



Road Management Plan 2007



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RMP REVISIONS:

Date	Details
30/08/2004	Draft Road Management Plan - Discussion
1/10/2004	Endorsed by Senior Management
11/10/2004	Council Briefing
18/10/2004	Public Viewing/comments for 28 days – no comments received
18/11/2004	Review with internal stakeholders regarding unmade infrastructure/level of Service
	Category of Level Of Service to cover Emergency situations and inclusion of a how to deal with existing Service Agreements or contracts.
24/11/2004	Review of type of defects for capture after trial areas completed
1/12/2004	Identification of defects considered dangerous and how these are treated.
13/12/2004	Road Register amended to exclude unmade laneways
20/12/2004	Road Management Plan report to Council
1/1/2005	Review Level of Service and Strategies during 12 month trial
6/1/2005	Bridge and Retaining wall Level of Service review
7/4/2005	Minor alterations suggested by Maunsells - consultant
7/9/2006	Revision of the Plan with reference to Council's RAMP
6/3/2007	Revision of LOS after trial period during 2005-2006.
21/3/2007	Finalised Road Management Plan (RMP)
	Submitted for Gazzetal

1.0 EXECUTIVE SUMMARY

This Road Management Plan defines the policies and practices for the maintenance of the road assets, the processes relating to road asset maintenance and the responsibilities of Council Managers.

The Victorian Government introduced and passed the Road Management Bill during the autumn 2004 sittings of Parliament. The purpose of the Road Management Act 2004 is to establish a coordinated approach and provide a legal framework for the management of the public roads that will promote a safe and efficient road network. It also recognises a responsible use of the road reserves for other legitimate purposes, such as the provision of utility services.

The road assets that are included are all assets directly associated with the road located within the road reserve and controlled by the Darebin City Council.

Council has identified external and internal key stakeholders to this Plan. Amongst other obvious users it is recognised that many other departments of Council have a key interest as either users of the asset and some as providers of other services to the Community.

Primarily, the intent of the Act is to:

- Establish a clear allocation of ownership of the road assets,
- Allocate responsibility for managing road assets,
- Develop effective decision making processes and procedures for the development of policies and setting of performance targets,
- Establish a framework for the management of the road network
- Sets out the rights and duties of road users,
- Establishes the principles which apply to road management
- Makes related amendments to the Transport Act 1983, the Road Safety Act 1986, the Local Government Act 1989 and certain other Acts and
- Provides for issues relating to civil liability arising out of road management;

The Road Management Act imposes specific statutory duties on road authorities to inspect, repair and maintain to a 'reasonable' standard those roads that form part of the public road network. It confirms the common law principle that roads are public open space, made available for the use by members of the public, and that all individuals have the right to travel over these roads.

The Act requires that the Council, keep a Register of Public Roads showing the roads for which it is the Coordinating Road Authority. Council and other road authorities will have separate Registers of Public Roads under their control. The Council's Road Register only includes details of the roads for which Council has responsibilities. Council is generally responsible for the overall management and development of the Council's local road network, which make up around 92% of the roads in the municipality. The responsibilities for maintenance of the Arterial road network and specified areas of the road reserves are allocated to VicRoads which is the Responsible Road Authority (RRA) for these roads.

The Road Register establishes a Council road hierarchy based on the function that each road performs. The road hierarchy categories are used only to determine service levels and maintenance standards. The road classifications or hierarchy adopted reflects the perceived risk associated with the vehicle and pedestrian usage of each road type and is used to differentiate service levels and maintenance standards.

Inspections of the road network form the cornerstone of the maintenance program and are undertaken on a regular basis to ensure that the road assets are being maintained in a safe manner and that adopted intervention levels are being met. Local circumstances such as the influence of schools, hospitals, community facilities or particular concentrations of older, disabled or other potentially vulnerable users are considered also.

The customer satisfaction surveys are considered in determining the "levels of service" This Plan builds on the assumption that existing levels of service targeted by Council are generally to the satisfaction of the users. The need to seek a balance of the economic, social, safety and environmental expectations of the community as well as the requirements of the Act to achieve 'reasonable' service targets are also considered. A combination of risk assessment and road/footpath hierarchies are used to determine the response times for road maintenance.

As customer expectations change and/or budgetary constraints have an effect it will be necessary to review the levels of service stated in the plan. The Road Management Plan and the response times or Level of Service targets will be reviewed every 4 years.

2.0 BACKGROUND

Road asset management involves the management of both physical assets and the aspects of the use and operation of those assets that affects asset condition. It applies to all road assets including pavements, bridges, roadsides, signs, delineation, traffic control equipment etc. It involves the management and maintenance of those assets. It may also involve the disposal of assets when they are no longer required, are replaced or are transferred to another agency.

This road management plan (The Plan) defines Darebin Council's policies and practices for the maintenance of existing road assets, the processes relating to road asset maintenance and the responsibilities of Council Managers with respect to road asset maintenance.

The Plan aims to ensure that Council meets its statutory responsibilities and provides best value to the community for the funding available for maintenance.

This Plan is fully integrated with other Council documents including fundamental inputs from:

- Council policies and strategies;
- Relevant Government legislation;
- Council objectives for road maintenance, in terms of the requirements stated in the Council Plan;
- The Council and Government budget for the maintenance of road assets.
- Road Asset Management Plan

2.1 Purpose of the Plan

The Victorian Government introduced and passed the Road Management Bill during the autumn 2004 sittings of Parliament. The purpose of the Road Management Act 2004 is to establish a coordinated management system for public roads that will promote safe and efficient State and local public road networks and the responsible use of road reserves for other legitimate purposes, such as the provision of utility services.

The Road Plan has been prepared to provide an understanding of Council's assets and concepts for their sustainable provision and provides a tactical approach towards achieving a cost-effective solution that meets Council's strategic goals in the long-term. It is also a document that provides compliance with the Road Management Act 2004. A listing of the roads which Council has responsibility for maintenance under this 'Plan' is contained separately in the 'Road Register'.

2.2 Infrastructure assets included/excluded in the Plan

The road assets include all assets directly associated with the road located within the road reserve and controlled by the Council. The pavement maintenance including kerb and channel on Declared Main Roads and State Highways is funded and maintained by VicRoads. The road network in Darebin is largely owned, planned and managed by Council and VicRoads.

A subsequent Code of Practice introduced by VicRoads in 2004 and known as "Operational Responsibility for Public Roads" sets out clear responsibilities for road maintenance and management between Councils and VicRoads.

Road assets that are considered in this plan are listed below and have been broken down into the following components;

- **Road, laneway and car park pavements**
Road pavements
Public Car parks and kerbside parking lanes
Laneways that are reasonably required for public access are covered in this Plan
Nature Strips
Retaining walls
- **Footpaths and Bike paths**
- **Surface drainage**
Kerb and channels including AG drains (Agricultural Drains)
Drainage Pits/Covers
- **Traffic Facilities**
Traffic devices (roundabouts, speed humps etc.),
Traffic signals on local roads
Signs, Line Markings, Guardrails
- **Bridges and Culverts – road and foot bridges**
- **Street Furniture – Bins, seats etc.**
- **Street Lighting – Non standard light poles and fittings**

Other road related assets that are not considered in this plan are:-

- Pavements and kerb and channel on Arterial Roads-VicRoads
- Vehicular Crossings – these are the responsibility of property owners
- Private property drains within the road reserve connecting to Council's legal point of discharge– these are the responsibility of property owners
- Landscaping
- Most street lighting (Standard) – timber and concrete power poles (not Council's Assets)
- Underground Council drainage is considered under a separate AMP
- Private driveways, private roads, private laneways and private car parks
- Footpaths/walkways, furniture/lighting on reserves/parks and buildings (covered under separate AMP)
- Bundoora Park roads, paths and car parks (crown land) managed by Bundoora Park Management Committee (Council)
- Entry roads, paths, staff and customer car parks associated with facilities such as Child Care Centres, Community Centres etc. These are considered part of the facility.

Those Council assets not included in this plan will be covered under separate asset management plans to be prepared for Open Space/Parks & Gardens, Buildings and Drainage.

2.3 Key stakeholders in the plan

Stakeholders are those individuals/groups who are, or perceive themselves to be, affected by a decision or activity. Council believes that there are external and internal key stakeholders of this Plan. It is recognised that many other departments of Council have a key interest in this plan as, either users of the asset and some as providers of other services to the Community. The order of the list does not represent any priority but rather is a general list of all parties concerned. Over time, the mix of stakeholders may change.

2.3.1 External Stakeholders

- The Ratepayers of the City of Darebin
- Road users in general – freight and motorists associations, industry and trader groups like RACV, Northland etc.,
- State Government – VicRoads, DSE
- Utility/Service Providers such as Water, Gas, Electricity, Telecommunications, Drainage and Sewerage authority(Melbourne Water),
- Public Transport operators

2.3.2 Internal Stakeholders

- The Councillors of the City of Darebin
- Asset Management – Infrastructure Planning
 - Road condition structural inspections services
 - Preparation and reporting of Council's long term Capital Works Program
 - Ensure road asset register is kept current and accurate
 - Supporting the on-going development of this RMP
- Asset Management – Capital Works Planning
 - Engineering Design and construction standards achieved
 - Assessment and supervision of subdivision developments to ensure compliance with Council standards and delivery of Capital Works Program
 - Provision of managed contract maintenance services
- Asset Management – Transport Planning
 - Traffic Engineering Design and assessment for vehicle and pedestrian safety which may include traffic devices such as traffic signals, roundabouts, speed humps and the like
- City Services Department
 - Road and footpath condition defect and safety inspection services and repairs
 - Respond to reactive issues generated from complaints
- Environment & Amenity Department
 - Asset Protection with regard to new building development and works undertaken by Authorities/Utilities within the road reserve
- Finance and Risk Management Department
 - Asset recognition and depreciation issues
 - Input in preparing and review of the long term financial plan
 - Risk assessment to identify opportunities and threats and avoid or mitigate losses

2.4 Purpose of Road Management Act 2004

2.4.1 Purpose and Outline

The Road Management Act 2004 has been introduced to provide a legal framework for the management of the public road network. The intent of the Act is to:

- Establish a clear allocation of ownership of the road assets,
- Allocate responsibility for managing road assets,
- Develop effective decision making processes and procedures for the development of policies and setting of performance targets,
- Establish a framework for the management of the road network
- Sets out the rights and duties of road users,
- Establishes the principles which apply to road management
- Makes related amendments to the Transport Act 1983, the Road Safety Act 1986, the Local Government Act 1989 and certain other Acts and
- Provides for issues relating to civil liability arising out of road management;

The Road Management Act imposes specific statutory duties on road authorities to inspect, repair and maintain to a 'reasonable' standard those roads that form part of the public road network.

