

Frankston City Council Road Management Plan (2022)

Version 3.0

A4662853

Date adopted by Council: 26/04/2022

Date plan comes into effect: 01/07/2022



opportunity » growth » lifestyle

Contents

1.0	INTRODUCTION.....	5
1.1	PURPOSE OF THIS PLAN.....	5
1.2	COUNCIL'S STRATEGIC FRAMEWORK.....	5
1.3	LEGISLATIVE FRAMEWORK.....	6
1.3.1	FUNCTIONS OF A ROAD AUTHORITY.....	6
1.3.2	OBLIGATIONS OF ROAD USERS.....	7
1.4	ASSETS TO WHICH THIS PLAN APPLIES.....	7
1.5	PLAN DEVELOPMENT ADOPTION & REVIEW.....	8
2.0	REGISTER OF PUBLIC ROADS.....	9
2.1	REGISTER INCLUSIONS.....	9
2.2	REGISTER EXCLUSIONS.....	10
2.3	APPROACH TO MAINTAINING THE PUBLIC ROAD REGISTER.....	10
2.4	DEMARCATON OF ROAD AUTHORITY RESPONSIBILITIES.....	11
3.0	ROAD & PATH HIERARCHIES.....	12
3.1	PURPOSE.....	12
3.2	ROAD HIERARCHY.....	13
3.3	PATH HIERARCHY.....	14
3.4	PROCESS FOR UPDATING THE HIERARCHIES.....	15
3.5	CURRENT APPLICATION OF THE HIERARCHIES.....	15
4.0	ROAD MANAGEMENT AT FRANKSTON.....	16
4.1	LEVELS OF SERVICE.....	16
4.2	IMPLEMENTING INSPECTION & MAINTENANCE PROGRAMS.....	17
4.3	FORCE MAJEURE.....	18
4.4	PERFORMANCE MONITORING & REVIEW.....	18
APPENDICIES.....		19
B.	ROAD & PATH HIERARCHIES.....	20
B.1	ROAD HIERARCHY.....	21
B.2	PATH HIERARCHY.....	25
C.	RESPONSIBILITIES FOR ASSETS IN ROAD RESERVES.....	28
C.1	ASSETS MANAGED IN ACCORDANCE WITH THIS PLAN.....	28
C.2	PROPERTY OWNER RESPONSIBILITIES.....	29
C.3	DRIVEWAYS (VEHICLE CROSSEOVERS).....	30
C.4	PROPERTY DRAINAGE CONNECTIONS.....	30
C.5	ASSETS CONSTRUCTED BY A PROPERTY OWNER.....	31
C.6	SERVICE AUTHORITY RESPONSIBILITIES.....	31
D.	DEMARCATON AGREEMENTS.....	33
E.	ROAD MAINTENANCE MANAGEMENT PLAN.....	34
E.1	INTRODUCTION.....	35
E.1.1	DEFINITIONS.....	35
I)	INSPECTION TYPES.....	35
II)	MAINTENANCE TYPES.....	36
E.2	ROUTINE DEFECT INSPECTIONS.....	36

E.2.1	DEFECT INTERVENTION LEVELS	36
E.2.2	BRIDGE & MAJOR CULVERT INSPECTIONS	52
E.2.3	PATH & PATH RELATED DEFECT INSPECTIONS	52
E.2.4	UNSEALED ROAD DEFECT INSPECTIONS	53
E.2.5	ROAD & ROAD RELATED DEFECT INSPECTIONS	53
E.2.6	INTERNAL DRAINAGE PIT DEFECT INSPECTIONS	54
E.2.7	ROADSIDE VEGETATION LINE CLEARANCE INSPECTIONS	54
E.2.8	NIGHT INSPECTIONS.....	56
E.2.9	ROAD PATROL INSPECTIONS	56
E.3	PUBLIC SAFETY RISK ASSESSMENT PROCESS	58
E.4	MAINTENANCE ACTIVITIES.....	61
E.4.1	REACTIVE MAINTENANCE	61
E.4.2	ROUTINE MAINTENANCE	85
E.4.3	ROUTINE MAINTENANCE SCHEDULE	87
E.4.4	MAINTENANCE ZONE AREAS.....	88
E.5	MANAGING UNEXPECTED RENEWAL WORKS	89
E.6	SERVICE DELIVERY DURING EXCEPTIONAL SITUATIONS.....	91
F.	SCHEDULE OF ROAD MANAGEMENT PLAN AMENDMENTS.....	93
F.1	AMENDMENTS TO VERSION 3.0	94
F.2	AMENDMENTS TO VERSION 2.0	95
F.3	AMENDMENTS TO VERSION 1.2	96
F.4	AMENDMENTS TO VERSION 1.1	100
F.4	AMENDMENTS TO VERSION 1.0	102

List of Figures

Figure 1 – Council’s Planning Framework.....	5
Figure 2- Road and Road Related Assets within a Road Reserve.....	7
Figure 3– Road Infrastructure Management System – Reactive Maintenance.....	17
Figure 4– Central Activity Area Boundary – Zone 0.....	27
Figure 5– Driveways (vehicle crossovers).....	30
Figure 6 - Property Drainage Connections.....	31
Figure 7- Public Safety Risk Assessment Process.....	58
Figure 8– Reactive Maintenance Flowchart.....	61
Figure 9 - Maintenance Zone Areas.....	88
Figure 10– Approach to Managing Unexpected Renewal Works.....	90
Figure 11– Process for Suspension and Reinstatement of Road Management Plan Compliance.....	91

List of Tables

Table 1– Road Hierarchy Classifications.....	13
Table 2– Path Hierarchy Classifications.....	14
Table 3- Road Hierarchy.....	23
Table 4- Road Hierarchy – Desirable Traffic Conditions & Physical Features.....	24
Table 5- Path Hierarchy – Description and Desirable Physical Features.....	26
Table 6– Assets in Road Reserves.....	29
Table 7– Road Authority Agreements.....	33
Table 8- Defect Intervention Levels – Sample Photographs.....	51
Table 9– Bridges & Major Culverts - Defect Inspection Frequencies.....	52
Table 10– Path & Path Related Asset - Defect Inspection Frequencies.....	52
Table 11–Unsealed Road Surface - Defect Inspection Frequencies.....	53
Table 12– Road & Road Related Asset - Defect Inspection Frequencies.....	53
Table 13–Internal Drainage Pit - Defect Inspection Frequencies.....	54
Table 14–Roadside Vegetation - Defect Inspection Frequencies.....	54
Table 15–Night Inspection Frequencies.....	56
Table 16 – Road Patrol Frequencies.....	57
Table 17– Public Safety Risk Assessment Process.....	60
Table 18–Routine Maintenance Activities.....	86
Table 19 - Routine Maintenance Schedule.....	87
Table 20– Examples of Asset Deterioration that Requires Asset Renewal.....	89
Table 21– Road Management Plan Amendments to Version 2.0 of the Plan.....	94
Table 22– Road Management Plan Amendments to Version 2.0 of the Plan.....	95
Table 23– Road Management Plan Amendments to Version 1.2 of the Plan.....	98
Table 24– New Attachments to the Road Management Plan.....	99

1.0 INTRODUCTION

1.1 Purpose of this Plan

The Frankston City Council road network consists of some 700 kilometres of constructed roads. These roads service local traffic demands. They provide access to residential homes, local businesses, community services and amenities. They also distribute traffic onto State arterial and non-arterial roads found within the municipality.

This Plan documents Council’s current road management responsibilities and practices. It provides Council with an opportunity to establish a policy defence against civil liability claims associated with management of the road network.

1.2 Council’s Strategic Framework

The Frankston City Council - Council Plan 2017-21 is a strategic document. It states Council’s vision of: “Lifestyle Capital of Victoria.” Four Long term Community Outcomes are also presented:

1. A Planned City
2. A Liveable City
3. A Well Governed City
4. A Well Managed City

All other Council documents, including this Road Management Plan, support delivery of the Council Plan.

Figure 1 Council’s planning framework

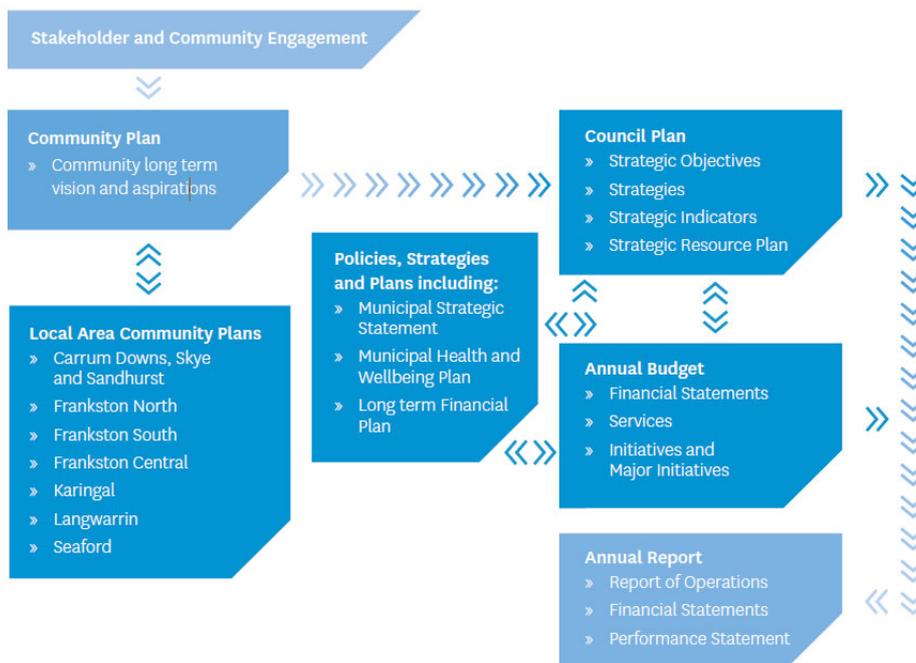


Figure 1 – Council’s Planning Framework

Source: Council Plan 2017-2021

1.3 Legislative Framework

The Road Management Act 2004 (RMA) governs the management of roads within the State of Victoria. Its primary purpose is to establish a coordinated management system for public roads. The RMA is supported by regulations and codes of practice. It governs alongside the principles and objectives of related Acts such as the Transport Act, the Road Safety Act and the Local Government Act, which provides a framework for the establishment and operation of Councils.

The RMA facilitated the making of Road Management Plans, which in effect provides opportunity for Councils to establish a policy defence against civil liability claims associated with management of the road network. In conjunction with associated Regulations and Codes of Practice, the RMA defines legislative principles that road authorities must conform to in the management of their road infrastructure.

1.3.1 Functions of a Road Authority

The Act sets out roles and responsibilities that Council (as a Road Authority) must adhere to in order to adequately exercise its duty. General functions of a Road Authority are set out in section 34 of the Act and are reproduced below:

- (1) A road authority has the following general functions—
 - a. to provide and maintain, as part of a network of roads, roads for use by the community served by the road authority;
 - b. to manage the use of roads having regard to the principle that the primary purpose of a road is to be used by members of the public and that other uses are to be managed in a manner which minimises any adverse effect on the safe and efficient operation of the road and on the environment;
 - c. to manage traffic on roads in a manner that enhances the safe and efficient operation of roads;
- (ca) to design, construct, inspect, repair and maintain roads and road infrastructure;
 - d. to coordinate the installation of infrastructure on roads and the conduct of other works in such a way as to minimise, as far as is reasonably practicable, adverse impacts on the provision of utility services;
 - e. to undertake works and activities which promote the functions referred to in paragraphs (a), (b), (c) and (ca) and to undertake activities which promote the function in paragraph (d).
- (2) The general functions conferred on a road authority under subsection (1) are not to be construed as limiting any other functions conferred on a road authority by or under this Act or any other Act.
- (3) In seeking to achieve its functions, a road authority should—
 - a. consult with the community and disseminate information in relation to the exercise of those functions;
 - b. take steps as are reasonably practicable to ensure the structural integrity and safety of public roads in accordance with this Act.

The Act indicates that, Road Authorities, such as Frankston City Council, can have both Coordinating and Responsible Road Authority responsibilities. A Coordinating Road Authority has coordinating functions as defined by section 36 of the Act. A Responsible Road Authority has operational functions as defined by section 37 of the Act.

1.3.2 Obligations of Road Users

Whilst Council has obligations as a Road Authority, there is also an onus upon road users to take due care when using the network. Section 17A of the Road Safety Act sets out the obligations of road users as follows:

- (1) A person who drives a motor vehicle on a highway must drive in a safe manner having regard to all the relevant factors, including (without limiting the generality) 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.
- (2) 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.
- (3) A road user must-
 - a. have regard to the rights of other road users and take reasonable care to avoid any conduct that may endanger the safety or welfare of other road users;
 - b. have regard to the rights of the community and infrastructure managers in relation to road infrastructure and non-road infrastructure on the road reserve and take reasonable care to avoid any conduct that may damage road infrastructure and non-road infrastructure on the road reserve;
 - c. have regard to the rights of the community in relation to the road reserve and take reasonable care to avoid conduct that may harm the environment of the road reserve.

1.4 Assets to which this Plan Applies

Where Council is deemed to be a Coordinating and/or Responsible Road Authority, the road has been listed on Council's Public Road Register (refer Attachment A) and is taken to encompass all legally constructed road infrastructure and road-related infrastructure assets as defined in the RMA and illustrated in Figure 1.

Public Road Register exclusions are detailed in Chapter 2. For some roads, Council's responsibilities are limited and defined by operational demarcation agreements with other road authorities (refer Attachment D).

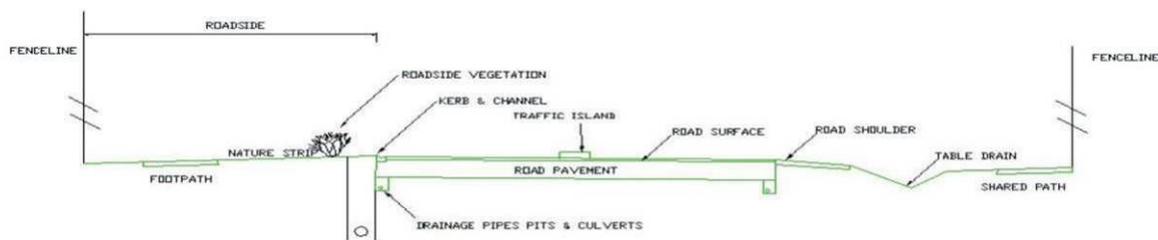


Figure 2- Road and Road Related Assets within a Road Reserve

Attachment C includes a list of the types of assets managed in accordance with this Plan. It also provides a summary of the responsibilities of property owners and other authorities.

1.5 Plan Development Adoption & Review

In accordance with the Road Management (General) Regulations 2016, Council, as a Road Authority, must conduct a review of its Road Management Plan at prescribed intervals. In 2004, the original Frankston City Council Road Management Plan was prepared, in accordance with the Road Management Act (2004). The original Plan was reviewed, amended and adopted by Council in 2007. In May 2009, the updated Plan was reviewed in accordance with Part 3 of the Act, and the Road Management (General) Regulations. The Plan was not amended.

In 2013, the Plan was subject to another formal review which took a fresh look at all aspects of the Plan. The review process included:

- ❖ Giving public notice of the Road Management Plan Review;
- ❖ Providing opportunity for receiving public submissions;
- ❖ Making the Plan available and identifying where a copy of the Plan can be obtained.

In 2017, the Road Management Plan was subject to another formal review and the findings of this review were adopted by Council on 22 May 2017.

It is expected that future reviews will continue to make use of a variety of information including:

- ❖ Formal and informal feedback received from the community via public opinion surveys and community requests;
- ❖ Performance audits by Council's insurers;
- ❖ Benchmarking against other road authorities.

2.0 REGISTER OF PUBLIC ROADS

2.1 Register Inclusions

The Frankston City Council Public Roads Register meets the requirements set out in Schedule 1 of the Road Management Act, which identifies matters that must be included in the register.

1. Matters which must be included in a register of public roads

The register must include-

- a. the name of each public road or, if a road is unnamed, a description which enables the particular road to be easily identified;
- b. if a road becomes a public road after 1 July 2004, the date on which the road became a public road;
- c. if a public road ceases to be a public road, the date on which the road ceased to be a public road;
- d. the classification, if any, of the public road;
- e. the reference of any plan or instrument made on or after 1 July 2004 that fixes or varies the boundaries of a public road;
- f. any ancillary areas;
- g. a reference to any arrangement under which road management functions in respect of any part of a public road or ancillary area is transferred to or from another road authority;
- h. in relation to the Link road and the Extension road, details of any toll zones declared under section 61 or 93H of the Melbourne City Link Act 1995;
- ha. in relation to East Link, details of any toll zones specified under section 195 of the East Link Project Act 2004;
- i. any matter required to be included by the relevant Minister under section 22;
- j. any other matter required to be included by this Act;
- k. any other matter which is prescribed for the purpose of this clause.

2. Matters which may be included in a register of public roads

The register may include information or cross references to information-

- a. if a road became a road before 1 July 2004, the date on which the road became a road;
- b. about infrastructure in, on, over or under a road;
- c. relating to the mechanism by which a road was created or became a road;
- d. relating to construction standards for a public road;
- e. the reference of any plan or instrument made before 1 July 2004 that fixes or varies the boundaries of a road;
- f. which a road authority considers appropriate.

Council's register of public roads is presented in Attachment A. Listed roads are managed in accordance with this Plan.

The Public Roads Register includes all public roads for which Frankston City Council is the Coordinating and/or the Responsible Road Authority as defined under the Act. It includes public roads, within the municipality, which are:

- ❖ Declared as roads under Sections 204(1) and 205 of the Local Government Act 1989.
- ❖ Declared by VicRoads as Municipal roads through notice within a Government Gazette.
- ❖ Considered by Frankston City Council as being reasonably required for general public use.

The register includes service roads alongside State arterial and non-arterial roads. It also includes laneways that are titled as road reserve and have constructed pedestrian or vehicle access, which is maintained by Council and available for general public use.

2.2 Register Exclusions

The following road asset categories are excluded from Council's Public Road Register:

- ❖ Car parks, roadways and pathways located within and/or providing access to recreational reserves;
- ❖ Car parks and access roads located within Council owned or operated facilities (e.g. Preschools, Community Halls, Pavilions);
- ❖ Foreshore car parks;
- ❖ Road reserves with no constructed vehicular or pedestrian access where Council undertakes no maintenance. These parcels of land have been deemed to not be reasonably required for general public use, as defined by the Road Management Act. They will therefore remain excluded from the public road register until a time when they are constructed by Council and/or made available for general public use;
- ❖ Common property access ways (including driveways) within the municipality. These access ways are generally not contained within a road reserve boundary and are effectively private driveways that are not intended to be used by the general public, even when servicing numerous properties. The management of this land is therefore the responsibility of the relevant land owner and/or body corporate (refer Appendix C.3). This includes vehicle crossovers adjoining hammerhead courts. These access ways may be contained within a road reserve boundary but function as private driveways that are not intended to be used by the general public, even when servicing numerous properties;
- ❖ Private roads within the municipality. These roads are generally associated with private developments (Sandhurst Club is an example). Council may currently perform some maintenance function on these roads. These roads are deemed not available for general public use; and
- ❖ Assets constructed illegally within a road reserve without Council's written approval. Council does not accept responsibility for illegal works undertaken within the road reserve or works undertaken by others for which Council has not been notified and provided written consent.

2.3 Approach to Maintaining the Public Road Register

Each road on the Public Road Register includes a unique identifier that links the road asset graphically and electronically to Council's GIS, Pavement Management System (SMEC) and Frankston Asset Management Information System (FAMIS). In Accordance with Council's Instrument of Delegation nominated officers have the power to amend the public road register. Council will update its Public Road Register electronically on an annual basis, at a minimum, as part of the asset revaluation process. This process will collate and record information from subdivision developments, planning permits, developer/building requirements, and infrastructure maintenance and capital works programs undertaken throughout the year to ensure that additions or alterations to assets are recorded. Any amendment by instrument, as recorded in the Public Road Register, will take account of the date at which a handover certificate was issued for that asset.

Council will provide a link to the Public Road Register on Council's website. The web link will be updated when the Public Road Register is updated so that the latest copy is made available electronically.

