

Road Management Plan 2025-29

October 2025

Version Control	Details	Date
Version 1.0	Adopted by Council	December 2004
	Reviewed	June 2009
	Revoked	August 2009
Version 2.0	Adopted by Council	August 2009
	Reviewed	June 2013
	Revoked	December 2018
Version 3.0	Adopted by Council	December 2018
	Reviewed	June 2021
	Revoked	June 2022
Version 4.0	Adopted by Council	June 2022
	Reviewed	July 2025
	Revoked	TBC
Version 5.0	Adopted by Council	TBC

Cardinia Shire Council

Civic Centre 20 Siding Avenue, Officer

PO Box 7 Pakenham 3810

Phone: 1300 787 624

Email: mail@cardinia.vic.gov.au Web: <u>www.cardinia.vic.gov.au</u>

National Relay Service (NRS)

TTY: 133 677 (ask for 1300 787 624)

Speak and Listen (speech-to-speech relay): 1300 555 727 (ask for 1300 787 624)

Translator Interpretation Service

131 450 (ask for 1300 787 624)

Acknowledgments

Acknowledgment of Country

Cardinia Shire Council acknowledges the Bunurong and Wurundjeri peoples as the Traditional Custodians of the land and waterways across our region.

We pay our respects to Elders past and present and recognise their deep and enduring connection to Country.

Guided by our community, we strive for a future grounded in truth, respect, equity, and cultural safety, where everyone feels connected and has the opportunity to thrive.

Our inclusivity statement

Cardinia Shire Council encourages a sense of belonging within our shire.

We support an inclusive community comprised of people from diverse backgrounds, including and not limited to Aboriginal and Torres Strait Islander people, people from cultural and linguistically diverse (CALD) backgrounds, those identifying as LGBTIQ+, people of faith, and people of all ages, genders and abilities.

Contents

Ackno	owledgments	2
Ackno	owledgment of Country	2
Our ir	nclusivity statement	2
Conte	ents	3
Defin	nitions	4
1.	Introduction	7
1.1	What is the purpose of this plan?	7
1.2	Legislation guiding this plan	7
1.3	What is covered in the plan?	7
1.4	Updating the plan	8
1.5	Exceptional circumstances	8
1.6	Responsibility for the plan	9
2. Rig	ghts and responsibilities	11
2.1	Public roads	11
2.2	Key stakeholders	11
2.3	Coordinating and responsible road authority	11
2.4	General functions of a road authority	12
2.5	Rights of the road user	12
2.6	Obligations of road users	12
3. Ro	oad management systems	15
3.1	Background and process	15
3.2	Asset hierarchies: municipal road network	15
3.3 0	Our road network	16
3.4	Maintenance management system	17
3.5	Asset levels of service	21
4.	Register of public records	23
4.1	Maintenance demarcation (boundary) agreements	23
4.2	Roads not listed on the register	23
5.	Technical references	23
6.	Attachments	9
6.1	Road hierarchy - roads	9
6.2	Pathway hierarchy	10
6.3	Inspections requirements	11
6.4	Inspection frequencies	13
6.5	Defect intervention levels and repair timeframes	15

Definitions

Ancillary areas	Any area designated as an ancillary area by the coordinating road authority under section 18 of The Act and may include any area which is a 'park and ride' carpark, rest stop or scenic lookout.
Arterial road	Refers to freeways, highways and declared main roads, which are managed by the Victorian Government, through Head of Transport for Victoria (as the co-ordinating road authority).
Co-ordinating road authority	The organisation which has the responsibility to co-ordinate works. Generally, if the road is a freeway or arterial road, this will be Head of Transport for Victoria. Generally, if the road is a municipal road, this will be Council.
Council	Refers to Cardinia Shire Council
Demarcation agreement	A formal agreement between Council and another organisation that defines areas of responsibility.
Motor vehicle	Refers to a vehicle that is propelled by an in-built motor and is intended to be used on a roadway. This does not include a motorised wheelchair or mobility scooter which is incapable of travelling at a speed greater than 10 km/h and is solely used for the conveyance of an injured or disabled person.
Municipal road(s)	Road for which the municipal council is the co-ordinating road authority. The Road Management Act 2004 imposes specific duties on the municipal council with respect to the inspection, repair and maintenance of these roads and associated road-related infrastructure.
Non-road infrastructure	Refers to infrastructure in, on, under or over a road, which is not road infrastructure. This includes (but is not limited to) such items as gas pipes, water and sewerage pipes, cables, electricity poles and cables, tram wires, rail infrastructure, bus shelters, public telephones, mailboxes, roadside furniture and fences erected by utilities, or providers of public transport.
Ancillary areas	Any area designated as an ancillary area by the coordinating road authority under section 18 of The Act and may include any area which is a 'park and ride' carpark, rest stop or scenic lookout.
Arterial road	Refers to freeways, highways and declared main roads, which are managed by the Victorian Government, through Head of Transport for Victoria (as the co-ordinating road authority).

