Macedon Ranges Shire Council

Road Management Plan 2021

Prepared by Macedon Ranges Shire Council

Contents

Definitions

The RMA - *Road Management Act, 2004.*

Arterial Road – are main roads usually managed by VicRoads as defined under section 14 of the RMA.

Council – means Macedon Ranges Shire Council.

Public Road – is a road declared a public road by Council under Section 17 of the Road Management Act 2004 and listed on Council's Public Road Register.

Non-Road Infrastructure - means infrastructure in, on, under or over a road which is not road infrastructure, examples include gas pipes, water and sewerage pipes, cables, electricity poles and cables, tram wires, rail infrastructure (including boom gates, level crossings and tram safety zones), bus shelters, public telephones, mail boxes, roadside furniture and fences erected by utilities or providers of public transport.

Road Infrastructure - the infrastructure which forms part of a roadway, pathway or shoulder.

Shared Path - is a path that is designated for use by pedestrians and cyclists.

Introduction

Council's Road Management Plan has been developed in accordance with section 52 of the RMA, and establishes Council's road management system for road infrastructure and road related infrastructure as defined under the RMA and for which Council is the relevant road authority. The plan has been developed in line with Council's obligations under the RMA and *Wrongs Act, 1958* with consideration given to resource availability and operational objectives.

Macedon Ranges Shire Council's Road Network

Macedon Ranges Shire Council (MRSC) records details of 1765 kilometres of roads and access tracks in the corporate asset register. Approximately 1570 kilometres of roads are listed on Council's Register of Public Roads (Sealed 840km, Un-sealed 730km).and this makes up the bulk of the local road network provided by Council. Council maintains a further 97km of roads including: roads within reserves and facilities (30km); and fire access tracks (67km) though these are subjected to a less stringent inspection and maintenance regime than those roads on the Public Road Register. The remaining 98km of roads that are not maintained by Council include access tracks to private properties (28km); Fire Access Tracks maintained by others (47km); and Public Roads maintained by neighbouring shires under agreement with MRSC (23km).

Public Road Register	Road Type	Length (km)
Yes	Sealed Roads	840
Yes	Unsealed Roads	730
	Sub-Total	1570
No	Shared Shire Boundary Roads on Neighbouring Shire Public Road Register	23
No	Roads within Reserves and Facilities	30
No	Unsealed Roads - Not Maintained	28
No	Fire Access Tracks - Seasonally Maintained	67
No	Fire Access Tracks - Unmaintained or Private Property	47
	Sub-Total	195
	Total	1765

The local transport network also includes 203km of footpaths, 325km of kerb and channel, 143 bridges and major culverts and 62 footbridges.

Objectives of this Road Management Plan

The objectives of this Road Management Plan are to:

- Provide an overview of the management system used to carry out Council's road management functions, as a responsible road authority under the RMA, and with regard to management and operational objectives and available resources;
- Set the relevant standard in relation to the discharge of duties of the Council in the performance of those road management functions.
- Aim to provide a safe and efficient network of municipal public roads primarily for travel and transport.

It is intended that this document provide sufficient information to enable Council and the community to fully appreciate the value of its road assets and associated activities to manage risk across the municipal road network. This document is intended to provide a simple easy to understand overview of Council's road management system and responsibilities as required under the RMA.

Road Management Plan Scope

This Plan covers all roads for which MRSC is responsible but concentrates on those roads listed in Council's 'Register of Public Roads'. It is limited to road infrastructure and road related infrastructure as defined under the RMA and for which Council is the relevant road authority. The assets covered include:

- Road pavement and surface;
- On-street car parking;
- Off-street Council owned car parks;
- Traffic control devices;
- Paths;
- Shared Paths;
- Bridges (only the road pavement, surface and footpath components. Other bridge components are managed in accordance with Council's Bridge Asset Management Plan); and
- Culverts, table drains and drainage pits.

Examples of infrastructure not included in this plan include:

- Underground drainage pipes;
- Roadsides (Council is currently preparing a Roadside Conservation Management Plan which refers to management standards for this area of the road reserve);
- Sub and Super Structures of Bridges;
- Vehicle crossings providing access to private properties; and
- Non-road infrastructure.

Various utilities make use of the road reserve to provide essential services. These are normally considered to the extent that they impact on the road assets.

Asset Management Framework

Council has an asset management framework consisting of Policy, Strategy, and Plans that provide long term strategic management of Council's various asset categories.

The Road Asset Management Plan

The MRSC Road Asset Management Plan (RAMP) is a cornerstone document of the Asset Management Framework and is separate to the Road Management Plan. The RAMP guides the long term strategic management of Council's road assets. The RAMP is reviewed every three years to provide assurance to Council, ratepayers and other stakeholders, that road assets are being managed efficiently and sustainably.

The RAMP is a detailed and comprehensive document that is used on a regular basis by Council staff to assist prioritisation of work and implementation of asset management goals.

The RAMP delivers a considered and planned approach to the long-term management of road assets by providing guidance on the short, medium, and long term investment required, by council, to maintain current levels of service to the community.

The RAMP links with other Council plans, policies and strategies to guide the implementation of works programs, and includes a summary of roads and related assets and a description of the road hierarchy.

Key Stakeholders

The key stakeholders for the Road Management Plan include:

- State and Federal Governments;
- Councillors (As representatives of the community);
- Ratepayers;
- Residents;
- Road Users;
- Visitors;
- Utilities;
- Developers;
- Employees;
- Special Interest Groups;
- Contractors/Suppliers; and
- Others.

Road Management Act 2004[1]

The Road Management Act 2004 (RMA – as amended) was passed on May 11 2004. The RMA was developed to provide an efficient and safe Victorian road network, and was the result of extensive stakeholder and community consultation.

The RMA is based on the following key principles:

- clear allocation of road asset ownership and management;
- established processes and accountabilities for policy decisions and performance standards;
- provision of operational powers to achieve targets and performance standards; and
- Clarification of civil liability laws for the management of roads.