2.4 Demarcation of Road Authority Responsibilities

In developing its original Road Management Plan, Council held discussions with numerous other road authorities to develop maintenance agreements. Council now has formal agreements with the following agencies:

- ❖ VicRoads
- ❖ City of Kingston
- ❖ Mornington Peninsula Shire
- ❖ Linking Melbourne Authority

Council is currently negotiating an agreement with Metro Franchise Melbourne.

The Public Road Register includes reference to demarcation agreements that describe the responsibilities of Frankston City Council and other road authorities at specific locations.

There are no municipal roads along Frankston City Council's boundaries with the Cities of Dandenong or Casey. As a result, Council does not have a demarcation agreement with the City of Dandenong or the City of Casey.

3.0 ROAD & PATH HIERARCHIES

3.1 Purpose

Through the development of road and path hierarchies, Council has recognised that various roads and paths within the municipality perform different functions. Therefore, when damaged or deteriorated, they potentially pose different levels of risk to public safety. The adoption of hierarchies enables more targeted and efficient management of Council assets and associated risks by allowing differing standards to be applied across different hierarchy classifications.

The hierarchies will inform inspection, maintenance and renewal programs. They also have the potential to inform Council's traffic management strategies, emergency management procedures, land use planning activities, design and construction standards. As a result, the hierarchies are expected to improve co-ordination of Council strategies and activities and assist the community in understanding Council's overall approach to road and path asset management.

Desirable criteria have been specified for each hierarchy classification and are set out in Attachment B to indicate what Council will aim to achieve with respect to:

- ❖ Design features
- ❖ Public transport routes
- ❖ Traffic management treatments
- ❖ Parking restrictions

Given that the municipality is largely developed, it is not intended that all existing roads or paths will comply with the desired standards documented in Attachment B. However, where practicable, effort will be made to achieve the desired standards via the delivery of Council's capital works programs. For example, when an asset is due for renewal or upgrade, re-design may enable it to better meet the desired physical features and therefore better serve the desired functionality of the assigned hierarchy.

3.2 Road Hierarchy

Council has the following categories for roads listed in its Public Road Register: Further details are provided in Attachment B.

Road Hierarchy Classification	Desired Function/ Description
Major Roads	<p>Act as through traffic routes.</p> <p>Connect to the VicRoads arterial road network.</p> <p>Complement the VicRoads arterial road network by efficiently and safely channelling traffic through the municipality.</p> <p>Carry traffic between major commercial, industrial and residential areas.</p> <p>High to moderate use by heavy vehicles.</p> <p>Bus routes may be provided on these roads.</p>
Collector Roads	<p>Concentrate locally generated traffic to an outlet.</p> <p>Provide safe and efficient connection to commercial and residential areas from Major Roads, or directly from the VicRoads arterial network.</p> <p>Provide direct access to the local road network.</p> <p>Not intended to act as a through traffic routes.</p> <p>Carry local traffic to shops, schools, commercial districts, hospitals, sporting and other local facilities.</p> <p>May provide access to abutting properties.</p> <p>Moderate to low use by heavy vehicles.</p> <p>Bus routes may be provided on these roads.</p>
Industrial Roads	<p>Provide access to local light industries concentrated in small areas within the municipality.</p> <p>Abutting properties are primarily industrial.</p> <p>High to moderate use by heavy vehicles.</p> <p>Bus routes may be provided on these roads.</p>
Local Access Roads	<p>Provide safe access to abutting properties (primarily residential).</p> <p>Low speed environment</p> <p>Bus routes may be provided on these roads.</p>
Laneway/ Right of Way	<p>Provide access primarily for abutting properties.</p> <p>Property access generally limited to the rear or side of properties.</p> <p>Land may contain drainage easements.</p> <p>Abutting property is often commercial or residential.</p> <p>Often used for the delivery of goods to commercial sites.</p>
Fire Tracks	<p>Provide access for fire authority vehicles only</p>
Key Central Activity Area (CAA) Roads	<p>Provide access to, from and within the designated Central Activity Area¹.</p> <p>Includes shared use areas with restricted vehicle access.</p> <p>Public amenity and aesthetic aspects of these roads take priority over speed and ease of movement of vehicles.</p>
Service Roads	<p>Roads, which run parallel to VicRoads arterial roads in order to provide access from an arterial road to the municipal road network and abutting properties.</p>
Unsealed Roads	<p>These roads have gravel/crushed rock surface. They may function as Major, Collector or Local Access road.</p> <p>Following formal construction of a sealed pavement, these roads will be re-classified into the appropriate class in accordance with their functional, physical and traffic characteristics.</p>

Table 1– Road Hierarchy Classifications

Notes:

1. The boundaries of the Central Activity Area (CAA) is illustrated in Attachment B

In developing the road hierarchy, Council considered local knowledge of staff, functional and physical features of the road, current and intended traffic management function, adjacent land zoning, pavement width and pavement type.

3.3 Path Hierarchy

A hierarchy has been developed for all paths within the municipality. This includes paths located within road reserves, which are managed in accordance with this Plan. The purpose of the path hierarchy is to facilitate consistency in Council’s approach to management of Council’s path networks. The hierarchy aims to differentiate high use areas that may require a greater level of service.

The table below outlines the desired functional features of each path classification. Further details are provided in Attachment B.

Path Hierarchy Classification	Desired Function
Footpaths	
Key Central Activity Area (CAA) Footpaths	Located within or adjacent to the Central Activity Area. ¹ Cater for high to medium volume pedestrian traffic with diverse needs.
Key Access Footpaths	Provide direct access to shopping and service precincts, transport hubs, schools, preschools, recreational facilities, parks, community centres, childcare centres, tourist attractions, religious centres, hospitals, facilities for seniors, and other public attractions. Cater for high to medium pedestrian traffic volumes with diverse needs.
Industrial Access Footpaths	Located within industrial precincts Withstand heavy vehicles
Reserve Footpaths ²	Located within Council open space reserves, including the Foreshore. Cater for variable volumes of pedestrian traffic.
Local Access Footpaths	Service predominantly suburban residential areas. Cater for low volume pedestrian traffic with diverse needs.
Shared Paths²	
Primary Shared Paths	Provide an alternative to the road system for pedestrians and cyclists travelling through the City. Cater for high to medium pedestrian and cyclist volumes and high speed cyclists.
Secondary Shared Paths	Provide an alternative to the road system for pedestrians and cyclists travelling locally within the municipality. Cater for moderate pedestrian and cyclist volumes

Table 2– Path Hierarchy Classifications

Notes:

1. The boundaries of the Central Activity Area are illustrated in Attachment B
2. Paths located in Council reserves may not be managed in accordance with maintenance and inspection service levels set out in Appendix E

The identification of paths involved review of all available aerial photographs. Classification of the paths is based on Council’s understanding of the current and desired function of each path and a review of existing data relating to: pedestrian generators, location, current and expected usage.

3.4 Process for Updating the Hierarchies

Opportunity exists to re-classify road and paths at any time, however, amendments are only likely to be made when Council prepares a major strategic document such as the Road or Pathway Asset Management Plan, a Bicycle Strategy, Pathway Development Strategy or similar document. Change to the hierarchy classifications may also occur when there are major changes to the function of a municipal road or path. This may result from new developments, for example, when a new road is built or when an existing road is closed or altered. Change to the hierarchy may also occur as the result of a serviceability audit which may recommend that the classification be reviewed.

Once the Road Management Plan has been formally adopted, the opportunity for the community to suggest amendments to the road or path hierarchies will be available via feedback on the Road Management Plan. Submissions will be considered when the Road Management Plan is reviewed and decisions affecting the hierarchy classification of an asset shall be considered from a strategic and operational viewpoint, taking into account a whole of network approach. Should a particular asset be deemed suitable for reclassification the Public Road Register will be updated.

3.5 Current Application of the Hierarchies

The hierarchies have been used in the development of Council's routine defect inspection regime. Proactive road management requires a proactive inspection regime in order to identify and manage potential risks. Defect inspection frequencies, documented within the Road Maintenance Management Plan (Attachment E), were developed by evaluating the risk associated with each asset category and hierarchy combination. The risk assessment was done in accordance with *AS/NZS ISO 31000:2018-Risk Management- Principles and Guidelines*. The assessment recognised that roads and paths of different hierarchy classifications perform different primary functions, they can therefore also be deemed to represent a different risk to the community if defective. For example, the likelihood of a fatal accident (due to a pothole) on a Major Road, which carries more than 6000 vehicles per day at speeds of 60 to 80 km/h, is greater than that on a Local Access Road or a Laneway, which may only carry 50 slow moving vehicles per day. The frequency of inspection for Major Roads is therefore shorter than that undertaken for Local Access Roads.

4.0 ROAD MANAGEMENT AT FRANKSTON

4.1 Levels of Service

Strategic asset management requires a holistic approach to decision making throughout all stages of the asset life cycle from asset planning to disposal.

Levels of service act as management targets that facilitate decision making at each stage of the asset lifecycle. They define performance expectations and are formulated through an assessment of legislative requirements, organisational objectives, community expectations, financial and other practical constraints.

Council's primary road management objective is to ensure the provision of a safe and efficient road network for use by the community. As a well-established municipality, with only a small proportion of new road and road-related assets being planned, designed and constructed each year, Council has focused on the documentation of detailed service levels for the Maintenance phase of the asset lifecycle. This phase represents the stage where Council is most exposed to risk. Routine defect inspections and maintenance service levels are detailed in the Road Maintenance Management Plan (RMMP, refer Attachment E).

The first step in determining inspection and maintenance service levels involved an examination of risk associated with Council's assets. An assessment of current Council inspection and maintenance activities was undertaken. This incorporated an examination of asset hierarchies, current reactive and routine maintenance activities carried out by Council, including response times for all works, frequencies of routine inspection and maintenance activities and the programming of renewal works.

The inspection and maintenance service levels, set out in Attachment E, describe the:

- ❖ Scope and frequency of Council's routine defect inspections;
- ❖ Scope and frequency of Council's routine maintenance activities;
- ❖ Response timeframes and defect intervention levels which serve as triggers to determine whether and when reactive maintenance repair works are to be carried out.

In developing the levels of service, Council has had regard to Best Value Principles (as per the Local Government Act 1989) that all services are:

- ❖ Measured against quality and cost standards;
- ❖ Responsive to community needs;
- ❖ Accessible to those members of the community for whom the service is intended;
- ❖ Subject to continuous improvement;
- ❖ Linked to a program of regular community consultation; and
- ❖ Reported regularly to the community.

It is expected that over time, detailed service levels will be prepared for other stages of the asset lifecycle. The identification and management of these service levels will be outlined in asset management plans developed for specific asset categories.

4.2 Implementing Inspection & Maintenance Programs

Council's approach to managing the defects on road and road-related assets within the municipality is risk-based. It aims to deliver activities that reduce extreme and high risks ahead of activities which reduce lower risks. An assessment of public safety is used to designate priorities when managing day-to-day maintenance activities.

The approach to reactive road infrastructure maintenance is illustrated in Figure 3 below. More details are provided in Appendix E.

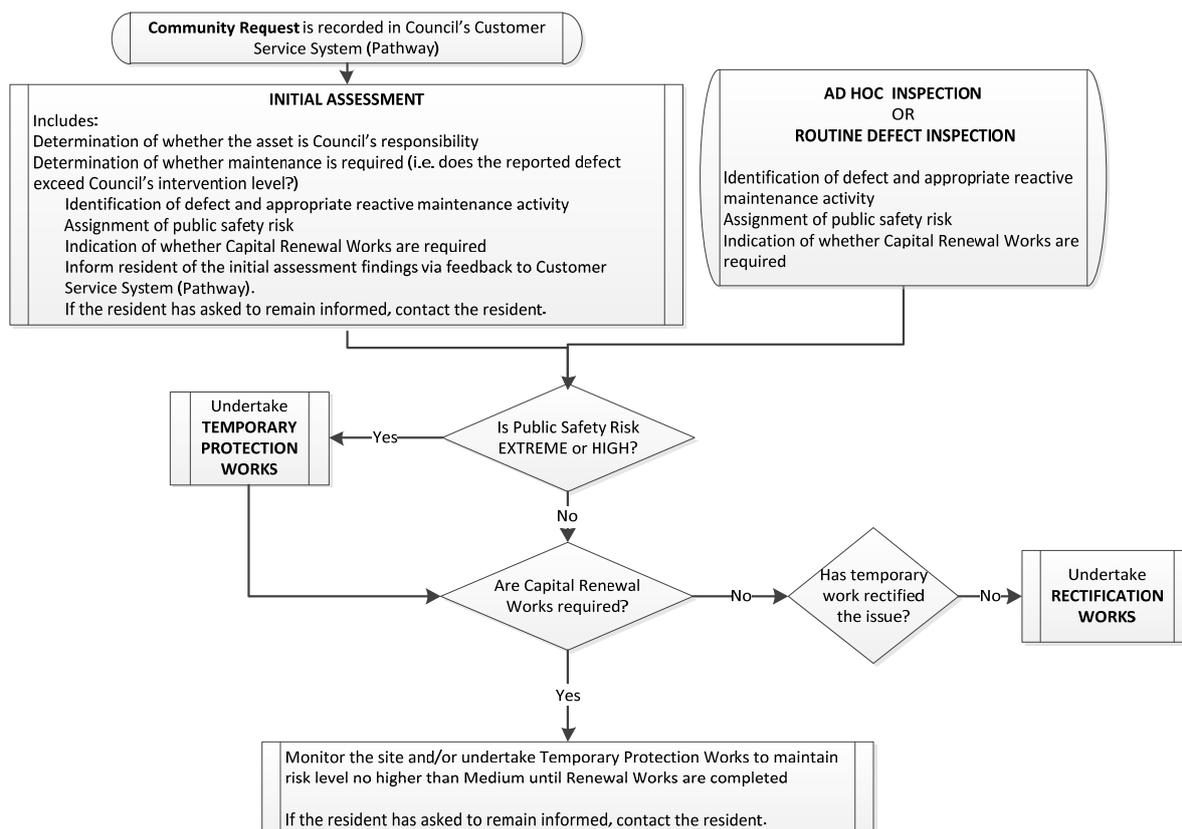


Figure 3– Road Infrastructure Management System – Reactive Maintenance

This process shows that an issue brought to the attention of Council via the public, is assessed by an experienced officer in order to determine whether the intervention levels set out in the RMMP have been exceeded, and whether a public safety risk exists. Defects are also identified by routine defect inspections or ad hoc inspections, undertaken by experienced Council officers. These inspection types are defined in Appendix E.

As part of the inspection process, an assessment is made to determine whether intervention levels have been exceeded. The assessment also evaluates the public safety risk present should no repair works be undertaken. Council's maintenance responses can then be prioritised based on risk.

Temporary protection works will be undertaken to minimise risks identified as extreme or high. Defects deemed to have lower risk levels will be programmed for rectification within designated rectification time frames. In the event that asset deterioration is such that the issue cannot be rectified by a maintenance activity, temporary protection works are undertaken and monitored until the asset can be rectified via a capital renewal program.

4.3 Force Majeure

Council operates in accordance with statutory obligations outlined in the Victorian Emergency Management Act (1986). To meet these statutory obligations, Council has prepared a Municipal Emergency Management Plan (MEMP) and has appointed a Municipal Emergency Resource Officer to ensure that the Council has processes in place to address prevention, response and recovery arrangements for municipal emergencies that may endanger the safety or health of any person, or which may destroy or damage property.

Council will make every endeavour to meet all aspects of its Road Management Plan. However, in the event of natural disasters and events not limited to, fires, floods, as well as funding shortfalls, human factors, but not limited to lack of Council staff or suitably qualified contractors, because of Section 83 of the Victorian Wrongs Act, 1958, as amended, Council reserves the right to suspend compliance with its Plan.

In the event that the Chief Executive Officer of the Council (or delegated officer), has to, pursuant to Section 83 of the said Act, consider the limited financial resources of Council and its other conflicting priorities, meaning Council's Plan cannot be met, they will write to Council's Officer in charge of its Plan and inform them that some, or all of the timeframes and responses in Council's Plan are to be suspended. Once the events beyond the control of Council have abated, or if the events have partly abated, Council's Chief Executive Officer (or delegated officer), will write to Council's Officer responsible for Council's Plan and inform them which parts of Council's Plan are to be reactivated and when.

Inspection and maintenance activities will be managed in accordance with the process set out in Attachment E Section E.6 with the aim being to return to normal service levels as soon as practicable. This approach is consistent with the Wrongs Act 1958, Part XII – Liability of Public Authorities, section 83, which refers to Principles concerning resources responsibilities etc. of public authorities. This in addition to the Principles concerning performance of road management functions, section 101, Part 6 – Civil Liability of the Road Management Act 2004 is used to determine whether a road authority has a duty of care or has breached their duty of care.

4.4 Performance Monitoring & Review

The service levels set out in the RMMP (Attachment E) are based on activities Council currently undertakes. Review of the service levels, documented in Attachment E, is necessary to ensure that Council is working towards providing the best road management service possible with its limited resources. As the setting of service levels is an iterative process, it follows that they will evolve over time taking into account community expectations, changes to legislation, industry service standards and practical constraints on Council resources. The service levels will be examined when this Plan is reviewed.

By documenting the service levels considered appropriate to maintain its road and road related assets, Council can monitor its own performance through an examination of its ability to meet these standards. The Frankston Asset Management Information System (FAMIS) will provide data for such analysis. Through use of FAMIS, Council will record the timing of all reactive maintenance and routine defect inspection activities undertaken against each road asset. This process will provide a means to monitor compliance with the service standards described in this Plan.

Council will actively monitor compliance with the standards described in this Plan to ensure any deficiencies can be identified and rectified promptly.

APPENDICIES

B. ROAD & PATH HIERARCHIES

This attachment includes descriptions of Council's road and path hierarchies.

B.1 ROAD HIERARCHY

Road Hierarchy Classification	Desired Function/ Description	Council's desired approach to managing these assets
Major Roads	<p>Act as through traffic routes.</p> <p>Connect to the VicRoads arterial road network.</p> <p>Complement the VicRoads arterial road network by efficiently and safely channelling traffic through the municipality.</p> <p>Carry traffic between major commercial, industrial and residential areas.</p> <p>High to moderate use by heavy vehicles.</p> <p>Bus routes may be provided on these roads.</p>	<p>Public transport and designated on-road bicycle routes are included where feasible.</p> <p>Traffic management treatments, such as speed humps, chicanes or threshold treatments, are avoided. Treatments are limited to roundabouts, traffic splitter islands and lane markings.</p> <p>Restrictions to on-street parking may be used during peak hours to facilitate peak hour traffic movements.</p> <p>Off-road shared paths and footpaths are encouraged, with controlled pedestrian crossings where required.</p>

Road Hierarchy Classification	Desired Function/ Description	Council's desired approach to managing these assets
Collector Roads	<p>Concentrate locally generated traffic to an outlet.</p> <p>Provide safe and efficient connection to commercial and residential areas from Major Roads, or directly from the VicRoads arterial network.</p> <p>Provide direct access to the local road network.</p> <p>Not intended to act as a through traffic routes.</p> <p>Carry local traffic to shops, schools, commercial districts, hospitals, sporting and other local facilities.</p> <p>May provide access to abutting properties.</p> <p>Moderate to low use by heavy vehicles.</p> <p>Bus routes may be provided on these roads.</p>	<p>Public transport and designated on-road bicycle routes may be provided.</p> <p>Traffic management treatments are used to improve safety and residential amenity; discourage through traffic without causing unreasonable traffic volumes to divert to other streets.</p> <p>Restriction of on-street parking may be used during peak times.</p> <p>Off-road shared/pedestrian paths are encouraged and pedestrian treatments are introduced to improve pedestrian safety and amenity.</p>
Industrial Roads	<p>Provide access to local light industries concentrated in small areas within the municipality.</p> <p>Abutting properties are primarily industrial.</p> <p>High to moderate use by heavy vehicles.</p> <p>Bus routes may be provided on these roads.</p>	<p>Facilitate safe movement of numerous large heavy vehicles particularly during business hours.</p> <p>Speed humps and chicanes avoided. Traffic management treatments are restricted to roundabouts, traffic splitter islands and lane markings.</p> <p>Street parking may be restricted during business hours to facilitate access.</p> <p>Pedestrian and cyclist activity not actively encouraged.</p>

Road Hierarchy Classification	Desired Function/ Description	Council's desired approach to managing these assets
Local Access Roads	Provide safe access to abutting properties (primarily residential). Low speed environment Bus routes may be provided on these roads.	Aim to maximise aesthetic value and provide a safe environment for formal and informal use by both pedestrians and cyclists. Designated on-road bicycle routes may be provided. Traffic management treatments are considered if safety and amenity concerns warrant treatment. Informal all-day street parking is encouraged
Laneway/ Right of Way	Provide access primarily for abutting properties. Property access generally limited to the rear or side of properties. Land may contain drainage easements. Abutting property is often commercial or residential. Often used for the delivery of goods to commercial sites.	Parking may be restricted during business hours to facilitate access.
Fire Tracks	Provide access for fire authority vehicles only	Maintain only as requested by fire authority to minimise fire safety risks within the municipality
Key Central Activity Area (CAA) Roads	Provide access to, from and within the designated Central Activity Area ¹ . Includes shared use areas with restricted vehicle access. Public amenity and aesthetic aspects of these roads take priority over speed and ease of movement of vehicles.	Aim to maximise aesthetic value and provide a safe environment for formal and informal use by both pedestrians and cyclists. Public transport and designated on-road bicycle routes may be provided. Traffic management treatments are considered if safety and amenity concerns warrant treatment. Parking may be restricted during business hours to facilitate access.
Service Roads	Roads, which run parallel to VicRoads arterial roads in order to provide access from an arterial road to the municipal road network and abutting properties.	Public transport and designated on-road bicycle routes may be provided.
Unsealed Roads	These roads have gravel/ crushed rock surface. They may function as Major, Collector or Local Access roads. Following formal construction of a sealed pavement, these roads will be re-classified into the appropriate class in accordance with their functional, physical and traffic characteristics.	