2.5 Role of the Road Authority

The Act provides that Council as the road authority is to exercise its functions within an overall policy and budgetary context and must take into account the needs and expectations of the community and the resources available to meet them.

2.6 Duties of the Road User

All road users have a duty of care under the Road Management Act 2004, Section 106 and 138 with particular obligations as prescribed in Section 17A of the Road Safety Act 1986.

The Road Management Act confirms the common law principle that roads are public open space, made available for the use by members of the public, and that all individuals have the right to travel over public roads. The Act also confirms that owners and occupiers of land adjoining a road have a right of access to the road.

The Act includes amendments to the Road Safety Act that clarifies the duties of road users, drivers, riders and pedestrians. The responsibilities include travelling safely having regard to the road, weather and traffic conditions, and avoiding unreasonable risks to other road users.

The Act requires persons wishing to make a claim against a road authority in relation to the performance of the road management functions to give notice of the incident within 30 days.

2.7 Obligations of Road Users

2.7.1 A person who drives a motor vehicle on a highway must drive in a safe manner having regard to all the relevant factors, including (without limiting the generality) the —

- 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.

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

2.7.3 A road user must —

- have regard to the rights of other road users and take reasonable care to avoid any conduct that may endanger the safety or welfare of other road users;
- 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.

2.8 Delegations

Council has delegated by instrument of Delegation various provisions of the Act and Regulations to various Council officers for the purposes of efficient administration of this Plan. The Chief Executive Officer is empowered under delegation to amend any of the Appendices attached and to periodically change and update the Register of Public Roads.

2.9 Relationship to other planning documents

Council has recognised that a corporate approach is essential towards good sustainable Asset Management and cannot be delegated solely to technicians. If the renewal and maintenance challenge is to be met, it will be by Senior Management taking a corporate wide and service outcome focus. For this reason strategic and corporate wide information is produced and assessed at a Senior Management level.

An Asset Management Policy and Asset Management Strategy have been developed and adopted by Council. These detail Council's promise to support and achieve sustainable asset management practices. This commitment has enabled the preparation of long term financial plans rather than just annual budgets.

The Council's Municipal Strategic Statement (MSS) outlines the strategic planning vision for Darebin and identifies the challenges and opportunities confronting the City, both now and into the future. The MSS is a medium term (5-year) strategic plan which is reviewed periodically. This review involves detailed consultation with residents and business communities. This feedback ensures the MSS remains a relevant strategic planning document for Darebin.

2.10 Terminology

Some of the terms relevant to understanding the information in Council's Road Management Plan and Road Register include:

- **Coordinating Road Authority (CRA)** - has coordination functions and powers in relation to works and infrastructure and responsibility for overall management of the roads. This role includes coordination of development and use of road reserves such as for transport purposes, utility infrastructure and leasing or licensing but also includes maintaining a Register of Public Roads, naming of roads and declaring controlled access roads.
- **Responsible Road Authority (RRA)** - has operational functions and powers and responsibility for construction, inspection, maintenance and repair of the road infrastructure as assigned by the legislation or accepted by transfer arrangement.
- **Code of Practice** - a document made by the relevant Minister, which provides practical guidance to the implementation of the RMA (eg draft Code of Practice "Operational Responsibility for Public Roads").
- **Urban Area** - is defined in the RMA and in general terms means areas with speed limits less than or equal to 60 kph or buildings on the land next to the road at specified intervals or street lighting at specified intervals.
- **Roadway** - the area of land in the road reserve developed for driving or riding of motor vehicles.
- **Roadside** - part of the area of land between the roadway and the road reserve boundary (property line).
- **Arterial Road** - a road which is declared to be an arterial road under section 14 of the Act;
- **Council** - the City of Darebin as the coordinating road authority and as the responsible road authority (as applicable);
- **Public Highway** - any area of land that is a highway for the purposes of the common law;
- **Public Road** - a public road within the meaning of section 17 of the Act
- **Sign** – includes any associated support structure not belonging to another authority eg. power pole.

2.11 Availability of Plan

This Plan is available at the following location and may be viewed, free of charge, by the public during the hours of 8.30am to 5.00pm each working day:

Darebin City Council
Preston Town Hall
Cnr. High Street and Gower Street Preston VIC. 3072
Customer Service: Phone 8470 8888

This Plan may also be viewed in digital form (PDF) on the Council website www.darebin.vic.gov.au

3.0 ASSET DESCRIPTION

3.1 Road Register

The **Road Management Act 2004** (RMA) requires that a road authority, such as Council, keep a Register of Public Roads showing the roads for which it is the Coordinating Road Authority (CRA). Council and other road authorities will have separate Registers of Public Roads under their control. The Council's Register only includes details of the roads for which Council has responsibilities.

Council is generally responsible for the overall management and development of the Council's local road network, which make up around 92% of the roads in the municipality. The responsibilities for maintenance of the main road network (State Highways and Declared Main Roads) and specified areas of the road reserves are allocated to VicRoads which is the Responsible Road Authorities (RRA) for these roads.

The road network in Darebin consists of approximately:-

- 56 km of Arterial Roads where VicRoads is the Responsible Road Authority
- 530km of local roads where Council is the responsible Road Authority
- 70km of made laneways
- 1,020km of footpaths
- 1,150km of kerb and channel

The Register establishes a Council road hierarchy based on the function that each road performs. The road hierarchy categories are asset types used only to determine service levels and maintenance standards.

The road register contains information about the location, length, type, capacity and year of construction of the road segments.

A person searching the Darebin Roads Register can establish if a particular road is included and thereby conclude that Council is the initial point of contact. If a road is not included, it will be the responsibility of another road authority such as VicRoads or by a Private road authority such as a 'Body Corporate' or by a private owner of the propert(ies).

The Road Register will be **updated annually**; however it is only current to the "last updated date". The Register contains details such as, Road name, Location, and Classification (Hierarchy). The Road Register is contained in a separate document.

3.2 Who should I contact about roads in the Council Register?

As a general guide, for any matter relating to a:

- **State Highways or Main Roads** in Council's Register contact **VicRoads** except for footpaths and nature strips.
- **Link Roads, Collector Roads, Access Roads or laneways/Bikepaths** in Council's Register, contact Darebin City Council.
- **Major Roadworks** such as reconstruction and resurfacing or development and use of any part of the road reserve, contact Council's **Asset Strategy Section on 8470 8888**, or
- **Maintenance (Operational) matters** including traffic management, maintenance, hazards and repairs contact Council's **Road Maintenance Section on 8470 8888**.
- **Bundoora Park** contact the Bundoora Park Management Committee
- **Private Roads** such as roads within a multi-unit development contact the Body Corporate (contact details usually attached on the street facing wall) or the Latrobe University for roads within the University site.

3.3 Other roads for which Council has responsibilities but are not part of Council's Register of Public Roads

The following are other roads which are not included on Council's Roads Register of Public Roads but where Council has some responsibilities in the nature of a road authority arising from arrangements that predate 1 July 2004.

- Roads within the Research Development Park at Latrobe University (Private property)
- Roads, Car parks and Bridges at Bundoora Park (crown land)
- Roads, Car parks and Bridges at Darebin Parklands (Council owned)

3.4 Road and Footpath Hierarchy

The Act establishes a road hierarchy for all roads in the municipality. The road classifications or hierarchy adopted reflects the perceived risk associated with the vehicle and pedestrian usage of each road type and is used to differentiate service levels and maintenance standards.

The hierarchies also take into account current and expected traffic characteristics and use, having regard to local transport and development plans. Local circumstances such as the influence of schools, hospitals, community facilities or particular concentrations of older, disabled or other potentially vulnerable users have been considered and taken into account. The hierarchies used in this Plan are shown in Appendix 3 of this Plan.

3.5 Road Management Responsibilities

3.5.1 Freeways

Darebin does not have any 'Freeways' within the municipal boundaries.

3.5.2 Arterial Roads - VicRoads

A 'Code of Practice' provides practical guidance in determining the physical limits of responsibility between road authorities for different parts or elements within the road reserve of public roads. It provides for the demarcation of responsibility to ensure that accountability for road infrastructure rests with a single entity. The code is called 'Code of Practice – Operational Responsibility for Public Roads' and is available from VicRoads..

The section of Arthurton Road from Goldsmith Grove to Merri Creek (includes the Arthurton Road bridge) is an Arterial Road having being gazetted on 21 September 1955. The rest of Arthurton Road east of Goldsmith Grove is a local road.

Footpaths along Arterial Roads are the responsibility of Council.

3.5.3 Public Roads and footpaths

All public roads, right-of-ways and footpaths, not belonging to VicRoads and listed in the road register are the responsibility of Council.

