



# Road Management Plan

Version 5

1 September 2021

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# 1. Executive Summary

The Melbourne City Council (Council) has developed its Road Management Plan (RMP) to meet the legislative requirements of the **Road Management Act 2004** (the Act) and the strategic directions adopted by the Council. The Council is the road authority for municipal roads. The RMP applies to municipal roads only.

The following table shows when the versions of the RMP were adopted by Council.

RMP Version	Date Approved	Reference
Version 1	August 2004	N/A
Version 2	February 2010 (approved under delegation)	N/A
Version 3	July 2015 (approved under delegation)	N/A
Version 4	July 2017 (approved under delegation)	DM#1106799191
Version 5	1 September 2021 (approved by Council 31-08-21)	DM#14920397v2

The RMP identifies responsibilities, maintenance standards and inspection regimes required to manage civil liability as well as demonstrate that the Council, as the road authority, is responsibly managing all the road assets under its control.

Reference is also made to other key Council policies and strategies and consideration is given to these to ensure that the RMP is consistent with the adopted strategic directions.

Details of the management of the road and road related infrastructure for which Council is the relevant road authority are included in the RMP with appropriate inspection, intervention standards and repair timelines designed to balance reasonable standards with community expectations and financial affordability.

The RMP is seen as a dynamic document and, in line with Council's policy on continuous improvement, the plan will be audited regularly as well as being formally reviewed every four years to ensure that the Council can continue to demonstrate that it is responsibly managing its road assets.

## 2. Introduction

### 2.1 Background

In order to facilitate the provision of its services to the community, the Council manages an extensive range of community assets. One of the most significant groups of these assets, with regard to the difficulty and expense of managing, are road assets.

The Council is responsible for approximately;

- 250 kilometres of local roads, along with associated footpath, kerb & channel and drainage.
- 23 vehicular and pedestrian bridges, refer Appendix 3.

In addition Council is responsible for footpaths located adjacent to arterial roads.

These assets have an approximate replacement value of \$1,331 million. The Council needs to set aside considerable funding in its annual budget just to meet the depreciation of these assets.

It is important to note that a safe and efficient road network depends heavily upon successfully managing two main components:

- Routine maintenance – repairing day to day wear and tear issues like potholes, cracking, uplifts around trees, failing service trenches/installations etc.
- Renewal/rehabilitation – rehabilitating assets to meet serviceability standards.

This plan is primarily directed towards the routine maintenance described above.

Generally, routine maintenance is funded through Council's operational budget while renewal/rehabilitation is funded through Council's capital works budget.

## **2.2 Key Stakeholders**

Key stakeholders who are users of the road network and/or are affected by it include:

- The community in general.
- Residents and businesses.
- Pedestrians.
- Users of a range of miscellaneous smaller, lightweight vehicles such as pedal cyclists, motorised buggies, wheel chairs, prams, etc.
- Vehicle users using motorised vehicles such as trucks, buses, commercial vehicles, cars and motor cycles.
- Tourists and visitors to the area.
- Utility agencies that utilise the road reserve for their infrastructure.
- State and Federal governments through their road agencies.
- Emergency agencies.
- Traffic and transport managers.
- Construction and maintenance contractors.
- Council.

## **2.3 Obligations of Road Users**

The Act and the *Road Safety Act 1986* outline the obligations of road users to behave in a safe manner, as follows:

*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:*

- *physical characteristics of the road*
- *prevailing weather conditions*
- *level of visibility*
- *condition of any vehicle the person is driving or riding on the highway*
- *prevailing traffic conditions*
- *relevant road laws and advisory signs*

- *physical and mental condition of the driver or road user.*

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

*A road user must—*

- *take reasonable care to avoid any conduct that may endanger the safety or welfare of other road users*
- *take reasonable care to avoid any conduct that may damage road infrastructure and non-road infrastructure on the road reserve*
- *take reasonable care to avoid conduct that may harm the environment of the road reserve.*

## **2.4 The Act**

Following the High Court decision that changed the common law governing civil liability for road management (nonfeasance defence), the State Government initiated a review of the State's road management legislation. As a result, the Act was introduced to establish a legislative framework to allow each road authority to determine its own appropriate RMP.

The purpose of the RMP is to identify responsibilities, reasonable maintenance standards and inspection regimes required to manage public roads based on policy and operational objectives having regard to available resources. The RMP is the basis for demonstrating that the Council is responsibly managing all of the road assets under its control.