How the Road Management Act affects the community[1]

The RMA affects the Victorian community in the following ways, it:

- Confirms the right of members of the public to travel on roads, and the right of property owners or occupiers of adjoining land to have access to the road;
- Provides an efficient and safe road network across Victoria;
- Provides roads that best meet the needs and priorities of the community;
- Clarifies the allocation of responsibility between road authorities for managing the different parts of the road reserve;
- Clearly defines the powers and obligations in regard to traffic management, the management of access to roads, road works by service authorities, and maintenance of public transport infrastructure within road reserves;
- Continues to provide municipalities with responsibility for parking on arterial roads;
- Provides for VicRoads to implement clearways on arterial roads, subject to consultation with Councils, affected land owners/occupiers, traders and the community in accordance with a Code of Practice;
- Imposes a limit in relation to liability for property damage or economic loss by way of setting a threshold amount (indexed annually). A road authority is not liable for property damages where the value of the damage is equal to or less than the threshold amount; and
- Minimises disruption to traffic and ensure the safety of road users as a result of service authorities and others undertaking works on roads.

[1] VicRoads Fact Sheet "The Road Management Act at a glance for the community".

Demand and Growth

The Macedon Ranges Shire population forecast for 2021 is 51,020 and is forecast to grow to 65,405 by 2036 (http://forecast.id.com.au/macedon-ranges). This growth in population will put pressure on existing road infrastructure and will result in the need for more road assets.

Funding Sources

The current funding sources available for the management of Macedon Ranges Shire Council road asset infrastructure include:

- Roads to Recovery – this is a fixed allocation by the Australian Government in four year blocks with no guarantee of continuance (Federal);
- Grants Commission – roads component of grant commission funding;
- Rate Revenue (capped at CPI)
- Black Spot/Length funding;
- Special Charge Scheme for Infrastructure Works; and
- Private developer funded works.

Driving on the Road

The obligations of road users are set out in Section 17A of the Road Safety Act 1986 (as amended by the Road Management Act 2004) and are summarised below:

A person who drives a motor vehicle on a highway must drive in a safe manner having regard to all relevant factors including (but not limited to) the:

a) Physical characteristics of the road;
b) Prevailing weather conditions;
c) Level of visibility;
d) Condition of the motor vehicle;
e) Prevailing traffic conditions;
f) Relevant road laws and advisory signs;
g) Physical and mental condition of the driver.

A road user other than a person driving a motor vehicle must use a highway in a safe manner having regard to all the relevant factors.

A road user must have regard to the rights of other road users and the community, taking reasonable care to avoid conduct that may:

a) Endanger the safety and welfare of themselves or other road users;
b) Damage any infrastructure on the road reserve;
c) Harm the environment of the road reserve.

Access to Private Property

The RMA provides that Council is not liable for private vehicle crossings specifically required for property access. The landowner is responsible for these assets and for ensuring the vehicle crossing, including the immediate surrounds that the vehicle crossing impacts on is maintained in a safe condition.

All properties are required to have a vehicle crossing for access to and from the road and the landowner, has a responsibility to ensure that the crossing does not present a hazard. The construction of a vehicle crossing must be carried out to Council's standards. Landowners require a permit from Council prior to the commencement of any modification or construction work.

A Council representative will inspect the works in accordance with Council's Asset Protection Policy. Where modifications to the Council's assets (e.g. paths and kerb and channel) are required, these shall be at the landowner's expense.

The diagrams below illustrate the responsibility for associated infrastructure for private vehicle crossings.