Co-ordinating road authority	The organisation which has the responsibility to co-ordinate works. Generally, if the road is a freeway or arterial road, this will be Head of Transport for Victoria. Generally, if the road is a municipal road, this will be Council.
Council	Refers to Cardinia Shire Council
Demarcation agreement	A formal agreement between Council and another organisation that defines areas of responsibility.
Motor vehicle	Refers to a vehicle that is propelled by an in-built motor and is intended to be used on a roadway. This does not include a motorised wheelchair or mobility scooter which is incapable of travelling at a speed greater than 10 km/h and is solely used for the conveyance of an injured or disabled person.
Municipal road(s)	Road for which the municipal council is the co-ordinating road authority. The Road Management Act 2004 imposes specific duties on the municipal council with respect to the inspection, repair and maintenance of these roads and associated road-related infrastructure.
Non-road infrastructure	Refers to infrastructure in, on, under or over a road, which is not road infrastructure. This includes (but is not limited to) such items as gas pipes, water and sewerage pipes, cables, electricity poles and cables, tram wires, rail infrastructure, bus shelters, public telephones, mailboxes, roadside furniture and fences erected by utilities, or providers of public transport.
Other roads	Include roads in state forests and reserves, and roads on private property. Municipal councils are not responsible for the inspection, repair or maintenance of these roads.
Pathway	Refers to a footpath, bicycle path, shared path or other area that is constructed or developed by Council for members of the public (not motor vehicles) to use. Pathways may be further categorised as: Footpaths – pathways designated solely for use by foot traffic (and limited mobility devices such as wheelchair users) Bicycle pathways – pathways designated solely for use by cyclists, scooters and the like but excluding foot traffic, and Shared pathways – pathways designated for use by riders of bicycles, the riders of electric scooters and pedestrians.
Public road	As defined by the Road Management Act 2004 and includes a freeway, an arterial road, a municipal road declared under section 14(1) of the Act and a road in respect of which Council has made a decision that it is reasonably required for general public use and is included on the Register of Public Roads.
Plan	Refers to this Road Management Plan.
Reported hazards	Situations reported to Council by the public that present an immediate and significant risk to the safety of road and pathway users (e.g. chemical spill, flooding across 50% of road surface, fallen trees/limbs or other objects on or blocking traffic lanes, etc).

Road	Has the same meaning as in the Road Management Act 2004, being inclusive of any public highway, any ancillary area and any land declared to be a road under section 11 of that Act or forming part of a public highway or ancillary area.
Road infrastructure	Refers to infrastructure which forms part of a roadway, pathway or shoulder, which includes structures and materials.
Road-related infrastructure	Refers to infrastructure installed or constructed by the relevant road authority to either facilitate the operation or use of the roadway or pathway, or support or protect the roadway or pathway.
Road reserve	Refers to the area of land that is within the boundaries of a road.
Roadside	Refers to any land that is within the boundaries of the road (other than shoulders) which is not a roadway or pathway. This includes land on which any vehicle crossing or pathway, which connects from a roadway or pathway on a road to other land, has been constructed. Example: any nature strip, forest, bushland, grassland or landscaped area within the road reserve would be considered roadside.
Roadway	Refers to the area of a public road that is open to, or used by, the public, and has been developed by a road authority for the driving or riding of motor vehicles. This does not include a driveway providing access to a public road, or other road, from adjoining land.
Rural	All roads that do not meet the definition of Urban as defined in section 3 (Definitions) of the Road Management Act 2004
Shoulder	Refers to the cleared area, whether constructed or not, that adjoins a roadway to provide clearance between the roadway and roadside. This does not refer to any area that is not in the road reserve.
Temporary measures	Measures implemented to reduce the risk to users of the road network until such time as appropriate repairs can be completed. (e.g. installing barriers, signage, closing the road/footpath, etc.)
Timeframe	The specified period of time in which an inspection or intervention is planned to take place. H = Hours, WD = Working Days, W = Weeks, M = Months, Y = Years
Urban	As defined in section 3 (Definitions) of the Road Management Act 2004

1. Introduction

1.1 What is the purpose of this plan?

This Plan is a road management plan for the purposes of s.39 of the Road Management Act 2004.

The Cardinia Shire is a road authority, as defined in the Act and is responsible for approximately 1,666 km of local roads and 932 km of pathway assets. Cardinia Shire Council is committed to ensuring that accessible, quality services and facilities are provided to our community.

The Road Management Plan complements the Council's development of Asset Management Plans for Roads, Pathways, Bridges and Drainage, by addressing specific elements of the inspection, repair, maintenance and management of the road and pathway network, as well as the legislative responsibilities under the Act.

Section 50 of the Road Management Act 2004 sets the following objectives for a municipal road management plan:

- 1) To establish a system for our road management functions, which is based on policy, operational objectives and available resources.
- 2) To set a performance standard for our road management functions.

Although it is termed a 'plan' in the legislation, it is functionally an operational protocol document – describing the systems and rules we use to make decisions and meet obligations within our available resources. The plan forms part of a larger Asset Management Framework related to maintenance and operations.

1.2 Legislation guiding this plan

In addition to the Road Management Act 2004, the plan also considers the following Acts, regulations and codes of practice:

- Local Government Act 2020
- Ministerial Codes of Practice
- Road Management (General)
 Regulations 2016

- Road Management (Works and Infrastructure) Regulations 2015
- Road Safety Act 1986
- Wrongs Act 1958.

1.3 What is covered in the plan?

The Plan is divided into six sections:

- 1. Introduction.
- 2. Rights and responsibilities: covers legislation and local laws relevant to road management.
- 3. Road management systems: how we classify roads, streets and footpaths known as our asset hierarchy and the plans and processes we use to maintain roads and road-related infrastructure.
- 4. Register of public roads: what's in it, how to access it and the process for making changes.
- 5. Technical References.
- 6. Attachments:
 - a. Attachment 1: Road Hierarchy Roads
 - b. Attachment 2: Pathway Hierarchy
 - c. Attachment 3: Inspection Requirements

- d. Attachment 4: Inspection Frequencies
- e. Attachment 5: Defect Intervention Levels and Repair Timeframes

1.4 Updating the plan

This Plan is a dynamic document that will be reviewed regularly in accordance with the timelines specified in the Act and associated Regulations. It will be checked against the current needs and expectations of the community. Council will review the performance of the Plan on an annual basis through the Budget preparation process.

This Plan must be updated within a defined period following Council elections. Outside of this cycle, changes may be required from time to time.

A process will be used to manage changes to this Plan:

- If material changes are made to standards and specifications, a report will be presented to Council, along with a brief explanation as to why such changes are necessary. The review process must follow the steps as set out in the Road Management (General) Regulations 2016 Part 3 – Road Management Plans.
- When changes do not alter these technical aspects of road management, changes may be approved by the Chief Executive Officer (CEO).