The Act states that a RMP:

- may set relevant standards or policies in relation to the discharge of duties in the performance of road management functions
- may include details of the management system that a road authority proposes to implement in the discharge of its duty to inspect, maintain and repair public roads for which the road authority is the coordinating road authority or the responsible road authority
- may specify the relevant policies and priorities adopted by the road authority
- must include any matters that a relevant Code of Practice specifies should be included in a road management plan.

For Council, the RMP is part of a total asset management strategy that covers all Council assets.

## **2.5 Availability of RMP**

The RMP may be viewed on [Council's website](#)<sup>1</sup>.

## **2.6 Codes of Practice**

An important element of the Act is the development of Codes of Practice.

The Act states that the main purposes of Codes of Practice are to provide practical guidance-

- By setting out benchmarks of good practice in relation to the performance of road management functions by road authorities and the conduct of works managers, infrastructure managers and providers of public transport.

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<sup>1</sup> [www.melbourne.vic.gov.au](http://www.melbourne.vic.gov.au)

- By clarifying or determining how the operational responsibility for different parts or elements of a road reserve is to be allocated between road authorities.
- To road authorities in determining how to allocate resources, develop policies, set priorities and make road management plans.
- In the performance of road management functions.

The RMP has been developed to meet the requirements of various Codes of Practice.

The Act states that compliance with a relevant Code of Practice will be admissible as evidence of performance of that function or compliance with the relevant duty.

## 2.7 City of Melbourne Strategic Direction

The purposes of the RMP are consistent with the direction outlined in two of the Council's key strategies, namely the relevant Council Plan and Transport Strategy.

The relevant Transport Strategy outlines a range of direct actions that the Council will take to deliver integrated transport outcomes. The responsible management of road assets is seen as playing a vital role in the implementation of these strategies. The RMP has been developed to meet the legislative requirements of the Act and the strategic directions adopted by the Council.

## 2.8 Definitions

Generally, the definitions contained in the Act have been adopted in this document. Other definitions, specific to the Council or not listed in the Act, are set out below.

<b>Term</b>	<b>Definition</b>
Road	The general term for the land between property boundaries used for vehicle or pedestrian movement.
Defect	Means a localised failure or damage to an asset or component, for example a pothole in a road surface.
Maintenance	The activities necessary for retaining an asset at a condition at which it meets its acceptable service outcomes.
Council	Melbourne City Council
Infrastructure and Assets Branch	a branch of the Infrastructure and Design Division at the City of Melbourne.
Pavement	the structural part of the roadway (not footpath), generally made up of crushed rock, stabilised soil or asphalt.
SMEC	Snowy Mountains Engineering Corporation, provider of the system which is utilised by the Council as its road inventory and pavement management system.
Subgrade	The natural ground on which the road pavement sits.
Road Categories	Is a rating given to each Street Segment to reflect its priority for maintenance of civil infrastructure. Pedestrian use and civic profile are the primary criteria applied for selecting the rating. There are four ratings: A, B, C and D.
Inspection frequencies	The frequency of road asset inspections as tabled in Appendix 2.

Term	Definition
Tree Plot	<p>The area within a tree plot and tree plot surround is not considered a trafficable area for pedestrians.</p> <p>For those tree plots where hard services have been applied, it is reasonable to expect that pedestrians will walk or stand on these surfaces, particularly in times of high traffic volume. This is not their intended purpose. It is reasonable to expect that some heaving will occur within a certain radius of large trees trunks or tree roots and that pedestrians should in turn be in a position to expect such.</p>

### 3. Register of Public Roads

#### 3.1 Register Content

Under section 19 of the Act, Council “...must keep a register of public roads specifying the roads in respect of which it is the coordinating authority”. The register comprises a listing of road names which describes those roads or part of roads which are Council’s responsibility. A map of the municipality is also a complementary component of the Register of public roads as it shows each road’s precise location.

The Council’s register also includes a listing of some non-road areas such as bike paths, open space and carparks.

Appendix 1 shows a copy of the Council’s municipal map which indicates the boundary of the municipality, but does not include all the roads on the register of public roads.

The Register of public roads may be viewed on [Council’s website](#)<sup>1</sup>.

#### 3.2 Data Source

The information used to compile the register has been obtained from Council records such as copies of the Government Gazette, Parish Maps, Crown lithographs, subdivision plans, construction plans, written agreements with government departments or private individuals, etc. For some of the older roads and laneways, no written records were available and decisions about responsibility had to be made based on history or management practice.

