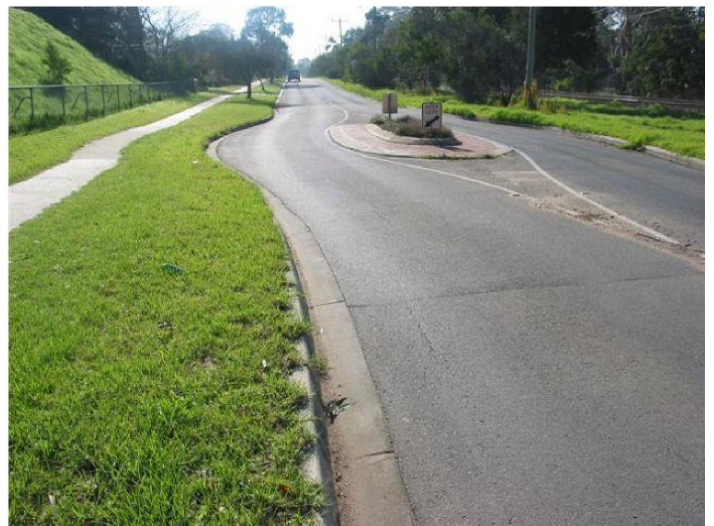


DRAFT 4/05/2017
Version 5.00 – 2017

Road Management Plan



Schedule of Changes & Amendments

Version	Date	Changes/Amendments
V1.00	6/12/2004	Adopted by Council at its meeting 6 December, Gazetted 9 December 2004 after public display and consideration of submissions by Council.
V1.00	9/12/2004	Notification of adoption in Government Gazette.
V1.01	25/11/2005	Revision 1 amendments adopted by Council.
V1.01	8/12/2005	Notification of adoption of amended plan in Government Gazette.
V2.00	Adopted by Council 14/11/2007	<p>These changes have been made as a result of review of the Plan during 2006 to establish if specified standards were being achieved with available budget funding. The following changes to service standards are as follows:</p> <ul style="list-style-type: none"> • S2.4.1 – Inclusion of on & off-road bicycle paths • S2.4.3 – Inclusion of reference to non standard road infrastructure assets • S5.1 – Asset Hierarchy, removal of two types of roads from Category 4 roads and addition of Category 4 in Pathway hierarchy. • Section 6.2 – recognising that intervention levels are not relevant with footpaths in industrial areas. • Attach. 3 – Inspection Frequencies, changes. • Attach. 4: - Road Defect Tolerance Intervention Levels, changes. • Attach. 5: - Pathway Defect Tolerance Intervention Levels, changes. • Section 6.7 – insertion of a Force Majeure clause.
V2.00	28/02/2008	Notification of adoption in Government Gazette.
V3.00	Adopted by Council 29/06/2009	<p>Update further refining levels of service to match available budget funding. Also provides more detail on management & maintenance of the bicycle path network.</p> <ul style="list-style-type: none"> • Contents page – insertion of Human Rights Statement. • Sections 2.4.1 & 2.5 – Additional information provided on the maintenance management arrangements for off-road cycle paths that lie within a road reserve. • Section 4.3 – Updated maintenance demarcation arrangements with VicRoads, adjoining councils, utility & service authorities and other government agencies • Section 7.3 – Current levels of funding table has been updated. • Appendix 2: Inspection Requirements – second page added to detail inspection arrangements for on-road cycle lanes and off-road cycle paths. • Appendix 3: Inspection Frequencies – information added to Table on inspections for on-road cycle lanes. • Appendices 4 & 5: Roadway & Pathway Defect Tolerance Intervention Level Schedules – several changes as follows: <ul style="list-style-type: none"> (a) Column in Table that was labelled 'Work Practice' has been renamed 'Defect Type'; (b) An additional column added called 'Defect Description' to improve the description of the defect; (c) A row inserted to recognise the management of Customer Requests; (d) Changes to response times – 7 days to 5 working days and 14 days to 10 working days. • Appendix 6: Schedule of Local Roads & Structures with Maintenance Demarcation Agreements – new appendix added.
V3.00	14/05/2009	Notification of adoption in Government Gazette.
V4.00	Adopted by Council 17/06/2013	<ul style="list-style-type: none"> • Update grammatical and technical references throughout document • S2.6 - Update City Plan Framework • S4.1.1 – Revise Road Hierarchy • S4.1.2 – Revise Pedestrian Pathway Hierarchy • S4.4.2 – Revise Maintenance Responsiveness & Performance Targets • S5.7 – Revise Force Majeure Clauses • App 1 – Update Reactive Customer Request/ Inspection Process Flowchart • App 3 – Revise Road Asset Inspection Frequencies • App 4 – Revise Roadway and On-Road Bicycle Lanes Defect Intervention Levels • App 5 – Revise Pathway and off-Road Bicycle Shared Pathways within the Road Reserve Defect6 Intervention Levels • App 6 – Revise Local Boundary Roads & Structures Maintenance Agreements with Adjoining Councils
V4.00	27/06/2013	Notification of adoption in Victorian Government Gazette.
V5.00		<ul style="list-style-type: none"> • Update grammatical and technical references throughout document • Revised Executive Summary • Changed Background to Introduction • Removed Section – What is a "Road"?

		<ul style="list-style-type: none"> • Revised Terms and Definitions • Revised Legislative Basis for the Plan • Revised Purpose of the Plan • Revised Responsibilities • Revised Section - Assets in the Road Reserve and included it in Responsibilities Section • Removed Section - Council's Strategic Planning Process • Revised Key Stakeholders • Revised Obligations of a Road User • Removed Section - Municipal Road Map • Removed Section - Maintenance Demarcation Agreements (included in appendix) • Removed Section - Utility & Service Authorities • Removed Section - Non-Council Assets on the Road Reserve • Removed Section - Updating the Road Register • Removed Section - Reviewing & Updating the Road Management Plan • Removed Section - Road Data Information System • Removed Section - Customer Service System & Procedures • Removed Section - Services Asset Management Plans • Removed Section - Community consultation • Removed Section – Best Value & Performance Measures • Removed Section – Auditing of Processes • Removed Section - Road Maintenance Management Performance • Removed Section - Asset Growth • Removed Section - Relationship with Budget Process • Removed Section - Future Fundy Strategy • Removed Section - Maintenance • Removed Section - Asset Renewals • Removed Section – Condition Standards • Removed Section – Force Majeure • Removed Section - Renewals – Road Works & Pathways • Removed Section - Renewal Works Program • Removed Section - Reporting Process • Removed Section - Technical References • Revised Register of Public Roads • Updated Appendix 1 flow chart to include new defect types • Revised Appendix 2 • Updated Appendix 3 to reflect new hierarchy levels and inspection intervals • Revised Appendix 4 and updated intervention levels • Updated Appendix 5 to include new defect types for pathways • Updated Appendix 6 to reflect new maintenance agreements, removed Bolton Street and removed Pedestrians Bridges due to it being covered under the Services Asset Management Plans
V5.00		Notification of adoption in Victorian Government Gazette.