Table 3- Road Hierarchy

Notes:

1. Refer map that shows the boundaries of the Central Activity Area.

Road Hierarchy Classification	Desirable Traffic Conditions			Desirable Physical Features		
	Two Way AADT (24 hour)	% Commercial Vehicles	Posted Speed Limit (km/h)	Kerb Type	Pavement Width (m) ¹	Pavement Type
Major Roads	5,000 to 10,000	Less than 7%	60 to 80	Barrier	7.4 to 12.0	Surface: Asphalt Pavement Standard Drawings TBD
Collector Roads	Less than 6,000	Less than 5%	50 to 60	Barrier/ Rollover	6.4 to 11.3	Surface: Asphalt Pavement Standard Drawings TBD
Industrial Roads	Less than 6,000	Variable	50 to 60	Barrier	7.6 to 11.8	Surface: Asphalt Pavement Standard Drawings TBD
Local Access Roads	Less than 2,000	Less than 3%	20 to 50	Barrier/ Rollover	3.8 to 8.8	Surface: Asphalt Pavement Standard Drawings TBD
Laneway/ R.O.W	Variable	Variable	20 to 50	Variable	3.8 to 6.4	Variable
Fire Tracks	N/A	Fire Authority Vehicles	N/A	Nil	Variable	Variable
Key Central Activity Area Roads ²	Variable	Less than 5%	30 to 40	Barrier/ Rollover	6.4 to 12	Surface: Asphalt Pavement Standard Drawings TBD
Service Roads	Less than 6,000	Less than 3%	20 to 50	Variable	Variable	Variable
Unsealed Roads	Less than 1,000	Less than 1%	50	Shoulder with table drain	Variable	Gravel

Table 4- Road Hierarchy – Desirable Traffic Conditions & Physical Features

Note:

1. Measurement of pavement width (Lip of Kerb) or edge of shoulder
2. Refer map that shows the boundaries of the Central Activity Area.

3. Given that the municipality is largely developed, it is not intended that all existing roads will comply with the desired standards. However, where practicable, and subject to Council discretion, effort will be made to achieve the desired standards via the delivery of Council's capital works programs. For example, when an asset is due for renewal or upgrade, re-design may enable it to better meet the desired physical features.

B.2 PATH HIERARCHY

Path Hierarchy Classification	Desired Function/ Description	Desirable Surface Material	Desirable Width	Council's desired approach to managing these assets
FOOTPATHS				
Key Central Activity Area (CAA) Footpaths	Located within or adjacent to the Central Activity Area. ¹ Cater for high to medium volume pedestrian traffic with diverse needs.	Asphalt or Concrete	1.5 to 2.4 m	Provide for safe movement of pedestrians within the Central Activity Area. Provide high quality, aesthetically pleasing sealed paths. Prioritise for DDA compliance.
Key Access Footpaths	Provide direct access to shopping and service precincts, transport hubs, schools, preschools, recreational facilities, parks, community centres, childcare centres tourist attractions, religious centres, hospitals, facilities for seniors, and other public attractions. Cater for high to medium pedestrian traffic volumes with diverse needs.	Asphalt or Concrete	1.5 to 2.4 m	Provide good quality sealed paths on both sides of the road. Provide safe access for pedestrians. Prioritise for DDA compliance.
Industrial Access Footpaths	Located within industrial precincts. Withstand heavy vehicles	Asphalt or Concrete	1.5 m	Provide safe access for pedestrians. Provide suitable construction to withstand occasional heavy vehicle usage. In low use areas provide path on one side of the road only.

Path Hierarchy Classification	Desired Function/ Description	Desirable Surface Material	Desirable Width	Council's desired approach to managing these assets
Reserve Footpaths ²	Located within Council open space reserves, including the Foreshore. Cater for variable volumes of pedestrian traffic.	Asphalt or Concrete or Unsealed or Timber	1.5 to 2.4 m	Provide safe access within Reserves. Provide suitable construction to withstand maintenance vehicle usage
Local Access Footpaths	Service predominantly suburban residential areas. Cater for low volume pedestrian traffic with diverse needs.	Asphalt or Concrete	1.5 m	Provide safe access for pedestrians. In low use areas provide paths on one side of the road.
SHARED PATHS				
Primary Shared Paths	Provide an alternative to the road system for pedestrians and cyclists travelling through the City. Cater for high to medium pedestrian and cyclist volumes and high speed cyclists.	Asphalt or Concrete	3.0 m	Provide a safe aesthetically pleasing environment for cyclists and pedestrians. Provide suitable construction to withstand maintenance vehicle usage.
Secondary Shared Paths	Provide an alternative to the road system for pedestrians and cyclists travelling locally within the municipality. Cater for moderate pedestrian and cyclist volumes	Asphalt or Concrete	2.5 m	Provide a safe environment for cyclists and pedestrians. Provide suitable construction to withstand maintenance vehicle usage.

Table 5- Path Hierarchy – Description and Desirable Physical Features

1. Refer map that shows the boundaries of the Central Activity Area (CAA).
2. Paths located in Council Reserves may not be managed in accordance with maintenance and inspection service levels set out in Appendix E of the Road Management Plan
3. New paths and path upgrade designs take into consideration the Austroads Guide to Road Design Part 6a: Pedestrian & Cyclist Paths
4. Given that the municipality is largely developed, it is not intended that all existing paths will comply with the desired standards. However, where practicable, and subject to Council discretion, effort will be made to achieve the desired standards via the delivery of Council's capital works programs. For example, when an asset is due for renewal or upgrade, re-design may enable it to better meet the desired physical features.

C. RESPONSIBILITIES FOR ASSETS IN ROAD RESERVES

This attachment includes the following:

- ❖ Listing of the asset types managed in accordance with this Plan
- ❖ Responsibilities of abutting property owners:
 - Driveways (vehicle crossovers)
 - Property drainage connections
 - Assets constructed by a property owner (e.g. mailboxes)
- ❖ Responsibilities of Service Authorities

C.1 ASSETS MANAGED IN ACCORDANCE WITH THIS PLAN

Where Council is deemed to be a Coordinating Road Authority, the road reserve shall be taken to encompass all road and road related assets located from property line to property line and listed in the table below.

Council accepts responsibility under the Road Management Act for the following assets, where they are located within a road reserve that is listed in Council's public road register.

ROAD INFRASTRUCTURE	
Bridges	Timber, concrete steel and composite road or pedestrian bridges (including major culverts and boardwalks).
Drainage	Pipes, culverts, pits (grated, side entry, and junction), pit lintels, table drains, spoon drains, gross pollutant traps, and litter baskets located within the road reserve, designed to transfer stormwater runoff from kerbs and road surfaces.
Footpaths	Designed for pedestrian use and constructed using concrete, asphalt, pavers, or compacted granitic material. Paths may include tactile markers.
Kerb and Channel	Rollover, barrier, or plinth located at the edge of a road designed to prevent vehicles from leaving the road carriageway. Kerb and channel facilitates the transfer of stormwater from road surfaces toward drainage side entry pits.
Local Area Traffic Management Treatments (LATMs)	Constructed to control traffic movements. Treatments include roundabouts, splitter islands, slow points, chicanes, speed humps, outstands and other traffic delineators. Treatments may include kerb and channel, garden beds and hardstand areas.
Minor Structures	Retaining walls, stairs, balustrades, hand rails, estate entrance walls.
Road Furniture	Includes school crossing posts, bike racks, bins, fencing, guardrail, banner poles, guideposts, non-standard street light (excluding globes) and seating.

ROAD INFRASTRUCTURE	
Road Pavement	Sub grade and sub base layers of constructed roads.
Roadside Vegetation	Trees and shrubs including significant vegetation planted within road reserve.
Sealed Road Surface	Wearing course of all asphalt, concrete and paved roads. Includes the area between lip of kerb on kerbed roads and the area up to the shoulder on un-kerbed roads. Includes on-road parking bays, on-road cycle paths, pavement markings and threshold treatments.
Shared Paths	Paths designed for shared use by pedestrians and cyclists. Constructed using concrete, asphalt, pavers, or compacted granitic material.
Signs	Regulatory, warning, special purpose and information signage provided for the control and/or guidance of traffic, as approved by Council. Includes street signposts, foundations and sign faces. Includes regulatory and warning signage related to the shared path function. Includes regulatory and warning signage related to the bridge function.
Table Drains	Open channels constructed to collect stormwater runoff from road surfaces, batters and edge formations.
Unsealed Road Surface	Any constructed road surface that does not have a sealed surface (i.e. asphalt, paved or concrete).

Table 6– Assets in Road Reserves

The following are not managed in accordance with this RMP:

- ❖ road reserves with no constructed vehicular or pedestrian access
- ❖ common property access ways (see Appendix C.3)
- ❖ private roads (maintained by body corporate or similar)
- ❖ off-street car parks and any associated signage and line marking
- ❖ roads and paths located on Council land that is not a public road listed in Council’s public road register
- ❖ pathways through Council’s recreational, drainage and linear reserves
- ❖ general horticultural management of trees (including tree health)

C.2 PROPERTY OWNER RESPONSIBILITIES

The following figures are intended to provide clarity regarding the limits of Council responsibility with regard to:

- ❖ Driveways (vehicle crossovers)laneway
- ❖ Property Drainage Connections
- ❖ Assets Constructed in the Road Reserve by a Property Owner

C.3 DRIVEWAYS (VEHICLE CROSSOVERS)

For the purposes of this Plan, a driveway is not a public road, even in instances where it may service more than one property or building.

As part of the routine defect inspection regime, Council will inspect for defects on Sections 1 and 3 of a driveway as illustrated below. Sections 1 and 3 will be maintained to address defects that exceed Council’s defect intervention levels (refer Attachment E).

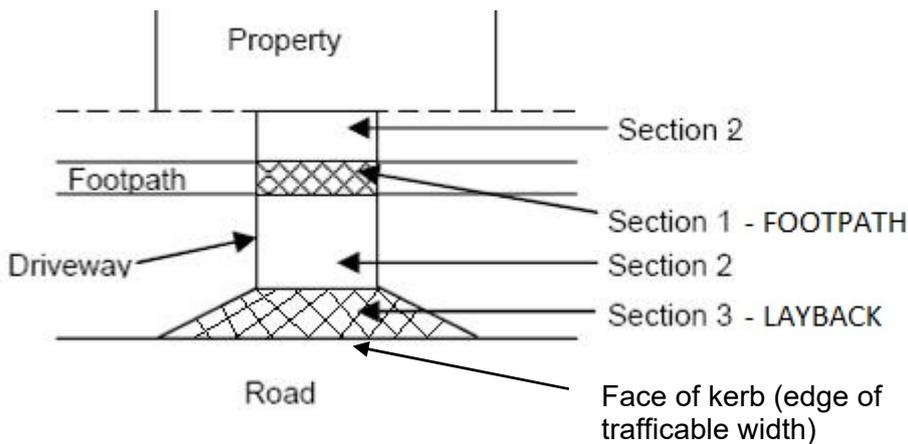


Figure 5– Driveways (vehicle crossovers)

Council does not have a statutory duty to inspect, maintain or repair Sections 2. It is the responsibility of the property owner to construct and maintain Section 2 to Council standards at the property owners cost.

C.4 PROPERTY DRAINAGE CONNECTIONS

Drainage pipes and pits located within Council drainage easements in private property are Council assets that will be maintained by Council.

Council will only maintain Section 3 illustrated in the figure below, in accordance with the service levels set out in this Plan (refer Attachment E).

Council does not have a statutory duty to inspect, maintain and repair Sections 1 and 2. Connection from a building on private property to Council’s drainage system is the responsibility of the property owner. The property owner is responsible for construction and maintenance to Council standards at the property owner’s cost.

Council is not responsible for any illegal connections to the municipal stormwater drainage network. Council does not accept responsibility for illegal works undertaken within the road reserve or works undertaken by others for which Council has not been notified and provided written consent.

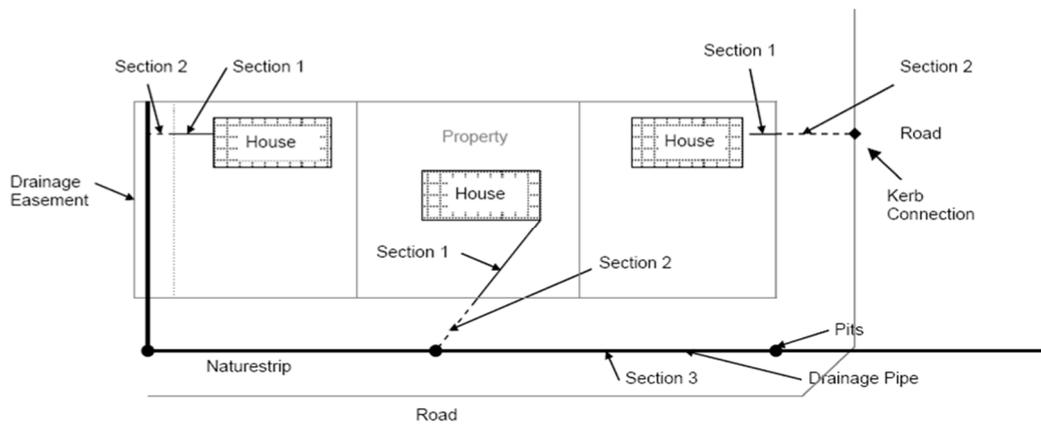


Figure 6 - Property Drainage Connections

C.5 ASSETS CONSTRUCTED BY A PROPERTY OWNER

The property owner is responsible for all assets installed within the road reserve by a landowner/ occupier for their own purposes. These types of assets constructed by a property owner vary and might include the following:

- ❖ Nature strip watering systems
- ❖ Landscaping and garden beds in the nature strip
- ❖ Private letter boxes
- ❖ House and business signage
- ❖ Restaurant furniture
- ❖ Billboards
- ❖ Bollards
- ❖ Fencing

These temporary or permanent assets remain the property of the landowner who has a responsibility to ensure that the assets do not become a hazard to members of the public or have a detrimental impact on Council's assets. If these assets become hazardous to members of the public, Council may notify the responsible owner and/or be required to make the hazard safe until such time that it is addressed.

Prior to installation off assets in the road reserve, Council approval and a Road Opening Permit is required.

C.6 SERVICE AUTHORITY RESPONSIBILITIES

Assets that are owned and maintained by service utility companies include:

- ❖ Power lines and poles (except for non-standard and metered lights)
- ❖ Water mains and associated meters
- ❖ Gas mains
- ❖ Sewer mains
- ❖ Telephone lines
- ❖ Letter boxes (Australia Post)
- ❖ Optical fibre cables
- ❖ Pits, pipes, poles, conduits, valves, cabling etc. and like structures associated with these services
- ❖ Permanent survey markers and other non-road infrastructure of any kind

In some instances where these assets are posing a safety hazard to members of the public, for example, a broken telecommunications pit in the footpath, Council may need to make these hazards safe until the relevant authority can come and address the issues. In these instances, Council may wish to seek reimbursement if it is required to protect against these hazards for an extended period of time.

Often these authorities need to do work in, on, under or over a roadway or roadside. Works and notifications must be undertaken in accordance with current regulations and associated Codes of Practice. For example:

- ❖ Road Management (General) Regulations (2016)
- ❖ Road Management (Works and Infrastructure) Regulations (2015)

D. DEMARICATION AGREEMENTS

This attachment includes reference to current formal demarcation agreements with other Road Authorities for roads located within the municipality.

Road Authority	Council Reference¹	Agreement Date
VicRoads	QA121452	June 2013 ²
Linking Melbourne Authority	QA121452	October 2012
City of Kingston	QA121452	June 2004
Mornington Peninsula Shire	QA121452	June 2004

Table 7– Road Authority Agreements

¹ This is the folder within Council's Electronic Document Management System (EDMS), where the agreements are currently stored.

² In accordance with the Act and the Ministerial Code of Practice for Operational Responsibility for Public Roads, VicRoads has a Coordinating Road Authority responsibility for the following roads within the municipality:

- ❖ Klauer Road
- ❖ Davey – Hastings Road
- ❖ Frankston – Flinders Road
- ❖ Cranbourne – Frankston Road
- ❖ Fletcher Road
- ❖ Nepean Highway

Frankston City Council has an agreement with VicRoads that details Council's maintenance responsibilities within specified designated areas within the above-listed road reserves. The agreement is updated annually.

E. ROAD MAINTENANCE MANAGEMENT PLAN

TABLE OF CONTENTS

- E.1 Introduction
 - E.1.1 Definitions
 - i) Inspection Types
 - ii) Maintenance Types
- E.2 Routine Defect Inspections
 - E.2.1 Defect Intervention Levels
 - E.2.2 Bridge & Major Culvert Inspections
 - E.2.3 Path & Path Related Defect Inspections
 - E.2.4 Unsealed Road Defect Inspections
 - E.2.5 Road & Road Related Defect Inspections
 - E.2.6 Internal Drainage Pit Defect Inspections
 - E.2.7 Roadside Vegetation Defect Inspections
 - E.2.8 Night Inspections
- E.3 Public Safety Risk Assessment Process
- E.4 Maintenance Activities
 - E.4.1 Reactive Maintenance
 - E.4.2 Routine Maintenance
- E.5 Managing Unexpected Renewal Works
- E.6 Service Delivery during Exceptional Situations

E.1 INTRODUCTION

This Road Maintenance Management Plan (RMMP) sets out Council's policy for the inspection and repair of road and road related assets. It describes the following:

- ❖ Routine defect inspections
- ❖ Maintenance activities
- ❖ Public safety risk assessment process
- ❖ Approach to managing unexpected renewal works
- ❖ Service delivery during emergency and abnormal situations

It is expected that this RMMP will be a living document, which is reviewed periodically to ensure that it is reflective of Council practices, industry requirements, risk management and community expectations.

E.1.1 DEFINITIONS

i) Inspection Types

The Road Management Act requires that Council proactively manage its network of road and road related assets. To achieve this, four types of inspections have been identified and are described below:

- ❖ **Routine Defect Inspections** – These inspections are intended to identify, as far as practicable, all asset defects likely to create a risk to the public, and therefore require intervention. Routine defect inspections are undertaken on a regular frequency between scheduled condition audits and complement informal ad hoc defect identification by staff, contractors and the general public.
- ❖ **Ad hoc Defect Inspections** – These inspections are impromptu. They are undertaken when a defect that poses a potential public safety risk is identified by staff, or contractors when undertaking other activities within the municipality.
- ❖ **Condition Audits** – These audits are used to determine the condition of the asset. They enable non-urgent maintenance and renewal needs to be identified and prioritised. Condition audit information enables Council to determine the remaining life of assets and predict future renewal requirements based on predicted asset deterioration rates.
- ❖ **Serviceability Audits** – These audits assess the ability of assets to fulfil their intended function. The appropriateness of the design, construction, capacity and other operational aspects may be assessed. For example, these audits may consider the appropriateness of intersections and local area traffic treatments or compliance with the Disability Discrimination Act.