These changes will be made in accordance with the processes prescribed by the Road Management Act 2004. To assist with version control, these changes will be numbered as follows:

- Versions presented to Council will be renumbered by whole numbers for example, from Version 1.00 to 2.00.
- Those approved by the Director will be renumbered by decimals for example, from Version 1.00 to 1.01.

1.5 Exceptional circumstances

Council will make every effort to meet its commitments under this Plan. However, there may be situations or circumstances that affect Council's business activities to the extent that it cannot deliver on the service levels of the RMP.

These include but are not limited to natural disasters, such as fires, floods, or storms, or a prolonged labour or resource shortage, due to a need to commit or redeploy Council staff and/or equipment elsewhere or due to the effects of pandemic and or government intervention.

1.5.1 Suspension of the plan

In the event that the CEO of Council has considered the impact of such an event on the limited financial resources of Council and its other conflicting priorities, and determined that the Plan cannot be met, then pursuant to Section 83 of the Wrongs Act 1958, the CEO will write to Council's Officer in charge of the Plan and inform them that some, or all, of the timeframes and responses in Council's Plan are to be suspended.

Council statements to residents about the suspension or reduction of the services under the RMP will include reference to how the work that will be done has been prioritised, and the period for which it is likely to be affected.

1.5.2 Reinstatement of the plan

Once the scope of the event/s have been determined, and the resources committed to the event response have been identified, then there will be an ongoing consultation between Council's CEO and Council's Officer responsible for the Plan, to determine which parts of Council's Plan are to be reactivated and when.

1.5.3 Communication and documentation around plan suspension

Council will provide information/statements to residents about the suspension or reduction of the services under its Plan, including:

- How the work that will be done has been prioritised; and
- The period for which it is likely to be affected.

This information will be provided by the Council on its website where its Plan is located and other channels as appropriate such as press releases or social media.

Where Council has suspended, in part or whole, it's Plan, associated documents (e.g. communications, meeting minutes, schedules, etc.) will be recorded and stored.

1.5.4 Inspections and repairs during suspension of plan

The suspension of the Plan will not necessarily mean that all inspections and repairs halt. However, it may mean that only certain categories of inspections and repairs are undertaken.

These will be based on a risk assessment and resources available to the Council, taking into account the resources needed to address the impact of the trigger event.

For example, some reactive inspections may take place and repair (temporary or permanent) of roads/footpaths which pose a high risk may be undertaken, depending on the resources available to the council and the accessibility of each asset.

1.6 Responsibility for the plan

Overall responsibility for administering and implementing the Plan rests with the Manager Operations.

THIS PAGE IS INTENTIONALLY LEFT BLANK

2. Rights and responsibilities

2.1 Public roads

Public roads are defined in the Road Management Act 2004 as including:

- a freeway
- an arterial road
- a municipal road declared under section 14(1) of the Road Management Act 2004
- a road in respect of which Council has decided that it is reasonably required for general public use and is included on the Register of Public Roads.

2.2 Key stakeholders

The key stakeholders impacted by this Plan include:

- the general community (for recreation, sport, leisure and business)
- residents and businesses adjoining the road network
- pedestrians
- vehicle users with motorised vehicles, such as trucks, buses, commercial vehicles, cars and motorcycles
- users of smaller, lightweight vehicles, such as pedal-powered bicycles, motorised buggies, wheelchairs, prams and so on
- tourists and visitors to the area
- emergency agencies (Victoria Police, Country Fire Authority, Ambulance Victoria, State Emergency Services)
- the military (in times of conflict and emergency)
- traffic and transportation managers
- Council as the responsible road authority and manager of the road and pathway network asset
- construction and maintenance personnel, who build and maintain asset components
- utility agencies using the road reserve for infrastructure (water, sewerage, gas, electricity, telecommunications)
- state and federal governments, who periodically provide funding for roads.

2.3 Coordinating and responsible road authority

Section 35 of the Road Management Act 2004 provides that a road authority has power to do all things necessary or convenient to be done for or in connection with the performance of its functions under the Act.

Section 36 of the Road Management Act 2004 outlines which road authority is the coordinating road authority. According to subsection (c), the coordinating road authority:

If the road is a municipal road, the municipal council of the municipal district in which the road or part of the road is situated.

However, there are instances where several authorities are responsible for components of the road within the road reserve. Section 37 of the Road Management Act 2004 identifies who is the responsible road authority in particular circumstances.

2.4 General functions of a road authority

The general functions of a road authority are described within Section 34 of the Road Management Act 2004.

2.5 Rights of the road user

The rights of public road users, which are legally enforceable, are set out in Sections 8 to 10 of the Road Management Act 2004.

2.6 Obligations of road users

2.6.1 General usage

The common law requires that a road user must take reasonable care for their own safety

The *Road Safety Act* 1986 sets out obligations on road users, including section 17A which requires that a person who drives a motor vehicle on, or uses, a highway must drive in a safe manner have regard for all relevant factors, including without limiting their generality, the following:

- a) physical characteristics of the road
- b) prevailing weather conditions
- c) level of visibility
- d) the condition of any vehicle the person is driving or riding on the highway
- e) prevailing traffic conditions
- f) the relevant road laws and advisory signs
- g) the physical and mental condition of the driver or road user.

Section 17A of the Road Safety Act 1986 also requires that a road user must take reasonable care:

- a) to avoid any conduct that may endanger the safety or welfare of other road users
- b) to avoid any conduct that may damage road infrastructure and non-road infrastructure on the road reserve
- c) to avoid conduct that may harm the environment of the road reserve

2.6.2 Incident claims

If a person proposes to make a claim in relation to a public road or infrastructure for which Council is the responsible road authority, that person should contact Council and Council will initiative respective investigation and insurance reporting processes.