#### 3.3 Road Hierarchy

A large proportion of the roads within the municipality have a unique nature due to the enormous daily influx of road users in the form of pedestrians, public transport users and private motorists.

While the maintenance standards and intervention levels are mostly the same for all Council roads, a street maintenance category is nominated for frequency of inspection for maintenance activities to reflect its usage profile. Traffic and pedestrian use and civic profile are the primary criteria applied for selecting the four category ratings: A, B, C and D.

The four road categories and associated inspection frequencies are specified in Appendix 2.

A separate listing of all road segments (a road may be broken up into several segments and these may have different inspection categories) may be viewed along with this RMP and the Register of the Public Roads on [Council’s website](#)<sup>1</sup>.



### **3.4 Partnerships**

Although the road register is meant to define primary responsibility, the map supporting the Council's Register of Public Roads will show all roads and the responsible authority for management of these roads. Any "other State Road Authority" roads located on non-Council land will be noted as such.

The Council may also have agreements with neighbouring municipalities where a boundary road may be maintained by either authority. This agreement must be identified in the Register of Public Roads. Presently, the Council has no agreements with neighbouring councils.

The Codes of Practice mentioned in Section 2.6 clarify demarcations of responsibility between councils and relevant state government departments and between councils and utilities. Due to the unique nature of a capital city municipality in the state, the Council has in place an arrangement pursuant to Section 15 of the Act with the relevant state government departments that specifies the Council responsibility for median strips, traffic islands, road trees, irrigation systems, etc. in arterial road reserves. This agreement must be reviewed by the parties every two years and can be terminated by either party with six months prior written notice to the other party. In addition, the relevant state government department has accepted responsibility for management and maintenance of all traffic signals and associated line-marking at all signalised installations in the municipality on both arterial and municipal roads, and also for maintenance of fairway line-marking and separators on arterial and local roads.

### **3.5 Private Roads**

A number of roads in the municipality are defined as private roads and are not managed by the Council. They are defined as "municipal roads" under the Act but Council does not consider they are required for general public use, nor are they included in the Council's Register of Public Roads.

The Council is not responsible for private roads and will not inspect or maintain them.

## **4. Road Asset Register**

### **4.1 Asset Management System**

Information on Council's assets is held in its asset management system. The information is considered "core data" which means this data has the highest level of integrity and any data held in Council's asset management system is treated as the official system of record on assets.

In the provision of routine maintenance services information is required to be collected in order to maintain the currency and accuracy of Council's asset management system when the following actions occur:

- asset inspections
- customer service request responses
- maintenance works on assets
- new assets installations
- assets modification or removal.

## 4.2 Road Asset Register

The Road Asset Register is a key element of Council's overall asset management system that enables it to comply with the evidentiary provisions of the Road Management Act and maintain records of displacements or other matters requiring repair or maintenance that are found on inspection or reported to Council, together with the details of proposed and completed repair and maintenance works.

The Road asset Register forms part of an integrated asset management system, which includes:

- GIS system, which contains spatial data.
- Data register (Asset Master), which contains attribute data and works management data.
- Customer service request system, which records all complaints associated with a particular asset.
- Document management system, which contains Asset related documentation, such as plans, manuals etc.
- A snapshot of this data is maintained in a spreadsheet, which is available for public access via [Council's website](#)<sup>1</sup>.

## 4.3 Clarification of Register Content

It should be noted that not all of the Council's road assets are located on Council roads. In some cases assets, such as signs, might be owned by the Council but located on roads under the management of other responsible road authorities.

Infrastructure associated with the services of other authorities is also located within the road reserve, but is not Council's responsibility. These include services provided by water, power and telecommunications utilities, as well as tram and train authorities. Under the Road Management Act, these respective utilities/authorities are responsible for maintaining their infrastructure.

The Council has identified that the portion of private property driveway crossings, where pedestrians walk, is part of the footpath, and so the Council's responsibility. The portion of driveway crossings which do not form part of the footpath (for example where they cross nature strips), are the responsibility of the property owner.

Where Council determines that a driveway crossing which is the responsibility of the property owner is not in a safe condition they may serve a notice on the property owner to have defects repaired.

Private building intrusions into footpaths and roadways, such as pavement lights (glass bricks in metal frames surrounded by masonry supports which provide natural lighting to building basements) and cellar access hatches, are the responsibility of the abutting property owner.

Property stormwater drains constructed within the road reserve from the property boundary to a discharge outlet in the kerb or into a Council drain are the responsibility of the property owner to maintain.