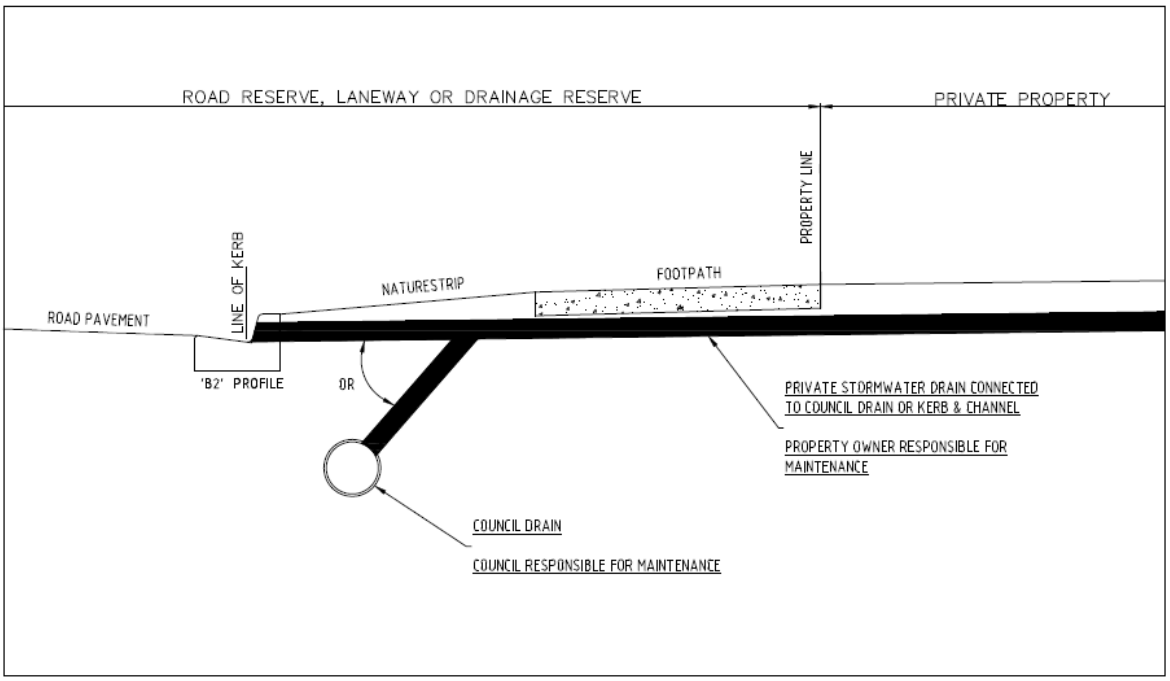
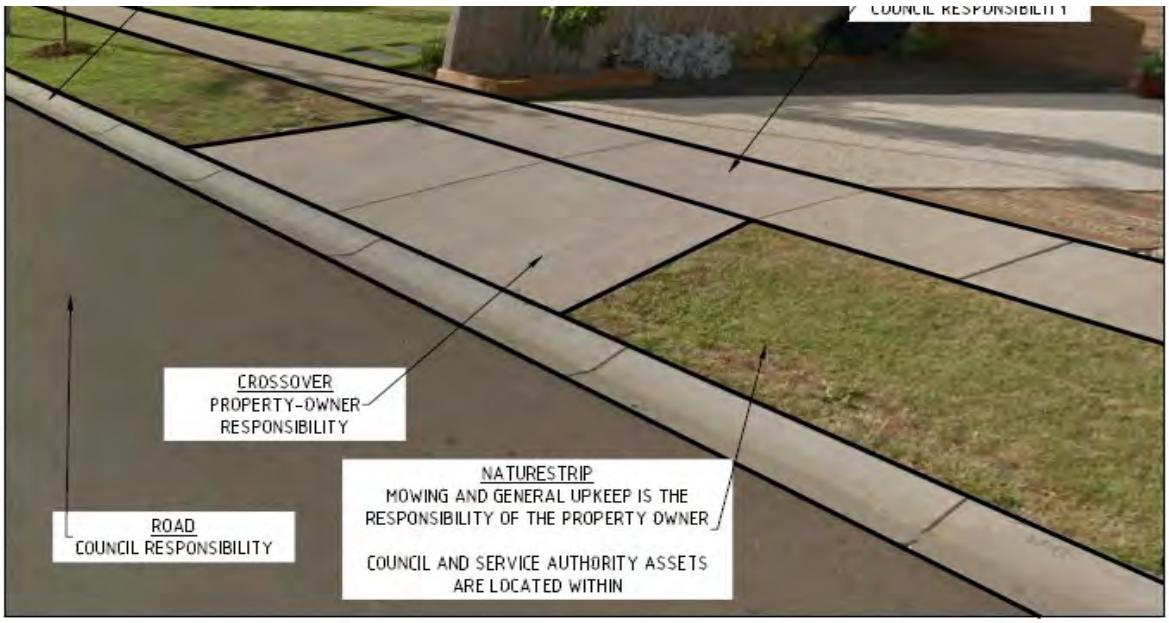


DIAGRAM – OPERATIONAL RESPONSIBILITY FOR VEHICLE CROSSINGS



TYPICAL VEHICLE CROSSING DIAGRAM

Utility Infrastructure and Service Providers

The RMA affects utility infrastructure and service providers in a number of ways. Specific obligations are set out in Schedule 7 of the RMA and under the RMA Code of Practice entitled 'Management of Infrastructure in Road Reserves'.

Register of Public Roads

Macedon Ranges Shire Council maintains a Register of Public Roads in accordance with Section 19 of the RMA. The register is located on Council's website:

https://www.mrsc.vic.gov.au/About-Council/Our-Council/Strategies-Plans/Public-Road-Register

Public roads are defined in Section 17 of the RMA. Section 17 also enables a road to gain the status of a public road if the road authority deems the road to be reasonably required for general public use.

MRSC determines whether or not a road is reasonably required for general public use using the Public Road Procedure. Which is located on council's website:

https://www.mrsc.vic.gov.au/About-Council/Our-Council/Strategies-Plans/Public-Roads-Procedure

Under the RMA the determination that a road is not reasonably required for general public use does not affect the status of the road as a public highway or affect the right of public use of the public highway.

Macedon Ranges Shire Council's 'Register of Public Roads' defines the roads for which Council is the responsible road authority. This register also identifies the functional road hierarchy category for each road, which forms the basis for all operations and maintenance management activities. For each road (or street), the Register of Public Roads records the:

- Road Name;
- Location/Segment Details; and
- Road Register Classification.

This register is updated regularly and can be inspected at Council's Administration Centres or downloaded from the Council website at www.mrsc.vic.gov.au.

Pathway Register (Footpaths and Cycle ways)

A pathway register containing all of Council's footpaths and cycle ways is maintained by Council in the corporate asset register. The register defines the pathways for which Council is responsible and identifies the functional pathway hierarchy for each section of pathway. This RMP defines the standards to which the pathway network are maintained.

Road Hierarchy

The RMA categorises roads into three main classifications:

- Freeways (VicRoads responsibility)
- Arterial Roads (VicRoads responsibility)
- Local Roads (MRSC responsibility)

The local road network is made up of sealed and unsealed roads. The functional road hierarchy splits the local road network into categories, as shown in Table 1.1

The pathway hierarchy splits the pathway network into two categories, as shown in Table 1.2.

The pathway hierarchy classification is different to that adopted for the roadway. It is based on the pedestrian movements (volumes), location and the 'pedestrian service level'.

The pathway hierarchy classification has regard to:

- the anticipated volume of pedestrians, for example, in the vicinity of a shopping centre, community facility, or a railway station as compared to a largely residential area;

These functional road and pathway hierarchy categories are used to determine inspection frequencies, maintenance regimes and standards for new construction.

Demarcation and Transfer of Responsibility

Council is not responsible for the following roads within the Shire:

- Arterial Roads and Freeways (these are controlled by VicRoads);
- Roads not included on the Register of Public Roads;
- Parks Victoria roads unless specifically agreed to by MRSC (these are controlled by the Department of Environment, Land, Water and Planning);
- Roads on shire boundaries that are, by agreement, included on a neighbouring shire's public road register;
- Roads or tracks located on private property.