- NB: 1. Primary number changes to Versions (e.g. V1.00 to V2.00) will be made when the document undergoes its regular review and when significant changes are made to standards and guidelines for inspections, intervention levels or work
2. Secondary number changes (e.g. V1.00 to V1.01) will apply to minor amendments that do not materially impact the document and are intended only to clarify or update issues.

Road Management Plan

Human Rights Statement

In accordance with section 28 of the Charter of Human Rights, the Road Management Plan has been assessed as being compatible with the human rights protected by the charter.

The Road Management Plan meets the legislative responsibilities of the Road Management Act and defines how Council will manage and maintain infrastructure assets within road reserves. This assessment is based on a Statement of Compatibility of the Human Rights protected by the Charter that are relevant to the Policy.

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Executive Summary

Banyule City Council is custodian of an extensive range of community assets that it provides to facilitate delivery of its services to the community. This includes the roads that it holds responsibility for under the Road Management Act 2004.

The Banyule City Council "Register of Public Roads" provides additional details of each of the roads for which Council is responsible.

The Road Management Plan has been developed to manage Banyule's municipal road system, taking into consideration the important links provided by the State road network and assists Council to cater for the needs of those who reside within the City or visit its many attractions.

The key elements of the Plan include:

- The Register of Public Local Roads for which Council is responsible
- The systems and procedures that Council uses to manage maintenance and renewals of its public road network
- Schedules of maintenance standards used by Council.

Included are details and schedules for:

- **Hierarchy classification of all roads, streets and pathways** - based on their specific function, types of users and user numbers
- **Levels of service** (acceptable or tolerable condition of the asset) - determined by the hierarchy classification and the available funding
- **Inspection regimes** – the types and frequency of inspections in order to detect defects when they reach the stage of requiring maintenance intervention
- **Maintenance activities** - outlining the various types of routine maintenance and the performance standard of each activity
- **Defect intervention levels** - relating to the defect type, indicating the point at which remedial action is required
- **Response times** - the target response times for completing remedial work once the defect has been detected.

The hierarchy classifications, levels of service, inspection regimes, defect intervention levels and response times are primarily determined by the risk associated with each of the elements. Risk management principles are utilised to prioritise maintenance and capital works programs.

The respective rights of Council, ratepayers, residents and the general public have been considered in the preparation of this Plan. There are also obligations of road users under the Act, which requires that they exercise personal responsibility for their own and other's safety and interests

The Road Management Plan is to be read in conjunction with Banyule's Asset Management Policy and Strategy, which is also available at Council Offices and Service Centres and on Council's website.

1. Introduction

The Road Management Plan is a document which describes management arrangements for road assets within the road reserve for which Council is responsible.

1.1 Terms and definitions

Road	as defined in the Local Government Act 1989 and includes a street, right of way, cul-de-sac, by-pass, bridge or ford, pathway, bicycle path, nature strip, culvert, kerbing or other land or works forming part of the road.
Public Road	as defined in the Local Government Act 1989 and includes a street, right of way, cul-de-sac, by-pass, bridge or ford, pathway, bicycle path, nature strip, culvert, kerbing or other land or works forming part of the road.
Arterial Roads	are Highways & Declared Main Roads which are managed by the State Government through VicRoads.
Municipal Roads	are roads for which the municipal council is the responsible Road Authority. The Road Management Act imposes specific duties on a council with respect to the inspection, repair and maintenance of its municipal public roads which are those that are reasonably required for general public use.
Other Roads	include roads in State forests & reserves, and roads on private property. The municipal council is not responsible for the care and maintenance of these.
Asset	Is an item owned and/or managed by Council.
Hierarchy	A framework for segmenting an asset base into appropriate classifications.
Asset Management	The combination of financial, economic, engineering management and other practices provided to maintain an asset at the required level of service.
Components	Individual parts of an asset.
Replacement	The cost of replacing the service potential of an existing asset, by reference to some measure of capacity, with an appropriate modern equivalent asset.
Geographic Information System (GIS)	A computer based mapping system used to manipulate, analyse and present information that is tied to a ground location.
Level of Service	Service level is standard to which an asset is maintained and relates to the quality, quantity, reliability, responsiveness, environmental acceptability and costs of related activities.
Maintenance	Activities necessary to retain an asset as near as practical to its original condition for it to reach its expected life. <ul style="list-style-type: none"> • Periodic – sustains the design life of an asset. • Routine/Programmed – condition monitoring activities used to predict failure. • Preventive – reactive maintenance through notification of defects.
Pavement Management System (PMS)	An asset management (AM) system designed to model road condition data and provide the outputs for managing annual and long term maintenance activities.
Performance	A measure of a service or activity used to compare actual performance against a standard.
Rehabilitation	Works to rebuild or replace parts or components of an asset, to restore it to a required functional condition and extend its life, (i.e. heavy patching of roads) without significant upgrading or renewal.
Renewal	Works to refurbish or replace existing facilities of equivalent capacity or performance quality.
Repair	Action to restore an item to its previous condition after failure or damage.
Replacement	Replacement of an asset that has reached the end of its life to an agreed level of service.
Risk Assessment	The process used to determine the level of risk against predetermined standards.
Risk Management	A management technique used to identify and analyse potential risks and responses.
Road Register	A detailed listing of roads for which Council (the Responsible Authority) is responsible for maintaining.
Strategy	A plan containing the long-term goals and strategies of an organization or function.

1.2 Legislative Basis for the Plan

This Municipal Road Management Plan has been prepared in accordance with the following Acts:

- Local Government Act 1989
- Road Management Act 2004.
- Road Management (General) Regulations 2016 (Vic)
- Road Management (Works and Infrastructure) Regulations 2015 (Vic)

1.3 Purpose of the Plan

The purpose of the Road Management Plan is to establish a management system for Council to inspect, maintain and repair its public roads based on policy and operational objectives having regard to available resources.

It also sets the relevant standard in relation to discharge of duties in the performance of those road management functions.

1.4 Key Stakeholders

The key stakeholder are users of the road network who have a vested interest in management of roads and associated road infrastructure assets.

2. Responsibilities

The Road Management Plan concentrates on Council's assets and responsibilities within the road reserve.

The following section lists the assets located within the road reserve covered by the Road Management Plan and broadly outlines maintenance and management responsibilities. The demarcation issues between Road Authorities and Service Utilities who use the road reserve are incorporated in the Banyule Road Register.