Some road assets which also form part of public transport infrastructure (for example level crossings and tram reserves) are the responsibility of the relevant public transport operators in accordance with the infrastructure leases with the relevant government department.

The Council may be required to jointly manage safety risks at level crossings and road/rail bridges through the establishment of safety interface agreements with rail infrastructure managers.

## **4.4 Pavement Management System**

Council has managed its key road assets by adopting the SMEC Pavement Management and Road Inventory System which has been in place for a number of years. The system was originally designed as an inventory, condition summary and budget planning tool for road pavements only but it has the capability to act as an asset register for footpath and kerb and channel as well.

The SMEC system sources base data from Council's Asset Management System for modelling purposes. This includes calculating the Pavement Condition Index (PCI), a composite index based on a number of pavement performance parameters for each pavement section. The outputs of SMEC such as the PCI are then re-imported back into Council's Asset Management System.

The Council undertakes a complete condition survey of all road and footpath assets on a nominal four year cycle for updating of the data in the Pavement Management System.

## **5. Road Renewal Programme and Maintenance Standards**

### **5.1 Council's Duty of Care**

In order to meet its duty of care to road users and the community, Council responsibly manage the road assets under its control. A safe, efficient and effective road network that meets reasonable community expectations can only be achieved if Council has in place a targeted road renewal program (capital works program) and appropriate maintenance standards.

### **5.2 Renewal Programme**

Based on the considerations stated in Section 4 of the RMP, the Council has adopted a long term road asset renewal programme. The list is monitored to take into account any changed conditions that may alter the prioritised listing of projects before a final programme is approved by the Council as part of its annual budget process.

### **5.3 Reactive Response Processes**

Hazards or defects which are reported to Council shall be assessed to determine the level of risk and timeframe in which the defect is to be repaired. For non emergency or high risk defect the repair time is four weeks.

Any reported hazard which poses an immediate threat to the public and their property and is considered high risk and an emergency will have temporary measures implemented within four hours from the time of notification. The intention is to reduce the risk to the public and property to a reasonable and acceptable level until such time as more permanent repairs can be completed. The hazard or defect is required to be fully rectified within four weeks unless otherwise agreed by Council.

Examples of high risk or emergency hazards include a tree that has fallen across the road, a sink hole or significant road infrastructure damage resulting from a traffic accident or fire.

### **5.4 Customer Service Request System**

Council has a Customer Contact Management System that is used to monitor and report on customer requests to ensure that all requests are investigated and actioned to the required standards and within specified timelines. The customer contact management system is also linked to Council's asset management system.

The service provider for the relevant civil infrastructure contract is responsible for ensuring that actions recorded in the asset management system are responded to and properly managed.

## **5.5 Responding to Customer Service Requests**

When Council receives a report of a potential defect by a member of the public or other third parties Council will undertake an initial inspection of the location within seven days.

## **6. Audit and Review of RMP**

### **6.1 Audit of RMP**

An annual internal audit will be conducted to review compliance with the RMP in relation to specified procedures and maintenance standards, in addition to regular reviews of contract performance relating to compliance with appropriate Key Performance Indicators in relation to the RMP.

### **6.2 Review of RMP**

A formal review of the RMP will be conducted every 4 years, in accordance with regulation 301 of the Road Management (General) Regulations 2005.

### **6.3 Amendment of RMP**

Unless required as a result of a significant change in budget allocations for road and footpath maintenance, this RMP will not be amended during the life of the plan.

Any revision of the plan would be subject to the consultation and approval processes as detailed in section 54 of the Act.

### **6.4 Force Majeure**

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

In the event that the Chief Executive Officer of the Council, has to, pursuant to Section 83 of the said Act, consider the limited financial resources of the Council and its other conflicting priorities, meaning Council's Plan cannot be met, they will write to the Council's Officer in charge of its Plan and inform them that some, or all of the timeframes and responses in the Council's Plan are to be suspended.

Once the events beyond the control of the Council have abated, or if the events have partly abated, the Council's Chief Executive Officer will write to the Council's Officer responsible for Council's Plan and inform them which parts of the Council's Plan are to be reactivated and when.

## **7. References**

### **7.1 Technical References**

- Integrated Asset Management Guidelines for Road Networks (AP-R202) 2002, Austroads Inc.
- International Infrastructure Management Manual (IIMM) 2006, IPWEA.