The RMA Code of Practice entitled 'Operational Responsibility for Public Roads' (S 267 – 17 December 2004) provides further guidance regarding demarcation boundaries between responsible road authorities, where local roads controlled by Councils intersect with Arterial Roads and Freeways controlled by VicRoads.

Council is also not responsible for the following assets in the road reserve:

- Water services and mains;
- Sewerage services and mains;
- Gas services and mains;
- Telecommunication cables and pits;
- Power cables, pits and poles; and
- Private vehicle crossings.

Boundary Roads

Council has municipal borders with six other municipalities:

- Mt Alexander Shire;
- Mitchell Shire;
- Hume City;
- Melton Shire;
- Moorabool Shire; and
- Hepburn Shire.

Formal agreements for managing boundary roads currently exist with Hume City Council, Mitchell Shire, Mt Alexander Shire and Hepburn Shire. There are currently no boundary roads with Moorabool Shire or Melton Shire.

Other Agreements

An agreement is in place with the Bolobek Lakes Body Corporate formalising the limits of responsibilities for assets within this estate.

Council's Road Infrastructure Network Classifications

Table 1.1 Council's Local Road Network

Category	Type	General Description	Typical ADT
1	Sealed Link	Sealed roads carrying high traffic volumes.	>2000
2	Sealed Collector	Sealed roads carrying low traffic volumes generally of a local nature. Provides access to properties on that particular road and adjoining roads.	1000-2000
3	Sealed Access	Sealed roads providing access to properties on that particular road.	500-1000
4	Unsealed Collector	Unsealed roads carrying low traffic volumes generally of a local nature. Provides access to properties on that particular road and adjoining roads.	200-500
5	Unsealed Access	Unsealed roads providing access to properties on that particular road. Generally dead-end roads.	50-200
6	Unsealed Local	Roads deemed to be of reasonable public benefit that do not meet Category 5 standards	<50
RESERVE	Sealed and Un-sealed	Roads within Council managed reserves and facilities	NA
(FAT)	Fire Access Tracks	Unformed roads used only for emergency access purposes. There are 3 sub-categories of Fire Access Tracks: Seasonally Maintained; Gated; and Private Property.	NA
Agreement	Boundary Roads and other third party agreements	See Agreement for details	Variable
Nil	Not Classified	Classification not required	Variable

Note: ADT = Average Daily Traffic Count. Traffic count is not the sole determining factor of which category a road belongs to.

Table 1.2 Council's Pathway Network Hierarchy

Category	Type	Pedestrian Service Level
High Priority	High pedestrian traffic areas around shopping precincts, schools, public transport, and community facilities.	High
Low Priority	Residential areas and areas with lower volumes of pedestrian traffic.	Moderate
Reserve High Priority	High pedestrian traffic areas within Council managed reserves and facilities.	High
Reserve Low Priority	Low pedestrian traffic areas within Council managed reserves and facilities.	Moderate
Off Road Mixed Use Trail	Formed off road walking and / or cycling trails not constructed to any standard.	Low

Note: Shared Paths are included in Council's corporate asset register as footpaths. Shared paths within reserves and facilities are not subject to the Road Management Plan.

Key Facts

Table 2 summarises the road assets that MRSC is responsible for maintaining as at 31 March 2017:

Table 2: Macedon Ranges Shire Council's Road Assets

Asset Group	Asset description	Unit	Quantity	Replacement Value
Roads	Sealed Roads	(km)	840	$447,169,000.00
	Unsealed Roads	(km)	730	$62,825,000.00
Paths	Footpaths and bicycle paths	(km)	203	$32,762,000.00
Kerb and Channel	All Kerb and Channel	(km)	325	$41,120,000.00
Bridges	Bridges and Major Culverts	each	143	$44,197,000.00
Footbridges	Footbridge assets in various locations	each	62	$2,838,000.00

Service Levels for Road Infrastructure and Road Related Infrastructure

The level of service is the defined service quality for a particular activity or service area (e.g. road pavements or footpaths) against which service performance can be measured. Levels of service typically relate to quality, quantity, reliability, responsiveness, environmental issues and cost.

There are two types of service levels:

- Community based; and
- Technical based.

Community based service levels relate to the function of the service provided and how the customer perceives the service.

Technical based service levels define the measures and targets in place to allow Council to manage its infrastructure to a standard that enables safe passage over the road network. The technical levels of service have been developed with regard to road safety, community expectations and available resources.

The levels of service for Macedon Ranges Shire Council's Road Related Infrastructure are defined within the ensuing schedules of the Road Management Plan.

Customer Expectations

Council's customer research into transport needs and satisfaction includes:

- One-on-one contact (letters, phone calls etc);
- State facilitated annual community satisfaction survey; and
- Analysis of Council's corporate customer request system showing type and nature of requests.

The annual customer survey measures satisfaction with the overall service. These give a broad understanding of current customer satisfaction and do not attempt to determine levels of service desired by customers or the reasons behind various satisfaction levels.

The feedback received from community consultation throughout reviews of this plan (and other consultations including township network movement studies) is factored into Council's understanding of asset performance.

Risk Management Framework

The objective of risk management is to identify the business risks associated with the ownership and management of the road infrastructure to ensure that strategies are put in place to mitigate these risks.

Minimising Risk

The strategies used to minimise risk include:

- Inspections;
- Routine Maintenance and Renewal programs;
- Register of Public Roads;
- Pre-determined Intervention levels;
- Customer requests management system (ie Pathway CRM); and
- Monitoring Asset Performance.

These risk mitigation strategies are described in more detail in the next section.

Inspections

Road network inspections fall into three broad categories, namely reactive inspections, proactive maintenance inspections and condition surveys. Inspections will result in the programming of maintenance work where defects are identified that exceed the stated intervention levels or to preserve the asset life. Asset renewals may be considered arising out of condition surveys as part of Council's long term asset management subject to budget resources and other competing priorities.