Where a boundary road exists between Darebin/Moreland and Darebin/Banyule, each Council has operational responsibility for that part of the road that lies within its municipal boundary. It is understood that any upgrade works on any of the boundary roads are shared on a proportional basis.

3.5.4 Car Parks

Car parks included within the road register are those that the public has access to and Council is responsible for the management and enforcement provisions.

3.5.5 Surface Drainage

Responsibility for upgrading of any surface drainage where a kerb and channel or spoon drain crosses a municipal boundary shall be agreed to by the Councils involved. Generally, any upgrade or maintenance works on one side of the municipal boundary shall be funded by that Council.

3.5.6 Private Property Drains in Road Reserves

Property drains located within the road reserve and connected to Council's legal point of discharge (Kerb and Channel, open drain or underground drain) are considered private drains and the management and maintenance of these is the responsibility of Owner/Occupier.

3.5.7 Nature Strips

The mowing of the nature strip is the responsibility of the adjoining property owner. Any alteration to the nature strip by way of planting of any trees/shrubs requires consent from the Council. Any difference in levels, in particular adjacent the footpath will be fixed by Council.

3.5.8 Bridges

Bridges along Arterial Roads are considered part of the road network and as such belong to VicRoads. The responsibility for the management and maintenance of these bridges lies with VicRoads.

All railway line bridges that cross above roads, and level crossings are the responsibility and maintained by the Rail authority.

All other road and footpath/bikepath bridges belong to Council. Some footbridges along shared boundaries along the creeks have a shared responsibility between neighbouring Councils. All road and footpath bridges except for those within the Northcote Golf Course are included in the Asset Register.

3.5.9 Public Transport Facilities

3.5.9.1 Passenger Shelters/Bus Stops - Shelters are the responsibility of either the Council, public transport operator, Department of Infrastructure or private company.

3.5.9.2 Trams - Yarra Trams provides the tram services within Darebin. They have many assets in the road reservation such as, tram tracks, overhead powerlines and shelters. Tram operators are responsible for the tram track reserve area within 450mm each side of the outer track rails in road reserves including crib crossings installed to protect pedestrians crossing tram tracks. Council is responsible for the road reserve outside these limits.

3.5.9.3 Trains - Connex Trains provides the train services within Darebin. All assets associated with the train services are located in a railway reservation, however, where the railway and road reservations cross each other, both road and railway assets interface and the responsible agencies must work-in together. Connex Trains have many assets other than the tracks and the overhead power supply at locations such as, bridges, boom gates and fencing. Train operators are responsible for all components of the rail track reserve area within the road boundaries to a minimum of 2.135 metres each side of the outer rails or the extent of the boom gate in metropolitan Melbourne or as agreed. Council is responsible for the road reserve outside these limits.

Council has leased a number of locations from the PTC along the Train Reserve for pedestrian and drainage access. The locations of these are too numerous to detail in this plan.

3.5.10 Private Roads

Generally roads within private property are not the responsibility of Council. Darebin Council has many 'private roads' belonging to either a body-corporate, state instrumentalities such as Department Human Services, Transport corporations and Educational Institutions.

3.5.11 Unmade Roads, Footpaths and Laneways

Construction of unmade infrastructure is undertaken in accordance with the Local Government Act. This means that a Special Charge Scheme is declared where associated costs are apportioned to abutting property owners. The inspection and maintenance of unmade roads and laneways where house frontages exist are covered in this Plan. The maintenance of unmade laneways (ROWs) that are **not** reasonably required for public access is not covered by this Plan.

3.5.12 Bundoora Park

Bundoora Park is designated crown land with the Darebin Council being nominated as the management authority. All roads, carparks and bikepaths within this park are therefore the responsibility of the Council but are not included in the Road Register.

3.5.13 Infrastructure associated with Parks and Facilities(Buildings)

All entry roads, carparks, footpaths and bikepaths and the like within a Park or Facility are the responsibility of the Council but are not included in the Road Register.

3.5.14 Service Authorities

All assets owned by a Service Authority contained within the road reserve are maintained by that authority, eg, Water, Gas, Electricity, Telecommunications, Bus Shelters, etc. and is covered in the Ministerial Code of Practice – Management of Road and Utility Infrastructure in Road Reserves.

3.5.15 Lighting

Darebin City Council is responsible for lighting facilities on public roads. The ongoing maintenance and management (excluding costs) of street lighting facilities are generally the responsibility of the electricity distribution business.

Council is also responsible for street lighting facilities for some specific schemes (such as decorative schemes) eg. High Street Preston adjacent the Town Hall and non-standard light poles and fixtures in new subdivisions such as, Mount Cooper, Gresswell Grange, Springthorpe, Central Creek and Lancaster Gate.

3.5.16 Bike Paths along Open Space

The maintenance of Bike paths along creeks and other open space (crown land) is a Council responsibility. This agreement was made between Council and Melbourne Water prior to the construction of the path and has been included in the Road Register.

3.5.17 Vehicle Crossovers

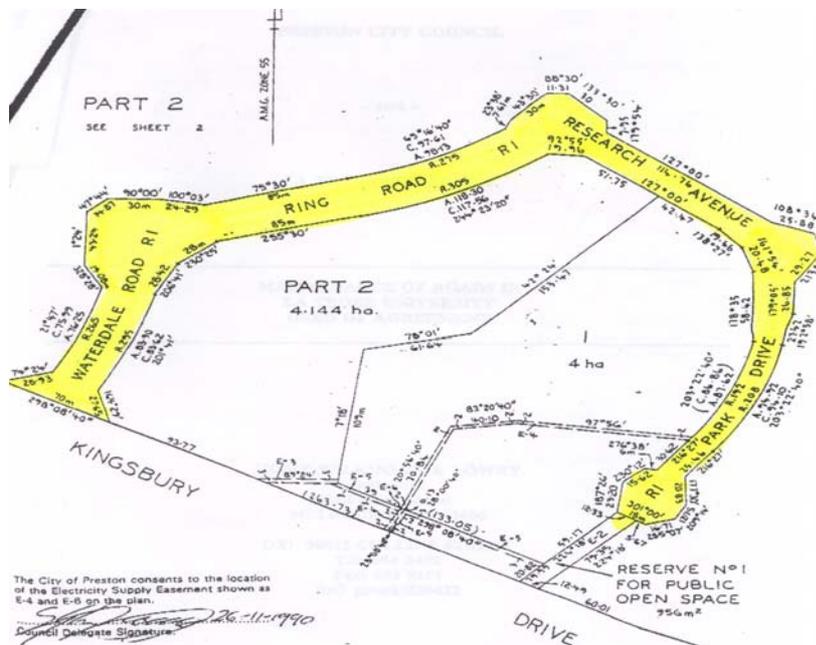
The owner of the premises must ensure that each vehicle crossing to the premises from an adjacent road and any channel forming part of the crossing is maintained to the satisfaction of Council. It is recognised that the section of vehicle crossing along the footpath line serves a dual purpose (pedestrian use and vehicle traffic) and therefore this section will be maintained by Council.

3.5.18 Overhanging Trees

Overhanging trees from abutting properties are the responsibility of the adjoining property owner. Council will however, undertake scheduled inspections and may issue notices to assist owners with identifying these problems.

3.5.19 La Trobe University

Darebin Council has an existing agreement with La Trobe University to maintain the roads leading to the business incubator. The roads included in this agreement are shown on the map below. All other roads within the University site are the responsibility of La Trobe University.



3.5.20 Responsibility for Non Council Assets

Where assets are identified as not the responsibility of Council, the responsible party shall comply with all codes and industry standards with regard to their management and maintenance. This will include approvals for work on the asset and the associated reinstatement by the responsible party for damage to the asset or adjoining assets.

3.5.21 Repair of damaged Council Assets

Where damage has been caused to a Council asset or road, the party that caused that damage shall be responsible for cost of the damage to ensure that it is safe and operates at the level it previously operated or higher. In particular where secondary or 'consequential' damage has been caused to Council's assets such as subsidence from water damage at a location other than the specific site of the asset works or repairs, the damage must be repaired by the responsible party to Council's satisfaction.

3.6 Demarcation

Demarcation will generally be defined within the relevant Codes of Practice for various assets and responsible authorities. The following Codes, relevant at the date of adoption of this Plan, shall be used to resolve any demarcation that may arise:

- Code of Practice for Operational Responsibility for Public Roads
- Code of Practice for Road Management Plans
- Code of Practice for Managing Utility and Road Infrastructure in Road Reserves
- Code of Practice for Worksite Safety – Traffic Management

4.0 LEVEL OF SERVICE

The Plan builds on the assumption that existing levels of service targeted by Council are generally to the satisfaction of the users as indicated on the annual satisfaction surveys and by virtue of the fact that complaints in relation to everyday performance of the assets by and large are minimal. The results of these surveys including risk management reports, the condition of the road, complaints received and injury crashes are also taken into account in reviewing users requirements.

The level of service is seen as a balanced approach where consideration has been given to factors such as, resources available (both physical and financial) and the many competing demands on Council.

4.1 Risk Assessment

A Risk assessment approach is seen as the best way to allocate available resources and considers the severity of the defect and the road hierarchy in allocating a suitable response time. The objectives of this type of approach is to separate the minor acceptable risks from the major risks, and to provide data to assist in the evaluation and treatment of these risks. This analysis has been used in determining the response times, frequency of inspections and options for treatment of the risks identified. These processes, in combination with available resources have been considered to be the main factors in setting reasonable levels of service. This adopted approach follows the suggested principles and guidelines of AS/NS 4360: Risk Management Australian standard.

All defect types likely to be found on the road reserve were evaluated and a risk assessment undertaken that considered both likelihood and consequence. The details of this analysis is shown in Appendix A of this Plan. An overall Risk Score is determined by the product of the road hierarchy and the defect risk assessment score. The result of the score determines the response time allocated to the defect.