2.1 Local Road Network – Council Responsibility

Banyule City Council is the 'Co-ordinating Road Authority' for municipal roads within its boundaries and is responsible for their care and management.

Council must ensure that if a road is required for public traffic, and therefore kept open for public use, Council may carry out work on the road. Council is not obliged to do any specific work on the road and in particular is not obliged to carry out any surface or drainage work on an unmade road.

Council is responsible for:

- Road Pavement
- Road Surface
- Footpaths and Pathways within the road reserve
- On-road Bicycle Lanes
- Off-road Bicycle Shared Paths within the road reserve
- Surface Drainage
- Traffic Management devices including line marking and regulatory traffic signs
- Bridges and Culverts
- Street Trees, Roadside Vegetation

Figure 1 outlines Council's responsibilities within the road reserve.

Council is not responsible for:

- **Vehicle crossovers & driveways** for that portion of a vehicle crossing, other than the footpath, located between the carriageway and the property boundary is the responsibility of the adjoining property owner to maintain
- **Nature strips & infill areas within urban areas** which are those residual areas between the edge of the road or back of the kerb and the property boundary not occupied by the pathway and private road crossings. These are normally sown with grass with responsibility for maintenance of the grass and any depressions generally being left to the adjoining property owner
- **Single property stormwater drains** that are constructed within the reserve from the property boundary to a discharge outlet in the kerb or into Council drain. They are there to benefit the property and as such are the responsibility of the owner of the property being served to maintain
- **Private or illegal landscaping works** on the road reserve that are not in accordance with any Council policy on such landscaping or have a potential of causing obstruction or injury/damage to pedestrian or traffic movement
- **Street lighting** (Standard) – timber and concrete power poles
- **Private roads** driveways, laneways and car parks (Common Property) associated with private developments
- **Rail crossings** and associated structures (bridges)
- **Service Authority temporary/permanent reinstatements** to the road and pathways and other road reserve assets organised by the authority directly
- **Service Authorities Assets** - Utility assets such as service pits (communications, water, sewerage, gas, electricity)
- **Crown and Service Authority Land/Easements** – for example, Department of Sustainability and Environment (DSE), Melbourne Water unless specified in a Road Register
- **Other Road Authorities' Assets**

Regardless of its maintenance obligations, Council has a duty of care and will as far as practicable notify the relevant utility or authority where a defect has been identified. Council may also serve a notice on a property owner to have defects repaired within a given period.

2.2 Arterial Roads

Responsibilities for Arterial Roads are divided between VicRoads and Council. Pathways and service roads along Arterial Roads are the responsibility of Council ('back of Kerb'). Median strips, kerb and channel, main thoroughfare, intersection and road signage and other are the responsibility of VicRoads. This is depicted in **Figure 2**.

The City of Banyule deems to be the responsibility of VicRoads all Structural assets associated with a main road such as embankments, retaining walls, sound barriers, cuttings, etc.

2.3 Freeways

VicRoads is the coordinating road authority and the responsible road authority for the whole of the road reserve of a freeway. This includes entry and exit ramps; other roads and pathways; and any road-related infrastructure (e.g. fences, noise walls) that are part of the freeway. VicRoads is generally the responsible road authority with respect to all bridges on, over or under freeways.

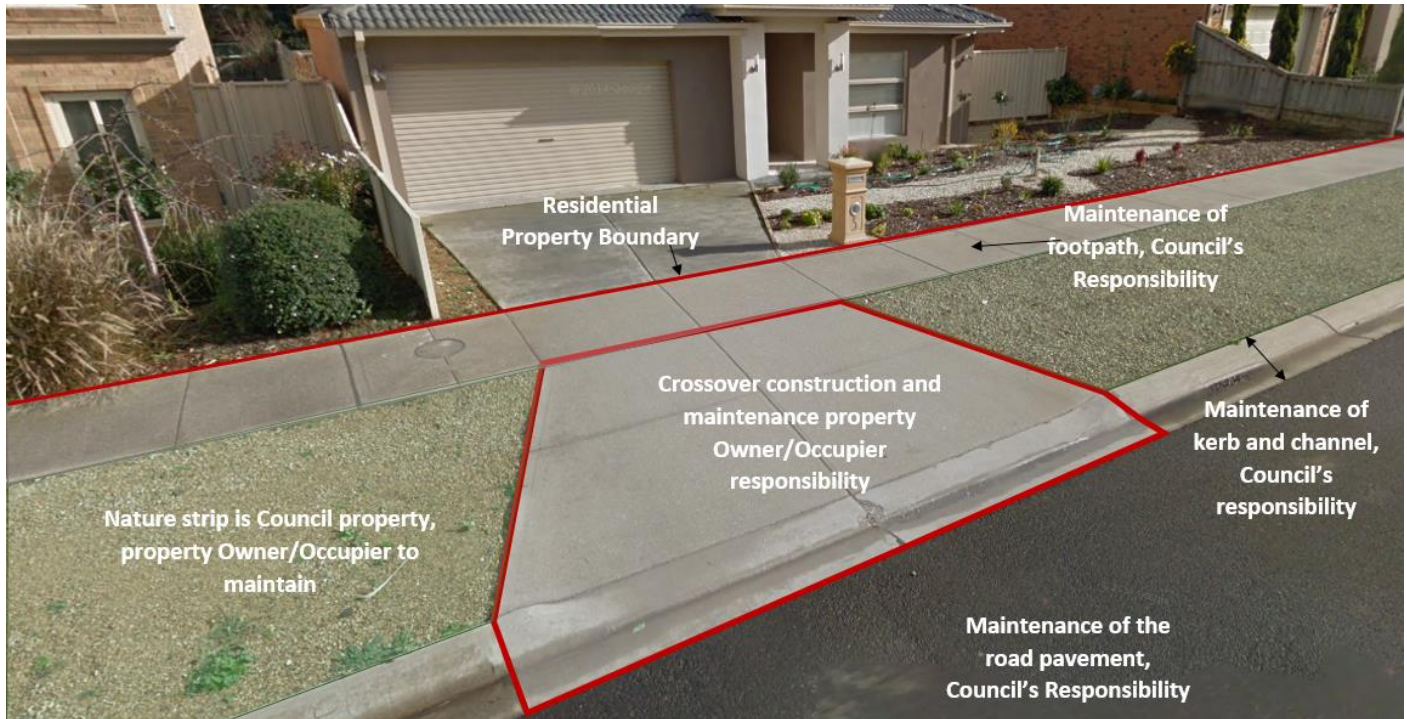


Figure 1. Responsibilities within the Road reserve.



Figure 2. Operational Responsibility on Arterial Roads

2.4 Non Standard Road Infrastructure

Non-standard and ad hoc infrastructure constructions in existence prior to the introduction of the Road Management Act 2004 are deemed as required assets. Historically, these assets were constructed to service community needs and are required to be maintained to the existing level of service they provide.