- Road Safety Act 1986.
- Transport Integration Act 2010.
- Local Government Act 1989.
- VicRoads Standard Specification Section 750 – Routine Maintenance.
- The Act – Codes of Practice (subject to any agreements that may be in place).

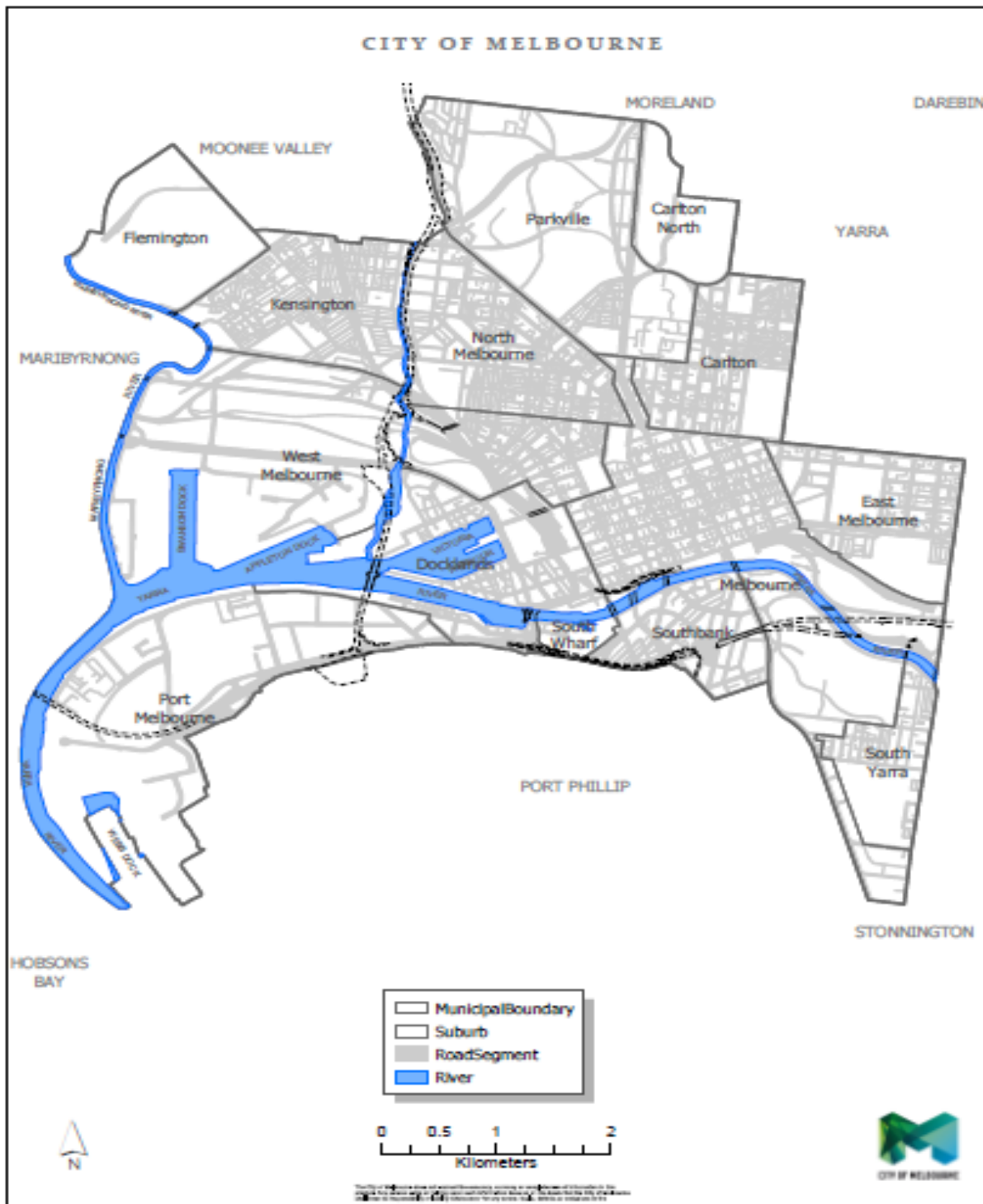
## **7.2 City of Melbourne Documents**

- Relevant Council Plan.
- Current Transport Strategy.
- Current Civil Infrastructure Services (CIS) Contract.
- Risk Register.
- Section 15 Arrangement with VicRoads.

