Central Goldfields Shire Council



Road Management Plan

Version 6

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Distribution

The Assets Coordinator shall be responsible for the:

Control of this Plan,
Distribution of the Plan, and
Control and issue of any amendments.

Copies (4) of the Plan shall be held by:

General Manager Technical Services
Manager Engineering & Services
Asset Coordinator
Works Department

Amendment Register

ISSUE	DATE	DETAILS	BY
Version 1	24 / 11 / 2004	Approved by Council following Public Consultation	C. Jones
Version 2	23 / 08 / 2006	Approved by Council following Public Consultation 30/160/120	C. Jones
Version 3	26 / 06 / 2009	Approved by Council following Public Consultation	M. Walker
Version 4	25 / 06 /2013	Approved by Council following Public Consultation	M. Walker
Version 5	22 / 09 /2015	Approved by Council following Public Consultation	W. Scott
Version 6	26 / 04 / 2017	Approved by Council following Public Consultation	W. Scott

EXECUTIVE SUMMARY

Council, as the custodian of all municipal classified roads within the Central Goldfields Shire, has the responsibility for the management of associated road related infrastructure in a safe condition and to specified maintenance standards.

The level of service provided on the public road network is a reflection of general community expectations, relevant government policies and available funding.

The extent of the public road network is subject to the implementation of Council's "*Public Road Register Policy"* which establishes the criteria by which Council accepts responsibility for the management of municipal classified public roads.

Council manages a diverse range of road and road related assets, covering 1,300 Km of roads of which 39% are sealed, 48% are gravel and 13% are tracks. To support these roads, 79 bridges and 175 major culverts are located throughout the road network.

Council's service charter to the community extends beyond that of a Road Authority into the areas of waste disposal, storm water management, parks and recreation, health and welfare and community governance.

This Road Management Plan sets the parameters by which Council will operate the road network over the next term of Council, the plan will be reviewed following each Council election and as required. As data is collected and analysed, the true nature of Council's commitment towards a sustainable network will become clearer, enabling detailed review of this and associated documents. This will enable detailed strategies to be modelled, communicated to the various stake holders and implemented by Council with the view of meeting future community expectations.

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1.0 INTRODUCTION

1.1 General

Purpose of Road Management Plan

Division 5 of the Road Management Act (RM Act) enables Council to produce a Road Management Plan.

Section 50 of the Road Management Act states:

"The purposes of a road management plan is:

- To establish a management system for the road management functions of a road authority which is based on policy and operational objectives and available resources; and
- To set the relevant standard in relation to the discharge of duties in the performance of those road management functions"

In accordance with *Section 39* of the RM Act, this plan will be regarded as a policy decision by Council in relation to the performance of its statutory road management function. As a result, it may be used in the defence of any common law proceedings in relation to the exercise of that road management function.

The contents of a Plan as referred to in the Road Management Plan Code of Practice, includes:

- A description of those assets on public roads for which a road authority is responsible;
- The standard, or target condition, of those assets to be maintained by a road authority having regard to the broad range of activities and constraints imposed on the road authority which may be financial, economic , political, social or environmental;
- A management system as established and implemented by a road authority to discharge its duty to inspect, maintain and repair public roads for which it is the coordinating road authority or the responsible road authority;
- Relevant policies and priorities adopted by the road authority; and
- Any matters that a relevant Code of Practice specifies should be included in the Road Management Plan.

Key Stakeholders

Key Stakeholder groups with an interest in the use or management of municipal public roads include:

- The community in general (for recreation, sport, leisure and business);
- Residents and businesses adjoining the road network;
- Pedestrians;
- Users of a range of miscellaneous smaller, lightweight vehicles such as bicycles, motorised buggies, wheel chairs, prams, etc;
- Commercial users of motorised vehicles such as trucks, buses;
- Primary producers including stock, grain, wine and hobby farms etc;
- Vehicles, cars and motor cyclists;
- Tourists and visitors to the area; and
- Utilities as prescribed in *Section 3* of the RM Act.