Examples of these assets include the construction of steps for connectivity where roads have been constructed on different levels due to terrain; steel plates at property entry points (driveways, installed in most cases by residents) where cars are 'bottoming out'. Other non-standard assets may be included as Council is made aware of them through its Customer Request, Reactive Maintenance program or Risk Management process.

2.5 Assets Not Included in the Road Management Plan

- Street Furniture
- Non Traffic Management Street Signs
- Street Lighting – Non standard light poles and fittings
- Entry roads, paths, facility car parks
- Pathways, walkways, shared paths, furniture and lighting in reserves/parks and associated Council buildings but not within the road reserve
- Underground drainage is considered under a separate Asset Plan
- Car Parks.

2.6 Bicycle Path Network

Under the Road Management Act 2004, where a bicycle path forms part of a road which is on Council's Public Road Register, on the shoulder of the road, or on a footpath adjacent to one of these roads, Council has a statutory duty to inspect and maintain such pursuant to Section 40 of the Road Management Act. This covers On-Road bicycle lanes and also parts of Off-Road Pathways that lie within the road reserve. Maintenance management arrangements are outlined within this Road Management Plan.

3. Obligations of Road Users

3.1 General Usage

Section 17A of the Road Safety Act 1986 provides that:

- 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 the motor vehicle
 - prevailing traffic conditions
 - relevant road laws and advisory signs
 - physical and mental condition of the driver.
- A road user other than a person driving a motor vehicle must use a highway in a safe manner having regard to all the relevant factors
- A road user must
 - have regard to rights of other road users and take reasonable care to avoid any conduct that may endanger the safety or welfare of other users
 - 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
 - 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.

3.2 Memorandum of Consent (MOC)

Council requires to issue an MOC where a member of the public or organisation proposes to undertake activities within the road reserve that may in any way impede access by the public or interfere with road infrastructure.

Codes of Practice and Regulations for access by service utility organisations have been developed by VicRoads.

4. Register of Public Roads

4.1 Public Road Register

Council has a register of public roads to record the details of the public roads, and ancillary areas, for which it is responsible. The register of public roads is available for inspection by the public at each of Council's Customer Service Centres and Council's website,

The Road Register will be updated with the following as information becomes available:

- Date a road ceased to be a public road
- Plans and other reference documents
- Identification of ancillary areas
- Ministerial directions/designated road projects.

4.2 Shared Municipal Boundary Roads

The City of Banyule shares boundary roads with both the Shire of Nillumbik and the City of Darebin. **Appendix 6** is a schedule of the roads and structures which are on the municipal boundaries. It lists the Maintenance Authority for each road or structure, being that Council that by mutual agreement has accepted the responsibility to maintain the asset.

5. Management of Municipal Road Assets

5.1 Road Hierarchy

All roads within the municipal road network are classified according to a hierarchy that takes into account their specific function and vehicular traffic volumes.

The hierarchy classification is used to assist in prioritising works programs and also intervention responses to remedy defects. The following table defines the hierarchical system used:

Category	Function Description
Level 1 Sub-Arterial Roads and Industrial Roads	<ul style="list-style-type: none"> • Carry 10,000 – 15,000 vehicles/day. • These carry heavy volumes of traffic including commercial vehicles and also provide the principal routes for traffic flows in and around the municipality. • Supplement the arterial road system within a Local Traffic Area. • Connector between arterial roads & lower order streets. • Caters for, but may restrain, Service & Heavy Vehicles. • Provides access to significant Public Services.
Collector and Distributor	<ul style="list-style-type: none"> • Carry 2,000 – 10,000 vehicles/day. • Carry significant volumes of traffic and provide access by linking residential areas to the arterial roads. • Carries heavy traffic. • Collect traffic from lower order roads. • Limited through traffic (not promoted or encouraged).
Level 2 Residential Streets, Courts and Fully Constructed Right Of Ways (ROW)	<ul style="list-style-type: none"> • Carry less than 2,000 vehicles/day • Limited through traffic. • Carry local traffic. Their primary function is to provide access to private property
Level 3 Unsealed Roads, Partially Constructed and Unconstructed ROWs	<ul style="list-style-type: none"> • Limited or No Through Traffic.
Private Access Roads & Common Property	<ul style="list-style-type: none"> • In private ownership therefore they are not a Council responsibility.

5.2 Pedestrian Pathway Hierarchy

Pathways within the municipal are classified according to a hierarchy that takes into account their specific function, types of users, pedestrian movement and potential risk.

The hierarchy classification is used to assist in prioritising works programs and also intervention responses to remedy defects.

The Road Register defines the locations of the Pedestrian Hierarchy.

Category	Function Description
Level 1 High Pedestrian Traffic	Shopping centres, hospitals, schools, elderly citizens, activity centres, transport interchanges and any other high pedestrian traffic areas as per the Footpath Register - Highest Usage Category .
Level 2 Low Pedestrian Traffic	Main roads, residential streets, industrial areas, and around recreation reserves (within the road reserve).

6. Standards for Construction, Upgrading, Renewal & Refurbishment

The standards for construction of new local roads and pathways and for the expansion, upgrading, renewal and refurbishment of existing local roads and pathways will be in accordance with the standards and specifications adopted by Council in any particular instance.

Generally the standards for construction, renewal and refurbishment will be based on the existing built standards taking into account the environmental sensitivities of matters such as established street trees and historical features, road safety and traffic management requirements.

The following are the key reference documents:

- Banyule City Council Standard Drawings – this provides details of kerb profiles, pits, drains, crossings, retaining walls and miscellaneous structures.

7. Road Maintenance Management

As a road authority, Council has a duty of care to road users and the community to maintain all public roads for which it is responsible in a safe condition and to specified maintenance standards. Council must also meet community expectations having regard to relevant government transport and other policies, and available funds.

The Maintenance Management System for the municipal road network infrastructure within the City of Banyule is a combination of standards, codes, guidelines and data management systems.

7.1 Maintenance Levels of Service

Levels of service for maintenance of the road network take into account:

- Community views and values through the Road Management Plan advertising and gazettal process
- Industry standards
- The need to provide a road network that is safe for all users
- Ability of Council to fund maintenance activities.

The Road Management Plan, establishes schedules of maintenance for different categories of public roads & pathways for which Council has operational and/or maintenance responsibility. The specific intervention levels and maintenance standards for roads and pathways are outlined in **Appendices 4 and 5**.

The hierarchy of roads and pathways is used as the basis for determining the various standards across the road network in line with relevant risk factors, while having regard to the type, volume and nature of road usage.

Banyule carries out routine maintenance programs for the road and footpath networks by Maintenance Areas to enable efficient work practices and to maximise resources.