4.2 Road and Footpath Classification

Roads and footpaths within Council are classified in a hierarchial system based on traffic and pedestrian volumes. The following definitions have been developed to determine the hierarchial system used:-

Road Hierarchy	Description	Length of Network
1	<p>Made Laneways/Right-of-Ways incl. Bikepaths– Those roads where the main function it to provide rear access to properties for delivery of goods, as in the case of commercial premises, or as a means to garage a car in the property in the case of residential properties.</p> <p><u>Very Low Pedestrian volumes</u></p>	88,350 m
2	<p>Access Roads incl. car parks (<3000vpd) – Those roads whose main function is to provide access to abutting properties or where the main function is to provide access to limited numbers of properties, or which provide almost exclusively for one activity or function.</p> <p><u>Low Pedestrian volumes</u></p>	415,664m
3	<p>Collector Roads (between 3000-5000vpd) – Those roads whose main function is to supplement arterial roads in providing for traffic movements, or which distribute traffic to local street systems</p> <p><u>Moderate Pedestrian volumes</u></p>	28,325m
4	<p>Arterial Roads-VicRoads – Roads whose function is predominantly for long distance trips and commuting between centres of population, and between these centres and the major road network</p> <p>Link Roads (>5000vpd) including 'Hot-Spots' – Those roads whose main function is to perform the principal avenue of communication for large traffic movements and/or between important centres and main roads/state highways.</p> <p><u>High Pedestrian volumes incl Hot-Spots</u></p>	55,545m 68,225m

4.3 Response Times

To resolve if maintenance is required, it is necessary for the defect to attain a compulsory level of decay, called the intervention level. A response time that takes into account a combination of risk and road/footpath hierarchy is considered the most reasonable and cost effective method of allocating priorities within limited resources. The tables below show the risk methodology used and the subsequent response times adopted:-

5 x 5 Risk Analysis Matrix			Consequences				
			AS 4360 Descriptions				
AS/NZS 4360			1	2	3	4	5
Likelihood - Description	Likelihood or Probability	Council Likelihood Ranking	Insignificant	Minor	Moderate	Major	Catastrophic
A - Almost certain	90%	5	5	10	15	20	25
B - Likely	70%	4	4	8	12	16	20
C - Possible	50%	3	3	6	9	12	15
D - Unlikely	30%	2	2	4	6	8	10
E - Rare	10%	1	1	2	3	4	5

This Risk matrix was used to determine the level of Service or Response Time to be adopted towards the making safe and repair of any defects found.

Risk Score Start at	AS/NZS Levels - Descriptions	Council Criticality Risk Descriptions	Response Times depending on Hierarchy	
Hierarchy X Risk				
Emergency situations		Extreme Risk – imminent danger and life threatening	A+	Respond to request within 1 hour & make safe immediately. Repair within 1day
4 x 15 = 60	E – Extreme	Extreme Risk - immediate action required	A	Respond to request & make safe within 24 hours. Repair within 90 days
4 x 10 = 40	H – High	High Risk – Senior Management attention required (potential danger but not life threatening)	B	Respond to request & make safe within 72 hours. Repair within 180 days of inspection or notification.
4 x 5 = 20	M – Moderate	Moderate Risk – Management responsibility must be specified (No danger but possible trip/fall or accident occurring)	C	Respond to request & make safe within 7 days. Repair within 360 days of inspection/notification.
4 x 3 = 12	L2 – Low	Low Risk – manage by routine procedures	D	Respond to request within 10 days & make safe as soon as practical. Repair within 540 days of inspection/notification
<12	L1 - Low	Insignificant Risk – manage if available resources are available	E	Respond to request within 10 days, prioritise and program work annually depending on severity and available resources.
Contract, Service Agreement or Special Case		As per contract or service agreement specification or for inclusion in the Capital Program	S	Notify responsible Contractor, Service Provider or Capital Works Planning As Soon As Possible.

Due to the uncertainty of the number and type of defects that will be found after defect inspections and whether existing resources will be able to cope with the demand a transition period will be required to achieve the response times stated.

Definition	Description
Respond	Make initial contact following a request for service either by phone or in person and agree on a course of action.
Make Safe	Isolate defect and take action (temporary or permanent) to remove risk to the community
Intervention Level	A defect on an asset has reached the level where maintenance is required to bring it back to the required standard

Where it is not possible to rectify within the response times shown due to the level of resources required or workload, appropriate warning of the hazard is to be provided until the repair can be completed.

5.0 Management and Maintenance Standards

Intervention levels serve as trigger points in determining whether repair works are to be carried out. As a general practice, intervention levels will be regularly monitored to reflect changing conditions and best appropriate practice standards, and it is anticipated that the intervention levels established may also change over time in relation to other Council roads and resource allocations.

Standard Job Description	Risk Score	Hierarchy	Intervention Level	Response Times
5.1 ROAD SURFACE				
POTHLES (sq.m.) - Pavement surface patching of potholes using appropriate materials to repair the defect and restore the riding surface to a smooth condition. These are defined as small breaks and depressions where loss of pavement wearing surface has occurred.	4 x 15=60	4	Condition 1: All potholes on the road surface	A
	3 x 15=45	3		B
	2 x 15=30	2		C
	1 x 15=15	1		D
DELAMINATION (sq.m) – Loss of an area of wearing course layer. Usually there is a clear delineation of the wearing course and the layer below.	4x9=36 3x9=27	3,4	Condition 1: Delamination of the road surface	C
	2x9=18	2		D
	1x9=9	1		E
PAVEMENT FAILURES/PATCHES (sq.m) - Treatment of isolated failed pavement , including bluestone laneways requiring excavation of the pavement such as 'crocodile cracking' or deteriorated patches by replacement with new material or improvement of existing material, including reinstatement of road surface	4 x 8=32 3 x 8=24	3,4	Condition 2: When a failed area results in danger to the public, the sealed surface no longer holds, extensive shoving has occurred and road surface drainage is no longer effective. This includes crocodile cracking. Conventional methods of maintenance fail to maintain the surface.	C
	2 x 8=16	2		D
	1 x 8=8	1		E
DEFORMATIONS (Depressions/Shoving/Rutting) (sq.m) - Localised distortion and or disintegration of the pavement surface associated with cracking, heaving and or subsidence or loss of structure..Application of a levelling course of bituminous materials to depressed or rutted areas of pavement.	4 x 4=16 3 x 4=12	3,4	Condition 3: Subsidence >100mm under a 3m straight edge.	D
	2 x 4=8 1 x 4=4	1,2		E
LINE CRACK SEALING (sq.m) - Filling of cracks and joints, excluding "crocodile" cracking, using liquid bituminous sealants. Notify Infrastructure Planning for inclusion in capital Works Program	4x3=12	4	Condition 2: All cracks >5mm width – program developed for Capital Works from 1 in 4 year structural inspection.	S
	<12	1,2,3		S
UTILITIES/TRADES (sq.m) – Temporary patches. Arranging for permanent reinstatement of service trenches.	4x9=36 3x9=27	3,4	Condition 1: Any trench or patch temporarily reinstated that is not smooth or level with the adjacent pavement	S
	2x9=18	2		S
	1x9=9	1		S
SKID RESISTANCE - POLISHING/TEXTURE LOSS (sq.m) - Application of bituminous materials and cover aggregate areas of pavement <25m ² with stripping, flushing and bleeding	4x10=40	4	At approaches to intersections or bends Condition 1 or 2: Treat when: (a) stripping (>50% loss of aggregate for an area >5m ²) (b) bleeding for an area >5m ² (substantial immersion of aggregate into bitumen binder)	B
	3x10=30 2x10=20	2,3		C
	1x10=10	1		E
	<12	1,2		E

Standard Job Description	Risk Score	Hierarchy	Intervention Level	Response Times
5.1 ROAD SURFACE (cont)				
PAVEMENT CLEANING (l.m.) - Cleaning of pavement including intersections, kerbs and channels to remove debris/weeds which is a danger to traffic or pedestrians or prevents the free drainage of the pavement.	4x4=16	4,3	Condition 1: When accumulation of aggregate, dirt or debris prevents the free drainage of the pavement	D
	3x4=12	1,2		E
ROAD MARKING and/or LINEMARKING (l.m.) - Regular painting of all pavement markings, including linemarking and raised pavement reflectors. Missing, illegible or confusing.	4x12=48	4	Condition 1: broken & solid lines, parking lanes, directional arrows and chevron markings with <50% of original visibility or Condition 2: Statcon Markings with <50% of original visibility or Condition 3: School Xing and Pedestrian Xing with <50% or original visibility	B
	3x12=36	2,3		C
	2x12=24	1		D
EDGE BREAKS/DROP REPAIR (l.m.) - Repair of broken edges of seal to line and level to maintain nominal sealed width. These are defined as fretting along the edge of the channel and may result in a reduced seal width but usually associated with eroded or weak shoulders in the vicinity of the bitumen edge.	1x12=12	4	Condition 2: <ul style="list-style-type: none"> Broken or irregular edge with a mean dimension of greater than 150mm width or Vertical displacement >50mm between pavement surface and shoulder 	D
	4x3=12	1,2,3		E
PROUD/SUNKEN/DAMAGED SERVICE COVERS (No.) - -realign pit covers level with adjacent road or ground surface	3x3=9	4	Condition 2: Difference in surrounding level is >= 40mm	C
	2x3=6	2,3		D
	1x3=3	1		E
WEED GROWTH –Laneways reasonably required for Public access only (sq.m) – Where weed overgrowth restricts passage or could fuel fire	4x6=24	4	Condition 1: Where growth is over 300mm high NOTIFY STRET CLEANSING	E
3x6=18	2,3	D		
2x6=12	1	E		
DUMPED RUBBISH – Laneways reasonably required for Public access only (cu..m) – Where rubbish dumped in the laneway	1x3=3	1	Condition 1: Dumped rubbish material NOTIFY STRET CLEANSING	E