Structure of Road Management Plans

Council's Road Management Plan (RM Plan) consists of three documents in conjunction with the public road register documents as illustrated below:

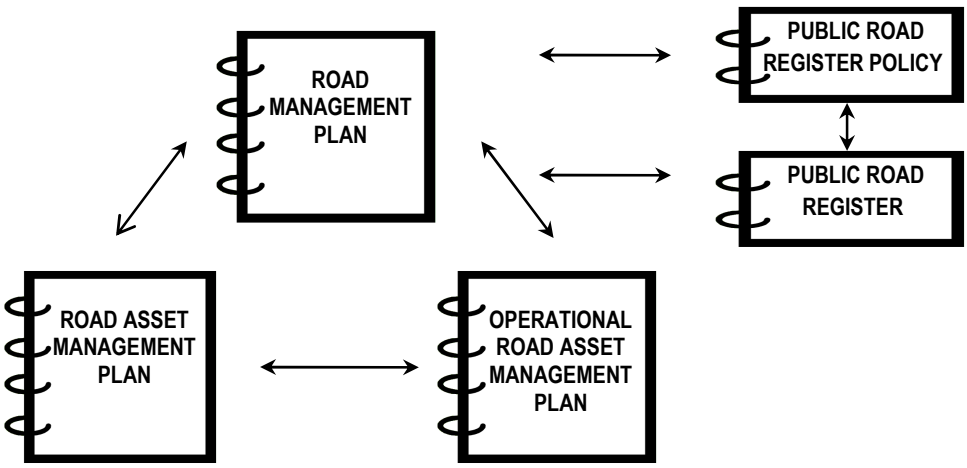


Figure 1: Road Management Plan Structure

Road Management Plan:-

Is an overriding document intended for public reference and compliance with the requirements of the Road Management Act. It provides the community with an overview of Council's systems and practices in relation to the management of the "local" public road network and includes a map of the road hierarchy.

Road Asset management Plan:-

This plan provides a strategic examination of the management of road infrastructure. It is intended to demonstrate Council's ability to fund and manage the local road network based on future demand predicted and modelled asset deterioration. Funding requirements, to address both short and long term works programs, are established.

Operational Road Asset management Plan:-

This plan provides a detailed description of how Council intends to deliver levels of service in relation to the operation of road related assets. It is an internal reference document which provides Council staff with essential criteria for the establishment of management system inputs and targeted outcomes.

Public Road Register Policy:

Council's Road Register policy establishes guidelines to assist Council in determining which municipal roads are to be included on the Public Road Register to accord with the requirements of the Act.

Public Road Register:

The Public Road Register is a list of all roads and pathways throughout the Central Goldfields Shire, with their classification and the authority responsible for them, specifically what the Central Goldfields Shire Council is responsible for.

Location of Documents

A hard copy of the *Road Management Plan, Public Road Register Policy, Public Road Register* and a Road Hierarchy Map is available for inspection at the Central Goldfields Shire Office during normal working hours, and on the Council web site www.centralgoldfields.com.au under Council Services - Transport.

1.2 Council's Legal Obligations

The following Acts, Codes of Practice and regulation are Council's obligations as a road authority.

Section 52(d) of the RM Act requires that the Plan

"Must include any matters that a relevant Code of Practice specifies"

Relevant Ministerial Codes of Practice are:

- Operational Responsibilities for Public Roads
- Road Management Plans - content
- Clearways on Declared Arterial Roads
- Management of Infrastructure in Road Reserves
- Worksite Safety - Traffic Management

The following Acts of Parliament and Regulations are referenced in the preparation of this plan.

- Road Management Act, 2004
- Road Management (General) Regulations, 2005
- Road Management (Works and Infrastructure) Regulations, 2005
- Local Government Act, 1989
- Local Government (Best Value Principles) Act, 1999
- Road Safety Act, 1986
- Disability Discrimination Act, 1992

1.3 Road User Obligations

Amendments to the Road Safety Act 1986, includes *Section 17A* "Obligations of Road Users" which specifies:

1 A person who drives a motor vehicle on a public highway must drive in a safe manner having regard to all relevant factors including the:

a) physical characteristics of the road,

b) prevailing weather conditions,

c) the level of visibility,

d) condition of the motor vehicle,

e) prevailing traffic conditions,

f) relevant road laws and advisory signs,

g) physical and mental condition of the driver.

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

a) infrastructure on the road reserve;

b) 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 A road user must:

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

b) have regard to the rights of the community and infrastructure managers in relation to road infrastructure and non-road infrastructure on the road reserve and take reasonable care to avoid any conduct that may damage road infrastructure and non-road infrastructure on the road reserve;

c) have regard to the rights of the community in relation to the road reserve and take reasonable care to avoid conduct that may harm the environment of the road reserve.