In accordance with Section 110 of the Road Management Act 2004, Council is not legally liable for property damages where the value of the damage is equal to or less than the threshold amount.

In cases where the claim relates to assets Council does not own or is not responsible for on the road reserve, the person who proposes to make a claim must refer the claim to the other authority or person responsible for those assets.

2.6.3 Permits for work within a road reserve

In cases where an individual or organisation proposes to carry out works within the road reserve that may impede public access, or interfere with road infrastructure, they must apply for an appropriate permit. There are some exemptions, as noted in the Road Management (Works and Infrastructure) Regulations 2015.

2.6.4 Obligations of others

There are several assets within the road reserve that Council does not have an obligation to inspect and/or maintain. These include:

- a) Non-road infrastructure: This includes (but is not limited to) such items as gas pipes, water and sewerage pipes, cables, electricity poles and cables, tram wires, rail infrastructure, bus shelters, public telephones, mailboxes, roadside furniture and fences erected by utilities, or providers of public transport.
- b) **Vehicle driveways**: The vehicle crossing (including Cross-over), located between the carriageway and the property boundary, must be maintained by the adjoining property owner. However, Council is responsible for the portion of the driveway where the constructed pathway is reasonably required by the public in accordance with the following diagrams:

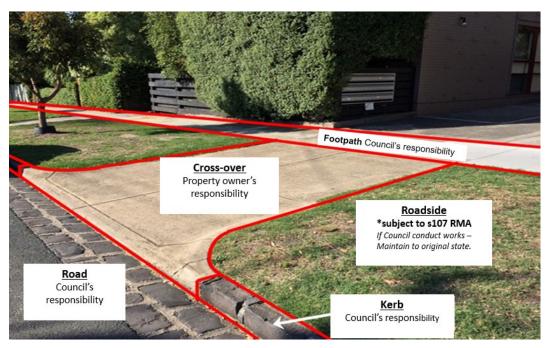


Figure 1 - Urban driveway / cross-over

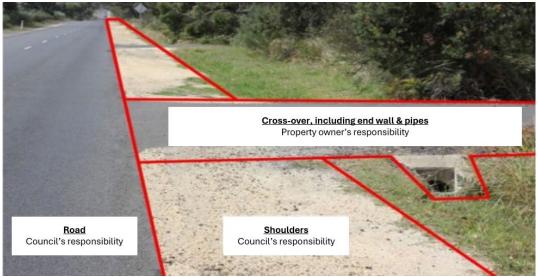


Figure 2: Extra urban and rural driveway / cross-over

- c) **Single property stormwater drains** for drains constructed within the reserve that carry water from a single property to an outlet in the kerb, or other drain.
- d) **Utilities** including but not limited to; telecommunication, power, water, gas and rail authority assets.
- e) Roadside as per Section 107 of the Road Management Act, Council has no "statutory duty or a common law duty to perform road management functions in respect of a public highway which is not a public road or to maintain, inspect or repair the roadside", described as "any land that is within the boundaries of the road (other than shoulders) which is not a roadway or pathway". This includes landscaped tree plots within the footpath/pathway where the surface of the tree plot is not constructed with the intention of providing a trafficable pedestrian surface.

Where Council becomes aware of a hazard created by the defective condition of assets / infrastructure owned by another party, Council may at its absolute discretion:

- If located within assets / infrastructure for which Council is responsible (e.g. footpaths, road surfaces, etc.) or otherwise presents an immediate and significant risk to members of the public, undertake temporary measures to reduce the risk to members of the public until such time as the respective owner can implement permanent repairs (subject to Council's available resources).
- Report in writing (e.g. email or letter) the presence of the hazard to the responsible party and request that repairs be implemented within a reasonable timeframe.
- Where repairs are not completed by the responsible party within the respective timeframe, Council may complete necessary repairs and invoice the responsible party for the costs.

However, where another party has a duty in relation to the asset / infrastructure, and Council has a discretionary power to take remedial action in relation to that matter, only that other party with the duty is liable in a subsequent proceeding, in accordance with s.104 of the Road Management Act 2004.

3. Road management systems

3.1 Background and process

In the context of this Plan, and as per the requirements of the Act, Cardinia Shire Council defines Management System as a process-based system which enables Council to make decisions in line with community expectations, needs and targets.

Road asset management involves managing both physical assets and uses and operation that have the potential to impact their condition. It applies to all road assets, including:

- the road pavement and surface, as well as footpaths, kerb and channel
- structures bridges, culverts and traffic management devices
- road infrastructure traffic signals and on-road electrical assets.

The aim of our road management system is to deliver a safe and efficient road network and meet community needs to the best of our ability, within available resources.

To create a road asset management system that would best meet our needs when inspecting, maintaining and repairing public roads, we used the following nationally recognised asset management frameworks:

- International Infrastructure Management Manual (IIMM) 2015, IPWEA
- IPWEA National Asset Management Systems (NAMS+)
- Other references, as listed in Technical References.

The system is designed to set the direction for our asset management activities. It is also linked to the annual business planning cycle.

3.2 Asset hierarchies: municipal road network

This Plan applies to all Public Roads for which Council is the coordinating road authority in accordance with Sections 36 and 37 of the Act. These are roads and pathways listed in Council's Register of Public Roads that Council has deemed to be:

- Managed and maintained by Council, and
- Considered to be reasonably required for general public use.

All roads and footpaths within the municipal road network are classified according to a hierarchy that takes into account how they are used, who uses them and how often.

The hierarchy classification is used to determine the levels of service required, prioritise works programs and determine defect intervention responses.

The classifications in the hierarchy are:

Road and street network	Is divided into the following categories: Local Arterial Local Major Collector Local Minor Collector Local Access Limited Access See Attachment 1 for more information.
Pathway network	Is divided into 2 categories, each of which is divided into 3 subcategories, as follows: Footpaths: High Medium Low
	Shared and Bicycle Pathways: • High • Other Shared Pathways See Attachment 2 for further information.