Standard Job Description	Risk Score	Hierarchy	Intervention Level	Response Times
5.2 FOOTWAYS				
TRIP HAZARD - caused by Trees	4x20=80	3,4	Condition 1: Footpath 5mm to 20mm step (Make safe by grinding) Condition 2: >20mm caused by differential settlement or damaged(cracked) or uneven footpath that may result in water ponding	A
	3x20=60	2		B
	2x20=40	1		C
TRIP HAZARD (l.m) – Uneven footpath caused by natural ground movement or cracked/damaged footpath with distortion	4x16=64	4	Condition 1: Footpath 5mm to 20mm step (Make safe by grinding) Condition 2: >20mm caused by differential settlement or damaged and cracked where cracks are > 5mm with distortion.	A
	3x16=48	3		B
	2x16=32	2		C
	1x16=16	1		D
SLIPPERY SURFACE (l.m) – any area where the surface is continually wet or mouldy and could cause the surface to be slippery	4x8=32	3,4	Condition 1: Any footpath area where the surface is continually wet or mouldy and could cause the surface to be slippery	C
	3x8=24			D
	2x8=16			E
BUILDING ACTIVITY (sq.m) – damage caused by builders and requires to be made safe. Costs for the permanent reinstatement/reconstruction to be recouped from Builder/Asset Protection Permit	4x12=48	4	Condition 2: Any damage caused by building activity and may cause a trip hazard	B
	3x12=36	2,3		C
	2x12=24	1		D
UTILITIES/TRADES (l.m) – Works undertaken by Utilities and Authorities which require reinstatement notice to be forwarded to Council. This could be damage to footpath or un-even temporary reinstatement that may cause a trip hazard	4x12=48	4	Condition 1: Any damage or temporary reinstatement that may cause a trip hazard	B
	3x12=36	2,3		C
	2x12=24			D
PONDING/DEPRESSIONS (sq.m) – usually caused by subsidence of the subgrade or due to trenching below the footpath and may cause water to pond in the area making the footpath hazardous	4x4=16	3,4	Condition 2: Greater than 20mm under a 1.2m straight edge	D
	3x4=12			E
	2x4=8	1,2		
1x4=4				
SPOON DRAIN (lm) footpath spoon drain has subsided and there is likely to be ponding of water across the footpath:	4x4=16	3,4	Severity 1: 25mm to 50mm over 1.2m straight edge – NO ACTION REQ. Severity 2: > 50mm over 1.2m straight edge	D
	3x4=12			E
NATURE STRIP IS UNEVEN (sq.m) – unevenness that could cause a tripping hazard	<12	1,2	Condition 2: Greater than 50mm step and is on the footpath side	
	4x4=16	3,4		D
	3x4=12			E
	2x4=8	1,2		
	1x4=4			

Standard Job Description	Risk Score	Hierarchy	Intervention Level	Response Times
5.2 FOOTWAYS (cont)				
NATURE STRIP TREE- Overhanging branches from Council nature strip tree obstructing footpath area OR diseased and could fall over and to ensure unobstructed visibility at intersections.	4x12=48	4	Condition 1: Branches overhanging onto the footpath at less than 2m from ground level. Notify Parks & Gardens	B
	3x12=36 2x12=24	2,3		C
	1x12=12	1		D
PRIVATE TREE —overhanging branches from Private tree obstructing footpath area or vehicular sight distance	4x12=48	4	Condition 1: Branches overhanging onto the footpath at less than 2m from ground level. NOTIFY LOCAL LAWS	B
	3x12=36 2x12=24	2,3		C
	1x12=12	1		D
VEHICLE CROSSOVERS — the section of crossover from the footpath line to the kerb has trip hazards	4x8=32 3x8=24	3,4	Condition 1: Trip hazards to pedestrians > 20mm height difference – NOTIFY OWNER WITHIN 5 DAYS TO FIX WITHIN REQUIRED RESPONSE TIME	C
	2x8=16	2		D
	1x8=8	1		E
ILLEGAL VEHICULAR CROSSOVER OR WIDENING – the crossover was constructed or widened illegally	4X3=12	4	Condition 1: Not constructed/widened or supervised to Council standards – NOTIFY OWNER WITHIN 10 DAYS TO FIX WITHIN REQUIRED RESPONSE TIME	D
	<12	1,2,3		E
UNFORMED FOOTPATHS (sq.m.)- the unformed or gravel footpath is uneven	<12	All	Condition 1: Uneven areas of unformed/gravel footpaths	E
5.3 SURFACE DRAINAGE – Kerb& Channel and Drainage Pits				
SURFACE DRAINS (l.m) – Kerb and Channel holding water- minor reshaping to maintain flow of water and protect road and through lane traffic	4x8=32 3x8=24	3,4	Kerb & channel has subsided or heaved and there is likely to be ponding of water beyond the parking lane or inner traffic lanes; Condition 3: <ul style="list-style-type: none"> • Difference is > 50mm over 1.2m straight edge or ▪ 150mm over a 10m length or ▪ missing/disintegrated length of kerb & channel 	C
	2x8=16	2		D
	1x8=8	1		E
UTILITIES/TRADES (l.m) – Works undertaken by Utilities/Authorities/Trades which require reinstatement notice to be forwarded to Council.	4x3=12	4	Condition 1: Any damage or temporary reinstatement that may cause a trip hazard, damage to a vehicle or impedes the flow of stormwater	D
	<12	1,2,3		E
PIT CLEANING - Inspection and cleaning of pits to maintain flow of water – blockages to the opening of the pit that prevents entry into the pit..	4X12=48	4	Any blockage which is a hazard to the public Notify Street cleansing	B
	3X12=36 2X12=24	2,3		C
	1X12=12	1		D

Standard Job Description	Risk Score	Hierarchy	Intervention Level	Response Times
5.3 SURFACE DRAINAGE – Kerb& Channel and Drainage Pits (cont)				
PIT REPAIR – Missing drainage pit lids	Emergency	All	Any drainage pit that has a missing pit lid/cover	A+
PIT REPAIR – Repair of damaged drainage pit lids, lintels, surrounds, grates, in pedestrian areas or traffic lanes.	4x8=32 3x8=24	3,4	Condition 1: Any missing pit lids or damaged surrounds/lintels which is a hazard to the public or when culvert or pit becomes non-functional	C
	2x8=16	2		D
	1x8=8	1		E
5.4 ROADSIDE				
GRASS MOWING/EDGE TRIMMING/WEED CONTROL OF MEDIAN STRIPS (Sq.m) - Mowing and edge trimming of medians to control weeds, grass growth, maintain sight distance, reduce fire hazard and maintain a tidy appearance	4x4=16 3x4=12	3,4	Condition 1: Grass length greater than 150mm - Cut to b/n 30-50mm. NOTIFY PARKS & GARDENS	D
	2x4=8 1x4=4	1,2		E
REGULATORY SIGN OR POLE REPLACEMENT - Replacement of regulatory and warning signs or poles which are worn, illegible, damaged or missing.	Extreme Risk	All	Condition 2: Any sign or support damage which is a hazard to the public	A
	4x15=60	4		A
	3x15=45	3	Condition 1: Replace if, after cleaning, sign is not visible from 150 metres at night, on low beam.	B
	2x15=30	2		C
	1x15=15	1		D
OTHER SIGNS – replace all other damaged signs and/or poles	4x9=36 3x9=27	3,4	Condition 1: Any damaged sign and/or pole or faded	C
	2x9=18	2		D
	1x9=9	1		E
STREET FURNITURE – Guardrail, Barriers, Bollards, Seats, Bins and Bus Shelters – missing/damaged or deteriorated	4x3=12	4	Condition 1: All defective damaged or deteriorated guardrail,barriers,bollards, Seats, Bins or BusShelters.	D
	<12	1,2,3		E
TRAFFIC DEVICES & PAVED ISLANDS (sq.m) - Replacement, repair or regulation of defective paved areas for pedestrian safety and repair of damaged traffic devices.	4x4=16 3x4=12	3,4	Condition 1: Repair/replace hard paved areas where sunk, cracked, heaved when: <ul style="list-style-type: none"> • >20mm in pedestrian areas or • >40mm in non-pedestrian areas 	D
	2x4=8 1x4=4	1,2		E
FENCING (l.m) - Realignment, replacement or repair of isolated lengths of fencing.	4x4=16 3x4=12	3,4	Condition 1: Repair/straighten or replace to maintain integrity and appearance of fence and fence's purpose (Not property boundary fences).	D
	2x4=8 1x4=4	1,2		E