Condition survey outputs are generally used to drive cyclical asset management processes and programs. Condition survey inspections are further defined in the MRSC Road Asset Management Plan.

Reactive inspections are undertaken by suitably qualified officers in response to a customer request or complaint relating to a reported defective or hazardous road or road related infrastructure.

Routine maintenance inspections are undertaken by suitably qualified officers and are designed to proactively identify defects.

The functional road and footpath hierarchies detailed in Tables 1.1 and 1.2 are used to drive different routine maintenance regimes for different road and footpath classifications. The routine maintenance inspection regimes for these assets are detailed in the Performance Standards.

Operational, Routine Maintenance and Renewal Programs

Examples of typical operational, routine maintenance and renewal activities undertaken as part of the management of Council's road assets are:

Operational Activities:

- Inspections;
- Administration;
- Linemarking;
- Vegetation control; and
- Street sweeping.

Routine Maintenance Activities

- Pothole repairs;
- Surface defect repairs;
- Edge break repairs;
- Corrugation repairs;
- Guidepost replacement;
- Guardrail repairs and maintenance;
- Road shoulder maintenance;
- Sign repair and replacement;
- Maintenance grading (unsealed)
- Surface and shape restoration (unsealed);
- Footpath repairs and
- Emergency works.

Renewal Activities:

- Resealing of sealed pavements
- Pavement Rehabilitation / Reconstruction of sealed pavements
- Re-sheeting of unsealed pavements
- Reconstruction of kerb and channel; and
- Reconstruction of footpaths.

Routine Maintenance Schedules

Council undertakes routine maintenance work in accordance with the inspection frequencies, intervention levels and response times outlined in the Performance Standards.

Much of the routine maintenance work is undertaken using in-house resources. However, some activities, such as vegetation control, linemarking (and others) are undertaken using a combination of internal and external resources.

Register of Public Roads

The RMA requires that a responsible road authority must maintain a register of public roads. The MRSC Register of Public Roads is updated regularly and can be inspected at Council's Customer Service Centres with 24 hours prior notice or viewed on Council's website at www.mrsc.vic.gov.au

Public roads are defined in the RMA as freeways, arterial roads and other roads reasonably required for general public use. Where doubt exists, MRSC will determine if a road is "reasonably required for general public use".

The Register of Public Roads clearly identifies which roads are maintained by MRSC. Roads that have been identified on the MRSC Register of Public Roads for ongoing maintenance are those roads that are reasonably required for public use. Private roads are not included, in line with established practice.

From time to time, MRSC will receive requests to include or add additional roads to the Register of Public Roads, or receive requests to maintain roads that are not currently on the Register. Council must then make a decision regarding the appropriateness of such requests using the Public Road Procedure.

It is important to note that the RMA does not create a duty to upgrade a road or to maintain a road to a higher standard than the standard to which the road is constructed (s.40 subsection 2).

Intervention Levels

Intervention levels support the service levels provided to the community, as they define trigger points in determining when maintenance works must be carried out. Below intervention level defects may be treated from time to time, if resources are available, when Council Officers determine that not treating the defect will likely lead to costly repairs, major inconvenience, or a major drop in the service level provided to the community.

Having defined intervention levels also assists Council in being able to organise maintenance works on a managed risk priority basis.

The greatest benefit of intervention levels is having transparent, consistent and logical reasons as to why certain works were, or were not, carried out.

MRSC's intervention levels are detailed in the Performance Standards.

Customer Requests System

All customer complaints, requests and enquiries to Council are input into the customer request management system (CRMS). This system requires the request/fault to be categorised by problem type and location.

Each request is dealt with in accordance with the response times listed within the schedules that make up the performance standards of this plan.

Where a defect is deemed to be outside intervention levels by the officer, the officer will arrange to have the defect rectified, temporarily repaired or treated with devices (signs, bollards or other) to warn road users and/or pedestrians of the hazard.

All requests will be responded to in the allocated time frames. Requests for work outside the scope of MRSC responsibility will be referred to the responsible authority and the party making the request will be advised. MRSC may take on an advocacy role in these cases in support of the request.

Exceptional Circumstances

Council will make every endeavour to meet all aspects of its Road Management Plan.

There may be situations or circumstances beyond Council's control, such as fires, floods, natural disasters, labour or financial resource shortages which may prevent Council from delivering on the prescribed service standards. Under such circumstances Council reserves the right to suspend compliance with its Road Management Plan in accordance with the provisions of Section 83 of the Victorian Wrongs Act, 1958 (as amended).

In the event that the Chief Executive Officer (CEO) of Council has considered the impact of the unforeseen event and determined that, due to conflicting priorities, compliance with the RMP is no longer reasonably viable, the CEO will pursuant to Section 83 of the above Act, notify the Council Officer in charge of its Road Management Plan that some, or all, of the timeframes and responses documented in the plan are to be suspended.

Once the financial and other resource needs of the event have been established, the CEO will continue to liaise with the Officer in charge of the Road Management Plan to determine which parts of the plan can be reactivated and the timeframes for doing so. Council will keep residents informed of these decisions.

Monitoring and Review

MRSC formally reviews the Road Management Plan in accordance with the requirements of the Local Government Act. The Road Asset Management Plan is reviewed every 3 years.

Where changes to the RAMP result in the need for significant changes to the Road Management Plan, the amended Road Management Plan will go through the Council approval and advertising requirements outlined in the Road Management Act and Local Government Act.

References

Other sources of road and asset information within Council include:

- Council Plan;
- Asset Management Policy;
- Asset Management Strategy;
- Various Asset Management Plans;
- Register of Public Roads;
- Public Road Procedure;
- Roadside Conservation Management Plan (Pending adoption in 2021);
- Street Tree Policy;
- Agreements on Public Roads;
- Australian Standards; and
- Austroads Guidelines.