3.3 Our road network

More information about Council's road network is shown in the tables below.

Road network length by classification / hierarchy:

Classification / Hierarchy	Length (km)	% of Network
Local arterial	230	14%
Local major collector	111	7%
Local minor collector	224	13%
Local access	1092	66%
Limited access	9	1%
Other roads and trails	230	14%
Total	1666	

Road network length by surface type:

Surface Type	Length (km)	% of Network
Sealed	844	51%
Unsealed	822	49%
Total	1666	

Pathway network length by category:

Classification	Length (km)	% of Network
Footpath High	31	3%
Footpath Medium	49	5%
Footpath Low	791	85%
Shared Pathway High	11	1%
Shared Pathway Other	50	5%
Total	932	

3.4 Maintenance management system

3.4.1 Maintenance management

Council has responsibilities to all road users and the community to maintain public roads to a reasonably safe and suitable standard, within our available funds and resources.

By developing long-term maintenance programs for our assets, we are better able to plan how we do this.

The following maintenance requirements shape our annual program and budget.

Routine	mai	nter	nand	ce
standard	ab			

Standards vary across the network depending on the asset type and relevant risk factors, such as traffic volumes and composition, operating speeds, the susceptibility of assets to deterioration and the cost effectiveness of repairs. Competing priorities for funding are also relevant.

Defect intervention levels have been established using the *VicRoads Standard Specification Section 750* and adapting it to local conditions.

The standards will be reviewed periodically to make sure they are adequate (see section 1.4).

Repair and maintenance works	Works must be completed within a specified time, depending on the severity and location of the defect. Response times are determined using local knowledge and experience and past performance as a guide. Response times are monitored and will be periodically reviewed (see section 1.4).
Temporary mitigation measures	These are temporary works designed to reduce the risk of an incident, until such time as repair or maintenance works can be completed. Response times and safety measures – for example warning signs, flashing lights, and safety barriers – are determined by reference to the risk to safety, road type and traffic volume.
Emergency works	Works that result from emergency incidents and must be undertaken immediately, for the safety of road users and the public. Emergency works might include traffic incident management, responses to fires, floods, storms and spillages, and any assistance required under the Victorian State Emergency Response Plan and Municipal Emergency Management Plan.
Day to day decision system and process	 The flow chart shown below outlines Council's day to day decision system process that includes how Council records works and inspections undertaken. This process includes: Pro-active inspections based on this Plan Reactive inspections when required Determination of third-party assets, notification of owners and mitigating actions Work scheduling and planning as per Council service levels Work prioritisation as per risk and response times

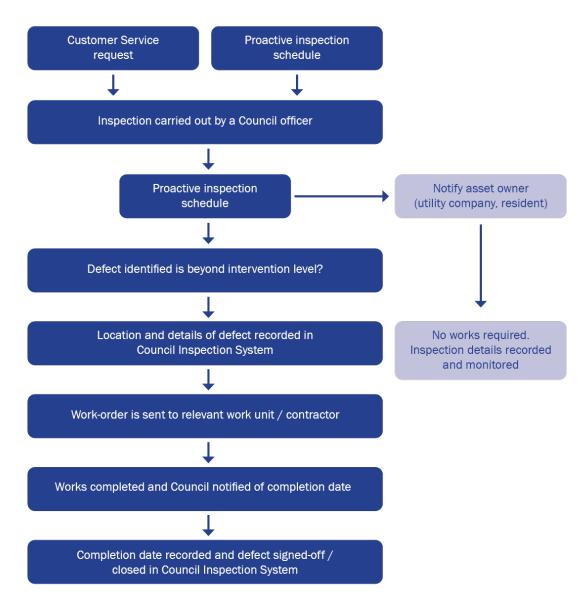


Figure 3 - Maintenance management process.

3.4.2 Asset management plans

Our asset management plans guide the development of long-term asset renewal programs, helping us to plan and finance asset renewal and replacement. Council has five Asset Management Plans that impact assets found in the Road Reserve including:

- Roads Asset Management Plan
- Pathway Asset Management Plan
- Open Space Asset Management Plan
- Bridge Asset Management Plan
- Drainage Asset Management Plan.

These documents detail the strategic guidelines and identify renewal, and upgrade improvements for the road network.

The Road Asset Management Plan takes a lifecycle approach to the management of Council's road network and identifies the elements necessary for the long-term sustainability of road assets.

Council's current funding profile for each asset group to deliver desired services is contained in each of the Asset Management Plans.

3.4.3 Maintenance surveys and inspections

A four-tier regime is used to inspect our road network assets. It covers safety issues, incidents, defects and condition inspections.

1. Reactive inspections (Request for Service or RFS)

These inspections are conducted in response to requests from the community. The inspection is carried out by a Council employee and assessed according to the Hazard intervention levels, contained within Attachment 5.

2. Proactive Inspections

Regular timetabled inspections that are scheduled depending on traffic flow, the types of defects likely to impact the asset and the perceived risks of these defects.

3. Condition Inspections

These inspections identify structural integrity issues which, if untreated, are likely to adversely affect the network overall. These issues may impact short-term serviceability, as well as the ability of the asset to perform for the duration of its intended life span.

These inspections are carried out in accordance with the Council's asset management plans.

3.4.4 Maintenance responsiveness and performance targets

The following information is recorded when we receive a Request for Service (RFS) from the community:

- Date the request was received
- Details of the request, including the location and nature of the reported hazard/defect (including any specific measurements if provided), name of the person making the request, copies of any photographs provided, etc.
- The personnel / department to which the request has been assigned for action

By recording this information, we can monitor compliance against target response times – that is, the time it takes from receiving a request to carrying out an inspection and ultimately completing necessary works.