7.2 Inspection Process

Survey and inspection processes are required for competent management of the road network assets. A four-tier inspection regime covering safety, incidents, defects and condition has been implemented.

The Inspection process upon receiving a customer request about a potential defect is outlined in **Appendix 1**.

Inspection requirements and their frequencies have been developed taking into account, among other things:

- The type of road infrastructure, and the volume and nature of road usage
- The scope of inspection
- Community expectations
- Any relevant risk factors
- Resource availability and the competing demands for those resources.

These are outlined in **Appendices 2 and 3**.

7.3 Risk Assessment & Prioritisation of Remedial Works

The consequences of asset failure can include loss of revenue, inconvenience to the community, loss of service and trade. It is not possible for Council to address all defects and eliminate all risks. However, risks may be identified and minimised by regular inspections and setting of clear priorities.

All types of defect likely to be found in the road reserve were evaluated and a risk assessment undertaken that considered both likelihood and consequence. The details of this analysis are shown in the Defects and Safety Inspection Manual.

7.4 Exceptional Circumstances

Council also has responsibilities under the Emergency Management Act 1986 that include a requirement to have a Municipal Emergency Management Plan. Through this Plan, it has responsibilities to plan for and provide assistance to emergency services and the community during an emergency or natural disaster. In the event of natural disasters and other events including, but not limited to, fires, floods, droughts and the like, together with human factors, such as a lack of Council staff or suitably qualified Contractors, in reliance upon Section 83 of the Victorian Wrongs Act, 1958, as amended, Council reserves the right to suspend compliance with its Road Management Plan.

In the event that the Chief Executive officer of Council has to, pursuant to section 83 of the Wrongs Act, consider the limited financial and other resources of Council and its other conflicting priorities, meaning Banyule's plan cannot be met (upon advice from, for example, the Business Continuity Manager, Risk Manager, MERO, or Manager in charge of the Road Management Plan), he/she will write to the officer

in charge of the Plan and inform him/her 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 partly abated, the Chief Executive Officer will write to the officer responsible for Banyule's Plan and inform him/her which parts of the Plan are to be reactivated and when.

7.5 Risk Management Implications

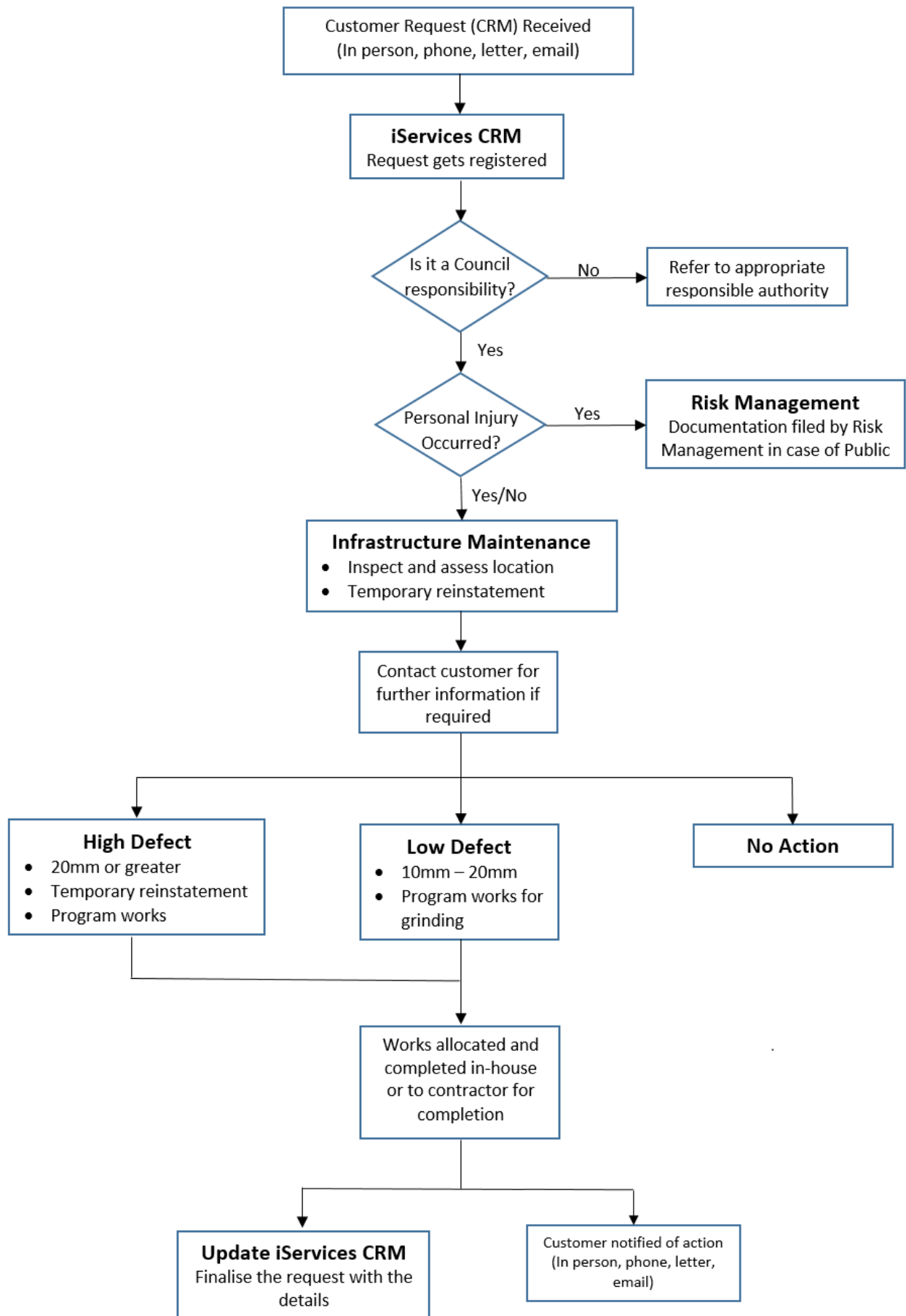
It is important to minimise exposure to risk, Council will endeavour to ensure that maintenance funding and performance is adequate to achieve the prescribed levels of service, including inspection regimes, intervention levels and response times. The Banyule community through Customer surveys has indicated an in-principle agreement to the existing level of service. The levels of service have been developed to match available budget funding levels.

7.6 Incident Claims

If a person proposes to commence a proceeding in a court based on a claim in relation to an incident arising out of the condition of a public road or infrastructure, the person must give written notice of the incident to the responsible road authority within the prescribed period of the incident occurring [section 115(1) of the Road Management Act].