Performance Standards

Schedule 1: Sealed Roads and Parking Bays (excluding bridge sub and super structures)

Schedule 2: Unsealed Roads (excluding bridge sub and super structures)

Schedule 3: Urban Streets

Schedule 4: Signs and Guardrails

Schedule 5: Tree and Vegetation Management

In this section, Council sets the performance standards for the following operational functions in roads, pathways and ancillary areas:

- Inspection frequencies;
- Defect intervention level; and
- Emergency and defect response time.

The objective of setting performance standards are:

1. To ensure public safety – achieved by undertaking regular scheduled inspections and being responsive to hazard notification, including emergency situations such as motor vehicle accidents

2. Protect road infrastructure assets – achieved by undertaking regular scheduled inspections and developing planned maintenance activities and repairs to avoid or minimise impairment to the asset's highest and best use potential. This is essential for the delivery of road transport service at the lowest cost to the community

3. To ensure an appropriate level of statutory protection against civil liability claims based on available Council resources.

Performance standards for defect inspection frequencies are derived from balancing available resources with the identified risk based on a hierarchy of road and footpath types, whilst also considering the obligations on road users to exercise reasonable care for their own safety.

SCHEDULE 1: SEALED ROADS AND PARKING BAYS

Schedule 1 details the inspection frequencies and intervention levels and response times for the maintenance of all sealed roads and parking bays (including road related infrastructure associated with bridges, but excluding bridge sub and super structures).

Sealed Roads and Parking Bays

All sealed roads and parking bays for which Macedon Ranges Shire Council is responsible will be inspected in accordance with the specified frequency in the table below:

Road Category	Inspection Frequency (per annum)
1	6
2	3
3	2

If a road category/hierarchy described earlier in this document does not appear in the schedules then inspection and maintenance of the asset will be performed on a reactive basis or in accordance with the appropriate written agreement.

Quality of Work/Service

All persons engaged to undertake inspections and works must be suitably trained and have the appropriate experience to perform the tasks specified.

Quality Standards

All work must be carried out in accordance with Council's standards and procedures.

Schedule 1, Table 1.1 Intervention Criteria for Sealed Roads and Parking Bays

The following requirements are to apply.

					DEFECT TREATMENT TIME		
ITEM	NO.	ACTIVITY	INTERVENTION LEVEL	* REACTIVE INSPECTION	CATEGORY 1	CATEGORY 2	CATEGORY 3
Potholes	1.1	Repair potholes in the road surface.	Any pothole > 300mm diameter and > 100mm deep.	Within 3 business days of being notified.	10 business days	14 business days	20 business days
Edge Repairs	1.2	Repair edge break on sealed road surface	Any edge break >100mm into the road seal for a distance >1 metre and >100mm deep	Within 3 business days of being notified.	10 business days	14 business days	20 business days
Pavement Failure	1.3	Repair failure and deformation of the pavement.	Failure or deformation is > 100mm when measured under a 2.0m straight edge.	Within 3 business days of being notified.	10 business days	14 business days	20 business days
Pavement Sweeping	1.4	Removal of loose aggregate on sealed surfaces.	A build up of loose material in excess of 50mm.	Within 3 business days of being notified.	10 business days	14 business days	20 business days
Edge Drop Offs	1.5	Reinstatement of edge drops that occur along the interface of a bituminous surface and the road shoulder / verge.	When drop-offs of > 100mm occur for continuous lengths of > 10m.	Within 3 business days of being notified.	10 business days	14 business days	20 business days
Shoulder Maintenance	1.6	Repair pothole in the road shoulder.	Any pothole > 300mm diameter and > 100mm depth	Within 3 business days of being notified.	10 business days	14 business days	20 business days
Shoulder Maintenance	1.7	Repair scours in the road shoulder	Any scour > 150mm width, > 150mm depth and > 1.2m length	Within 3 business days of being notified.	10 business days	14 business days	20 business days

					DEFECT TREATMENT TIME		
ITEM	NO.	ACTIVITY	INTERVENTION LEVEL	* REACTIVE INSPECTION	CATEGORY 1	CATEGORY 2	CATEGORY 3
Shoulder Maintenance	1.8	Repair corrugations in the road shoulder	Any corrugations > 150mm width and > 75mm depth.	Within 3 business days of being notified.	10 business days	28 business days	42 business day
Bleeding Roads	1.9	Spreading of grit over spray seals with excess bitumen bleeding. (Typically occurs during very high temperatures)	Vehicle types start to 'pick up' bitumen, resulting in the loss of seal integrity.	Within Business 3 business days of being notified.	10 business days	10 business days	14 business days
Open/Table Drains	1.10	Maintain drains which run generally parallel to the road or adjacent to the road and drain water from the road surface and adjoining slopes.	Where water is encroaching road at a depth > 50mm and >1m wide over 1.2m distance	Within 3 business days of being notified.	10 business days	28 business days	42 business days

* High risk situations/interventions are subject to a risk assessment subject to the Road Management Plan and will be assessed on a case by case basis

SCHEDULE 2: UNSEALED ROADS

Schedule 2 details the inspection frequencies and intervention levels and response times for maintenance of all unsealed roads (including road related infrastructure associated with bridges, but excluding bridge sub and super structures) for which Macedon Ranges Shire Council is responsible.

Unsealed Road Grading/Pothole Patching/Ripping

Unsealed roads that are subject to the Road Management Plan must be inspected in accordance with the specified frequency in the table below:

Road Category	Minimum Inspection Frequency (per annum)
4	3
5	1
6	1

If a road category/hierarchy described earlier in this document does not appear in the schedules then inspection and maintenance of the asset will be performed on a reactive basis or in accordance with the appropriate written agreement.

Quality of Work/Service

All persons engaged to undertake inspections and works must be suitably trained and have the appropriate experience to perform the tasks specified.

Quality Standards

All work must be carried out in accordance with Council's standards and procedures.