Customer requests will be inspected and assessed in accordance with timeframes specified in Attachment 5. Following are some possible outcomes from a reactive inspection:

- If a defect identified exceeds a *Description / Intervention level* specified in Attachment 5, a work order would be created with a date for completion of works in line with respective specified repair timeframes.
- If repairs are significant for example, rehabilitation works are required temporary mitigation measures may be undertaken to reduce the risk posed by the hazard/defect until the proper works can be undertaken (and subject to available resources).
- If the defect is assessed as below the *Description / Intervention Level* specified in Attachment 5, it would be noted (including why), but no remedial action will be conducted.

In all cases, the action taken would be noted against the original request.

Target response times and intervention times are based on 'normal' conditions. The same level of service would not apply in cases where the Plan has been suspended, under Section 1.5.

3.5 Asset levels of service

Five elements are taken into account when determining appropriate levels of service for the road and pathway network. These are:

- Community expectations
- Technical standards
- Organisational capacity
- Performance measures and targets
- Safety of road and footpath users.

THIS PAGE IS INTENTIONALLY LEFT BLANK

4. Register of public records

Council maintains a register of public roads – called the Register of Public Roads – with the details of all public roads and ancillary areas for which we are responsible.

The Register of Public Roads is available on Council's website www.cardinia.vic.gov.au. A hard copy is made available upon request at our Customer Service Centre, 20 Siding Avenue, Officer, 3809.

4.1 Maintenance demarcation (boundary) agreements

Where there are boundary agreements between us and other road authorities or private organisations, the schedule of roads affected, and agreements are listed in the Municipal Road Register.

Council has agreements with the following road authorities:

- Baw Baw Shire Council
- Bass Coast Shire Council
- Casey City Council
- Yarra Ranges Council

- South Gippsland Shire Council
- Department of Transport and Planning.

4.2 Roads not listed on the register

The following roads are not listed on our Register of Public Roads:

- Roads which are the full responsibility of the state government, or a private enterprise;
- Unused roads for which we have not accepted responsibility;
- Roads drawn out on a plan of subdivision, until such time that we accept responsibility for these roads;
- Roads which we have not determined are reasonably required for general public use.

5. Technical references

- AS ISO 31000:2018 Risk Management Guidelines
- Integrated Asset Management Guidelines for Road Networks (AP-R202) 2002, Austroads Inc.
- International Infrastructure Management Manual (IIMM) 2015, IPWEA
- VicRoads Risk Management Guidelines
- VicRoads Standard Specification Section 750 Routine Maintenance

THIS PAGE IS INTENTIONALLY LEFT BLANK

6. Attachments

6.1 Road hierarchy – roads

Category	Description
4A- Local Arterial	Caters for major vehicle movements across shire. Provides vital contribution to arterial road network that may have limited alternative higher order routes available locally. May have limited direct property access provisions.
	Focus on through traffic movements. Provides access between major activity centres. Key economic significance for the area.
4B1 - Local Major Collector	Provides connection between local collector/access roads and arterials with low/medium access provisions. Makes major contribution to road network complimenting arterial network. Alternative routes may be available.
	Provides major connection between estates, arterial network roads and activity centres.
4B2 - Local Minor Collector	Provides important connection between local roads and arterials whilst also providing access. Makes minor contribution to road network, generally impacting limited area. Alternative routes will likely be available.
	Provides connection between properties, arterial/collector network and/or activity generators.
4C - Local Access	Provides access from properties to the higher order road network. Low strategic value and usually minor contribution to surrounding network.
	Provides direct access to properties and the "normal" or default classification of a local road.
4D - Limited Access	Limited to only a handful of properties and generally unsealed. Very low use and very little impact on surrounding network.
	Short link to provide access to generally only a few properties
4E - Fire Access Tracks	Access in most cases restricted to emergency and maintenance vehicles and not subject to RMP inspection and maintenance standards.
	A select number, where ungated and regularly used by members of the public are inspected and maintained as per 4D – Limited Access roads.

6.2 Pathway hierarchy

6.2.1 Footpaths

Category	Area	Description
High	High-use Areas	Areas identified as potential high risk due to the nature and volume of pedestrian traffic associated with particular properties adjacent to Council footpath. These properties may include malls, major shopping areas, preschools, schools, community buildings (halls, library, health centres,) elderly homes precincts, medical precincts and hospitals.
Medium	Moderate-use Areas	Moderately trafficked pedestrian areas such as designated collector footpaths.
Low	Other Areas	All other constructed paths for which Council is responsible including residential areas.

6.2.3 Shared and bicycle pathways

Category	Area	Description
High	High-use Pathways	The category of 'highest use' that includes pathways used by high volumes of commuter cyclists, select high-use recreational pathways and select tourist pathways.
Low	Other Pathways	This category includes all other shared bicycle/pedestrian pathways.

6.3 Inspections requirements

Inspection Type	Purpose	Inspection and Reporting Requirements
Reactive – Request for Service (RFS)	Reactive inspections are designed to confirm the nature of defects/hazards reported by members of the public or Council employees and identify any that exceed the intervention levels specified in Attachment 5.	Performed by a Council representative with knowledge of Description / Intervention Levels (Attachment 5) and road maintenance techniques who may then call in a higher level of expertise if necessary. Defects are measured and photographed as specified in Council procedures. Documentation is required to identify the specific safety defect as detailed in Appendix 5, the time it was first reported, the time/date it was inspected and by whom.
Proactive Inspection	Council inspects all roads, pathways, and bridges for which it is responsible on a cyclic basis to identify defects which exceed the stated intervention levels. The inspection program reflects the priority identified in each asset group classification system and appropriate use of resources in accordance with the requirements of the Act.	Proactive Inspections of roads, footpaths, pathways and bridges are performed by a Council representative with knowledge of Description / Intervention Levels (Attachment 5). Defects are identified, measured and photographed as specified in Council procedures. A record of each asset is to be completed detailing the name of the
Bridge Inspections	Level 1 Inspections are carried out in conjunction with a Routine or Reactive inspection to check the general serviceability of the structure, particularly the safety of road users, and to identify any emerging problems. Details regarding Level 2 and 3 Inspections are included within Council's Bridge Asset Management Plan.	inspector, the inspection date, and a description of any defects found that exceed the intervention levels specified in Attachment 5. In addition, details of the inspection will be electronically recorded against the particular asset inspected.