## 8. Appendices

- Appendix 1: City of Melbourne Municipal Map
- Appendix 2: Standards of Maintenance
- Appendix 3: Summary of Maintenance Standards - Bridges

### Appendix 1: City of Melbourne Map



## Appendix 2: Summary of Road Maintenance Categories and Road Asset Inspection Frequencies

### 1. Proactive Road Asset Inspection Frequencies – Assets in Road Reserve (including footpaths but excluding bridges)

Road Category	Road Hierarchy Description	Minimum Inspection Frequency
A	Premium Roads and Public Realm Areas	2 Monthly
B	Arterials	4 Monthly
B	Major Local	4 Monthly
C	Minor Local (CBD)	6 Monthly
D	Laneways, Right of Way and Residential	12 Monthly

### 2. Standards of Maintenance and Response Times

Asset Category	Description of Defect/ Hazard	Intervention Standard (Maximum Target Response time to reduce risk/ repair defect is 4 Weeks)
Road, Footpath and Shared Zone Segmental Pavement	Level discontinuity (edge steeper than 1:1)	Over 20mm level difference
Road, Footpath and Shared Zone Segmental Pavement	Level discontinuity (edge slope 1:4 to 1:1)	Over 20mm level difference.
Road, Footpath and Shared Zone Segmental Pavement	Mounding or Heaving caused by uplifted area of pavement.	Over 100mm gap under 1.2m straightedge
Road, Footpath and Shared Zone Segmental Pavement	Uneven surface grade caused by sunken area of pavement.	Over 50mm gap under 1.2m straightedge
Road, Footpath and Shared Zone Segmental Pavement	Loose paver unit	Unstable Paver
Road, Footpath and Shared Zone Segmental Pavement	Missing paver unit	Missing
Road, Footpath and Shared Zone Segmental Pavement	Gaps between pitchers and / or adjacent assets (including service covers and walls) caused by loss of grout.	Over 40mm depth
Road, Footpath and Shared Zone Segmental Pavement	Gaps between paver units and / or adjacent assets (including service covers and walls) caused by loss of grout.	Over 40mm depth
Asphalt Road and Footpath Pavement	Pavement breakout -potholes / digouts / edge breaks	Over 50mm depth with a diameter greater than 200mm.
Asphalt Road and Footpath Pavement	Pavement deformation– rutting / depressions / shoving	Over 40mm gap under a 1.2m straightedge transverse or under a 3m straightedge longitudinal
Asphalt Road and	Mounding or Heaving caused by	Over 100mm gap under 1.2m straightedge

<b>Asset Category</b>	<b>Description of Defect/ Hazard</b>	<b>Intervention Standard</b> (Maximum Target Response time to reduce risk/ repair defect is 4 Weeks)
Footpath Pavement	uplifted area of pavement.	
Asphalt Road and Footpath Pavement	Surface distress – crocodile cracking / flushing	3mm wide cracks and over 1m <sup>2</sup>
Asphalt Road and Footpath Pavement	Pavement cracking – block cracks, longitudinal, transverse	3mm wide cracks and over 1m <sup>2</sup>
Bluestone and Precast Concrete Kerb	Level difference between adjacent kerbstones.	Over 20mm level difference.
Bluestone and Precast Concrete Kerb	Level difference between uplifted / sunken kerbstones and Footpath.	Over 20mm level difference
Bluestone and Precast Concrete Kerb	Uplifted or sunken kerbstones.	Over 50mm gap under 1.2m straightedge
Bluestone and Precast Concrete Kerb	Displaced laterally	Over 50mm gap under 1.2m straightedge
Bluestone and Precast Concrete Kerb	Broken or chipped	Thickness of missing or loose part over 50mm
Bluestone and Precast Concrete Kerb	Tilted.	Over 1:15 slope in top surface (laterally)
Bluestone and Precast Concrete Kerb	Missing.	Missing
Bluestone and Precast Concrete Kerb	Broken, dislodged or missing render infill at property stormwater outlet.	Thickness of missing or loose part of render infill over 30mm
Bluestone and Precast Concrete Kerb	Loose.	Unstable kerbstone
Bluestone and Precast Concrete Channel	Level difference between adjacent channel sections.	Over 20mm level difference
Bluestone and Precast Concrete Channel	Level difference between uplifted / sunken channel sections and roadway.	Over 20mm level difference
Bluestone and Precast Concrete Channel	Uplifted or sunken channel sections.	Over 30mm gap under 1.2m straightedge
Bluestone and Precast Concrete Channel	Displaced laterally	Over 30mm gap under 1.2m straightedge
Bluestone and Precast Concrete Channel	Broken or chipped	Thickness of missing or loose part over 50mm
Bluestone and Precast Concrete Channel	Missing.	Missing
Bluestone and Precast Concrete Channel	Pooling of water in channel locally.	Over 30mm gap under 1.2m straightedge
Tree Plot and Tree Plot Surrounds within Footpaths	Granitic sand infill level below footpath level in Road Maintenance Category A and B Road Segments	More than 40mm
Tree Plot and Tree Plot Surrounds within Footpaths	Granitic sand infill level below footpath level in Road Maintenance Category C and D Road Segments	More than 40mm
Tree Plot and Tree Plot Surrounds within Footpaths	Permeable surface infill level below footpath level in Road Maintenance Category A and B Road Segments	More than 40mm
Tree Plot and Tree Plot Surrounds within	Permeable surface infill level below footpath level in Road Maintenance	More than 40mm