8. Appendices

Appendix 1:- Flowchart – Reactive Customer Request/Inspection Process



Appendix 2: - Inspection Requirements

Inspection Type	Purpose	Inspection Requirements	Reporting Requirements
Reactive Inspection	<ul style="list-style-type: none"> Reactive Inspections respond to Customer enquiries, council employees or any defect notifications. 	<ul style="list-style-type: none"> Council representative with an appropriate level of knowledge of road maintenance and experience will inspect all reported defects. 	<ul style="list-style-type: none"> Record date first reported: date inspected, inspector, location required action and date of completion.
Incident Inspection	<ul style="list-style-type: none"> An inspection carried out to comply with the requirements of the Road Management Act [Part 6, Division 5 – Claims Procedure, section 116] and Civic Mutual plus (CMP) risk management practices. This inspection enables an incident condition report to be prepared for use in legal proceedings and to gather information to analyse the cause of accidents or incidents and the planning of road management and safety measures. 	<ul style="list-style-type: none"> Council representative with an appropriate level of knowledge of road maintenance and experience will inspect all reported defects. 	<ul style="list-style-type: none"> Record date first reported: date inspected, inspector, Location required action and date of completion. Specific Incident Report (SIR) required.
Programmed Defect Inspection	<ul style="list-style-type: none"> The intent of the Programmed Defect Inspections is to identify defects that may not be reported through Customer enquiries, council employees and occur 'between' Condition Inspections. Inspections undertaken in accordance with a formal programmed schedule to determine if the road infrastructure complies with the levels of service specified within the Road Management Plan. In addition, a notation must be recorded of any street/road inspected where no defect was apparent under the specific rigour of the inspection. 	<ul style="list-style-type: none"> Council representative with an appropriate level of knowledge of road maintenance and experience will inspect all reported defects. 	<ul style="list-style-type: none"> A record of each street/road is to be completed detailing the name of the inspector, the inspection date and a description of any defects that have been identified and require intervention as per the Road Management Plan. A record of the inspection is to be recorded on Council's Information Systems (for example, an Asset Management System or GIS) to enable the defect to be programmed for action with Council's routine maintenance work.
Condition Inspection	<ul style="list-style-type: none"> An inspection specifically to identify deficiencies in the structural integrity of the various components of the road infrastructure assets which if untreated, are likely to adversely affect the condition of the road network. Regular or periodic assessment, measurement and interpretation of the resulting condition data is required to determine the need for any preventive or remedial action to be programmed for the relevant treatment works. 	<ul style="list-style-type: none"> Inspection undertaken by external/internal officer under the direction of a qualified engineer or experienced technical officer with knowledge in road construction and maintenance practices. Roads, Footpaths, Kerb & Channel (pit lids, frames and lintels only), On-Road and Off-Road Bicycle Lanes within the road reserve are inspected once every 4 years. 	<ul style="list-style-type: none"> A record of the inspection is to be recorded on Council's Information Systems (for example, an Asset Management System or GIS) to enable the defect to be programmed for action with Council's routine maintenance work.

Appendix 2: – Inspection Requirements (Continued)

In addition to the road inspection requirements there is a specific inspection requirement for off-road bicycle paths within road reserves.

Management of shared bicycle and pedestrian paths is detailed in the Services Asset Management Plans - Roads and Pathways

Inspection Type	Purpose	Inspection Requirements	Reporting Requirements
Defect Inspection for Off-Road Bicycle Shared Pathway within Road Reserve	<ul style="list-style-type: none">Defect Inspections will identify defects as specified in the RMP.	<ul style="list-style-type: none">Council representative with an appropriate level of knowledge and experience of safety requirements for cyclists will inspect all reported defects.	<ul style="list-style-type: none">Record date first reported: date inspected, inspector, location required action and date of completion.

Appendix 3: - Road Asset Inspection Frequencies

Asset Group Category		Programmed Defect Inspection Interval
Hierarchy	Sub-Category	
Roads, Kerb & Channel (pit lids, frames and lintels only) and On-Road Bicycle Lanes		
Level 1.	Sub-Arterial Roads, Industrial Roads, Collector and Distributor.	Once a year.
Level 2.	Residential Streets, Courts and Fully Constructed ROW's.	Once in 2 years.
Level 3.	Unsealed Roads, Partially Constructed and Unconstructed ROW's.	Only by Customer Request.
Pedestrian Pathways and Off-Road Bicycle Shared Pathways within the Road Reserve		
Level 1.	High Pedestrian Traffic. <ul style="list-style-type: none"> Shopping centres, hospitals, schools, elderly citizens, activity centres, transport interchanges and any other high pedestrian traffic areas as per the "Footpath Register - Highest Usage Category". 	Once a year.
Level 2.	Low Pedestrian Traffic. <ul style="list-style-type: none"> Main roads, residential streets, industrial areas, and around recreation reserves (within the road reserve). 	Once in 4 years.
Line marking - In conjunction with Roads		
Level 1.	Sub-Arterial Roads and Industrial Roads, Collector, and Distributor.	Once a year.
Level 2.	Residential Streets & Courts.	Once in 2 years.
Regulatory Signs - In conjunction with Roads		
Level 1.	Sub-Arterial Roads and Industrial Roads, Collector and Distributor.	Once in 2 years – Night inspection only.
Level 2.	Residential Streets & Courts.	
Level 3.	Unsealed Roads only.	
Bridges/Major Culverts (within road reserves)		
All.	All.	Alternate every year between Level 1 visual inspections (In-house) to level 2 structural inspection (Consultant).

Appendix 4: - Roadway Defect Intervention Levels including On-Road Bicycle Lanes

Activity	Defect Type	Road Cat.	Intervention Levels	Description of Work	Programmed Defect Inspection	Target Rectification Response Time
Customer Requests	All	Level 1	Intervention requirement is an inspection to assess the extent of the request and determine 'appropriate' action. Necessary remedial action is referred to the relevant works program.	Responding to requests for action.	Not Applicable	Inspect within 2 working days.
		Level 2				Inspect within 5 working days.
		Level 3				Inspect within 15 working days.
Emergency Repairs	All Defect types.	All	<ul style="list-style-type: none"> Instigated by Customer Request (CRM). Repairs programmed by Inspecting Officer. 	As described in Pavement Defects below.	Not Applicable	Temporary repair within 2 working days. Permanent repair to be programmed as part of major patching/re-surfacing program.
Pavement Defects	Potholes.	Levels 1 & 2	Repair when they exceed 50 mm in depth and 300mm in diameter.	Patch surface in roadway using bituminous material for sealed surfaces or suitable gravel for unsealed roads to restore the surface.	Yes	Temporary repair within 10 working days. Permanent repair to be programmed as part of routine maintenance or major patching/re-surfacing program.
	Edge Breaks, Edge Drop Offs and Sealed Shoulder repairs.	Levels 1 & 2	<ul style="list-style-type: none"> Undertake edge break repairs when edges have broken back in excess of 150mm laterally and greater than 5.0m in length. Undertake edge drop-off repairs – typically involving adding crushed rock to the unsealed shoulder when drop off is 50mm over a 10m length. 	Patch or repair road pavement surface and edge using bituminous material for sealed surfaces or suitable gravel for unsealed roads to restore the surface.	Not Applicable	Temporary repair within 10 working days if initiated by a Customer Request (CRM). Permanent repair to be programmed as part of routine maintenance or Major Patching Capital Works/Re-surfacing programs and is subject to funding allocation.