Schedule 2, Table 2.1 Intervention Criteria for Unsealed Roads

The following requirements are to apply:

					DEFECT TREATMENT TIME		
ITEM	NO.	ACTIVITY	INTERVENTION LEVEL	* REACTIVE INSPECTION	CATEGORY 4	CATEGORY 5	CATEGORY 6
Unsealed Road Maintenance	2.1	Grading of unsealed surface.	Potholes > 600mm diameter and 125mm deep.	Within 3 business days of being notified	28 business days	36 business days	42 business days
Unsealed Road Maintenance	2.2	Grading of unsealed surface.	Corrugations > 50mm deep and over 100m long.	Within 3 business days of being notified	28 business days	36 business days	42 business days
Unsealed Road Maintenance	2.3	Grading of unsealed surface.	Scours > 150mm depth and 150mm wide and over 50m long (longitude) and 150mm depth and 150mm wide over 2.0m (traverse)	Within 3 business days of being notified	28 business days	36 business days	42 business days
Unsealed Road Maintenance	2.4	Grading of unsealed surface.	Loose Material shall not exceed 100mm in depth in the carriageway over 50m or intersection >4m2	Within 3 business days of being notified	28 business days	36 business days	42 business days
Open/Table Drains	2.5	Maintain drains which run generally parallel to the road or adjacent to the road and drain water from the road surface and adjoining slopes.	Where water is pooling or and encroaching carriageway at a depth >50mm and >1.0m wide over 1.2m distance	Within 3 business days of being notified	28 business days	36 business days	42 business days

* High risk situations/interventions are subject to a risk assessment subject to the Road Management Plan and will be assessed on a case by case basis

SCHEDULE 3: URBAN STREETS

Schedule 3 details the inspection frequencies and intervention levels and response times for all:

- drainage pits (including cleaning);
- footpaths, shared paths and bicycle paths; and
- kerb and channel

Drainage Pits

Drainage pits within road reserves that are subject to the Road Management Plan will be inspected in accordance with the specified frequency in the table below:

Road Category	Minimum Inspection Frequency
1,2,3,4,5, and 6	Annually

Footpaths, Shared Paths and Bicycle paths

Footpaths and bicycle paths that are subject to the Road Management Plan will be inspected in accordance with the specified frequency in the table below:

Pathway Category	Minimum Inspection Frequency (per annum)
High Priority	2
Low Priority	1

If a pathway category/hierarchy described earlier in this document does not appear in the schedules, then inspection and maintenance of the asset will be performed on a reactive basis or in accordance with the appropriate written agreement.

Kerb and Channel including Median Kerb

Kerb and channel (including median kerb) that are subject to the Road Management Plan will be inspected in accordance with the specified frequency in the table below:

Road Category	Minimum Inspection Frequency (per annum)
1,2,3,4,5,6	Reactive

Quality of Work/Service

All persons engaged to undertake inspections and works must be suitably trained and have the appropriate experience to perform the tasks specified.

Quality Standards

All work must be carried out in accordance with Council's standards and procedures.

Schedule 3, Table 3.1 Intervention Criteria for Urban Streets

The following requirements are to apply.

ITEM	NO.	ACTIVITY	INTERVENTION LEVEL	* REACTIVE INSPECTION	DEFECT TREATMENT TIME
Drainage Pits	3.1	Pit clearing.	> 30% capacity reduced	Within 3 business days of being notified	30 business days
Drainage Pits	3.2	Repair and maintenance of pit lids and/or surrounds	Missing pit lids, surrounds or grates in pedestrian areas or traffic lanes.	Within 3 business days of being notified	30 business days
Footpaths, Shared Paths and Bicycle Paths	3.3	Repair / rectify pedestrian area with displacement.	Displacement > 25mm .	Within 3 business days of being notified	30 business days
Kerb and Channel	3.4	Repair and maintenance of kerb and channel.	Kerb is broken or heaved to the extent of preventing the free flow of water.	Within 3 business days of being notified	30 business days

* High risk situations/interventions are subject to a risk assessment subject to the Road Management Plan and will be assessed on a case by case basis

SCHEDULE 4: SIGNS, LINEMARKING, GUIDEPOSTS AND GUARDRAILS

Schedule 4 details the inspection frequencies and intervention levels and response times for maintenance of all regulatory and traffic advisory signs, linemarking and guardrails on road reserves within and under the control of the Municipality, including:

- Directional signs;
- Traffic signs;
- Hazard and flood markers;
- Speed, Regulatory and Warning signs;
- Centre line and edge lines;
- Statutory Control lines and School Crossings;
- Guideposts
- Guardrails

Signs, Guardrails and Guideposts

Signs, linemarking, guardrails and guideposts that are subject to the Road Management Plan will be inspected in accordance with the specified frequency in the table below:

Signs and Guardrails

Road Category	Minimum Inspection Frequency
1,2,3,4,5 and 6	Annually

Linemarking

Road Category	Minimum Inspection Frequency (per annum)
1,2,3	Annually

Guidepost Repair/Replacement

Guideposts that are subject to the Road Management Plan will be inspected in accordance with the specified frequency in the table below:

Road Category	Minimum Inspection Frequency
1	Annually

2	Annually
3	Annually
4	Every 2 years
5	Every 2 years
6	Every 2 years

Quality of Work/Service

All persons engaged to undertake inspections and works must be suitably trained and have the appropriate experience to perform the tasks specified.

Quality Standards

All work must be carried out in accordance with Council's standards and procedures.

Schedule 4, Table 4.1 Intervention Criteria for Signs, Linemarking, Guideposts and Guardrails

The following requirements are to apply.