<b>Asset Category</b>	<b>Description of Defect/ Hazard</b>	<b>Intervention Standard</b> (Maximum Target Response time to reduce risk/ repair defect is 4 Weeks)
Footpaths	Category C and D Road Segments	
Tree Plot and Tree Plot Surrounds within Roads	Granitic sand infill level below road level in Road Maintenance Category A B, C & D Segments	More than 40mm
Vegetation and Trees	Overgrown vegetation and trees on Council Roads and VicRoads Roads	Maintain Roadway height clearance > 4.5m
Vegetation and Trees	Overgrown vegetation and trees on Council Roads and VicRoads Roads	Maintain Footpath clearance > 2.5m
Vegetation and Trees	Overgrown vegetation and trees across footpath	Remove encroachment of vegetation on footpath > 250mm
Vegetation and Trees	Overgrown vegetation and trees across shared path	Remove encroachment of vegetation on shared path > 500mm
Vegetation and Trees	Overgrown vegetation and trees across Council Roads and VicRoads Roads	Roadway lateral clearance <1m from back edge of shoulder
Vegetation and Trees	Overgrown vegetation and trees obstructing regulatory and warning signs	Remove obstruction and maintain clear view and line of sight
Vegetation and Trees	Overgrown vegetation and trees obstructing parking signs	Remove obstruction and maintain clear view and line of sight
Vegetation and Trees	Overgrown vegetation and trees obstructing view of intersecting traffic	Remove obstruction and maintain clear view and line of sight
Vegetation and Trees	Overgrown vegetation and trees obstructing Council street lighting	No foliage touching light fitting and no foliage within a cone (60 degrees wide) below the light
Vegetation and Trees	Fallen tree limb obstructing pedestrian/ cyclist traffic	Remove obstruction
Vegetation and Trees	Fallen tree limb obstructing vehicular traffic	Remove obstruction
Traffic Sign and Sign Support	Loose sign and/ or sign support	Repair any component that is not firmly fastened
Traffic Sign and Sign Support	Misaligned sign and/ or sign support	Sign face is more than 20 degrees from correct alignment as required by Council's design standards.
Traffic Sign and sign support	Missing sign and/ or sign support	Any missing component
Traffic Sign	Sign face bent by impact or other applied force	Departure from flat surface when measured as gap under a straightedge placed on sign face to be not more than 30mm
Traffic Sign	Sign face curved	Departure from flat surface when measured as gap under a straightedge placed on sign face to be not more than 30mm
Traffic Sign	Metal sign board creased	Previous efforts to straighten bent sign have resulted in unsightly distortion of sign face.

<b>Asset Category</b>	<b>Description of Defect/ Hazard</b>	<b>Intervention Standard</b> (Maximum Target Response time to reduce risk/ repair defect is 4 Weeks)
Traffic Sign	Degraded sign face (other than reflectivity)	Not easily readable in the circumstances that the sign is intended to be read. Sign is faded or damaged such that >20% of the sign is illegible from a distance of 15 meters.
Traffic Sign	Defaced with graffiti, paint, sticker or other applied material	Any amount
Traffic Sign	Sign face dirty	Visible deposit of accumulated dirt
Traffic Sign Support	Bent or otherwise damaged	Any component bent out of alignment by more than 10 degrees. Any damage that has caused significant structural weakness.
Traffic Sign Support	Corroded/rusty	More than 20% of surface affected
Traffic Sign and Sign Support	Pedestrian hazard	Any Sign or Sign Support or parts thereof that present an immediate and significant hazard to pedestrians due to height, location, sharp edges etc.
Drainage Pit Grates and Pit Lids	Displaced component	Laterally or vertically displaced by more than 20mm.
Drainage Pit Grates and Pit Lids	Damage	Bent or broken to extent that structural integrity is materially affected or any part is more than 20mm out of alignment.
Drainage Pit Grates and Pit Lids	Missing component	Any missing component.
Drainage Pit Grates and Pit Lids	Rust / corrosion	When a part has rusted or corroded to the extent that the thickness of remaining metal at any point has reduced to less than 75% of original thickness.
Drainage Pit Grates and Pit Lids	Uneven trafficable surface	When a component forms part of a surface where pedestrians are expected to walk is lower or higher than adjacent surfaces by more than 20mm.
Drainage Pit Grates and Pit Lids	Hazard to persons or property	Any Drainage Pit component that is a potential immediate and significant hazard to pedestrians, cyclists or vehicular traffic.