This RMMP details Council's routine defect inspection regime only. The scope and frequency of condition and serviceability audits are beyond the scope of this document and will be detailed as part of Council's future asset management plans.

ii) Maintenance Types

This RMMP details two types of maintenance activities that occur on roads and road related assets within the municipality.

- ❖ **Reactive Maintenance** – Maintenance works undertaken to provide temporary and/or permanent repair to a damaged or deteriorated asset in order to provide protection against potential risks and restore an asset’s intended functionality. This type of maintenance occurs after the asset failure or damage has been identified.
- ❖ **Routine Maintenance** – Maintenance works undertaken to preserve the life of an asset and ensure the asset retains its intended functionality. This type of maintenance aims to prevent asset failure and generally occurs on a regular frequency.

E.2 ROUTINE DEFECT INSPECTIONS

Council has identified a need to undertake regular defect inspections. The defect inspection regime includes the following:

- ❖ Bridges & Major Culverts
- ❖ Path & Path Related Assets
- ❖ Unsealed Road Surface
- ❖ Road & Road Related Assets
- ❖ Internal Drainage Pit Defects
- ❖ Roadside Vegetation
- ❖ Night Inspections

E.2.1 DEFECT INTERVENTION LEVELS

Defects identified for each asset category (with the exception of Bridges and Major Culverts discussed in section E.2.2) are listed in Table 10 below.

The defect inspector(s) look for and report these defects during the routine defect inspections. The defect intervention levels listed here indicate the severity of defects that will trigger a reactive maintenance activity. A sample photograph is provided wherever possible.

BRIDGES & MAJOR CULVERTS

B001 – Component damage or deterioration is presenting a hazard to road or path users

B002 – Structural integrity issues require further investigation

B003 - Accumulation of material causes interruption to the escape of stormwater runoff

B004 - Accumulation of material causes interruption to the operation of expansion joints.

B005 – Vegetation growing in joints or cracks

B006 - Any log debris >150 mm in diameter within 10m of structure.

B007 - Any accumulation of debris >400 mm in dimension within 10m of structure.

DRAINAGE

D-001 Open drain capacity >50% obstructed.



D-002 Water on trafficable lanes



D-003 Private land inundated



D-004 Building inundated



D-005 Nature-strip holding water



D-006 Water ponding over >60% of path for longer than 72 hours.



INTERNAL DRAINAGE DEFECTS

DI-001 Debris in pit impeding pipe flow to outlet pipe



DI-002 Pipe/ culvert obstructions impede stormwater flow



DI-003 Broken frames that no longer support the pit lid securely



DI-004 Missing/ damaged/ deteriorated step irons and/or mesh panels.

DI-005 Collapsed pit walls

DI-006 Collapsed pit floor



EXTERNAL DRAINAGE DEFECTS

DE-001 Debris obstructing pit inlets



DE-002 Pit throat (inlet) is damaged to the extent that it obstructs stormwater flow into the pit:



DE-003 Lintel damaged or deteriorated to the extent that it could be hazardous to pedestrians



DE-004 Reinforcement is exposed



DE-005 Broken or missing pit covers



DE-006 Broken or missing pit grates including bike grates



DE-007 Pit surrounds damaged to the extent that they are hazardous to road users/ pedestrians



DE-008 Vertical displacement >25mm only if the pit is within a designated pedestrian walkway

DE-009 Cracks considered likely to cause the pit lid or surrounds to collapse



FOOTPATHS

F-001 Debris or ponding that is >400mm in diameter or considered hazardous to pedestrians or obstructing drainage



F-002 Dumped rubbish

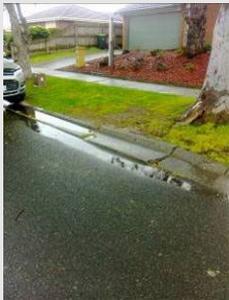
F-003 Path edge failures >75mm deep at the interface of the path and adjacent ground

F-012 Dead Animal

F-014 Damaged tactile pavers (cracked or worn) that could be hazardous to pedestrians affecting > 50% of the tiles

F-015 Damaged grate located in in a path

CONCRETE FOOTPATH DEFECTS	
<p>FC-001 Vertical displacement/ tripping hazard >25mm</p> 	<p>FC-002 Dislodged wedge</p>
<p>FC-003 Cracks >15mm wide and 200mm long</p> 	
ASPHALT FOOTPATH DEFECTS	
<p>FA-001 Potholes >25mm deep and 150 mm diameter</p>	<p>FA-002 Mounding/ undulations >100mm resulting from tree root uplift</p>
<p>FA-003 Cracks >15mm wide and 200 mm long</p>	
PAVED FOOTPATH DEFECTS	
<p>FP-001 Vertical displacement/ tripping hazard >25mm</p>	<p>FP-002 Loose, missing or dislodged pavers with gaps >20mm</p> 
CONSTRUCTED UNSEALED FOOTPATH DEFECTS	
<p>FU-001 Potholes >50mm deep and 150 mm diameter</p>	<p>FU-002 Corrugations/ subsided areas >50mm deep</p>
<p>FU-003 Debris or ponding that is > 400mm in diameter or considered hazardous to pedestrians or obstructing drainage</p>	

KERB AND CHANNEL	
<p>K-001 Hollows & peaks >50mm in 10m, that may result in ponding of stormwater on trafficable areas</p> 	<p>K-002 Concrete spalling/ worn exposing aggregate >100mm in width and 200mm in length</p> 
<p>K-003 Vertical displacement >50 mm</p> 	
LOCAL AREA TRAFFIC MANAGEMENT DEVICES (LATMs)	
<p>L-001 Damaged kerb & channel that may result in ponding of stormwater on trafficable areas</p>	<p>L-002 Vertical displacement/ tripping hazard >25mm within designated pedestrian walkways and pedestrian refuge areas</p>
MINOR STRUCTURES (e.g. Stairs, Retaining Walls)	
<p>S-001 Major damage affecting structural performance</p>	<p>S-002 Minor damage affecting structural performance</p>
<p>S-003 Settled and/or eroded batters and/or embankments, including seepage at toe of wall/ stairs.</p>	<p>S-004 Loose/ missing handrails/ balustrades</p>
<p>S-004 Loose/ missing handrails/ balustrades</p>	<p>S-005 Loose/ missing steps</p>
<p>S-006 Gaps > 50mm in staircase landings</p>	<p>S-007 Slippery surface impacting >50% of steps or landings</p>
ROAD FURNITURE	
SCHOOL CROSSING INFRASTRUCTURE DEFECTS	
<p>SX-001 Missing/ Damaged school crossing posts/ other infrastructure</p>	
GUIDE POST DEFECTS	
<p>GP-001 Post has >50% loss of paint and/or reflectivity.</p>	<p>GP-002 >10% of guide posts missing on straights</p>
<p>GP-003 >10% of guide posts missing on curves with an advisory speed</p>	<p>GP-004 >3 guideposts in a row are missing</p>

GUARD RAIL DEFECTS

GR-001 Guardrail broken or deformed by >500mm



GR-002 Loss of >50% of guardrail reflectors

NON-STANDARD STREET LIGHT DEFECTS

SL-001 Standards/ poles - hazardous to road users/ pedestrians/ property



SL-002 Arms/ masts - hazardous to road users/ pedestrians/ property

SL-003 Base supports - hazardous to road users/ pedestrians/property



SL-004 Non-standard Street Light – not functioning

OTHER ROAD FURNITURE DEFECTS

RF-001 Fencing rotten/ corroded/ broken poses hazard to public



RF-002 Fencing posts, rails, strainers, wire or panels is not operational and is facilitating unrestricted access



RF-003 Missing/ damaged bin enclosures



RF-004 Damaged/missing/ non-functional bike racks



RF-005 Street furniture posing a hazard to road users, pedestrians or property



RF-006 Banner/flag poles posing a hazard to road users, pedestrians or property

ROAD PAVEMENT

RP-001 Failed area >300mm in diameter and >50mm in depth with potential for pavement collapse



ROADSIDE VEGETATION

RV-001 Line Clearance in accordance with Code of Practice for Electric Safety (Electric Line Clearance) Regulations 2020



RV-002 Constructed Path Height Clearance < 2.5 m. Minimum 1m trafficable width on path with vegetation not exceeding 25mm in height representing a tripping hazard



RV-004 Roadway Height Clearance < 4.5m



RV-005 Roadway Lateral Clearance < 200mm from back edge of shoulder and/or kerb



RV-006 Foliage obstructing regulatory and/or warning signs



RV-007 Vegetation within sight clearance triangles as per Austroads Guidelines



RV-008 Limbs potentially hazardous to road or path users or property. (i.e. immediate risk of falling)

RV-009 Tree potentially hazardous to road or path users or property. (i.e. immediate risk of falling)

RV-010 Fallen limb obstructing pedestrian/ cyclist or vehicular traffic.

RV-011 Fallen tree obstructing pedestrian/ cyclist or vehicular traffic.



RV-012 Stumps obstructing pedestrian/ cyclist or vehicular traffic



RV-014 Vegetation diseases likely to affect tree stability



RV-015 Weeds/ grass >500mm high, within 1.5m of back of kerb/edge of shoulder during the fire danger period

RV-015A Weeds/ grass >500mm high affecting sight distance



SEALED ROAD SURFACE

RS-001 Potholes >25mm deep and/or >150mm diameter on designated on-road cycle path



RS-002 Potholes >50mm deep and/or >150mm diameter in trafficable lane



RS-003 Stripping/ bleeding likely to result in loss of skid resistance



RS-004 Crocodile cracking with fines pumping



RS-005 Cracks >15 mm wide and covering an area of 5m² or greater



RS-006 Edge break >1m long & >50mm deep &/or extends/ protrudes 75mm laterally into trafficable areaspc-003

RS-007 Damaged/ dislodged or missing pavement markers (RRPMs & RPMs)



RS-008 Faded Statcon pavement marking (<50% effective reflectivity)



RS-009 Faded other line marking (<50% effective reflectivity)	RS-010 Substance on road surface where there is a danger to traffic
RS-011 Substance on road surface where there is potential for stormwater pollution 	RS-012 Dead Animal
RS-013 Debris on road surface where there is a danger to traffic 	RS-995 Dumped Rubbish
RS-014 Wheel rutting / depression >50mm depth under a 1.2m straight edge	
SHARED PATHS	
SP-001 Path edge failures >75mm protrusion at the interface of the path and adjacent ground 	SP-002 Dumped Rubbish 
SP-003 Dirt/ silt/ ponding debris likely to cause slipping or obstruct stormwater flow	SP-007 Damaged/ dislodged or missing pavement markers (RRPMs & RPMs);
SP-008 Faded shared path line marking (<50% effective reflectivity)	SP-012 Dead Animal
CONCRETE SHARED PATH DEFECTS	

<p>SPC-001 Vertical displacement/ tripping hazard >25mm in sealed path</p> 	<p>SPC-002 Dislodged Wedge</p>
<p>SPC-003 Cracks >15mm wide and 1m long</p> 	
<p>ASPHALT SHARED PATH DEFECTS</p>	
<p>SPA-001 Potholes >50mm deep and 150 mm diameter</p> 	<p>SPA-002 Mounding/ Undulations >100mm resulting from tree root uplift</p> 
<p>SPA-003 Cracks >15mm wide and 1m long</p>	
<p>UNSEALED SHARED PATH DEFECTS</p>	
<p>SPU-001 Potholes >50mm deep and 150 mm diameter</p>	<p>SPU-002 Corrugations >50mm deep</p> 

SIGNS (Regulatory Only)

SI-001 Damaged/ faded signs to an extent that makes them unreadable



SI-002 Missing sign face

SI-003 Sign posts that are not vertical (>15 degrees from vertical)



SI-004 Graffiti covering >10% of the sign face rendering it unreadable



SI-005 Unauthorised material attached to signs. (E.g. posters, balloons, signs, etc.)



UNSEALED ROAD SURFACE

US-001 Rutting and corrugations exceeding 100mm over 50% of the unsealed road or shoulder length



US-002 Potholes >500mm diameter and 150mm deep over 50% of the unsealed road or shoulder length



US-003 Edge drops from traffic lane to shoulder >50mm over 20m length under a 1.5m straight edge



US-004 Dust restricting visibility to less than 3m in either direction

US-005 Dead Animal

US-006 Debris on road surface where there is a danger to traffic

Table 8- Defect Intervention Levels – Sample Photographs

E.2.2 BRIDGE & MAJOR CULVERT INSPECTIONS

ROAD AND PEDESTRIAN BRIDGES	BRIDGES & MAJOR CULVERTS ROUTINE DEFECT INSPECTION FREQUENCY
All Council managed road and pedestrian bridges within roads listed in Council's Public Road Register	6 month cycle

Table 9– Bridges & Major Culverts - Defect Inspection Frequencies

The defect inspector will look for defects listed in Table 10 against the Bridges & Major Culverts asset class

E.2.3 PATH & PATH RELATED DEFECT INSPECTIONS

PATH HIERARCHY CLASSIFICATION	PATH & PATH RELATED ROUTINE DEFECT INSPECTION FREQUENCY
PRIMARY SHARED PATHS	6 month cycle
SECONDARY SHARED PATHS	1 year cycle
KEY CENTRAL ACTIVITY AREA FOOTPATHS	Monthly
KEY ACCESS FOOTPATHS	6 month cycle
INDUSTRIAL ACCESS FOOTPATHS	2 year cycle
LOCAL ACCESS FOOTPATHS	2 year cycle

Table 10– Path & Path Related Asset - Defect Inspection Frequencies

This inspection will be done from the perspective of a pedestrian or cyclist. The defect inspector will look for defects listed against the following asset categories in Table 10.

- ❖ Footpaths
- ❖ Shared Paths
- ❖ Drainage (External) – Only for pits located on the path network.
- ❖ Local Area Traffic Management Devices – only LATMs that contain designated pedestrian access.
- ❖ Minor Structures - Only consider minor structures that form part of the path network (e.g. Retaining Walls, Stairs).
- ❖ Roadside Vegetation - Only identify defects that affect the function of the path network.
- ❖ Road Furniture - Only consider furniture servicing the path network (e.g. school crossing infrastructure, non-standard street lights, fences, bins, bike racks)
- ❖ Signs (Regulatory Only)– Only consider regulatory signs associated with the shared path network.

E.2.4 UNSEALED ROAD DEFECT INSPECTIONS

ROAD HIERARCHY CLASSIFICATION	UNSEALED ROAD ROUTINE DEFECT INSPECTION FREQUENCY
UNSEALED ROAD SURFACE	3 month cycle

Table 11–Unsealed Road Surface - Defect Inspection Frequencies

During these inspections, the defect inspector will look for defect intervention levels associated with the unsealed road surface only (refer Table 10).

This inspection forms part of the routine grading program. Inspection of road related assets such as signs will be inspected as part of the road & road related routine defect inspection regime outlined below.

E.2.5 ROAD & ROAD RELATED DEFECT INSPECTIONS

ROAD HIERARCHY CLASSIFICATION	ROAD & ROAD RELATED ROUTINE DEFECT INSPECTION FREQUENCY
MAJOR ROADS	6 month cycle
COLLECTOR ROADS	1 year cycle
INDUSTRIAL ROADS	2 year cycle
LOCAL ACCESS ROADS	2 year cycle
LANEWAY/ R.O.W	2 year cycle
FIRE TRACKS	Nil – Reactive Only
KEY CENTRAL ACTIVITY AREA ROADS	6 month cycle
SERVICE ROADS	2 year cycle
UNSEALED	1 year cycle

Table 12– Road & Road Related Asset - Defect Inspection Frequencies

This inspection will be done from the perspective of a motorist. During these inspections, the defect inspector will look for defect intervention levels listed in Table 10 and associated with the following asset categories:

- ❖ Drainage (External) - Only consider Side Entry Pits and Other Pits located in trafficable lanes (including on-road cycle paths)
- ❖ Kerb and Channel
- ❖ Local Area Traffic Management Devices
- ❖ Minor Structures - Only consider minor structures that form part of the road network (e.g. Retaining Walls, Stairs)
- ❖ Road Furniture - School crossing infrastructure, fences, guideposts, guard rails, and non-standard street lights only
- ❖ Roadside Vegetation – Only identify defects that affect the function of the road network
- ❖ Sealed Road Surfaces

- ❖ Signs (Regulatory and Warning) – Only regulatory and warning signs associated with the road network. Exclude defects that affect the functioning of paths.

E.2.6 INTERNAL DRAINAGE PIT DEFECT INSPECTIONS

ROAD HIERARCHY CLASSIFICATION	DRAINAGE ROUTINE INSPECTION FREQUENCY ¹ (INTERNAL) DEFECT
MAJOR ROADS	6 month cycle
COLLECTOR ROADS	1 year cycle
INDUSTRIAL ROADS	2 year cycle
LOCAL ACCESS ROADS	3 year cycle
LANEWAY/ R.O.W	3 year cycle
FIRE TRACKS	Nil – Reactive Only
KEY CENTRAL ACTIVITY AREA ROADS	3 month cycle
SERVICE ROADS	3 year cycle
UNSEALED	1 year cycle

Table 13–Internal Drainage Pit - Defect Inspection Frequencies

Note: 1. Only Side Entry and Grated Pits within the road reserve will be inspected

During these inspections, the defect inspector will look for defect intervention levels listed under the heading Internal Drainage Defects in Table 10.

E.2.7 ROADSIDE VEGETATION LINE CLEARANCE INSPECTIONS

ROAD/ PATH HIERARCHY CLASSIFICATION	STREET TREES IN THE VICINITY OF OVERHEAD POWER LINES ROUTINE DEFECT INSPECTION FREQUENCY ¹
MAJOR ROADS	High voltage power lines - 1 year cycle
COLLECTOR ROADS	
INDUSTRIAL ROADS	Low voltage power lines along roads in the Central Activity Area only - 1 year cycle
LOCAL ACCESS ROADS	
LANEWAY/ R.O.W	Low voltage power lines along all roads (excluding the Central Activity Area) - 2 year cycle
FIRE TRACKS	
KEY CENTRAL ACTIVITY AREA ROADS	
SERVICE ROADS	
UNSEALED	

Table 14–Roadside Vegetation - Defect Inspection Frequencies

Note: 1. These inspections are undertaken as part of line clearance works

E.2.8 NIGHT INSPECTIONS

ROAD HIERARCHY CLASSIFICATION	NIGHT ROUTINE DEFECT INSPECTION FREQUENCY
MAJOR ROADS	1 year cycle
COLLECTOR ROADS	2 year cycle
INDUSTRIAL ROADS	2 year cycle
LOCAL ACCESS ROADS	Nil
LANEWAY/ R.O.W	Nil
FIRE TRACKS	Nil
KEY CENTRAL ACTIVITY AREA ROADS	6 month cycle
SERVICE ROADS	Nil
UNSEALED	Nil

Table 15–Night Inspection Frequencies

During these inspections, the defect inspector will look for defect intervention levels listed in Table 10 and associated with the following asset categories:

- ❖ Signs (Regulatory Only) – Only regulatory signs associated with the road network
- ❖ Road Furniture – Only the following defects: Guidepost (GP-001 to 004), Guard rail (GR-001), Non-standard street lights only (SL-001to 004)
- ❖ Sealed Road Surfaces - Only pavement markings defects (RS-007 to 009)³

E.2.9 ROAD PATROL INSPECTIONS

ROAD HIERARCHY CLASSIFICATION	NIGHT ROUTINE DEFECT INSPECTION FREQUENCY
MAJOR ROADS	Weekly
COLLECTOR ROADS	Monthly
INDUSTRIAL ROADS	Nil
LOCAL ACCESS ROADS	Nil
LANEWAY/ R.O.W	Nil
FIRE TRACKS	Nil
KEY CENTRAL ACTIVITY AREA ROADS	Twice per week
SERVICE ROADS	Nil
UNSEALED	Nil

³ Refer to defect intervention levels described in Table 10.

Table 16 – Road Patrol Frequencies

During these inspections, the hazard inspector will only look for the following defects. If possible, these defects are repaired during the road patrol.