Note: All works are dependent on annual budget allocations.

Appendix 4: - Roadway Defect Intervention Levels including On-Road Bicycle Lanes (Continued)

Activity	Defect Type	Road Cat.	Intervention Levels	Description of Work	Programmed Defect Inspection	Target Rectification Response Time
Surface Defects	Cracking - Longitudinal & Transverse.	Levels 1 & 2	15 mm or wider.	Crack seal as required.	Not Applicable	Refer to annual crack sealing program.
	Cracking - Block and Crocodile combined with pavement failure. Stripping and Delamination.	Levels 1 & 2	Greater than 10mm crack width, and 35 mm depression.	Repair surface defects. Routine Patching up to 5 sqm in area. Major Patching 5 to 25 sqm in area. Greater than 25 sqm in area referred to Major Patching Capital Works/Re-surfacing programs.		All Patching will be programmed and actioned in routine maintenance or referred to annual Major Patching Capital Works/Re-surfacing programs and is subject to funding allocations.
Line Marking	Poor line marking visibility.	Level 1	<ul style="list-style-type: none"> ▪ Severity 1: Broken & solid lines, parking lanes, road humps, directional arrows and chevron markings with less than 50% of original visibility. ▪ Severity 2: Statcon markings with less than 50% of original visibility. ▪ Severity 3: School crossing and pedestrian crossing with less than 50% or original visibility. 	Repair/restore effectiveness of line marking and raised pavement reflectors.	Yes	Completed within the line marking program.
		Level 2				Programmed and completed as funding allows.
Deformation	Wheel Ruts, Depressions, Corrugations and Shoving.	Levels 1 & 2	When defect is 35mm in depth 750mm wide and/or greater than 6m long.	Repair ruts, depressions, corrugations and shoving. Routine Maintenance Patching 0 to 25 sqm in area. Greater than 25 sqm in area referred to Capital funding allocations.	Not Applicable	All Patching will be programmed and actioned in routine maintenance or referred to annual Capital funding allocations.

Note: All works are dependent on annual budget allocations.

Appendix 4: - Roadway Defect Intervention Levels including On-Road Bicycle Lanes (Continued)

Activity	Defect Type	Road Cat.	Intervention Levels	Description of Work	Programmed Defect Inspection	Target Rectification Response Time
Unsealed Pavements	Poor condition.	Level 3	Inspect upon receiving a Customer Request (CRM); schedule remedial works as necessary.	Works as deemed necessary by Works Supervisor.	Not Applicable	Programmed by Works Supervisor & dependent on available budget.
Pavement Surface Drainage	Kerb and Channel blockage.	All	Where water flow along kerb and channel is impeded.	Unblock channel to enable free flow of water.	Not Applicable	Routine street sweeping.
	Kerb and Channel ponding.		Schedule works where channel defect exceeds 10 linear metres or where 3 or more bays are broken and cannot perform drainage operation or water does not drain away within 24 hours.	Restore channel to enable free flow of water.		Programmed with road reconstruction or re-surfacing programs depending on available funding.
	Table drains and cross over culverts blockages.		Inspect upon receiving a Customer Request (CRM); schedule remedial works as necessary.	Unblock drains to enable free flow of water.		Programmed by Works Supervisor dependent on available budget.
	Pit blockages.		When water flow to the pit is impeded.	Clean pit to enable free flow of water.		Cleaned as per drainage works program.
	Pit lids, frames and lintels broken.		When missing, collapsed or broken.	Replace if missing, collapsed or broken.	Yes	Repair as required dependent on available budget.
Right of Ways (ROWs)	Defects in Fully Constructed ROWs.	Level 2	As per level 2 roads	As per level 2 roads	As per level 2 roads	As per level 2 roads
	Defects in Partially Constructed and Unconstructed ROWs.	Level 3	By Customer Request (CRM) or annual fire hazard clearance works.	Works as deemed necessary by Works Supervisor.	Not Applicable	Inspect within 20 working days. Necessary works programmed & dependent on budget availability.

Note: All works are dependent on annual budget allocations.

Appendix 4: - Roadway Defect Intervention Levels including On-Road Bicycle Lanes (Continued)

Activity	Defect Type	Road Cat.	Intervention Levels	Description of Work	Programmed Defect Inspection	Target Rectification Response Time
Vegetation Management Includes traffic treatments, medians, islands and roundabouts where vegetation occurs.	Road reserve trees obstructing road, shared bicycle paths and pathway users.	All	All street trees - Inspection and/or trimming program.	Tree Management.	Not Applicable	Every 2 years.
	Private trees obstructing road and pathway users.		Not a Council responsibility. Notifications to residents by Local Laws Unit.	Private Trees.		Notify as required.
Roadside Street Furniture	Damaged or defective roadside furniture.	All	Inspect and rectify as necessary when notified through Customer Request (CRM).	Repair or replace as necessary.	Not Applicable	Inspect within 10 working days. Program repair depending on funding availability.
Signage and Traffic Management Devices	Poor signage visibility, damaged, graffitied or missing signs.	All	Traffic Management Signage identified by risk inspection or by Customer Request (CRM). Others signs by Customer Request (CRM).	Cleaning and/or replacement of signs.	Yes – only for all Traffic Management Signage defects only.	For Defect Inspection, repair within 40 working days. For Customer Request (CRM), inspect within 5 working days. Repair within 10 working days.
			Traffic Management Signage identified by Customer Request. Other signs by Customer Request.		Not Applicable	For Customer Request (CRM), inspect within 5 working days. Repair within 10 working days.
	Guard Rail; Safety Fencing.		Inspect and rectify as necessary when identified by Customer Request (CRM).	Replacement of damaged guard rails and safety fencing.		For Customer Request (CRM), inspect within 5 working days. Program repair depending on funding availability.

Note: All works are dependent on annual budget allocations.