Note: While the maximum target resolution time to repair defects is four weeks there may be occasions when this time is reduced due to the nature, size and location of the defect including the assessment of associated risks at the time of assessment.

### **3. Response Times and Intervention Levels – Pavement Marking**

Pavement marking includes all line marking, road marking and raised pavement markers for roads designated as under the Council responsibility but excludes traffic signal and pedestrian crossing line marking maintenance (as per VicRoads Agreement with Council) as well as parking bay and footpath markings.

The Service Provider is responsible for Pavement Marking maintenance and shall ensure that the Council's Target Service Level is maintained. The Council's required service level for Pavement Marking is specified below.

- Line-marking and road-marking condition shall be determined from the retro-reflectivity performance of the glass beads in the line-marking and road-marking.
- For line-marking and road-marking the average level of retro-reflectivity over the City is to be not less than 150 millicandela/square metre/lux (mcd/m<sup>2</sup>/lx) and the minimum acceptable reflectivity is 120 mcd/m<sup>2</sup>/lx.
- For raised reflective pavement markers (RRPMs) the minimum acceptable condition is when wear or damage has reduced the reflective surface by 30 per cent..

If the Service Provider is notified of a Pavement Marking that is below the minimum standards specified above, the Pavement Marking shall be renewed within a period that is appropriate for the level of risk to the public. This period shall not exceed 4 weeks.

### **Appendix 3: Summary of Maintenance Standards – Bridge Structures**

#### **Bridge Maintenance**

Currently the Council has total responsibility for 23 bridges (road and pedestrian) located throughout the city as listed below.

<b>No.</b>	<b>Asset Number</b>	<b>Asset Description</b>
1	1073775	Bridge - Arden Street Bridge
2	1073776	Bridge - Macaulay Road Bridge
3	1073777	Bridge - Morell Bridge
4	1073778	Bridge - Princes Bridge
5	1073779	Bridge - Queens Bridge
6	1073780	Bridge - Sims Street Bridge
7	1073781	Bridge - Stock Subway Bridge
8	1073782	Bridge - Stock Bridge
9	1073783	Bridge - Evan Walker Bridge (formerly Southbank Pedestrian)
10	1073784	Bridge - The Avenue Ped. Underpass
11	1073785	Bridge - Sandridge Foot Bridge
12	1073786	Bridge - Birrarung Marr Foot Bridge
13	1282465	Bridge - Docklands - Collins to Spencer to Stadium Dr Bridge (July 07)
14	1282466	Bridge - Latrobe Street Bridge
15	1282467	Bridge - Webb Bridge
16	1282468	Bridge - Yarra's Edge Promenade Pedestrian Access Ramp
17	1375195	Bridge - Manningham Street Foot Bridge
18	1449246	Bridge - Sims St Footbridge North
19	1449247	Bridge - Sims Street Foot Bridge South
20	1498894	Bridge - 717 Bourke Street Pedestrian Bridge
21	1527877	Bridge - Seafarers Bridge
22	1579827	Bridge - Jim Stynes Bridge (Charles Grimes Bridge Underpass)
23	1598059	Bridge - Alexandra Avenue Bicycle Path Ramp

The above list may be altered as new bridges are constructed and added to the Council's asset responsibility.

The 3 levels of inspections are as specified in the applicable Bridge Manual as follows:

- **Level 1:** Routine inspections, twice yearly with a maximum interval of 6 months.
- **Level 2:** Periodical inspections, maximum 2 year interval.
- **Level 3:** Structural inspections/investigations when a problem is detected in a Level 2 inspection.