SEALED ROAD SURFACE

- ❖ RS-001 Potholes > 25mm deep and/or >150mm dia. on designated on-road cycle path
- ❖ RS-002 Potholes > 50mm deep in depth and/or >150mm dia. in trafficable lane
- ❖ RP-001 Failed area >300mm in diameter and >50mm in depth with potential for pavement collapse
- ❖ RS-010 Substance on road surface where there is a danger to traffic
- ❖ RS-011 Substance on road surface where there is potential for stormwater pollution.
- ❖ RS-012 Dead Animal
- ❖ RS-013 Debris on road surface where there is a danger to traffic
- ❖ RS-014 Debris/ on road surface where there is potential for stormwater pollution.

DRAINAGE (in traffic lanes or on constructed pathways only)

- ❖ DE-005 Broken or missing pit covers
- ❖ DE-006 Broken or missing pit grates

SIGNS (Regulatory Only)

- ❖ SI-001 Damaged / faded signs to an extent that makes them unreadable
- ❖ SI-002 Missing sign face
- ❖ SI-003 Sign posts that are not vertical (>15% from vertical).
- ❖ SI-004 Graffiti covering >10% of the sign face rendering it unreadable
- ❖ SI-005 Unauthorised material attached to signs. (e.g. posters, balloons, garage sale signs, etc.)

FOOTPATHS

- ❖ F-011 Dumped Rubbish

ROADSIDE VEGETATION

- ❖ RV-008 Fallen limbs/ trees- potentially hazardous to road users/ pedestrians or property.
- ❖ RV-009 Limbs/ trees potentially hazardous to road users/ pedestrians or property. (i.e. immediate risk of falling)

E.3 PUBLIC SAFETY RISK ASSESSMENT PROCESS

All defects are given a public safety risk rating which is used to prioritise works and identify if temporary protection works are required. A public safety risk assessment process has been developed in accordance with (AS/NZS ISO 31000:2018-Risk Management- Principles and Guidelines) to assist staff in the consistent assessment of risks. The risk assessment process, focuses on public safety risk, and is consistent with Council's Safety Management System.

Public safety risk assessments are undertaken by:

- ❖ Council's routine defect inspector(s) as part of the routine defect inspections described in this document;
- ❖ Council officers, with responsibility for asset maintenance, when potential hazards are brought to their attention via requests logged into Council's customer service system (Pathways);
- ❖ Council officers, with responsibility for asset maintenance, when undertaking ad hoc inspections, while undertaking other duties on site.

The public safety risk assessment process is illustrated in the figure below. Officers use this process to assess the consequences and likelihood of a potential hazard. The risk rating is assigned to the resulting work order and is an indication of the risk if no action was to be undertaken by Council.

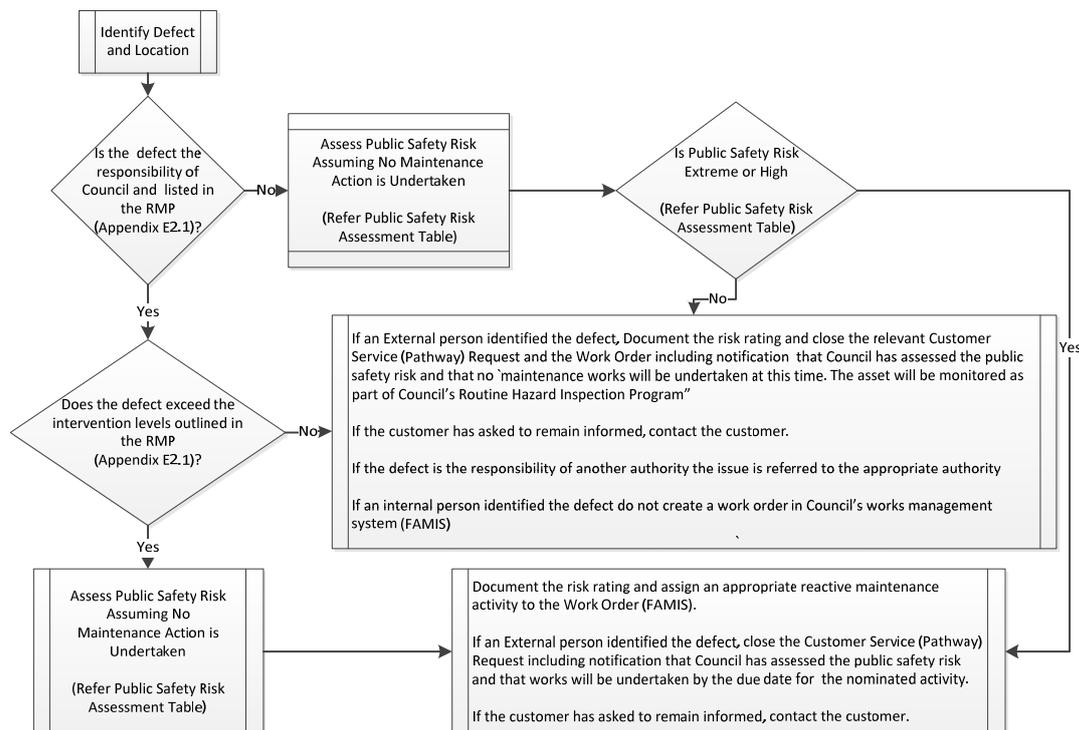


Figure 7- Public Safety Risk Assessment Process

The assigned risk level determines whether temporary protection works are required and is used to create prioritised schedules of rectification works with the objective of meeting the reactive maintenance activity timeframes set out in this document.

Wherever possible, ensuring that higher risks are addressed ahead of lower public safety risks.

When making the risk assessment Council Officers consider the needs of vulnerable road users. In a situation where a defect may cause travel in a mobility aid to be unsafe, the risk is automatically assessed 'High'. This triggers the requirement for temporary works to mitigate the risk.

1. NOMINATE THE MOST LIKELY PUBLIC SAFETY CONSEQUENCE	
CONSEQUENCE	DESCRIPTION
CRITICAL	An incident caused by the defect is likely to result in death, permanent disability or disease.
MAJOR	An incident caused by the defect is likely to result in extensive injury, long-term illness or require admission to hospital
MODERATE	An incident caused by the defect is likely to result in medical attention. Injured person will need to visit a doctor or hospital casualty wars
MINOR	An incident caused by the defect is likely to result in first aid treatment.
INSIGNIFICANT	An incident caused by the defect is likely to result in no injury.
2. FOR THE CONSEQUENCE SELECTED IN STEP 1, NOMINATE THE LIKELIHOOD	
ALMOST CERTAIN	<p>A negative public safety consequence is expected to occur in most circumstances. For example:</p> <ul style="list-style-type: none"> • Defect exceeds intervention level specified in the RMP • The size/ extent of the defect exceeds the intervention level specified in the RMP by more than 100% • Defect is in an area which is not illuminated at all • Asset user has little or no opportunity to identify and safely avoid the defect or hazard • High usage of the asset by frail individuals including the elderly/ children/ disabled • The nature of the defect would make it difficult to identify at night
PROBABLE	<p>A negative public safety consequence will probably occur in most circumstances.</p> <p>For example:</p> <ul style="list-style-type: none"> • Defect exceeds intervention level specified in the RMP • The size/ extent of the defect exceeds the intervention level specified in the RMP by 75% to 100% • Defect is in an area which is poorly illuminated. • Asset user has minimal opportunity to identify and safely avoid the defect or hazard • Moderate to high usage of the asset by frail individuals including the elderly/ children/ disabled • The nature of the defect would make it difficult to identify at night
POSSIBLE	<p>A negative public safety consequence should occur at some time.</p> <p>For example:</p> <ul style="list-style-type: none"> • Defect exceeds intervention level specified in the RMP • The size/ extent of the defect exceeds the intervention level specified in the RMP by 50% to 75% • Defect is in an area with variable/ restricted visibility • Asset user has some opportunity to avoid the defect Grade is variable • Moderate usage of the asset by frail individuals including the elderly/

	children/ disabled				
UNLIKELY	<p>A negative public safety consequence could occur at some time. For example:</p> <ul style="list-style-type: none"> • Defect exceeds intervention level specified in the RMP • The size/ extent of the defect exceeds the intervention level specified in the RMP by less than 50% • Defect is in an area with good visibility • Asset user can easily avoid the defect • Asset usage is low and infrequent • Occasional usage of the asset by frail individuals including the elderly/ children/ disabled 				
RARE	<p>A negative public safety consequence may only occur in exceptional circumstances</p> <ul style="list-style-type: none"> • Defect exceeds intervention level specified in the RMP • The size/ extent of the defect is equal to the intervention level specified in the RMP • Defect is in an area with good visibility • Defect is easily avoidable • Rare usage of the asset by frail individuals including the elderly/ children/ disabled 				
3. EVALUATE THE RISK					
LIKELIHOOD	CONSEQUENCE				
	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CRITICAL
ALMOST CERTAIN	MEDIUM	MEDIUM	HIGH	EXTREME	EXTREME
PROBABLE	LOW	MEDIUM	HIGH	HIGH	EXTREME
POSSIBLE	LOW	MEDIUM	MEDIUM	HIGH	HIGH
UNLIKELY	LOW	LOW	MEDIUM	MEDIUM	MEDIUM
RARE	LOW	LOW	LOW	LOW	MEDIUM

Table 17– Public Safety Risk Assessment Process

This risk assessment process recognises the need for Council to mitigate all extreme and high public safety risks, regardless of whether the defect is described in the Road Management Plan. For officers responsible for delivering day-to-day maintenance, it reinforces the importance of addressing higher risk defects ahead of lower risk defects given funding and other practical constraints.

Whenever a maintenance issue is rated as an Extreme or High risk, Council will undertake works to mitigate the risk and provide temporary protection to the community. Temporary risk mitigation works will occur, within 1 or 5 days respectively. The target completion date for temporary works is calculated in actual days from the date the issue was identified by a routine or ad hoc defect inspection. Or, in the case of community requests, from the date a Council maintenance officer commenced the initial assessment of the request. Temporary works may take the form of providing protection from the defect through the use of signs, barriers or other temporary repair

measures. When undertaking temporary works, Officers recognise that the needs of all road users must be accommodated, including people with special needs.

E.4 MAINTENANCE ACTIVITIES

E.4.1 REACTIVE MAINTENANCE

Reactive Maintenance works are undertaken to provide temporary or permanent repair to protect against potential public safety risk and/or rectify a defect in order to restore an asset's intended functionality. In some instances it may not be possible to rectify the defect within the target rectification timeframe due to the nature of the repair, the level of resources required, or the work load being experienced by the Operations Department. In these cases, appropriate temporary protection works will be provided until the permanent repair can be completed.

Council's reactive maintenance process is summarised in the figure below.

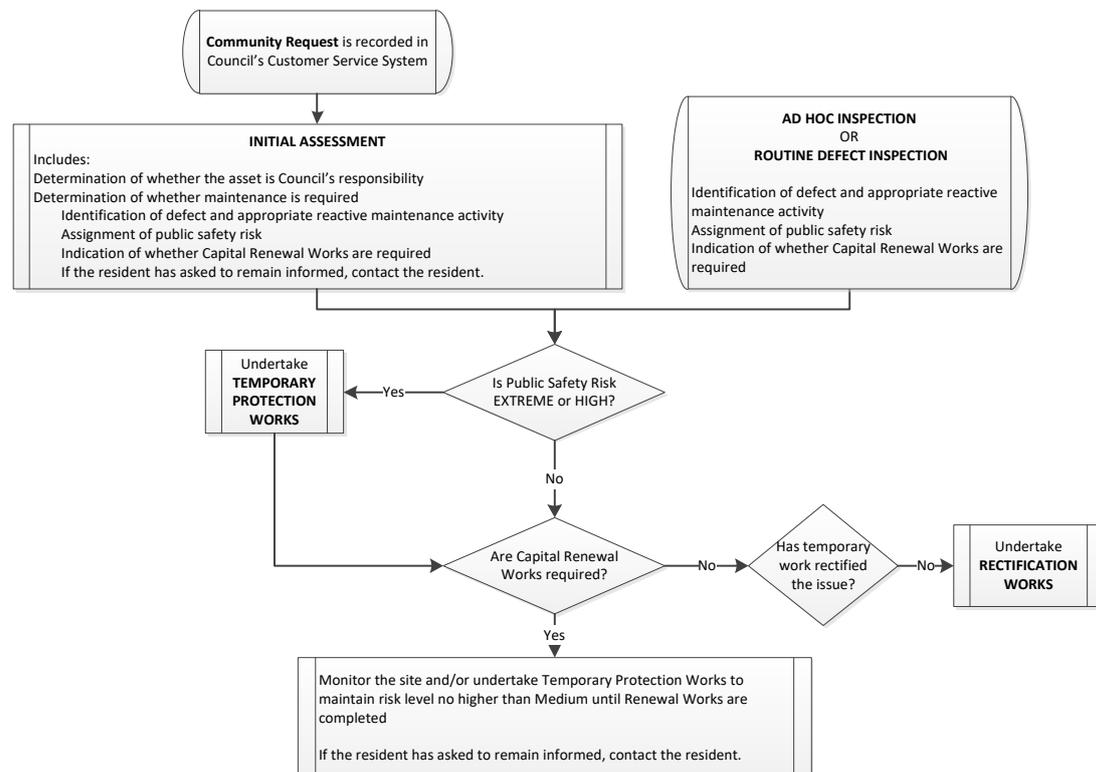


Figure 8– Reactive Maintenance Flowchart

Reactive maintenance activities and the associated target response timeframes for initial assessment and rectification works are indicated in the table below. The target response time for initial assessment of a community request is calculated from the date and time that the request was logged in Council's customer request system (Pathway).

For community requests, the target response times for completion of rectification works are calculated, in working days, from the date and time that the request was logged in Council's customer request system (Pathway). For defects identified by a routine or an ad hoc defect inspection, the target response times for completion of rectification works are calculated from the date and time of the inspection.

Whenever a maintenance issue is rated as an Extreme or High risk, Council will undertake works to mitigate the risk and provide temporary protection to the community. Temporary risk mitigation works will occur, within 1 or 5 days respectively, from the date of the risk assessment and may take the form of providing protection from the defect through the use of signs, barriers or other temporary repair measures.

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
BRIDGES & MAJOR CULVERTS			
<p>B-REA-001 Bridge/ Major Culvert Maintenance</p> <p>Maintenance of bridge and culvert components including: repair and painting including repair of spalled posts and parapets, and repair, tightening and painting of railing.</p> <p>Repair or reinstatement of isolated damage <2 sq. m. caused by vandalism or traffic incident.</p> <p><i>In the event that defects identified are beyond the scope of maintenance crews, or if structural integrity issues are observed, then the person undertaking the inspection, must undertake temporary protection works and make recommendation for the structure to be assessed via a Level 3 inspection.</i></p> <p><i>If structural failure is identified (or damage caused by vandalism or traffic incident is >2 sq.m.) temporary protection works are undertaken and the repair is prioritised as part of Council's asset renewal program.</i></p>	<p>B001 – Component damage or deterioration is presenting a hazard to road or path users</p> <p>B002 – Structural integrity issues require further investigation</p>	2 days	150 days

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
<p>B-REA-002 Bridge/ Major Culvert Cleaning and Clearing</p> <p>Cleaning and clearing of components including:</p> <ul style="list-style-type: none"> (a) cleaning and clearing of deck, footway, expansion joints, scuppers and downpipes; (b) cleaning and clearing of dirt from superstructure and substructure and vegetation from in and around bridge; <p><i>In the event that defects identified are beyond the scope of maintenance crews, or if structural integrity issues are observed, then the person undertaking the inspection, must undertake temporary protection works and make recommendation for the structure to be assessed via a Level 3 inspection. If required, consent from the asset owner or service authority will be sought to facilitate maintenance or repairs.</i></p>	<p>B003 - Accumulation of material causes interruption to the escape of stormwater runoff</p> <p>B004 - Accumulation of material causes interruption to the operation of expansion joints.</p> <p>B005 – Vegetation growing in joints or cracks</p>	2 days	100 days

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
<p>B-REA-003 Stream Maintenance</p> <p>Council should raise request with Melbourne Water or relevant authority to clear out debris around bridges / major culverts and log the reference number as Council is not permitted to clear debris within waterways.</p> <p><i>In the event that defects identified are beyond the scope of maintenance crews, or if structural integrity issues are observed, then the person undertaking the inspection, must undertake temporary protection works and make recommendation for the structure to be assessed via a Level 3 inspection.</i></p>	<p>B006 - Any log debris >150 mm in diameter within 10m of structure.</p> <p>B007 - Any accumulation of debris >400 mm in dimension within 10m of structure.</p>	2 days	120 days
<p>B-REA-004 Bridge Sign Maintenance</p> <p>Straighten signposts when it becomes noticeable that it is not vertical, or replace when damage renders sign ineffective.</p>	<p>SI-001 Damaged/ faded signs to an extent that makes them unreadable</p> <p>SI-002 Missing sign face</p> <p>SI-003 Sign posts that are not vertical (>15 degrees from vertical).</p>	2 days	30 days

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
DRAINAGE			
D-REA-001 Clear Blocked Drainage Pits Clean debris from pit inlet and pit if obstruction impedes pipe flow to the outlet causing upstream flooding.	D-002 Water on trafficable lanes D-003 Private land inundated D-004 Building inundated D-005 Nature-strip holding water D-006 Water ponding over >60% of path for longer than 72 hours. DI-001 Debris in pit impeding pipe flow to outlet pipe DI-001 - Debris in pit impeding >50% of pipe flow to outlet pipe DE-001 Debris obstructing pit inlets	2 days	60 days
D-REA-002 Clear Blocked Drainage Pipes & Culverts Temporary and/or permanent treatment to remove obstruction that impedes pipe flow. This activity may include replacement of up to 10m of pipe of up to 300mm diameter. <i>If damaged pipe length exceeds 10m, temporary protection works are undertaken and the repair is prioritised as part of Council's asset renewal program.</i>	D-002 Water on trafficable lanes D-003 Private land Inundated D-004 Building inundated D-005 Nature-strip holding water D-006 Water ponding over >60% of path for longer than 72 hours. DI-002 Pipe/ culvert obstructions impede stormwater flow	2 days	40 days

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
<p>D-REA-003 Drainage Pit Structure Maintenance</p> <p>Provide temporary and/or permanent pit repair when pit structure is damaged or deteriorated and posing a potential hazard to road users/ pedestrians.</p> <p><i>If pit walls and/or floors are collapsed the repair is prioritised as part of Council's asset renewal program.</i></p>	<p>DE-001 - Debris Blocking >50% of pit inlets</p> <p>DE-002 Pit throat (inlet) is damaged to the extent that it obstructs stormwater flow into the pit:</p> <p>DE-003 Lintel damaged or deteriorated to the extent that it could be hazardous to pedestrians</p> <p>DE-004 Reinforcement is exposed</p> <p>DI-003 Broken frames that no longer support the pit lid securely</p> <p>DI-004 Missing/ damaged/ deteriorated step irons and/or mesh panels.</p> <p>DI-005 Collapsed pit walls</p> <p>DI-006 Collapsed pit floor</p>	2 days	90 days
<p>D-REA-004 Drainage Pit Surrounds Maintenance</p> <p>Provide temporary and/or permanent pit surrounds repair when damaged or deteriorated posing a potential hazard to road users/ pedestrians.</p>	<p>DE-004 Reinforcement is exposed</p> <p>DE-007 Pit surrounds damaged to the extent that they are hazardous to road users/ pedestrians</p> <p>DE-008 Vertical displacement >25mm only if the pit is within a designated pedestrian walkway</p> <p>DE-009 Cracks considered likely to cause the pit lid or surrounds to collapse</p>	2 days	45 days
<p>D-REA-005 Drainage Pit Lid Maintenance</p>	<p>DE-005 Broken or missing pit covers</p> <p>DE-006 Broken or missing pit grates</p> <p>DE-009 Cracks considered likely to cause the pit lid or surrounds to collapse</p>	2 days	5 days

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
D-REA-006 Open Drain Maintenance Clean and/or reshape open drain to maintain adequate stormwater flow.	D-001 Open drain capacity >50% obstructed	7 days	120 days
FOOTPATHS			
F-REA-001 Concrete Footpath Maintenance Provide temporary and/or permanent repair of vertical displacements, holes, edge breaks, lifted/ subsided/ distressed areas posing a potential hazard to pedestrians. Treatment may involve wedging, grinding, crack sealing and/or bay replacement. Where achievable and practicable Footpath Gradient should be not steeper than 1 in 8 as Per Council standard drawing. SD 320 <i>If >2 sq. m are damaged, temporary protection works are undertaken and the repair is prioritised as part of Council's asset renewal program. Renewal may consider realignment of paths to minimise impact of trees.</i>	FC-001 Vertical displacement/ tripping hazard >25mm FC-002 Dislodged wedge FC-003 Cracks >15mm wide and 200mm long F-015 Damaged grate within footpath	2 days	45 days