Standard Job Description	Risk	Hierarchy	Intervention Level	Response Times
5.5 STRUCTURES				
BRIDGE & MAJOR CULVERTS MAINTENANCE (Man.Hours) <ul style="list-style-type: none"> Cleaning and clearing of debris where debris impedes the performance of the bridge Minor repairs as defined in the VicRoads Bridge Inspection Manual 	4x 15=60	4	When considered dangerous to cyclists, pedestrians or vehicles	A
	3x15=45	3		B
	2x15=30	2		C
	1x15=15	1		D
	4x12=48	4	>50% of waterway exit points blocked for Cleaning/clearing OR When defect observed but not likely to lead to an accident	B
	3x12=36	2,3		C
	2x12=24			D
	1x12=12	1		
RETAINING WALLS – unstable structure that could slide or overturn, check for shrinkage cracks at the surface and/or verticality of the structure	4x5=20	4	Signs of surface cracks at the top of the retaining wall or gaps greater than 20mm in walls or horizontal movement (sliding) or changes in the 'verticality' of the wall. Notify Capital Works Planning - Engage a qualified Structural Engineer to inspect and provide a report with recommended works and estimate of works required. Include in Capital Works for feasibility study.	S
	3x5=15	3		
	Not valid	1,2		
5.6 OPERATIONAL WORKS				
EMERGENCY WORKS AND SERVICES (No.) - All work arising from emergency incidents including flooding, fires, storms, traffic accidents(oil/hazardous substances spills), etc. to ensure the safety of the public and protection of the asset.	Emergency	All	When event is detected or made known.	A+
BUILDING MATERIAL (No.) – Placed on the footpath, nature strip and/or the road presenting danger to traffic and pedestrians.	Emergency	All	Obstructing the footpath, kerb & channel and nature strip and/or the road presenting danger to traffic and pedestrians. Notify Local Laws within 5 days	S
ELECTRICAL HARDWARE/TRAFFIC SIGNALS (No.) - Reporting of damage to traffic signals, street lighting and emergency telephones.	Emergency	All	When damage is detected or made known. Report to Maintenance Contractor, Service Provider As Soon As Possible	S

Standard Job Description	Hierarchy	Intervention Level	Frequency
5.7 INSPECTIONS			
DEFECT (HAZARDS) INSPECTIONS:- The undertaking by suitably qualified and experienced staff regular inspections of the asset to determine condition, compliance with maintenance standards and risk.	1	An defect inspection is undertaken to assess if any defects are present against an agreed set of criteria.	24 months
	2		24 months
	3	Risk inspections are undertaken in response to customer complaints. Reports are provided by a nominated officer or maintenance staff	12months
	4		6 months
SAFETY (NIGHT) INSPECTION:- - involve driving on the local road network at 20km/hr	3,4	Hazards to the public, in particular reflectivity of traffic and regulatory signs, line marking and street lighting.	12 months
INCIDENT INSPECTION: - an inspection carried out to comply with the requirements of the Road Management Act – Division 5 – Claims Procedure.	All	This inspection enables an incident condition report to be prepared for use in legal proceedings and the gathering of information for the analysis of the causes of accidents and the planning and implementation of road management and safety measures. Requirements include:- <ul style="list-style-type: none"> An Inspection by a Qualified engineer or Experienced Technical Officer with extensive knowledge and experience in road construction and maintenance practices. Formal Incident Report 	Within 14 days
REACTIVE COMPLAINT/REQUEST:-	All	Complaints or requests received through Council's complaints management system	Within 10 working days
CONDITION (STRUCTURAL) INSPECTION:- - Structural condition surveys combines walking for assessment of pavement and footpath defects with calibrated vehicle for roughness measurements.	All	A condition assessment using the AustRoads Visual Assessment Guidelines is used for pavement defects, while the kerb & channel and footpath is assessed on definitions that best describe these assets.	Once every 4 years
BRIDGE INSPECTION:- -	All	In accordance with the VicRoads Bridge Inspection Manual	6months-3 years

6.0 ROAD MANAGEMENT SYSTEM

6.1 Relevant Government transport and other policies

Council will have regard for and comply with the following initiatives and government policies:

- Any Federal Government policies and strategies like AusLINK and Roads to Recovery.
- Operational Responsibility for Declared Freeways and Arterial Roads
- Code of Practice – Management of Road and Utility Infrastructure in Road Reserves
- The Council Annual Plan.
- State Government policies and strategies
- Council's Municipal Strategic Statement
- Council's Integrated Transport Plan (ITP).
- Council's Asset Management Policy and Asset Management Strategy

6.2 Relevant Standards and Guidelines

6.2.1 Program or Capital Works

Council maintains a road and inventory register which is also a Pavement Management System (PMS). This system records the location and nature of road assets for which Council has maintenance responsibility on all roads listed on Council's road register of public roads. These details are recorded when assets are created, and then updated progressively as assets are changed or a condition assessment is undertaken.

Every 4 years Council undertakes a structural condition audit of the entire road network. This information is used to update the existing data in Council's PMS. Modelling of the road network is undertaken using the new data to determine the success or failure of the previous 4 year efforts.

6.2.2 Routine Maintenance standards

To ensure a consistent approach to assessing defects found on the road network, Council has produced a 'Defects and Safety Inspection Manual'. The manual provides information about how the defects are to be assessed or rated, the personnel and equipment required, safety and preparation necessary to undertake the surveys.

6.2.3 Design and Construction Standards

Road Geometry Guidelines setting out Council's standards for the construction of new roads and reconstruction of existing roads has been developed and approved by Council. These guidelines are used for setting the standard of road geometry to be used on new developments. It details the standard of such things as, road reserve widths, pavement widths, provision for footpaths and bike paths etc.

Road construction is usually carried out to the VicRoads standards, that is, VicRoads road construction specifications are used for tendering purposes. In addition, many of the Australian Standards such as Disabled Access, parking provisions, are also used during the engineering design stage.

The ITP sets out Council's policy for travel in the municipality. It guides all decisions affecting travel, such as those related to new roads or road improvements, train stations, tram and bus routes and stops, footpaths and pedestrian crossings, cycle paths, parking and even land use zoning and new development. It promotes alternative modes of transport while achieving sustainable outcomes with expected results of improved pedestrian safety and environmental quality.

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

6.3 Community needs and expectations regarding roads standards

The need for sustainable maintenance and management of the road assets is a driving factor. Consideration is being given to environmental and urban character issues, such as the re-use of existing materials and using recycled materials. Council's Urban Character study has identified heritage issues that need to be considered during the planning and preliminary engineering design stages. This involves the use of traditional materials such as bluestone pavers for new kerbs and asphalt for replacement of footpaths. Other issues such as traffic management, landscaping, greening the streetscape are also considered at the early stage and are incorporated where possible.

Initiatives to reduce private vehicle usage and congestion and reduce greenhouse gases (including demand management, mode shifts and more efficient road infrastructure) are necessary. Additional to the ongoing infill there is a general expectation within the community for steady improvements to basic services.

6.4 Competing priorities

Council has a diverse and multi-cultural community and as such provides a large range of services to the community. Also, cultural diversity, environmental sustainability, business investment and infrastructure planning are all recognised as key elements for effective planning. The competing demand for human resources and funds to address key elements of Council's service provision to the community requires that all projects included in the Capital and Routine Maintenance Works Program be individually evaluated and prioritised.

Furthermore, Darebin is also competing for road funds that are allocated to all Councils by the Victorian Grants Commission. The funding allocation trend since 2000/01 has been declining mainly due to the introduction of a new distribution formula which favours Rural Councils.

6.5 Resources available to the road authority

6.5.1 Human Resources

The levels of service specified in this Plan are matched to the financial and staff resources available to deliver the commitments and obligations stated in this Plan. Council undertakes the defect and safety inspections by a combination of out-sourcing and by qualified and trained Council officers.

6.5.2 Financial

The resources available are predominantly funded through Council rates and charges. Additional resources are provided through the Victorian Grants Commission and special Federal Government programs. Additional revenue is raised through the implementation of Council's Development Contribution Plan (DCP). The DCP encompasses the entire municipality and has been approved by the State Planning Minister.

Unmade infrastructure is constructed by following the provisions of a Special Charge Scheme complying with the Local Government Act whereby abutting owners share all the costs of the scheme.

6.6 Policy and Procedures for the establishment of priorities and allocation of Resources

6.6.1 On a Network level (Global)

Road funding levels are determined using a Pavement Management System (PMS). Annual updating of the PMS data is performed to reflect the rehabilitation and resurfacing programs undertaken during that year. A condition assessment of the entire road network is undertaken once every 4 years with the results recorded on the PMS. Council uses these results to undertake a 20 year PMS analysis for a number of different funding scenarios optimising the funds to minimise User and Agency costs. The results of this analysis determine the optimum funding levels for the maintenance of the road network. This analysis also provides a means by which Council can identify gaps in asset performance caused by changes in external influences, budgetary constraints as well as any changes to asset management strategies.

Council's long term financial plan is updated annually and has been set up to ensure a break-even point is achieved. Many of the funds allocated to the various program areas are based on the 'Best Value' review but generally have been set on achieving existing levels of service.

6.6.2 On a Project level (Local)

The maintenance program aims to identify the best mix of maintenance treatments that can satisfy the identified asset maintenance needs at the lowest life-cycle cost and within the level of funding provided. Candidate road pavement and road resurfacing projects are ranked in priority order using the results of road condition surveys undertaken every 4 years and the outputs of the Council's PMS analysis. Bridges are ranked using the condition results of the level 2 bridge inspections undertaken by a qualified bridge inspector every 3 years.

Routine maintenance projects are identified and prioritised based on the annual defect and safety inspections and is based on meeting Council's statutory obligations under this Plan, preserving asset integrity and satisfying safety criteria including any environmental goals.

To address competing demands Council has adopted a project evaluation procedure recommended in the 'Guidelines for Evaluating Government Capital Works Projects'. This allocates priority to projects of highest risk and ensures full consideration is given for the need to balance costs, benefits and opportunities. This process provides a mechanism for identifying large reductions in risk with relatively low expenditure. Projects which cannot be implemented within the limit of available budget must either await the availability of further financial resources or, a case needs to be made to secure additional funds.

6.7 Roles and responsibilities of key staff

The Chief Executive Officer shall have responsibility for assigning the roles and responsibilities of the appropriate Council officers for the purposes of implementing the requirements of the Road Management Act and this Plan. The duties to be undertaken by Council staff are set out below.

6.7.1 Assets Strategy

The unit is responsible for preparing asset management strategies, long term maintenance management programs and capital works planning for Council's main civil infrastructure assets.

Major residential developments such as those at the North-east corridor are assessed to ensure they meet appropriate design standards and that the infrastructure developed meets the needs of the community.