Night Inspections

Inspections undertaken in accordance with a formal programmed inspection schedule for select assets (as specified in Attachment 4) to assess the reflectivity of road signage, cat's eyes and roadside guideposts, and the visibility of line marking at night.

Performed by a dedicated Plan inspector, Night Inspections are conducted via a slow-moving vehicle with standard driving lights (low beam), with visibility, legibility, and reflectivity assessed by eye from distances specified respective of each asset defect type.

6.4 Inspection frequencies

If an Inspection Frequency falls due on a Weekend or Public Holiday, the due date to complete the inspection is the next Working Day.

Due to resource planning compliance with this Plan for inspection frequencies of 1 Month, will practically operate with a nominal inspection frequency within a calendar month.

H = Hours, WD = Working Days, W = Weeks, M = Months, Y = Years

Asset Group	Hierarchy Category	Reactive Inspection Timeframe	Proactive Inspection Frequency	Night Inspections
Sealed Roads	4A – Local Arterial	5 WD	1 M	1 Y
(and respective Regulatory, Warning and	4B1 – Local Major Collector	5 WD	2 M	2 Y
Hazard Signs)	4B2 – Local Minor Collector	8 WD	3 M	n/a
	4C - Local Access	10 WD	12 M	
	4D - Limited Access	10 WD	12 M	
Unsealed Roads	4A - Local Arterial	5 WD	4 M	1 Y
(and respective Regulatory, Warning and	4B1 – Local Major Collector	5 WD	6 M	2 Y
Hazard Signs)	4B2 – Local Minor Collector	8 WD	12 M	n/a
	4C - Local Access	10 WD	12 M	
	4D - Limited Access ³	10 WD	12 M	
Footpaths,	High	5 WD	6 M	n/a
Kerb and Channel ¹	Medium	8 WD	12 M	
	Low	10 WD	24 M	
Shared Pedestrian and	High	5 WD	6 M	n/a
Bicycle Pathways	Other Pathways	10 WD	12 M	
Vehicular Bridges and Major Culverts ²	Timber Bridges	5 WD	6 M	n/a
	Concrete Bridges	5 WD	12 M	
	Major Culverts	5 WD	12 M	
Emergency Respo Categories	onse – All Asset /	24 H	n/a	n/a

 1 Kerb and Channel assets only subject to proactive inspections when directly adjoining High category footpaths.

²Level 1 inspections only.

 3 Also applied to a limited select number of 4E – Fire Access Tracks where they are ungated and used regularly by the public (e.g. for recreational purposes).

6.5 Defect intervention levels and repair timeframes

If a Defect Intervention or Repair Timeframe falls due on a Weekend or Public Holiday, the due date to complete the intervention or repair is the next Working Day.

Where a defect is due to be repaired > 8 weeks, temporary measures, may be implemented to reduce risk as much as is reasonably practicable pending permanent repairs in line with Repair Timeframes.

Pram crossings & ramps providing transition between road and footpath/pathway levels are treated as part of Footpaths & Pathways for the purposes of intervention levels and repair timeframes.

H = Hours, WD = Working Days, W = Weeks, M = Months, Y = Years

6.5.1 Sealed roads

Defect type	Description / Intervention Level	Repair timeframes by hierarchy			erarchy
		4A	4B1 & 4B2	4BC	4D
Pothole	Potholes in sealed pavement >50 mm in depth and >300 mm in diameter Potholes located in dedicated/marked bicycle lanes >30 mm depth and >150 mm diameter.	2 W	3 W	4 W	12 W
Edge break	Edge breaks >75 mm laterally over a 2m or greater length from the nominal seal line.	3 W	6 W	12 W	12 W
Edge / shoulder drop	Edge drops onto an unsealed shoulder >75 mm in depth over a 1m or greater length.	6 W	6 W	12 W	12 W
Depressions / deformations	Depression / deformations in the traffic lane of a sealed pavement >75 mm in depth under a 3m long straight edge.	3 M	6 M	12 M	12 M
Missing pit lids	Missing Council drainage pit lids.	1 WD	1 WD	1 WD	1 WD
Damaged pit lids	Damaged Council drainage pit lids (such that they are potentially structurally unsound).	2 WD	4 WD	8 WD	8 WD

Roadside Vegetation – encroachment	Vegetation intruding into the road envelope: • <4.9 m clearance over the trafficable portion of 4A roads • <4.5 m over the trafficable portion of 4B1 roads	2 W	4 W	n/a	n/a
	 <4.0 m over the trafficable portion of 4B2 and 4C roads 	n/a	8 W	12 W	12 W
Roadside Vegetation – Obstructing sightlines	Vegetation that is obstructing sightlines to intersections or regulatory, warning and hazard signs.	4 W	8 W	6 M	6 M

6.5.2 Unsealed roads

Defect type	Description / Intervention Level	Repair timeframes by hierarchy		rarchy	
		4A	4B1 & 4B2	4C	4D1
Pothole	Potholes in unsealed pavement >100 mm in depth and >500 mm in diameter	8 W	8 W	12 W	12 M
Wheel ruts / scouring	Wheel ruts or scouring on an unsealed road >100 mm in depth	6 W	6 W	12 W	6 M
Corrugations	Corrugations on an unsealed road >75 mm in depth and >150 mm between each corrugation, over a distance of 50 metres or more.	6 W	6 W	12 W	6 M
Roadside Vegetation encroachment	Vegetation intruding into the road envelope: • <4.5 m over the trafficable portion of 4A, 4B1 and 4B2 roads	2 W	4 W	n/a	n/a
	 <4.0 m over the trafficable portion of 4C and 4D roads 	n/a	n/a	8 W	12 W
Roadside Vegetation – Obstructing sightlines	Vegetation that is obstructing sightlines to intersections or regulatory, warning and hazard signs.	4 W	8 W	4 M	6 M

¹Also applied to a limited select number of 4E – Fire Access Tracks where they are ungated and used regularly by the public (e.g. for recreational purposes).