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
<p>F-REA-002 Asphalt Footpath Maintenance</p> <p>Provide temporary and/or permanent repair of holes, edge breaks, lifted// subsided/ distressed areas posing a potential hazard to pedestrians.</p> <p><i>If the distressed area is >2 sq. m. temporary protection works are undertaken and the repair is prioritised as part of Council's asset renewal program. Renewal may consider realignment of paths to minimise impact of trees.</i></p>	<p>FA-001 Potholes >25mm deep and 150 mm diameter</p> <p>FA-002 Mounding/ undulations >100mm resulting from tree root uplift</p> <p>FA-003 Cracks >15mm wide and 200mm long</p> <p>F-015 Damaged grate within footpath</p>	2 days	45 days
<p>F-REA-003 Paved Footpath Maintenance</p> <p>Provide temporary and/or permanent repair of loose, missing and dislodged pavers posing a potential hazard to pedestrians.</p> <p><i>If the distressed area is >2 sq.m temporary protection works are undertaken and the repair is prioritised as part of Council's asset renewal program. Renewal may consider realignment of paths to minimise impact of trees.</i></p>	<p>FP-001 Vertical displacement/ tripping hazard >25mm</p> <p>FP-002 Loose, missing or dislodged pavers with gaps >20mm</p> <p>F-015 Damaged grate within footpath</p>	2 days	45 days

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
<p>F-REA-004 Constructed Unsealed Footpath Maintenance</p> <p>Provide temporary and/or permanent repair of surface corrugations and/or potholes posing a potential hazard to pedestrians.</p> <p>Treatment may include grading and/or spot gravelling of constructed path with crushed rock.</p>	<p>FU-001 Potholes >50mm deep and 150 mm diameter</p> <p>FU-002 Corrugations/ subsided areas >50mm deep</p>	2 days	45 days
<p>F-REA-005 Clear Obstructions - Footpath</p> <p>Removal of dumped rubbish that poses a hazard to pedestrians and/or obstructs stormwater flows and traffic movements.</p>	<p>F-001 Debris or ponding that is >400mm in diameter or considered hazardous to pedestrians or obstructing drainage</p> <p>F-012 Dead Animal</p> <p>F-002 Dumped rubbish</p>	2 days	14 days
<p>F-REA-006 Path Edge Repair</p> <p>Provide temporary and/or permanent repair of depressions at the interface of the constructed paths and the surrounding ground</p> <p>Treatment may involve topping up with topsoil, gravel or sand.</p>	<p>F-003 Path edge failures >75mm deep at the interface of the constructed path and adjacent ground</p>	3 days	60 days

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
F-REA-007 Tactile Paver Repair Provide temporary and/or permanent repair of tactile pavers.	F-014 Damaged tactile pavers (cracked or worn) that could be hazardous to pedestrians affecting > 50% of the tiles	2 days	45 days
KERB & CHANNEL			
K-REA-001 Kerb & Channel Maintenance Provide temporary repair measures if deformation is likely to result in ponding of stormwater on trafficable areas. <i>If the distressed length is >10m temporary protection works are undertaken and the repair is prioritised as part of Council's asset renewal program.</i>	K-001 Hollows & peaks >50mm in 10 m, that may result in ponding of stormwater on trafficable areas K-002 Concrete spalling/ worn exposing aggregate >100mm in width and 200mm in length K-003 Vertical displacement >50 mm K-004 Displacement > 100mm at kerb adaptor with broken outlet pipe Kerb adaptor and surrounding kerb to be replaced.	3 days	120 days
LOCAL AREA TRAFFIC MANAGEMENT TREATMENT			
L- REA-001 LATM Constructed Infill & Kerb Maintenance Provide temporary and/or permanent repair of damaged infill and/or kerb posing a potential hazard to pedestrians and/or road users.	L-001 Damaged kerb & channel that may result in ponding of stormwater on trafficable areas L-002 Vertical displacement/ tripping hazard >25mm within designated pedestrian walkways and pedestrian refuge areas	3 days	120 days

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
MINOR STRUCTURES (e.g. Stairs, Retaining Walls)			
S-REA-001 Minor Structure Maintenance Install temporary measures and/or repair structural damage to retaining walls, stairs and other Council constructed minor structures. Temporary repair may include asset closure to allow for extensive repairs. <i>If structural failure is identified, temporary protection works are undertaken and the repair is prioritised as part of Council's asset renewal program.</i>	S-001 Major damage affecting structural performance S-002 Minor damage affecting structural performance S-003 Settled and/or eroded batters and/or embankments, including seepage at toe of wall/ stairs S-004 Loose/ missing handrails/ balustrades S-005 Loose/ missing steps S-006 Gaps > 50mm in staircase landings S-007 Slippery surface impacting >50% of steps or landings	2 days	120 days
ROAD FURNITURE (i.e. School Crossing Infrastructure, Guide Posts, Guard Rail, Non-Standard Street Lighting, Fencing, Bins, Bike Racks)			
SX-REA-001 School Crossing Maintenance Provide temporary and/or permanent repair to damaged school crossing infrastructure including posts, hardware and accessories that are defective. Repair school crossings to meet AS1742 Pedestrian Control & Protection.	SX-001 Missing/ Damaged school crossing posts/ other infrastructure	2 days	14 days

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
<p>GP-REA-002 Guide Post Maintenance</p> <p>Provide temporary and/or permanent repair when more than 50% of a guidepost is noticeably degraded; or when 50% of posts are missing on straights, more than 5% are missing on curves with an advisory speed, or where more than two posts in a row are missing.</p>	<p>GP-001 Post has >50% loss of paint and/or reflectivity</p> <p>GP-002 >50% of guide posts missing on straights</p> <p>GP-003 >10% of guide posts missing on curves with an advisory speed</p> <p>GP-004 >3 guideposts are missing</p>	2 days	30 days
<p>GR-REA-003 Guard Rail Maintenance</p> <p>Provide temporary and/or permanent repair if guardrail is non-effective, misaligned or broken.</p>	<p>GR-001 Guardrail broken or deformed by >500mm</p> <p>GR-002 Loss of >50% of guardrail reflectors</p>	2 days	60 days
<p>SL-REA-004 Non-Standard Street Light Maintenance</p> <p>Provide temporary and/or permanent repair to damaged standards/ poles/ arms & masts for non-standard streetlights that are non-functional or posing a potential hazard to road users/ pedestrians or property.</p>	<p>SL-001 Standards/ poles - hazardous to road users/ pedestrians/ property</p> <p>SL-002 Arms/ masts - hazardous to road users/ pedestrians/ property</p> <p>SL-003 Base supports - hazardous to road users/ pedestrians/property.</p> <p>SL-004 Non-standard street light – not functioning</p>	5 days	120 days

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
<p>RF-REA-006 Maintain Fencing within Road Reserve</p> <p>Provide temporary and/or permanent repair if fencing poses a potential hazard to the public and/or to maintain functionality</p> <p><i>If the distressed fencing is >15 lineal metres, temporary protection works are undertaken and the repair is prioritised as part of Council's asset renewal program.</i></p>	<p>RF-001 Fencing rotten/ corroded/ broken poses hazard to public</p> <p>RF-002 Fencing posts, rails, strainers, wire or panels is not operational and is facilitating unrestricted access</p>	5 days	60 days
<p>RF-REA-007 Bin Enclosure Maintenance</p> <p>Replace missing and/or damaged bins and bin enclosures to restore functionality.</p>	RF-003 Missing/ damaged bin enclosures	5 days	30 days
<p>RF-REA-008 Bike Rack Maintenance</p> <p>Replace non-functional or missing bike racks.</p>	RF-004 Damaged/missing/ non-functional bike racks	5 days	30 days
<p>RF-REA-009 Banner/Flag Pole Maintenance</p> <p>Replace non-functional or missing banner/flag poles</p>	RF-006 Banner/flag poles posing a hazard to road users, pedestrians or property	3 days	30 days

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
RF-REA-010 Miscellaneous Street Furniture Maintenance Provide temporary and/or permanent repair if furniture poses a potential hazard to the public.	RF-005 Street furniture posing a hazard to road users, pedestrians or property	3 days	30 days
ROAD PAVEMENT			
RP-REA-001 Repair Pavement Collapse (Dig-out/ Major Patching) Provide temporary repair when there is potential for pavement collapse and/or where other treatments have failed to remediate the pavement. Temporary works may include road closure to allow for extensive repairs. <i>If the distressed area >10 sq.m, temporary protection works are undertaken and the repair is prioritised as part of Council's asset renewal program.</i>	RP-001 Failed area >300mm in diameter and >50mm in depth with potential for pavement collapse	2 days	30 days
ROADSIDE VEGETATION			
RV-REA-001 Pruning - Power Line Clearance Line Clearance in accordance with Code of Practice for Electric Safety (Electric Line Clearance) Regulations 2015.	RV-001 Line Clearance in accordance with Code of Practice for Electric Safety (Electric Line Clearance) Regulations 2015	2 days	30 days

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
<p>RV-REA-002 Pruning - Street Trees & Shrubs</p> <p>Prune foliage to comply with clearance limits and remove branches posing an immediate risk of falling along Major and Collector roads.</p> <p>Council will aim to meet the clearance requirements as best as possible in all other roads with due regard for tree health.</p> <p>Temporary protection measures, such as warning signs to be installed if pruning of existing trees would adversely affect tree stability or if the street amenity would be dramatically affected.</p> <p>Where existing trees would become dangerous and the minimum clearances cannot be achieved, streets are to be signed as Low Clearance Ahead stating the available clearance.</p>	<p>RV-002 Constructed Path Height Clearance < 2.5 m and minimum 1m trafficable width with vegetation not exceeding 25mm in height representing a trip hazard</p> <p>RV-004 Roadway height clearance <4.5m</p> <p>RV-005 Roadway lateral clearance < 200mm from back edge of shoulder and/or kerb.</p> <p>RV-007 Vegetation within sight clearance triangles as per Austroads Guidelines</p> <p>RV-008 Limbs potentially hazardous to road or path users or property (i.e. immediate risk of falling)</p>	2 days	30 days
<p>RV-REA-003 Pruning- Sign Obstructions</p> <p>Prune foliage obstructing regulatory/ warning and special purpose/ directional/ street name/ parking signs.</p> <p>Relocation of the sign if pruning of existing trees would adversely affect tree stability</p>	RV-006 Foliage obstructing regulatory and warning signs	2 days	30 days

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
<p>RV-REA-004 Tree Removal</p> <p>Provide temporary protection works and/or remove dangerous street trees and/or limbs posing a potential hazard to road users/ pedestrians or property.</p> <p>Temporary protection measures, such as warning signs to be installed if pruning of existing trees would adversely affect tree stability or if the street amenity would be dramatically affected.</p>	<p>RV-009 Trees potentially hazardous to road or path users or property. (i.e. immediate risk of falling)</p> <p>RV-014 Vegetation diseases likely to affect tree stability</p>	2 days	30 days
<p>RV-REA-005 Stump Removal</p> <p>Provide temporary protection works and/or remove dangerous street tree stumps posing a potential hazard to road users/ pedestrians or property, that is, stumps obstructing pedestrian/ cyclist or vehicular traffic.</p>	RV-012 Stumps hazardous to road users/ pedestrians or property (obstructing pedestrian/ cyclist or vehicular traffic)	5 days	100 days
<p>RV-REA-006 Fallen Limb or Fallen Tree Removal</p> <p>Remove broken and/or fallen limb and/or tree obstructing pedestrian/ cyclist or vehicular traffic movements.</p>	<p>RV-010 Fallen limb obstructing pedestrian/ cyclist or vehicular traffic</p> <p>RV-011 Fallen tree obstructing pedestrian/ cyclist or vehicular traffic</p>	2 days	20 days
<p>RV-REA-007 Weed Control</p> <p>Removal of weeds/grasses resulting in fire management risk or affecting sight distance for vehicles and traffic management.</p>	<p>RV-015 Weeds/ grass>500mm high, within 1.5m from the back of kerb or shoulder and during the fire danger period</p> <p>RV-015A Weeds/ grass>500mm high affecting sight distance</p>	2 days	30 days

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
SEALED ROAD SURFACE			
<p>RS-REA-001 Pothole Repair Provide temporary and/or permanent repair of potholes in trafficable lanes and on-road shared paths.</p> <p><i>If the distressed area >10 sq.m, temporary protection works are undertaken and the road surface is prioritised as part of Council's asset renewal program.</i></p>	<p>RS-001 Potholes >25mm deep and/or >150mm diameter on designated on-road cycle path</p> <p>RS-002 Potholes >50mm deep and/or >150mm diameter in trafficable lane</p>	2 days	20 days
<p>RS-REA-002 Minor Surface Treatment Provide temporary and/or permanent repair to restore a safe driving/ riding surface.</p> <p>Treatment may include the application of bitumen and cover aggregates, or other suitable products.</p> <p><i>If the distressed area >10 sq.m, temporary protection works are undertaken and the road surface is prioritised as part of Council's asset renewal program.</i></p>	<p>RS-003 Road surface stripping/ bleeding likely to result in loss of skid resistance</p> <p>RS-004 Crocodile cracking with fines pumping</p>	2 days	40 days
<p>RS-REA-003 Crack sealing Provide temporary and/or permanent repair of cracks posing a potential hazard to road users.</p>	<p>RS-005 Cracks >15 mm wide and covering an area of 5m² or greater.</p>	2 days	60 days

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
<p>RS-REA-004 Edge Repair</p> <p>Provide temporary and/or permanent repair to edge breaks posing a potential hazard to road users</p> <p><i>If the distressed length is >25 lineal m, temporary protection works are undertaken and the road surface is prioritised as part of Council's asset renewal program.</i></p>	RS-006 Edge break >1m long & >50mm deep &/or extends/ protrudes 75mm laterally into trafficable area	2 days	20 days
<p>RS-REA-005 Pavement Markings Maintenance</p> <p>Replace damaged/ dislodged or missing pavement markers (RRPMs & RPMs). Reinstate faded regulatory line marking.</p>	<p>RS-007 Damaged/ dislodged or missing pavement markers (RRPMs & RPMs);</p> <p>RS-008 Faded Statcon pavement marking (<50% effective reflectivity)</p> <p>RS-009 Faded other line marking (<50% effective reflectivity)</p>	2 days	30 days
<p>RS-REA-006 Clear Spillage</p> <p>Temporary measures to limit access and clear spill from road surface where there is a potential danger to traffic and/or potential for stormwater pollution.</p>	<p>RS-010 Substance on road surface where there is a danger to traffic</p> <p>RS-011 Substance on road surface where there is potential for stormwater pollution.</p>	1 day	1 day

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
RS-REA-007 Clear Debris/ Obstructions Remove litter (including dead animals/ birds) considered unsightly and/or likely to cause a traffic hazard or preventing free drainage of the road surface.	RS-012 Dead Animal RS-013 Debris on road surface where there is a danger to traffic RS-995 Dumped Rubbish	1 day	1 day
SHARED PATH			
SP-REA-001 Concrete Shared Path Maintenance Provide temporary and/or permanent repair of vertical displacements, holes, edge breaks, lifted// subsided/ distressed areas posing a potential hazard to cyclists or pedestrians. Treatment may involve wedging, grinding, crack sealing and/or bay replacement. <i>If >2 sq. m are damaged, temporary protection works are undertaken and the repair is prioritised as part of Council's asset renewal program. Renewal may consider realignment of paths to minimise impact of trees.</i>	SPC-001 Vertical displacement/ tripping hazard >25mm in sealed path SPC-002 Dislodged wedge SPC-003 Cracks >15mm wide and 1m long	2 days	40 days

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
<p>SP-REA-002 Asphalt Shared Path Maintenance</p> <p>Provide temporary and/or permanent repair of holes, edge breaks, lifted// subsided/ distressed areas posing a potential hazard to cyclists or pedestrians.</p> <p><i>If the distressed area is >2 sq. m. temporary protection works are undertaken and the repair is prioritised as part of Council's asset renewal program. Renewal may consider realignment of paths to minimise impact of trees.</i></p>	<p>SPA-001 Potholes >50mm deep and 150 mm diameter</p> <p>SPA-002 Mounding/ Undulations >100mm resulting from tree root uplift</p> <p>SPA-003 Cracks >15mm wide and 1m long</p>	2 days	40 days
<p>SP-REA-003 Unsealed Shared Path Maintenance</p> <p>Provide temporary and/or permanent repair of surface corrugations and/or potholes posing a potential hazard to cyclists or pedestrians.</p> <p>Treatment may include grading and/or spot gravelling with crushed rock.</p>	<p>SPU-001 Potholes >50mm deep and 150 mm diameter</p> <p>SPU-002 Corrugations/ potholes >50mm deep</p>	3 days	60 days

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
<p>SP-REA-004 Sealed Shared Path Edge Repair</p> <p>Provide temporary and/or permanent repair of depressions at the interface of the constructed shared paths and the surrounding ground</p> <p>Treatment may involve topping up with topsoil, gravel or sand.</p>	SP-001 Path edge failures >75mm protrude at the interface of the constructed path and adjacent ground	3 days	60 days
<p>SP-REA-005 Clear Obstructions - Shared Path</p> <p>Removal of dumped rubbish/ debris/ ponding that poses a hazard to cyclists or pedestrians and/or obstructs stormwater flows. If the hazard cannot be removed it must be managed appropriately with signage/reflectors/fencing etc. where available to do so.</p>	<p>SP-003 Dirt/ silt/ ponding debris likely to cause slipping or obstruct stormwater flow</p> <p>SP-012 Dead Animal</p> <p>SP-002 Dumped Rubbish</p>	2 days	14 days
<p>SP-REA-006 Shared Path Line Marking Maintenance</p> <p>Replace damaged/ dislodged or missing pavement markers (RRPMs & RPMs). Reinstate faded regulatory line marking.</p>	<p>SP-007 Damaged/ dislodged or missing pavement markers (RRPMs & RPMs);</p> <p>SP-008 Faded shared path line marking (<50% effective reflectivity)</p>	2 days	30 days

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
SIGNS			
SI-REA-001 Sign Maintenance - Regulatory/ Warning Provide temporary and/or permanent repair of damaged/ missing sign. Straighten signposts when it becomes noticeable that it is not vertical, or replace when damage renders sign ineffective.	SI-001 Damaged/ faded signs to an extent that makes them unreadable SI-002 Missing sign face SI-003 Sign posts that are not vertical (>15 degrees from vertical)	2 days	14 days
SI-REA-002 Sign Maintenance - Special Purpose/ Directional/ Street Name/ Parking Provide temporary and/or permanent repair to damaged/ missing signs.	SI-001 Damaged/ faded signs to an extent that makes them unreadable SI-002 Missing sign face SI-003 Sign posts that are not vertical (>15 degrees from vertical)	2 days	40 days
SI-REA-003 Sign Cleaning – Regulatory/ Warning Signs Remove graffiti and posters covering the face of regulatory/ warning signs.	SI-004 Graffiti covering >10% of the sign face rendering it unreadable SI-005 Unauthorised material attached to signs. (E.g. posters, balloons, signs, etc.)	2 days	14 days
UNSEALED ROAD SURFACE			

REACTIVE MAINTENANCE ACTIVITY TITLE/ DESCRIPTION	DEFECT INTERVENTION LEVELS	TARGET RESPONSE TIMES	
		INITIAL ASSESSMENT (Working Days)	RECTIFICATION WORKS (Working Days)
<p>US-REA-001 Unsealed Surface Repair/ Grading</p> <p>Install temporary measures and/or grade unsealed roads or shoulders. Treatment may include spot gravelling with crushed rock.</p>	<p>US-001 Rutting and corrugations exceeding 100mm over 50% of the unsealed road or shoulder length</p> <p>US-002 Potholes >300mm diameter and 150mm deep over 50% of the unsealed road or shoulder length</p> <p>US-003 Edge drops from traffic lane to shoulder >50mm over 20m length under a 1.5m straight edge</p>	2 days	30 days
<p>US-REA-002 Dust Suppression</p> <p>Apply dust suppression to the formed unsealed surfaces to improve visibility.</p>	<p>US-004 Dust restricting visibility to less than 3m in either direction</p>	2 days	30 days
<p>US-REA-003 Clear Debris/ Obstructions</p> <p>Remove litter (including dead animals/ birds) considered unsightly and/or likely to cause a traffic hazard or preventing free drainage of the road surface.</p>	<p>US-005 Dead Animal</p> <p>US-006 Debris on road surface where there is a danger to traffic</p>	1 day	1 day

Table 19 –Reactive Maintenance Activities

E.4.2 ROUTINE MAINTENANCE

Routine maintenance works are undertaken to preserve the life of the asset and ensure that it retains its intended functionality.