6.7.2 Engineering Design

The unit is responsible for the delivery of a range of services within the Asset Management Department. Projects undertaken by this unit include road design and construction, asphalt re-sheeting of roads, drainage construction, footpath works and design of traffic devices.

The type of works includes design, tendering and contract management and supervision of the various works within the Capital Works budget. This section also prepares Special Charge Schemes for the construction of unmade infrastructure following the requirements of the Local Government Act.

6.7.3 Transportation Planning/ Traffic Engineering

This service provides strategic planning, policy development and day to day management of traffic and transport and parking management related issues.

6.7.4 Infrastructure Maintenance

This unit undertakes routine maintenance on the road infrastructure assets. Maintenance works are carried out in a regular and orderly manner within available funds and resources and within the requirements of this Plan. Reactive works resulting from customer requests are also assessed using the processes mentioned in this Plan.

The unit monitors the development works within Darebin by regular inspections to reduce asset and environmental damage and to maintain public safety.

6.7.5 Finance and Risk Management Departments

These departments are involved with the recognition of assets and depreciation issues in compliance with the relevant codes of practice, input in preparing and review of the long term financial plan and avoidance or mitigate losses identified through the various risk assessments.

6.7.6 Local Laws

This unit monitors the development works within Council by regular inspections to reduce asset and environmental damage and to maintain public safety.

6.8 Categorisation and priorities for high risk maintenance works

Work priorities are established in accordance with the principles of risk management and hierarchies adopted taking into account duty to inspect, maintain and repair public roads listed in the Road Register. This process is automated through the implementation of a Maintenance Management System.

The categories adopted follow the type of asset base identified within the road reserve. These are:-

- Pavements – sealed and unsealed
- Footpaths
- Surface drainage
- Roadside including signs, road markings etc.
- Structures such as Bridges

Council also recognises the importance of local circumstances such as the influence of schools, hospitals, community facilities or particular concentrations of older, disabled or other potentially vulnerable users. These factors have been considered and taken into account by assigning a different inspection frequency to the various road and footpath hierarchies.

6.9 Contract and Service Agreements

Council has a service agreement with VicRoads with regard to road sweeping of Arterial Roads within Darebin. This agreement was necessary to address the need for higher intervention levels along certain Arterial roads adjacent to shopping strips having higher than normal litter generation and a higher community expectation to keep these areas clean.

Council also has a service agreement with VicRoads for the maintenance of traffic signals along the local road network. The response times to maintain these assets is stated in this agreement.

Works by Utilities are undertaken in accordance with the Ministerial Code of Practice – Managing Utility and Road Infrastructure in Road Reserves & Worksite safety Traffic Management.

External contractors wishing to open any part of the road for water, gas, telecom and the like are required to take out a road opening permit in accordance with Council's General Local Law. At the completion of the works the contractor is required to make the area safe and must notify Council so that permanent reinstatement can be affected. In some cases Council may permit permanent repairs by external contractors but only after approval/consent by the delegated Council Officer.

6.10 Policies and Procedures for delivering and auditing management programs

6.10.1 Key Maintenance Activities

The key maintenance activities undertaken by Council generally follow the risk assessment undertaken in previous sections of this Plan. These are:-

- Footpath Maintenance
- Road Pavement Maintenance
- Road and Footpath reinstatements as a result of road openings
- Drainage cleaning including kerb & channel and pit maintenance
- Roadside including signs, line markings and other street furniture
- Asset protection permits and inspections

6.10.2 Detail of maintenance delivery arrangements

Council has an agreement with VicRoads with regard to the sweeping of declared main roads. Those roads in the vicinity of shopping strips or high pedestrian generation are swept to a higher level of service than stated by VicRoads in their Road Management Plan.

6.10.3 Recording of maintenance activities

The majority of the operational and works planning records (reactive maintenance programs) are stored on Council's Maintenance Management System. These records include but are not limited to, the date the inspection was undertaken, date the work was completed, location and task completed.

6.10.4 Recording asset performance

Asset performance is recorded primarily through Council's Pavement Management System and Maintenance Management System. After the completion of the 1 in 4 year structural condition assessment Council undertakes an analysis to show the relative condition and roughness of the road network compared to the previous survey. The Routine Maintenance component is recorded in the Maintenance Management System.

Performance monitoring is undertaken on a programmed basis and generally follows:

- Regular management meetings of the City Services department
- Reports on performance to the community via the Council Annual Report.
- Annual State of Assets report to Council

The management systems that have been put in place provide Council with a means to ensure it is delivering the levels of service adopted. It also provides a means by which Council can review the service levels from one year to the next and make decisions about the need for any additional resources to address scope of works and funding requirements.

6.11 Responding to incidents

6.11.1 Emergency Response

Council is committed to providing a response to any emergency situation in accordance with the specified response times stated in section 4.

It should be noted that, in extreme events response times may not be achievable due to resource limitations at the time.

6.11.2 After Hours Service

Calls are received through Council's after hours Call Centre and are screened for public safety by a Council Officer before patrol staff are called out. Required stock of warning signs and barricades are maintained to make areas safe until the following working day. Backup resources are available to patrol staff if required. The details resulting from the after hours calls are recorded in the Maintenance Management System for any follow up action.

6.11.3 Temporary measures and warning systems to warn road users of hazards

If a section of road is closed for any reason appropriate assistance is provided to members of the public. The Council assists or seek appropriate assistance for any person injured or at risk in any accident.

During wet weather particular attention is given to sections of road which are likely to be inundated by water to minimise damage.

If the road is obstructed by broken down vehicles or any other cause Council's Local laws section is notified and steps to safeguard the traffic is undertaken

In the event of a spillage on the road the relevant fire fighting authority is notified of hazardous materials spillages.

Where spillage of chemicals or fuel is involved action is taken under direction from the control agency or the Environment Protection Authority (EPA) to prevent spillage from entering water courses. Road surfaces affected by spillages are treated to provide safe driving conditions.

In the case of mud on roads Council's local laws section is notified and appropriate action to clean up is initiated.

6.11.4 Incident inspections and response

The Road Management Act requires Council to undertake as soon as practicable but within 14 days of receiving a Notice of Incident an inspection and prepare a condition report of the part of the public road or infrastructure, specified in the notice.

6.11.5 Recording and assessment of complaints/requests

Requests and complaints for work/repairs are received as either proactive or reactive. Any reactive complaints or requests are logged onto Council's complaints register and are forwarded to City Services for investigation. The inspector responds to the request by carrying out a site inspection/assessment in accordance with this Plan. This inspection also determines whether it is necessary to make the area safe until work resources become available. The assessment is recorded onto Council's Maintenance Management System. Reactive complaints/requests are linked via their complaint number making an easy audit trail.

6.11.6 Temporary Measures

Council is committed to providing a response to any situation in accordance with the specified response times. However in some circumstances where a hazard cannot be rectified within the timeframes due to lack of resources will be made safe and prioritised for fixing. These works will be programmed annually depending on severity and availability of resources. The measures and warning systems provided are stated in Section 6.11 Responding to incidents.

6.11.7 Duty to Inform Utility or Service Provider

During the inspection program if the Council becomes aware that any road infrastructure not belonging to Council is in need of repair or appears to be in an unsafe condition, it will convey the information in writing to the relevant service provider as per the response times indicated in the Level of Service section of this Plan.

6.11.8 Inspection Regime – Proactive and Reactive

Details of the type and frequency of proactive inspection regimes are covered in section 3 of this plan. Reactive inspections are undertaken when a complaint or notification from the public is received. The reported defect is assessed on the same criteria as a proactive inspection.

6.11.9 Linkage between inspections and actual maintenance/action undertaken

Every inspection whether it is proactive or reactive is assigned a unique reference number automatically. All works undertaken to repair any defect are consecutively entered in the Maintenance Management System having the same unique reference number. This allows for a complete and accurate audit process to be established tracking the defect from the day it was reported or captured till it is completed or fixed.