					DEFECT TREATMENT TIME					
ITEM	NO.	ACTIVITY	INTERVENTION LEVEL	* REACTIVE INSPECTION	CATEGORY 1	CATEGORY 2	CATEGORY 3	CATEGORY 4	CATEGORY 5	CATEGORY 6
Regulatory and Warning Signs	4.1	Replace or repair illegible or missing regulatory and warning signs.	Regulatory or warning signs missing or illegible making them substantially ineffective.	Within 3 business days of being notified	30 business days	30 business days	30 business days	30 business days	30 business days	30 business days
Line marking of roads and pavements.	4.2	Line marking of all lines and pavement markings on sealed surfaces.	Missing or illegible line marking.	Within 3 business days of being notified	30 business days	30 business days	30 business days	N/A	N/A	N/A
Guardrail	4.3	Realign, repair or replace guardrail, posts and associated hardware	Guardrail that is missing or damaged making the section substantially ineffective.	Within 3 business days of being notified	90 business days	90 business days	90 business days	90 business days	90 business days	90 business days
Guidepost Repair/Replacement	4.4	Replacement of broken or missing guideposts	Guideposts are non-functional or missing	Within 3 business days of being notified	30 business days	30 business days	30 business days	30 business days	30 business days	42 business days

SCHEDULE 5: VEGETATION MANAGEMENT

Schedule 5 details the inspection frequencies and intervention levels and response times for all:

- Tree and vegetation encroaching into clear zone envelope of Sealed and Unsealed roads
- Tree and vegetation encroaching into clear zone envelope of footpaths, shared paths and bicycle paths
- Safety sight lines
- Vegetation obstructing clear vision of regulatory or warning signs.

Tree & Vegetation on roadside

Trees and vegetation within road reserves that are subject to the Road Management Plan will be inspected in accordance with the specified frequency in the table below:

Road Category	Minimum Inspection Frequency (every 4 years)
1, 2 and 3	1
4, 5 and 6	Currently not inspected

Tree & Vegetation Footpaths, Shared Paths and Bicycle paths

Footpaths and bicycle paths that are subject to the Road Management Plan will be inspected in accordance with the specified frequency in the table below:

Pathway Category	Minimum Inspection Frequency (per annum)
High Priority	2
Low Priority	1

*These inspections are carried out as part of footpath inspections

Quality of Work/Service

All persons engaged to undertake inspections and works must be suitably trained and have the appropriate experience to perform the tasks specified.

Quality Standards

All work must be carried out in accordance with Council's standards and procedures.

Schedule 5, Table 5.1 Intervention Criteria for Tree and Vegetation Management

The following requirements are to apply.

					DEFECT TREATMENT TIME		
ITEM	NO.	ACTIVITY	INTERVENTION LEVEL	* REACTIVE INSPECTION	CATEGORY 1	CATEGORY 2	CATEGORY 3
Vegetation Management	5.1	Removal and/or trimming back of vegetation to allow clear access by vehicles along the carriageway	Vegetation to be kept clear in the following space: <u>Category 1 Roads:</u> Vegetation clearance to be kept > 5.0m height over the road surface for the trafficable width. <u>Category 2 Roads:</u> Vegetation clearance to be kept > 5.0m height over the road surface for the trafficable width. <u>Category 3 Roads:</u> Vegetation clearance to be kept > 4.0m height over trafficable width	Within 3 business days of being notified	14 business days	28 business days	42 business days
Roadside Vegetation	5.2	Mowing / trimming of vegetation on roadsides, verges and park lands	Trees, shrubs or grasses that have grown to restrict design sight distance to intersections or restrict viewing of regulatory or warning signs.	Within 3 business days of being notified	14 business days	30 business days	48 business days

					DEFECT TREATMENT TIME		
ITEM	NO	ACTIVITY	INTERVENTION LEVEL	REACTIVE INSPECTION	CATEGORY 4	CATEGORY 5	CATEGORY 6
Vegetation Management	5.3	Removal and/or trimming back of vegetation to allow clear access by vehicles.	Category 4 and 5 Roads – Vegetation clearance to be kept > 5.0m height over the road surface for the trafficable width. For all other roads including Category 6 and (FAT) vegetation clearance to be kept > 4.0m height over the trafficable width.	Within 3 business days of being notified	28 business days	36 business days	42 business days
Roadside Vegetation	5.4	Mowing / trimming of vegetation on roadsides, verges and park lands	Trees, shrubs or grasses that have grown to restrict design sight distance to intersections or restrict viewing of regulatory or warning signs.	Within 3 business days of being notified	28 business days	36 business days	42 business days

* High risk situations/interventions are subject to a risk assessment subject to the Road Management Plan and will be assessed on a case by case basis

ITEM	NO	ACTIVITY	INTERVENTION LEVEL	REACTIVE INSPECTION	
Footpaths, Shared Paths and Bicycle Paths	5.5	Remove overhanging or encroaching vegetation	Overhanging vegetation lower than 3.0m above the path or affecting clearance envelope of the path restricting pedestrian passage to < 2.5m.	Within 3 business days of being notified	30 business days

* High risk situations/interventions are subject to a risk assessment subject to the Road Management Plan and will be assessed on a case by case basis

Vegetation on Unsealed Roads

					DEFECT TREATMENT TIME		
ITEM	NO.	ACTIVITY	INTERVENTION LEVEL	* REACTIVE INSPECTION	CATEGORY 4	CATEGORY 5	CATEGORY 6
Vegetation Management	5.6	Removal and/or trimming back of vegetation to allow clear access by vehicles.	Category 4 and 5 Roads – Vegetation clearance to be kept > 5.0m height over the road surface for the trafficable width. For all other roads including Category 6 and (FAT) vegetation clearance to be kept > 4.0m height over the trafficable width.	Within 3 business days of being notified	28 business days	36 business days	42 business days
Roadside Vegetation	5.7	Mowing / trimming of vegetation on roadsides, verges and park lands	Trees, shrubs or grasses that have grown to restrict design sight distance to intersections or restrict viewing of regulatory or warning signs.	Within 3 business days of being notified	28 business days	36 business days	42 business days

* High risk situations/interventions are subject to a risk assessment subject to the Road Management Plan and will be assessed on a case by case basis