ASSET CATEGORY	ROUTINE MAINTENANCE ACTIVITY TITLE	ACTIVITY DESCRIPTION	FREQUENCY
DRAINAGE	D--ROU-001 Clear Blocked Drainage Pits	Remove accumulated debris from drainage pits including inlets if accumulation obstructs the outlet pipe opening.	4 year cycle (+ higher frequency for critical drainage assets)
DRAINAGE	D-ROU-002 Open Drain Maintenance	Reset rock beaching, reshape and clear any scour >100mm, debris >150mm and weed infestations where open drain >20% obstructed.	4 year cycle (+ higher frequency for critical drainage assets)
DRAINAGE	D-ROU-003 Gross Pollutant Trap Maintenance	Check contents of Council owned GPTs and clean if required.	1 month cycle
FOOTPATHS	FP-ROU-001 CAA Footpath Pressure Cleaning	Pressure clean designated footpaths in Central Activity Area only.	6 monthly
FOOTPATHS	FP-ROU-002 CAA Footpath Sweeping	Sweeping designated footpaths in Central Activity Area only.	weekly
LOCAL AREA TRAFFIC MANAGEMENT DEVICES (LATMs)	L-ROU-001 LATM Garden Bed Maintenance	Maintenance of vegetation in LATMs includes pruning and replanting as required.	30 day cycle
ROAD FURNITURE	RF-ROU-001 CAA Seat Painting	Painting of designated seats located within the Central Activity Area only.	Twice per year
ROADSIDE VEGETATION	RV-ROU-001 Electric Line Clearance Pruning	Line Clearance in accordance with Council's Tree Maintenance Services Contract.	2 year cycle (1 year cycle within CAA)

ASSET CATEGORY	ROUTINE MAINTENANCE ACTIVITY TITLE	ACTIVITY DESCRIPTION	FREQUENCY
ROADSIDE VEGETATION	RV-ROU-002 Street Tree Maintenance	Tree maintenance in accordance with Council's Tree Maintenance Services Contract which includes: road and path clearance; intersection clearance; road and street name sign clearance; street and reserve light clearance; awning and signage clearance, formative pruning of juvenile trees, preservation pruning; dead wooding; and palm tree pruning.	2 year cycle (1 year cycle within CAA)
SEALED ROAD SURFACE	RS-ROU-001 Road Pavement Marking Maintenance	a) Replace damaged/ dislodged or missing pavement markers (RRPMs & RPMs). b) Reinstate faded (<50% effective reflectivity) regulatory line marking (statcon markings).	4 year cycle
SEALED ROAD SURFACE	RS-ROU-002 Street Sweeping	Sweep kerb and channel only to remove accumulation of dirt and debris.	weekly cycle (designated CAA area only) 4 week cycle all other sealed roads
UNSEALED ROAD SURFACE	US-ROU-001 Unsealed Road/ Shoulder Grading	Grade unsealed roads and shoulders to maintain safety and restore trafficable surface condition when rutting and corrugations exceed 100mm over 50% of the unsealed road length and/or potholes exceed 300mm in diameter and 100mm deep over 50% of the unsealed road length. May include spot gravelling with crushed rock. Road shape will be reassessed every 2 years and brought back to design standard with additional material if required. Grade shoulder when edge drop from traffic lane to shoulder exceeds 50mm over 20m length under a 1.5m straight edge or when shoulder becomes rough or scoured. Trim lower edge of shoulder when build up holds water.	6 month cycle (+ more frequently on high traffic roads.)
UNSEALED ROAD SURFACE	US-ROU-002 Dust Suppression	Apply dust suppression to the formed unsealed surfaces to improve visibility if it is reduced to less than 20m in either direction.	1 year cycle (selected roads only)

Table 18–Routine Maintenance Activities

1. Refer map in Appendix B that shows the boundaries of the Central Activity Area (CAA).

E.4.3 ROUTINE MAINTENANCE SCHEDULE

A3116295 Updated 12 October 2021

ROAD MANAGEMENT PLAN - MAINTENANCE SCHEDULE																								
2020 / 2022 / 2024												2021 / 2023 / 2025												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
GRINDING	19	20	24	18	2	22	4	23	15	1	5	21	8	6	17	14	13	11	12	7	9	3	16	10
ASSESSOR	10	19	20	24	18	2	22	4	23	15	1	5	21	8	6	17	14	13	11	12	7	9	3	16
ZONE WORKS	16	10	19	20	24	18	2	22	4	23	15	1	5	21	8	6	17	14	13	11	12	7	9	3
RMP INSPECTION	JAN*	FEB*	MAR*	APR*	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	3	16	10	19	20	24	18	2	22	4	23	15	1	5	21	8	6	17	14	13	11	12	7	9

* 2020 - Jan zone 16, Feb zone 10, Mar zone 19, Apr cancelled due to COVID-19

RMP LINE MARKING SCHEDULE - as at 15/4/2021

Awaiting quotes to possibly finish off 2020		2021 & 2022						2022 & 2023						2023 & 2024				2024 contracting ending 11/11/24						
APRIL	JUNE																							
21	8	6	17	14	13&0	11	12	7	9	3	16	10	19	20	24	18	2&0	22	4	23	15	1	5	21

FCC - TREE MANAGEMENT PROGRAM - MAINTENANCE WORKS

2020 / 2022 / 2024												2021 / 2023 / 2025											
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
10	19	20	24	18	2	22	4	23	15	1	0,5	21	8	6	17	14	13	11	12	7	9	3	16

Table 19 - Routine Maintenance Schedule

E.4.4 MAINTENANCE ZONE AREAS

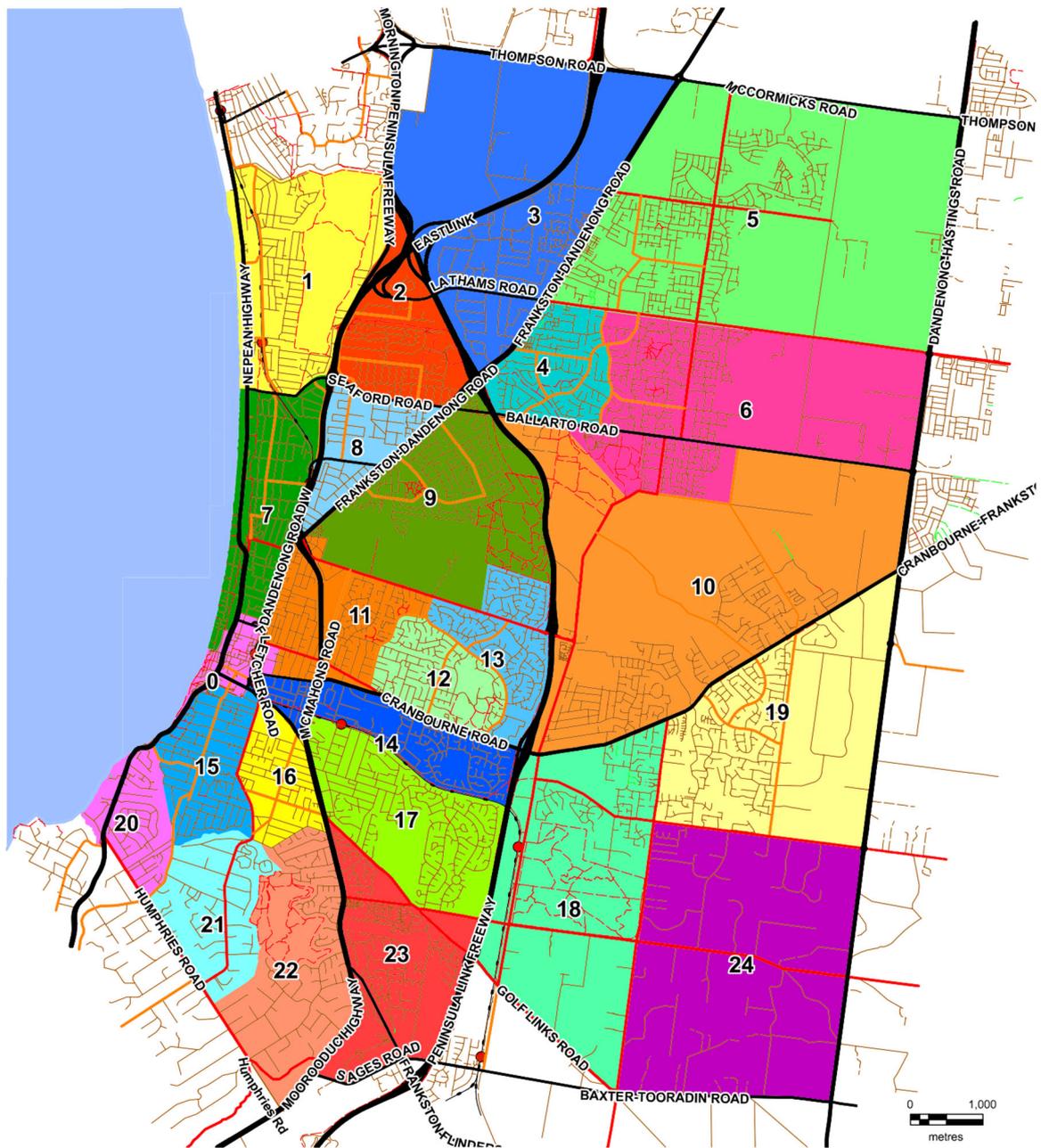


Figure 9 - Maintenance Zone Areas

E.5 MANAGING UNEXPECTED RENEWAL WORKS

Sometimes the extent of asset deterioration is such that functionality cannot be restored via a reactive maintenance activity. For example, if the distressed area of asphalt shared path is greater than 2 sq. m. then this is too big an issue to be repaired by the standard reactive activity SP-REA-002 Asphalt Shared Path Maintenance (described in Table 19). In these cases, asset replacement, rehabilitation or renewal works are necessary to restore functionality. These works are undertaken as part of Council’s capital renewal program.

The table below provide examples where the extent of deterioration is such that asset renewal is required. A sample photograph is provided wherever possible.

<p>Bridge Structural failure</p>	<p>Culvert Structural failure</p>	<p>Drainage Pipes Damaged pipe length exceeds 10m</p>
<p>Drainage Pit Structure Pit walls and/or floors are collapsed</p>	<p>Asphalt Footpath Distressed area is >20 sq. m.</p>	<p>Paved/Concrete Footpath Distressed area is >20 sq. m.</p>
<p>Kerb & Channel Distressed length >10 lineal m</p>	<p>Minor Structure Structural failure</p>	<p>Fencing within Road Reserve Distressed fencing is >15 m.</p>
<p>Sealed Road Surface Distressed area >50 sq.m. Edge break >25 lineal m</p> 	<p>Concrete Shared Path >25 sq. m are damaged</p>	<p>Asphalt Shared Path Distressed area is >25 sq. m</p>

Table 20– Examples of Asset Deterioration that Requires Asset Renewal

In cases where capital renewal works are required, it may take Council a significant amount of time to implement the works. Delays may be caused by capital funding constraints. Delays may also occur because of the complexity of the issue. Significant design or other technical input may be required in

order to deliver an appropriate solution. For example, the renewal project may consider realignment of the path, or an innovative construction method to minimise the impact of tree roots on the path.

If an issue that requires renewal is identified during:

- ❖ initial assessment of a community request;
- ❖ routine defect inspection; or
- ❖ ad hoc inspection

Council officers follow the approach described in the flowchart below.

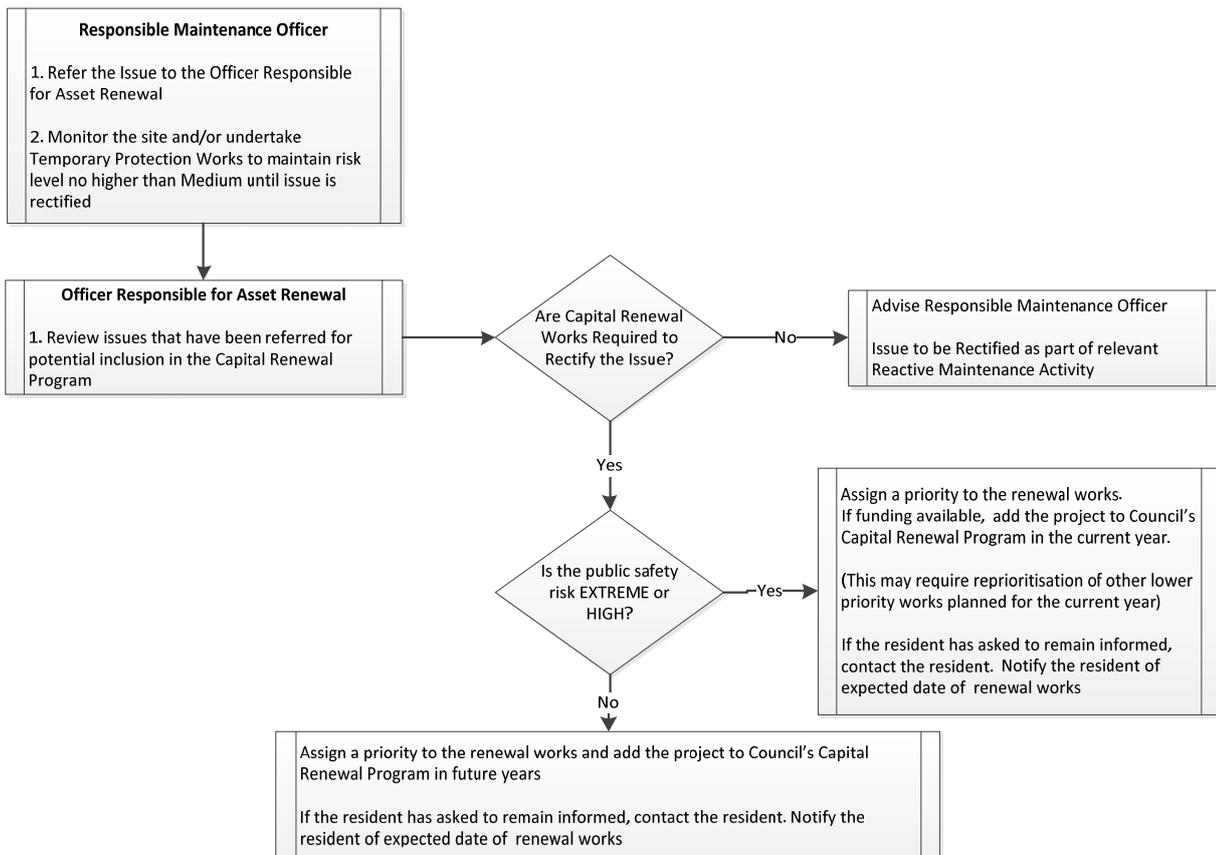


Figure 10– Approach to Managing Unexpected Renewal Works

E.6 SERVICE DELIVERY DURING EXCEPTIONAL SITUATIONS

Under normal operating conditions, Council will aim to deliver its road management activities in accordance with the service levels described in this Road Maintenance Management Plan.

Normal Compliance Target

Given current resources and funding, a margin of 10% is considered acceptable for all reactive maintenance activities. That is, an activity with a target response time of 100 working days can be completed within 110 days and still be considered compliant.

A tolerance of 1 month is permitted for routine defect inspections and routine maintenance activities. That is, for an activity that occurs on a 12 month cycle and is due on the 15 December, it can be completed on the 15 January and still be considered compliant.

Management of Abnormal Events

In the event of natural disasters and other emergency situations (not limited to storms, floods or fire) as well as human factors (not limited to industrial action, staff shortages, diminished availability of plant or contractors, or funding shortfalls) Council may suspend or adjust some or all of the specified services, maintenance activities and inspection regimes set out in this Plan until Council has recovered sufficiently from the event to return to normal operations (in part, or in whole). The flowchart below illustrates the management approach.

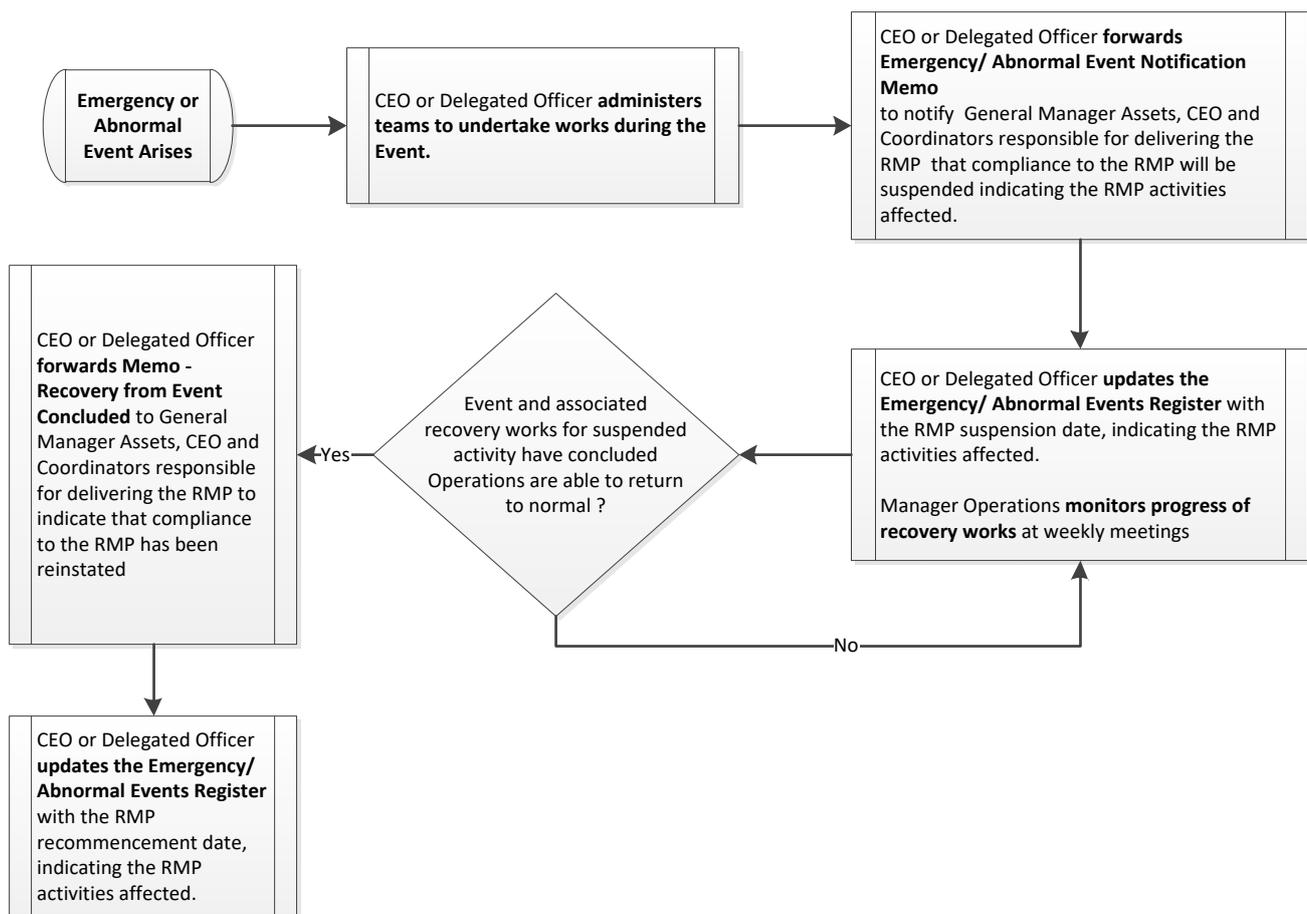


Figure 11– Process for Suspension and Reinstatement of Road Management Plan Compliance

Whenever compliance with the Road Management Plan is suspended or reinstated, the Manager Operations (or officer acting in this role) will issue a memo indicating the scope, timing and reason for the change in compliance levels. In issuing such directions, the Manager will take into account the considerations contained within the Wrongs Act 1958 including:

- ❖ Duty of care
- ❖ Awareness of risk
- ❖ Negligence of professionals and persons professing particular skills
- ❖ Non-delegable duties and vicarious liability
- ❖ Contributory negligence
- ❖ Liability of Public Authorities

F.SCHEDULE OF ROAD MANAGEMENT PLAN AMENDMENTS

The table below indicates the history of amendments to Council's Road Management Plan

Amendment Date	Description
29/12/2005	Amendment of the original Road Management Plan (Version 1.0).
7/5/2007	Amendment of Road Management Plan (Version 1.1)
29/09/2014	Amendment of Road Management Plan (Version 1.2)
29/01/2019	Amendment of Road Management Plan (Version 2.0)
dd/mm/yyyy	Draft Amendment of Road Management Plan (Version 3.0) – <i>TO BE ENDORSED</i>

This attachment includes a summary of all three amendments made to the Frankston City Council Road Management Plan.