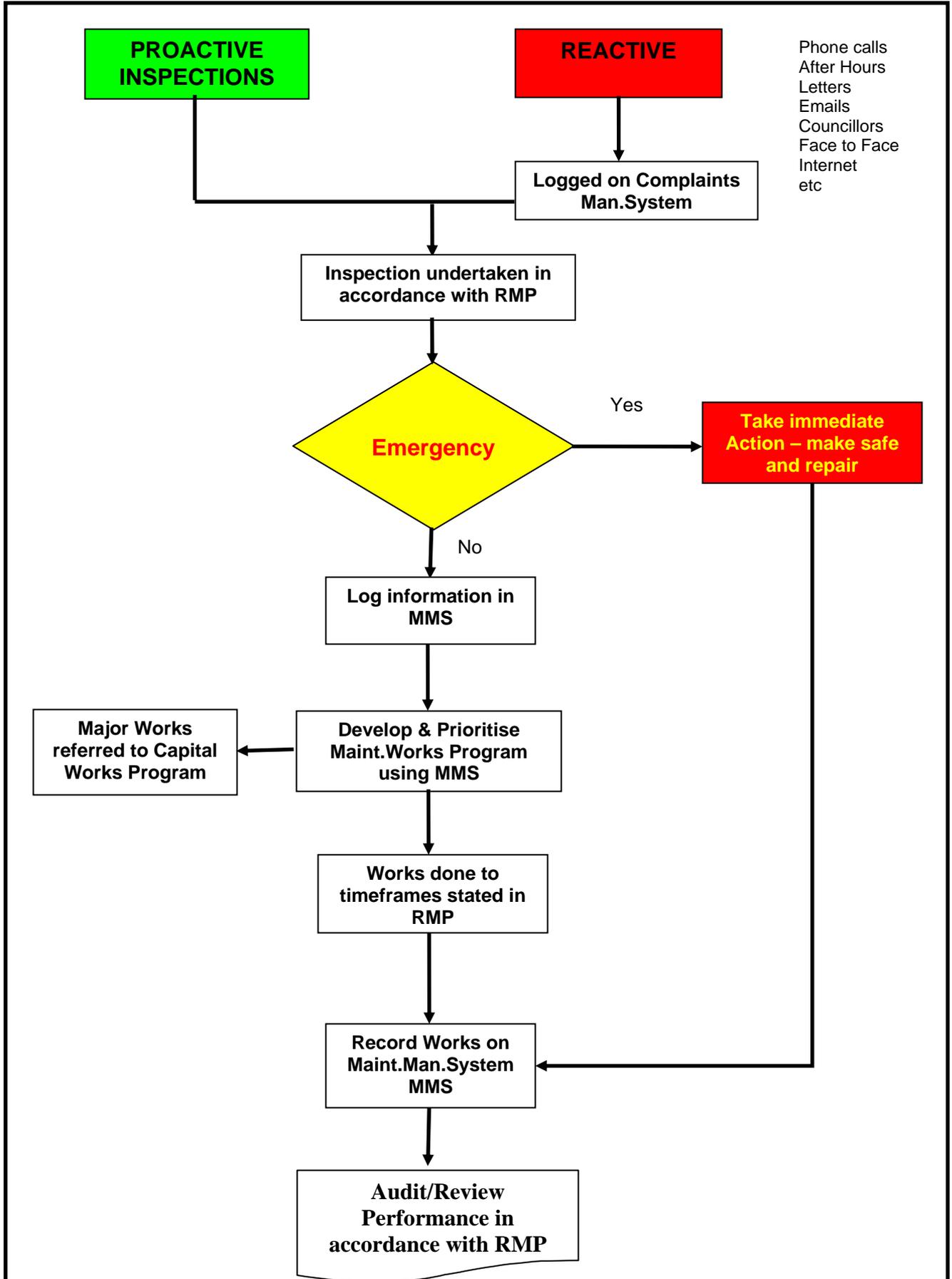
612 Amendment of this Plan

As customer expectations change and/or budgetary constraints have an effect it will be necessary to review the levels of service stated in the plan.

It is therefore intended that this Plan be monitored annually in conjunction with the preparation of Council's annual maintenance and management budget process but a review or audit be done every 4 years coinciding with the Structural condition audit.

The Road Register will be reviewed annually. At the completion of each review the Road register will be presented to Council for formal adoption and a copy will be distributed to all Customer Enquiry Centers and relevant Council departments.

6.13 Management System to Inspect, Repair and Maintain



7.0 APPENDICES

7.1 APPENDIX A – RISK ASSESSMENT

EXPOSURE	Likeli- hood	Conse- quence	Score
ROADS			
Potholes – damage to vehicles and possible accident site causing property damage, injury or death	3	5	15
Delaminations - damage to vehicles and possible accident site causing property damage, injury or death	3	3	9
Failures/Patches – localised distortion and or disintegration of the pavement surface often associated with cracking, heaving and/or subsidence and/or disintegration and loss of structure OR deteriorated patches or isolated failed pavement areas could cause accidents and damage to road including bluestone laneways	2	4	8
Skid Resistance - Polishing/Texture Loss – could cause accidents in wet weather	2	5	10
Road markings/Linemarking – damaged/missing or faded could cause accident particular during night	3	4	12
Retaining Walls – Unstable and a safety risk	1	5	5
Utilities/Trades – works resulting in temporary reinstatement for long periods resulting in complaints and further damage to road	3	3	9
Deformations (Depressions/Shoving/Rutting) – damage to vehicles and road surface causing higher running costs and complaints from users. Could hold water during wet weather causing aqua planning	2	2	4
Line Cracking – further damage to road by water penetration into road	3	1	3
Edge Breaks/Drop – edge of the pavement is broken or irregular could cause loss of control of vehicle if too close	1	3	3
Pavement Cleaning – clean pavements incl. intersections, k&c, to remove debris which is a danger to traffic & pedestrians	1	4	4
Proud/Sunken Service Covers – pit covers in the road pavement are not flush with surrounding road pavement and could cause extra noise and damage to vehicle	2	3	6
Weed Growth – weed growth could restrict passage through a laneway or could fuel fires.	3	1	3
Dumped Rubbish – dumped rubbish could restrict passage through a laneway, can be a health problem.	3	1	3
FOOTPATHS			
Trip Hazard caused by trees	4	5	20
Trip Hazard caused by natural ground movement– could cause injury to users resulting in Council being held liable and negligent	4	4	16
Footpath Cracked – cracks greater than 5mm in width with distortion of the adjoining pieces of footpath - could cause a high heel shoe or similar to lodge into it	4	4	16
Building Activity – resulting in extensive footpath damage and complaints from residents	3	4	12
Slippery Surface - could cause injury to users resulting in Council being held liable and negligent	2	4	8
Utilities/Trades –temporary reinstatement for long periods resulting in complaints and may cause injury to pedestrians	3	4	12
Depressions – caused by un-evenness resulting in water ponding and could cause injury to users resulting in Council being held liable and negligent	1	4	4
Spoon Drain – spoon drain along side the footpath has subsided & is pooling water	1	4	4

EXPOSURE	Likeli- hood	Conse- quence	Score
FOOTPATHS (cont)			
Nature Strip Trees – overhanging branches could cause injury to pedestrians or diseased and could fall over, dangerous to traffic and pedestrians	3	4	12
Private Tree – overhanging branches onto the footpath could cause injury to pedestrians, ratepayer to be advised	3	4	12
Vehicle Crossovers – damaged vehicle crossings could cause injury to pedestrians. Ratepayer to be advised as these are owned by ratepayer	2	4	8
Illegal Vehicle Crossovers – not constructed to Council standard	1	2	2
Unformed Footpaths - the unformed or gravel footpath is uneven	1	3	3
SURFACE DRAINAGE			
Channel holding water – could cause accident if water extends out to the running lane	2	4	8
Utilities/Trades –temporary reinstatement resulting in complaints and may cause injury to pedestrians/damage vehicles/impede water flow	1	3	3
Damaged Drainage Pit – could cause damage to vehicle tyres or injury to pedestrians	2	4	8
Blocked Pits – could cause flooding damage and/or road accident	3	4	12
Blocked House Stormwater Pipe – pipe in nature strip is blocked and could cause damage to property	2	2	4
BRIDGES			
Cleaning and clearing of debris – >50% of waterway exit points blocked	3	4	12
Cleaning and clearing of debris – when considered dangerous	3	5	15
Minor Repair – when defect observed but not likely to lead to an accident	3	4	12
Minor Repair – when considered dangerous to cyclists, pedestrians or vehicles	3	5	15
ROADSIDE MAINTENANCE			
Regulatory Signs – Safety and regulatory signs damaged/missing or faded could cause an accident	3	5	15
Other Signs – all other signs and poles damaged/missing or faded	3	3	9
Street Furniture – Guardrail, Barriers, bollards, seats, – missing/damaged or deteriorated	1	3	3
Fencing – missing, damaged or deteriorated	1	4	4
Median Strips - Grass Mowing/Edge Trimming/Weed Control – overgrown grass or major surface irregularities, or unwanted weeds and vegetation impacting on the road assets and the environment	4	1	4
Traffic Devices & Paved islands (sq.m) - Replacement, repair or regulation of defective paved areas <2m ² area for pedestrian safety.	4	1	4
Nature Strip – unevenness causing a tripping hazard	2	2	4
OPERATIONAL WORKS			
EMERGENCY WORKS AND SERVICES -All works arising from emergency incidents including flooding, fires, storms, traffic accidents(oil/hazardous substances spills) to ensure the safety of the public and protection of the asset	5	5	25
Electrical Hardware – reporting damage to traffic signals, street lighting	3	5	15
Traffic Signals – Priority faults (all faults except single lamp failures, pedestrian lamp replacement, pedestrian call box faults, cowl damage excluding missing cowls, pedestrian lantern damage/alignment, backing board damage)	3	5	15
Building Materials – placed on nature strip, footpath and/or road – obstruction to pedestrians, traffic and stormwater run-off.	3	4	12

7.1 APPENDIX B – PEDESTRIAN HOT-SPOTS

The criteria used for determination of a Hot Spot area are:-

Facility	Criteria
Primary and Secondary Schools	Main Entrance to school Public Transport
Customer Service Centres	All Customer Service Centres are located on existing Hierarchy 4 roads and are therefore included in the higher inspection frequency and the equivalent response times
Libraries	Main Entrance road
Community Centres	Major Centres only Converted Houses not included From nearest Link/Arterial Road to closest approach
Child Care Centres/Kindergartens/Maternal Child Care Centres	Not included as children driven and picked-up by parents.
Aged Care Centres	Not included as elderly are usually assisted during any physical work like walking

8.0 OTHER REFERENCES

City of Darebin – Road Asset Management Plan (RAMP)

City of Darebin – Defect and Safety Inspection Manual – A Visual Condition Assessment for Road Surfaces and Road Inventory

Australian and New Zealand Standard AS/NZS 4360: Risk Management

Guidelines for Evaluating Government Capital Works Projects – DOI

City of Darebin – Road Geometry and Drainage Design Guidelines

City of Darebin – Integrated Travel Plan

City of Darebin – Municipal Strategic Statement (MSS)

Melbourne 2030 – Planning for Sustainable Growth

AustRoads – Pavement Design

AustRoads – A Guide to the Visual Assessment of Pavement Condition

VicRoads – Guide to Pavement Design

VicRoads – Road Design Guidelines

Ministerial Code of Practice – Managing Utility and Road Infrastructure in Road Reserves

Code of Practice – Worksite Safety - Traffic Management