includes only those signs on the approach to a crossing for which Council is responsible)			2W	2W	2W	2W
Tourist & Services Signs (includes street fingerboard signs)			1M	1M	1M	1M

DEFECT	DEFINITION/DESCRIPTION	INTERVENTION LEVEL	TARGET RESPONSE TIMES			
			Primary	Secondary	Minor	Other
Damaged Guard Rail	The re-alignment, repair and replacement of isolated guardrail sections less than 10m in length, posts and hardware that is defective. Includes the cleaning of guardrail.	Replace damaged guard rail sections, end terminals and support posts, subject to the availability of materials.	1M*	2M*	2M*	2M*
Missing/damaged Guide Posts / Delineators	Reinstatement, repair, cleaning of guide posts and delineators to ensure safe and acceptable condition.	Any missing or damaged guide posts (where existing) making them substantially ineffective in a hazardous location for the travelling public	2W	3W	1M	1M
Pavement Markings						
Centre Line	Defined as remarking of all illegible/defective road marked symbols, signs, line work where existing.	When markings lack definition, loss of reflectivity and/or legibility at safe sight distances.	3 Year Program			
Give Way and Stop Holding Lines			6W*	6W*	6W*	N/A
School Crossings			6W*	6W*	6W*	N/A
Railway Crossings			6W*	6W*	6W*	N/A
Parking Bays		Reinstate line marking to ensure effective visibility.	2 Year Program			N/A
Bicycle Lanes			3 Year Program			N/A
ROAD RELATED DRAINAGE						
Kerb & Channel Damage	Repair of damaged kerb and channel due to concrete deterioration or damage.	Replace or undertake repairs when: – Uplift section of 35mm in tray and water ponds for greater than 10m in channel – Lateral displacement of top of kerb and tilted tray by more than 50mm – Broken pieces greater than 200mm missing	1YR*	1YR*	1YR*	N/A

DEFECT	DEFINITION/DESCRIPTION	INTERVENTION LEVEL	TARGET RESPONSE TIMES			
			Primary	Secondary	Minor	Other
Drainage Pit Lid or Surround – Damaged or Missing	Damaged to the point where the structural integrity has been significantly compromised or missing pit lids, surrounds, or grates in pedestrian areas and traffic lanes.	Replacement or reseating of pit lid or surround.	2D	2D	2D	N/A
Surface Drains	Cleaning and minor reshaping of isolated ditches and surface drains >50 m long to maintain adequate drainage. Includes verge drains and back drains.	Reshape when there is ponding in drains or the drain is not functioning to 80% capacity.	At least annually	At least annually	At least annually	At least annually
Sub-Surface Drains	The removal of dirt and debris from sub-surface drain outlets and pits to ensure water is removed from subgrade. Includes checking of rodent and flood flaps.	Inspect and clean subsoil drains **annually.** Inspect known problem areas and free flowing subsoil drains at scheduled intervals.	At least annually	At least annually	At least annually	At least annually
Culvert/Pit Cleaning	The removal of dirt and debris from culverts and pits to maintain adequate drainage.	Inspect and clean culverts and pits based on **Annual** Program. Inspect regularly known problem areas after heavy rain, and mouths of pits keeping such free of blockages. Inspect catch basins after heavy rains.	At least annually	At least annually	At least annually	At least annually
Kerb & Channel Cleaning	Clearance of any debris fouling the surface between the face of the kerb and 2.4-metres from the invert of the channel.	Clearance of kerb and channel undertaken to ensure effective drainage.	1M	1M	1M	N/A
VEGETATION MAINTENANCE						
Vegetation Obstruction - Roadway	The cyclic maintenance of trees, shrubs and grasses in road reserves not in urban areas, control provides for fuel reduction as part of annual fire prevention program.	Prune roadside trees, shrubs and grasses to comply with the following clearance limits: – Height Clearance: min.4.6m above carriageway – Lateral Clearance: in line with guideposts, back of shoulder, or kerb – Maintenance of safe sight distances at intersections and curves.	1M*	2M*	PW*	PW*

DEFECT	DEFINITION/DESCRIPTION	INTERVENTION LEVEL	TARGET RESPONSE TIMES			
			Primary	Secondary	Minor	Other
Vegetation Obstruction - Other	Prune trees and/or shrubs and/or grasses to provide for long term desired height, lateral and sight clearances.	Tree, shrub or grasses obstructing safe sight distances, restricts viewing of warning signage, or assessed to be in an unsafe condition causing hazard to traffic or public.	2W	1M	2M	6M

DEFECT	DEFINITION/DESCRIPTION	INTERVENTION LEVEL	TARGET RESPONSE TIME	
			Primary	Local
FOOTPATH AND SHARED USE PATH MAINTENANCE				
Displacements	Replacement, repair, regulation and surface patching of footpath.	Repair or regulate footpath surface where vertical displacement between concrete bays or unstable segmented paving areas exceeds 20mm.	1W	1M
Potholes (Sealed Surface)	Repair of potholes in hard paved areas.	Repair or regulate where potholes exceed 25mm in depth.	1W	1M
Potholes (Unsealed Surface)	Potholes in unsealed surfaces.	Repair when pothole exceeds ***25mm*** in depth and ***300mm*** in diameter	1W	1M
Depressions/ scouring	Regulation of subsided areas exceeding 1-sqm and less than 5-sqm.	Repair or regulate where depressions exceed 30mm in depth over a 2 metre straight edge.	1W	1M
Footpath – Vegetation Obstruction	Street tree and/or shrub and/or grasses shaping to maintain desired height, lateral and sight clearances.	Prune street trees, shrubs and grasses to comply with the following clearance limits: • Height Clearance: min. 2.4m above footpath • Lateral Clearance: min. 500mm from edge of path	1M	2M
Footpath - Vegetation Control	The control of vegetation growth	Areas where tree, and/or shrub and/or gr grass encroaches across greater than 30% of footpath width or obstructs viewing of signage.	1M	2M
Footpaths/Shared Paths/Bike Paths Edge Repairs	Treatment to reduce depressions, holes or drop-off at the interface (edge) of constructed asphalt, concrete or brick paved footpaths/shared paths/bike paths.	Provide repair of depressions exceeding 50mm in depth at the interface of the nature strip and surrounding constructed footpaths/shared/bike paths with topsoil, gravel or sand	1W	1M
Unstable Segmented Paving Areas	The maintenance of paved areas of various construction.	Distressed area where: – There are loose, missing, or dislodged pavers, – This is vertical displacement greater than 20mm, or – There are gaps exceeding 25mm Consideration given to replacement of paved areas within annual programs.	1W	1M

DEFECT	DEFINITION/DESCRIPTION	INTERVENTION LEVEL	TARGET RESPONSE TIME	
			Primary	Local
Shared Use Pathway Signs – Guide, Information, Regulatory & Warning	The minor repair, re-erection, straightening, and cleaning of signs and sole purpose supports.	▪ Straighten sign support when it becomes noticeable that it is not vertical. ▪ Replace when damage renders either the sign or support ineffective. ▪ Clean/ replace the sign face when: ○ there is a noticeable accumulation of dirt. ○ Message on sign is defaced by graffiti etc. ○ Replace missing or if incorrect sign is in place.	2W	1M