Appendix 4: - Roadway Defect Intervention Levels including On-Road Bicycle Lanes (Continued)

Activity	Defect Type	Road Cat.	Intervention Levels	Description of Work	Programmed Defect Inspection	Target Rectification Response Time
Road Bridges and Major Culverts	Bridge structural hazard.	All	Works to be programmed in line with Level 1 & 2 VicRoads Bridge inspection.	The repair and maintenance of decks, joints, footings, abutments, wing walls and safety rails.	Yes	Make safe within 5 working days. Rectify within 90 days of inspection depending upon funding availability.
Utility Reinstatement, where Council undertakes the works on behalf of the Utility	Utility's temporary reinstatement works if it requires permanent completion by Council to ensure that the road asset integrity is restored.	All	Rectification works to be programmed after receiving notification from the relevant Utility.	Final reinstatement of pavement to match surrounding works and retain the pavement's structural integrity.	Notification by Utility.	Inspect within 40 working days. Program repairs.

Note: All works are dependent on annual budget allocations.

Appendix 5: - Pathway Defect Intervention Levels including Off-Road Bicycle Shared Pathways within the Road Reserve

Activity	Defect Type	Path Cat.	Intervention Levels	Description of Work	Programmed Defect Inspection	Target Rectification Response Time
Customer Requests	All	Level 1	Intervention requirement is an inspection to assess the extent of the request and determine 'appropriate' action. Necessary remedial action is referred to the relevant works program.	Responding to requests for action	Not Applicable	Inspect within 2 working days
		Level 2			Not Applicable	Inspect within 5 working days
Concrete/ Paved/ Asphalt Pathway Replacement & Repairs	High Pathways that have cracks or displacement equal to or greater than 20mm, collapsed, heaved, missing or sinking.	All	<ul style="list-style-type: none"> Pathway has loose, missing or dislodged components. Displacements or cracks of greater than 20mm. Sections have collapsed, heaved, missing or sinking. 	Patch/wedge with asphalt for temporary repair. Program works to remove or replace bays/paving/asphalt section and match existing pathway surface level. Refer to annual program for funding.	Yes	High Defects to be temporarily repaired within 30 working days. Then program temporarily repaired works and undertake these repairs in conjunction with High Defect types depending on available funding.
	Low Pathways that have cracks or displacement between 10mm to 20mm.	All	Displacement or cracks are between 10mm and 20mm.	Grind concrete bays to match existing pathway surface level. Note: If concrete has been grinded before, program for removal/replacement to match existing pathway surface level. Refer to annual program for funding.	Yes	Program repair works depending on available funding.
	No Action Required Pathways that have cracks or displacement below 10mm.	All	Displacement or cracks are between 10mm and 20mm.	No Action Required	No	No Action Required

Note: All works are dependent on annual budget allocations.

Appendix 5: - Pathway Defect Intervention Levels including Off-Road Bicycle Shared Pathways within the Road Reserve (Continued)

Activity	Defect Type	Path Cat.	Intervention Levels	Description of Work	Programmed Defect Inspection	Target Rectification Response Time
Utility Reinstatement, where Council undertakes the works	Utility's temporary reinstatement works requires permanent reinstatement by Council.	All	Rectification works to be actioned after receiving notification from the relevant Utility.	Permanent reinstatement of pavement to match surrounding works and retain the pathway's structural integrity.	Notification by Utility.	Inspect within 40 working days. Program repairs.
Utility Assets	Damaged utility assets.	All	Council will notify the responsible Service Authority of a damaged utility asset within pathways if the owner of the asset can be identified.	Notification to Utility Service Authority.	Yes	For Defect Inspection. Notify Service Authority within 10 days after completion of inspection. For Customer Request (CRM). Notify the Utility within 5 working days.
Unsealed Pathway Maintenance	Defective unsealed pathway Gravel pathway.	Not Applicable	Subject to Customer Request (CRM), site determination by Council's Supervisor. Wherever practicable, use materials that match existing.	Remedial work to address hazard evident.	Not Applicable	Within 40 days of requests.
	Unformed 'track'.	Not Applicable	Not Applicable	No maintenance required.	Not Applicable	Not Applicable.

Note: All works are dependent on annual budget allocations.

Appendix 6: - Local Boundary Roads & Structures Maintenance Agreements with Adjoining Councils June 2017

Boundary Road Agreements have been developed for the administrative arrangements between the councils involved. It contains the details of maintenance arrangements for which there has been a mutual agreement.

Local Roads	Structure	Adjoining Council	Banyule Hierarchy Classification	Length (m)	Pavement Width (m)	Pavement Type	Maintenance Authority	Agreement Type
Weidlich Road (Karingal Drive to Progress Road)	Local Road	Nillumbik	Distributor	299	10.9	Sealed from kerb to kerb	Banyule	Type 'A'
Progress Road (Weidlich Road to Ryans Road)	Local Road	Nillumbik	Distributor	1159	12.3	Sealed from kerb to kerb	Banyule	Type 'A'
Ryans Road (Progress Road to Wattletree Road)	Local Road	Nillumbik	Distributor	1350	Nom 7.6	Sealed from kerb to kerb or kerb to shoulder and/or table drain.	Banyule	Type 'A'
Cherry Street (Waioara Road to Wungan Street)	Local Road	Darebin	Distributor	530	7.0	Sealed from kerb to kerb	Darebin	Type 'A'
Waioara Road (Ruthven Street to Cherry Street)	Local Road	Darebin	Distributor	618	9.5	Sealed from kerb to kerb	Banyule	Type 'A'
Plenty River Drive (Under Greensborough Bypass)	Local Road	Nillumbik	Sub-Arterial			Sealed from kerb to kerb	Banyule/Nillumbik	Type 'B'
Beales Lane (Across Proposed VicRoads Road)	Local Road	Nillumbik	Distributor			Sealed from kerb to kerb	Banyule/Nillumbik	Type 'B'
Aqueduct Road (Across Proposed VicRoads Road)	Local Road	Nillumbik	Distributor			Sealed from kerb to kerb or kerb to shoulder and/or table drain	Banyule/Nillumbik	Type 'B'

Appendix 6: - Local Boundary Roads & Structures Maintenance Agreements with Adjoining Councils June 2017 (Continued)

'A'	Maintenance Authority: Routine maintenance activities of pavement between both kerb backs or shoulder and/or table drains (not all lengths have kerb both sides)
	Road Authority: Maintenance activities to road reserve/property boundary from back of kerb or shoulder and/or table drains is the responsibility of that Council on whose side it adjoins.
	Road Authority: Maintenance activities to road reserve/property boundary from back of kerb or shoulder and/or table drains (Adjoining Council – Darebin)
	Both Councils: Equal share of costs for significant maintenance costs as well as any capital works after consultation and mutual agreement to the proposed works (Adjoining Council – Nillumbik)
'B'	Maintenance Authority: Routine maintenance activities from road reserve/property boundary to road reserve/property boundary up to the centre of the VicRoads Freeway Reserves for the adjoining Council.
	Both Councils: Equal share of costs for significant maintenance costs as well as any capital works after consultation and mutual agreement to the proposed works.