F.1 AMENDMENTS TO VERSION 3.0

❖ Amendment No. 4: dd/mm/yyyy – TO BE ENDORSED

RMP Section (version 2.0 adopted by Council 01/04/2019)	Description of Amendment	Section of Current RMP (v 3)
2.0 Register of Public Roads	Public Road Register extracted from RMP document and updated with planning controls. Public Road register has been updated, including road hierarchial changes and recognition of gifted assets. Frequency of Public Road Register updates to be a minimum of 12 months. Date of creation and date of cessation separated into two columns.	2.0 and Public Road Register
3.0 Road & Path Hierarchies	Desirable physical features of roads and footpaths updated to be at Council's discretion	3.0
4.0 Road and Footpath Maintenance Category	Include reference to the reporting and monitoring framework including RMP service levels and works management performance to ensure compliance to the RMP and enable any deficiencies to be identified and rectified promptly	4.0
Appendix C – Responsibilities For Assets in Road Reserves	Water meters included in assets managed by utility service providers. Further detail provided on management of hazards and safety issues caused by other service authorities' assets. Updated relevant regulations and figure 5 in relation to vehicle crossovers.	C
Appendix E –Road Maintenance Management Plan	Amendments as identified in the Staff Feedback section (Attachment A of the 2021 RMP Review) relating to defect definition, intervention levels, inspection frequencies and hierarchies (for further detail refer to Attachments A of the 2021 Review).	E

Table 21– Road Management Plan Amendments to Version 2.0 of the Plan

F.2 AMENDMENTS TO VERSION 2.0

❖ Amendment No. 3: 29/01/2019

RMP Section (version 1.2 adopted by Council 29/09/2014)	Description of Amendment	Section of Current RMP (v 2)
1.0 Introduction	Updated alignment to the Council Plan. Updated reference to Road Management (General) Regulations 2016.	1.0
2.0 Register of Public Roads	Register exclusions updated to specify vehicle crossovers adjoining hammerhead courts. Public Road register has been updated, including the declaration of Rutherford and Lathams Road as arterial roads.	2.0
3.0 Road & Path Hierarchies	Equestrian Trails removed from the Path Hierarchy. Update to Local Access Roads to recognise that they may function as bus routes. Updated reference to ISO31000:2018.	3.0
4.0 Road and Footpath Maintenance Category	The text was revised and updated. Equestrian Trails removed from Path Hierarchy	4.0
Appendix A – Public Road Register	Public Road register has been updated, including the declaration of Rutherford and Lathams Road as arterial roads.	A
Appendix B - Road & Path Hierarchies	Equestrian Trails removed from Path Hierarchy	B
Appendix C – Responsibilities For Assets in Road Reserves	Updated text regarding responsibility for connections to pipes, pits and kerb and channel. Updated text regarding illegal connections. Updated reference to Road Management (General) Regulations 2016.	C
Appendix E –Road Maintenance Management Plan	Amendments as identified in the Staff Feedback section (Attachment 1 of the 2017 RMP Review) relating to defect definition, intervention levels, inspection frequencies and hierarchies (refer to Attachments 4-6 of the 2017 Review).	E

Table 22– Road Management Plan Amendments to Version 2.0 of the Plan

F.3 AMENDMENTS TO VERSION 1.2

❖ Amendment No. 3: 29/09/2014

RMP Section (version 1.1 adopted by Council 7/5/07)	Description of Amendment	Section of Current RMP (v 2)
1.0 Purpose	This information was incorporated into Section - 1. Introduction The last two paragraphs were deleted. The remaining text was revised. The new Section - 1 includes subsections to describe: - Functions of a Road Authority; Obligations of Road Users; Legislative Controls; Assets to which this Plan Applies; Road Management Plan Adoption and Review Process.	1.0
2.0 Terms	The section was deleted.	-
3.0 Register of Public Roads	This section was replaced by Section - 2 Register of Public Roads. Paragraphs 3, 4, 6 were deleted. The remaining text was revised. The new Section - 2 includes subsections to describe: - Public Road Register Details, Register Inclusions, Register Exclusions, Demarcation of Road Authority Responsibilities, Approach to Maintaining the Public Road Register.	2.0
4.0 Road and Footpath Maintenance Category	This section was replaced by Section - 3. Road & Path Hierarchies The new Section - 3 includes subsections to describe: Desired Function/ Features of each Road and each Path Hierarchy Classification; Council's approach to using and reviewing the hierarchies.	3.0
5.0 Road Asset Register	This section was deleted. The text was revised and incorporated into a new Attachment C- Responsibilities for Assets in Road Reserves.	C
6.0 Assets that are the Responsibility of Others	This section was deleted. The text was revised and incorporated into a new Attachment C- Responsibilities for Assets in Road Reserves.	C
6.1 Abutting Landowners or Occupiers	This section was deleted. The text was revised and incorporated into a new Attachment C- Responsibilities for Assets in Road Reserves.	C
6.2 Service Utilities and Public Transport Facilities	This section was deleted. The text was revised and incorporated into a new Attachment C- Responsibilities for Assets in Road Reserves.	C
7.0 Duty of the Road User	This section was deleted. The duty of the road user is described in Section 1- Introduction and includes extracts from the Act	1.3.2

RMP Section (version 1.1 adopted by Council 7/5/07)	Description of Amendment	Section of Current RMP (v 2)
8.0 Management System	Section – 4. Road Management at Frankston was created to describe Council's current approach to the following: <ul style="list-style-type: none"> • Levels of Service • Implementing the Inspection and Maintenance Programs • Force Majeure • Performance Monitoring & Review 	4.0
8.1 Policy Framework	The section was deleted. Council's policy framework is described in Section 1- Introduction	1.2
8.2 Service Delivery - CAD	This section was deleted. The description of Service Delivery –CAD is no longer applicable. This section is replaced by information in a new Attachment E – Road Maintenance Management Plan.	E
8.3 Road Maintenance	This section was deleted and replaced by information in a new Attachment E – Road Maintenance Management Plan.	E
8.4 Information Management System	This section was deleted.	-
9.0 Risk Assessment	This section was deleted. A description of the risk assessment process is included in the new Attachment E - Road Maintenance Management Plan.	E.3
10.0 Construction Expansion Upgrading Renewal and Refurbishment Priorities, Standards and procedures	This section was deleted. This information will be revised and included in future revisions of Councils Road Asset Management Plan (RAMP). Renewal is discussed in Appendix E5	-
11.0 Financial Resources	This section was deleted. Future revisions of Councils Road Asset Management Plan (RAMP) will consider financial resources available for overall road management.	-
12.0 Asset Management Strategy	This section was deleted. Council has a separate document that describes Council's Asset Management Strategy.	-
13.0 Performance Management	This section was deleted. Section 4 - Road Management at Frankston, includes a subsection Performance Management to describe Council's approach to performance management; specific to the delivery of the Road Management Plan.	4.4
14.0 Plan Review	This section was deleted. The approach to reviewing the Plan described in Section 1- Introduction	1.5
15.0 Supporting Documents	This section was deleted.	-
15.1 Technical References	This section was deleted.	-

RMP Section (version 1.1 adopted by Council 7/5/07)	Description of Amendment	Section of Current RMP (v 2)
15.2 Council Documents	This section was deleted. Council's Strategic Framework is illustrated in Section 1 - Introduction	1.2
15.3 Appended Documents	This section was deleted. All new attachments (A to E) are listed in the main table of contents	Table of Contents
Appendix A - Road Classification	This section was deleted and replaced with new Attachment B- Road & Path Hierarchies.	B
Appendix B - Road Maintenance Standards	This section was deleted and replaced with a new Attachment E – Road Maintenance Management Plan that provides greater clarity regarding Council's road maintenance standards and maintenance management approach. Comments regarding 10% margin for response times and inspection frequencies (p17 and 16 of version 1.2 of the RMP), and comments regarding temporary works i.e. # "Where, because... limit)". And notes on p 30 regarding trees i.e. # Where, existing trees...safe clearance have been retained.)	E
Appendix C - Central Activities District	This section was deleted. The area is shown on relevant maps in new Attachment B - Road & Path Hierarchies.	B
Appendix D - Amendments to Plan Version 1.1	Contents moved to Attachment F- Schedule of Road Management Plan Amendments.	F
Appendix E - Amendments to Plan Version 1.2	Contents moved to Attachment F - Schedule of Road Management Plan Amendments.	F

Table 23– Road Management Plan Amendments to Version 1.2 of the Plan

❖ New Attachments	
❖ RMP Section ❖ (version 2)	❖ Description of Attachment
Attachment – A. Public Road Register	The public road register, as at 13 th May 2014
Attachment – B. Road & Path Hierarchies	Includes tables to describe the locations and desirable features of each road and path hierarchy classification.
Attachment - C. Responsibilities for Assets in Road Reserves	<p>Indicates the asset categories that will be managed in accordance with the service levels described in the Road Management Plan (RMP).</p> <p>Indicates the assets that are excluded from the RMP.</p> <ul style="list-style-type: none"> o road reserves with no constructed vehicular or pedestrian access o common property access ways o private roads (maintained by body corporate or similar) o off-street car parks o general horticultural management of trees (including tree health) <p>Indicates policy position regarding:</p> <ul style="list-style-type: none"> o Driveways (vehicle crossovers) o Household drains
Attachment – D. Demarcation Agreements	Includes reference to all existing agreements with other Road Authorities
Attachment - E. Road Maintenance Management Plan	<p>This Road Maintenance Management Plan (RMMP) improves the clarity of the information presented in the current RMP and better describes Council's maintenance approach.</p> <p>Contents of this Attachment include:</p> <ul style="list-style-type: none"> • Introduction • Definitions • Routine Defect Inspections <ul style="list-style-type: none"> o Defect Intervention Levels o Routine Defect Inspection Frequencies • Public Safety Risk Assessment Process • Maintenance Activities <ul style="list-style-type: none"> o Reactive Maintenance o Routine Maintenance • Approach to Managing Unexpected Renewal Works • Service Delivery Approach During Exceptional Situations
Attachment - F. Schedule of Road Management Plan Amendments	This attachment summarises changes made to all adopted versions of the RMP.

Table 24– New Attachments to the Road Management Plan

F.4 AMENDMENTS TO VERSION 1.1

❖ Amendment No. 2: 7/5/2007⁴

Summary:

The principal objective of road management is to ensure that a safe and efficient network of roads is provided to the community.

The introduction of the Road Management Act in June 2004 provided Council with an opportunity to review its road management systems and service standards based on its policy framework, operational objectives and available resources at that time.

The initial Road Management Plan developed from this review was adopted by Council on 13/12/2004.

A minor review of the Plan in December 2005 did not reduce the standards for inspection or maintenance and was therefore exempt from the requirement to advertise and seek public submissions.

The Plan and service standards have now been in operation for 2 years. In that time, a considerable amount of data has been generated and recorded.

This review of the Plan is based on an analysis of this data and identified improvements in the efficient and effective use of available resources without compromising risks to the public from the use of the road network.

RM Plan Reference	RM Plan Version 1.1	RM Plan Version 1.2
4. Road and Footpath Maintenance Category	Categories are Extreme (E), High (H), Medium (M) and Low (L)	Categories are Major Roads (MR), Collector Roads (CR), Bus Routes (BR) and Local Roads (LR).
5. Road Asset Register	Council's Management system records.....	Council's Maintenance Management System records.....
6. Assets the Responsibility of Others	5.1 Abutting Landowners	Include landscaping, letter boxes, house and business signage.
7. Management System	7.1 Policy Framework	General update on Council Plan 2006-2010, policies and added Community Consultation
	7.3 Road Maintenance	7.3.1 Inspections – update on (a) Hazard Identification, add (b) Night
15. Supporting Documents	14.1 Technical References	General update on list of references.
Appendix A: Road Functional Classification		Revised description to accord with hierarchy of roads in Melway Edition 33 –

⁴ This is an extract from Road Management Plan version 1.2, Appendix E

<p>Appendix B: Road Maintenance Standards</p>		<p>Update category to reflect new definitions in clause 4 of the Plan.</p> <p>Hazard Response Table updated to include Road Patrol, Footpath and Drainage Response hazard priority.</p> <p>A. Condition Assessment Inspections – inspection frequencies for Cat 5 Local road decreased from 6 months to 12 months (MR), increased from 36 months to 12 months (BR).</p> <p>B. Hazard Identification Inspections – inspection frequencies decreased from 6 months to 12 months (MR), increased from 36 months to 12 months (BR)</p> <p>Road Patrol Inspections – inspection frequencies decreased from 1week to 4 weeks (CR), introduce new inspection 12 weeks (BR)</p> <p>1. Sealed Road Pavement Hazard Response – surface cracking: hazard priority reduced from H5 to H6 (increase in response time)</p> <p>3. Drainage Hazard Response – response time increased to 150 weeks for all hazards and maintenance categories (except pit covers – no change)</p> <p>6. Concrete/Asphalt/footpaths – response time 50 weeks for all hazards and maintenance categories MR, CR, BR; 150 weeks for all hazards in category LR</p> <p>10. Emergencies – Road Patrol: response time immediate for oil/chemical/freight spills in all maintenance categories</p>
---	--	---

F.4 AMENDMENTS TO VERSION 1.0

❖ Details of Amendment No. 1: 31/12/2005⁵

RM Plan Reference	RM Plan Version 1.0	RM Plan Version 1.1
5.0 Road Asset Register		<p>After “Kerb and channel” add “including vehicle crossing laybacks 600 mm from invert of channel as per FCC Standard Drawing 310”</p> <p>After “Roadside furniture” add “(bins, seats, bike stands, parking machines)’</p> <p>After “Street lighting” add “(non-standard and metered supply)”</p> <p>After “Other structures e.g. retaining walls, barriers,” add “steps” Add the following items to the list:</p> <p>Fire hydrant/plug marker post and surround</p> <p>Bus shelters (Council owned)</p> <p>Roadside (fire hazards, grass over footpaths, clearance to roads and pathways only)</p>
6.0 Assets that are the Responsibility of Others	6.1 Abutting Land Owners or Occupiers	<p>After “Vehicle driveways connecting the roadway to private property” add “</p> <p>- between the private property boundary to the footpath (if any) and from the footpath (if any) to the layback as per FCC Standard Drawing SD 310”</p> <p>After “Property drainage pipes” add “ (stormwater) connecting to Council’s or Melbourne Water main drains or kerb and channel”</p> <p>Add the following to the list:</p> <p>“Pipes/conduits/valves etc. delivering utility services to properties e.g. gas, water, power, telephone, cable TV, data, etc.”</p> <p>At the end of the last paragraph, add:</p> <p>“Trees located in private property that cause damage Council assets e.g. footpath, drains, etc may have to be contained or removed by the property owner. “</p>
	6.2 Service Utilities and Public Transport Facilities	<p>After “Powerlines and poles” add “(except for non-standard and metered lights)”</p> <p>Add the following item o the list”</p> <p>Permanent survey markers and other non-road infrastructure of any kind</p> <p>Delete “Bus stop signs and timetable information boards” and replace with “Train, and bus stop assets including posts, signs and timetable information boards and other signs, structures and furniture associated with the service.”</p> <p>Permanent survey markers and other non-road infrastructure of any kind</p> <p>Delete “Bus stop signs and timetable information boards” and replace with “Train, and bus stop assets including posts, signs and timetable information boards and other signs, structures and furniture associated with the service.”</p>

⁵ This is an extract from Road Management Plan version 1.2, Appendix D

RM Plan Reference	RM Plan Version 1.0	RM Plan Version 1.1
8.0 Management System		After “policy framework” add “the service delivery arrangements,”
		Insert new section “8.2 Service Delivery – CAD”
	8.2 Road Maintenance Standards	Road Maintenance Delete first paragraph and substitute three new paragraphs “Road Assets
	8.2.1 Inspections	Inspections Change “(a) Hazard Inspection” to “(a) Hazard Identification” Add new paragraph “In addition.....” Change (b) Road Condition Assessments” to “(b) Condition Assessments”
	8.2.2 Response to Hazards	Response Time New first paragraph “Where.....” Second paragraph to begin “For hazards identified through the Hazard Identification inspections.....” In paragraph three, delete “Default” and substitute “Reactive” Add new paragraph four “Where time frames
	8.3 Information Management System	Information Management System Add new section “8.4.1 InfraServe – CAD” Add new section heading “8.4.2 Council”
13.0 Performance Management		Insert new section “13.1 InfraServe – CAD” Add new section “13.2 Council – PRIDE”
14.0 Plan Review		Delete all text after “reviewed” and add “in accordance with regulation 301 of the Road Management (General) Regulations 2005 by: commencing a review by 1 January 2009, and completing the review by 30 June 2009 “
15.0 Supporting Documents	15.1 Technical References	Add “(n) Road Management (General) Regulations 2005” and “(o) Road Management (Works and Infrastructure) Regulations 2005”

RM Plan Reference	RM Plan Version 1.0	RM Plan Version 1.1
Appendix A : Road Classification		<p>Class: 9</p> <p>Description: Private Road – add “or vehicle crossing or carpark”</p> <p>Road Type: A road – add “access to private property or parking area” – Which has not been constructed by Council; and</p> <p>Which is not maintained by Council - add</p> <p>“Which is in private ownership”</p> <p>Common Description: Internal road – add “or carpark” of a private development.</p>
Appendix B: Road Maintenance Standards		<p>Change “Condition Inspection” to “Condition Assessment Inspection”</p> <p>After “kerb and channel replacement “ add “pathway or footpath replacement”;</p> <p>Delete “Footpath Safety Inspection Program, Pavement Safety Inspection Program”</p> <p>Change “Hazard Inspection” to “Hazard Identification Inspection”</p> <p>After “pathway” add “footpath”</p> <p>Hazard Priority and Response Times</p> <p>In second paragraph, delete “default” and substitute “reactive”</p>
	Inspection Frequencies and Response Mechanism	<p>Add “A. Condition Assessment Inspections”</p> <p>Under Inspection Frequencies:</p> <p>Asset Component Inspected</p> <p>Delete “Kerb and Channel” and “Footpath”</p> <p>Inspection Frequency in Months by Road Classification</p> <p>Road Class 5 – delete “36” and substitute “See below”</p> <p>Add new Table “Road Classification 5 – Local Road” Add “B. Hazard Identification Inspections”</p> <p>Under Inspection Frequencies:</p> <p>Footpath – Inspection frequencies “E” delete “12” and substitute “6”</p> <p>Add new Table “Road Patrol Inspections”</p> <p>Under Response Mechanism: 1. Sealed Road Pavement Hazard Response</p> <p>Unsealed Shoulder – Inspection frequencies “L” delete “250W” and substitute “150W”</p> <p>Add “Surface Cracking”</p> <p>Under Response Mechanism: 2. Unsealed Road Pavement Hazard Response –</p> <p>Inspection frequencies “E” delete “4W” and substitute “N/A” (no unsealed roads in this maintenance category)</p> <p>Under Response Mechanism: 4. Traffic Management Facilities Hazard Response –</p> <p>Road Pavement Markings - Hazard Priority delete “H4” and substitute “H5”; Response time E = 25W, H = 50W, M = 100W, L = 150W</p> <p>Under Response Mechanism: 6. Concrete/etc Footpath Hazard Response:</p> <p>Delete complete Table and replace with new Table for surface misalignment/undulation/cross fall and water/slippery defects.</p> <p>Under Response Mechanism 8. Street Lighting</p> <p>Delete Hazard Priority “H6” – response time not risk based - 50W for all.</p>