6.5.3 Traffic control devices

Defect type	Description / Intervention Level	Repair timeframes by hierarchy		erarchy	
		4A	4B1 & 4B2	4C	4D
Missing / Damaged Signage	Regulatory, warning and hazard signs missing, illegible or damaged making them substantially ineffective when viewed from 100 metres.	1 W	2 W	3 W	4 W
Missing / Damaged Guard Rail or fencing	Guard rail/fence damaged or missing making them substantially ineffective	12 W	12 W	6 M	6 M
Damaged Retaining wall	Road and footpath retaining walls with a component affected so as to render ineffective.	6 M	6 M	6 M	6 M
Missing / Damaged Pavement Markings, guideposts and rumble bars	Pavement markings which are missing or faded making them substantially ineffective	15 M	15 M	15 M	15 M

6.5.4 Footpaths

Defect type	Description / Intervention Level	Repair timeframes by hierarchy		
		High	Medium	Low
Vertical Displacement	Sealed footpaths – Vertical Displacement >25 mm in height Gravel footpaths – Vertical Displacement >50 mm in height.	8 W	12 W	2 Y
Loose segmented pavers	Loose and unstable segmented pavers (i.e. bluestone, bricks, etc.) that move underfoot	8 W	12W	2 Y
Cracking	Cracking in footpaths >40 mm wide	8 W	12 W	2 Y
Undulations	Sealed footpaths – Undulations (depressions / bumps) >75 mm in depth/height under a 1.2m straight edge Gravel footpaths – Undulations (depressions / bumps) >100 mm in depth/height under a 1.2m straight edge ¹	8 W	12 W	2 Y
Dislodged / missing pieces / potholes	Sealed footpaths – Dislodged or missing pieces or potholes >300 mm in length/width and >25 mm in depth Unsealed footpaths – Dislodged or missing pieces or potholes >300 mm in length/width and >50 mm in depth	8 W	12W	2 Y
Missing pit lids	Missing Council drainage pit lids	1 WD	1 WD	1 WD
Damaged pit lids	Damaged Council drainage pit lids (such that they are potentially structurally unsound)	2 W	4 W	8 W
Vegetation overhead clearance	Vegetation intruding into the footpath envelope: • <2.5 m over footpath surface	2 M	3 M	4 M

Damaged / missing tactile indicator	Damaged rendering ineffective or missing	3 M	12 M	18 M
Missing plank (Timber footpaths only)	Missing timber plank	1 WD	1 WD	1 WD

¹Not applied to intentional design elements such as integrated drainage swales / water-bars, speed humps, etc. Such elements are assessed on a case-by-case basis to ensure they remain functional while also not presenting an unreasonable safety risk to users.

6.5.5 Shared and bicycle pathways

Defect type	Description / Intervention Level	Repair timeframes by hierarchy		
		High	Other Pathways	
Vertical Displacement	Sealed pathways – Vertical Displacement >25 mm in height Gravel pathways – Vertical Displacement >50 mm in height	8 W	12 W	
Cracking	Cracking perpendicular to path of travel >30 mm wide Longitudinal cracking >20 mm wide	8 W	12 W	
Undulations	Sealed Pathways – Undulations (depressions / bumps) >75 mm in depth/height under a 1.2m straight edge Gravel Pathways – Undulations (depressions / bumps) >100 mm in depth/height under a 1.2m straight edge ¹	8 W	12 W	
Dislodged / missing pieces / potholes	Sealed pathways – Dislodged or missing pieces or potholes >300 mm in length/width and >25 mm in depth Gravel pathways – Dislodged or missing pieces or potholes >300 mm in length/width and >50 mm in depth	8 W	12 W	
Missing pit lids	Missing Council drainage pit lids	1 WD	1 WD	
Damaged pit lids	Damaged Council drainage pit lids (such that they are potentially structurally unsound)	2 W	8 W	
Vegetation clearance	Vegetation intruding into the pathway envelope: • <3.0 m over shared pathway surface and within <50 cm from each edge	2 M	4 M	

Vegetation – Obstructing sightlines	Vegetation that is obstructing sightlines to intersections or regulatory, warning and hazard signs when viewed from <20 m	2 M	4 M
Damaged / missing tactile indicator	Damaged rendering ineffective or missing	3 M	18 M

¹Not applied to intentional design elements such as integrated drainage swales / water-bars, speed humps, etc. Such elements are assessed on a case-by-case basis to ensure they remain functional while also not presenting an unreasonable safety risk to users.

6.5.6 Kerb and channel

Defect type	Description / Intervention Level	Repair timeframes by hierarchy	
		High use footpaths	All other categories
Vertical Displacement	Vertical displacement – uplift section >50 mm	8 W	12 W
Horizontal Displacement	Horizontal displacement section >50 mm	8 W	12 W



Cardinia Shire Council

Civic Centre 20 Siding Avenue, Officer

PO Box 7 Pakenham 3810

Phone: 1300 787 624

Email: mail@cardinia.vic.gov.au Web: www.cardinia.vic.gov.au

National Relay Service (NRS)

TTY: 133 677 (ask for 1300 787 624)

Speak and Listen (speech-to-speech relay): 1300 555 727 (ask for 1300 787 624)



Translator Interpretation Service

131 450 (ask for 1300 787 624)