1.4 Land Owner Obligations

Land owners have responsibilities relating to their driveways, trees and nature strips, these are discussed in detail in *section 6*

Driveways and infills

Driveway crossings are the responsibility of the landowner.

The land owner is responsible for maintaining the driveway and the immediate surrounds effected by the driveway in a safe and roadworthy condition and in most circumstances the correction of any problems relating to drainage and vehicles 'bottoming' out (refer *section 6.2*).

Footpaths and Overhanging branches

A land owner has a responsibility to keep a footpath clear of vegetation growing from their property. Under the provisions of Council's local laws, Council may direct the landowner to trim overhanging branches or obstructing vegetation (refer *section 6.2* for further information).

2.0 ASSET MANAGEMENT

The Council realises the holistic life cycle costing approach to asset management. This approach / strategy is detailed in the *Road Asset Management Plan*. The figure 2 below is a typical model for the life cycle costing with related activities for the life of a sealed road.

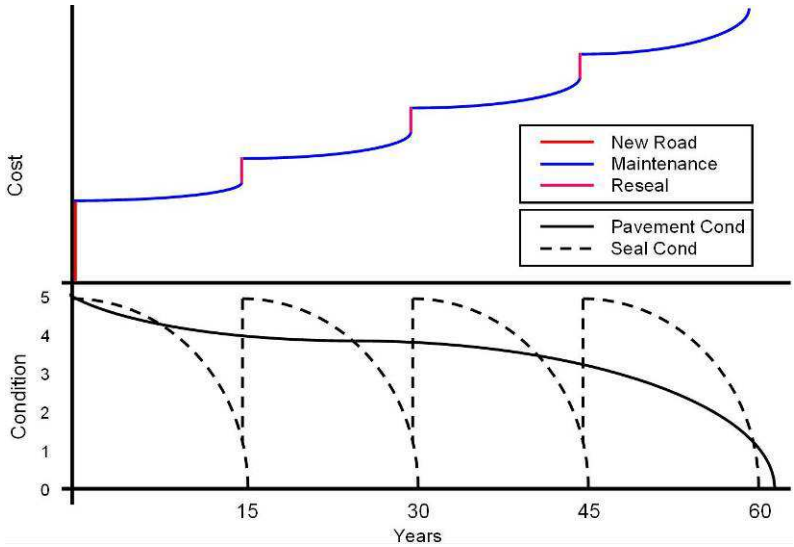


Figure 2: Life Cycle Costing for a Sealed Road

2.1 Asset Management

Asset Management Policy

Council's asset policy broadly outlines the Councils goals and focuses towards asset management.

Sound asset management is required to effectively and efficiently manage Council's infrastructure. It is an essential function that enables Council to:

- Respond to community needs;
- Deliver services for current and future generations;
- Support economic and social development; and
- Respond to the changing environment in which we live.

(Refer to the Corporate Asset Management Policy)

Asset Management Strategies

Council's Asset Management Strategies develop a structured set of actions aimed at enabling improved Asset Management by the organisation.

Council has vested the responsibility of overseeing the implementation of the Asset Management Strategies to the Asset Management Steering Committee - consisting of nominated Councillors and senior management and representatives from each of the interest departments throughout the organisation. (Refer to the *Corporate Asset Management Strategy*).

The Road Asset Management Plan is the detailed plan of how Council will practically implement its asset management in respect roads and road related assets.

2.2 Council Budget Process

Funding for roads is considered with the wide range of services provided by Council. Council's aim, when allocating funds to roads and to the various roads activities and projects, is to:

- Identify, and prioritise risks;
- Maximise the life of the asset to assist the operation of a sustainable road network; and
- Progressively upgrade the network to meet established minimum levels of service.

Council's Engineering Department consider:

- Requests for capital works, either from external or internal sources; and
- The most recent asset condition surveys

When reviewing priority lists relating to short term capital works programs, the annual works program is generated by distributing the indicative budget allowance to the highest priority rated projects which consider the risk, should the works not proceed.

2.3 Asset Planning and Performance

The ability of Council to achieve a sustainable and acceptable level of service is dependent on road user expectations, the extent and growth of the asset base and sufficient funding and resource availability. These factors are assessed, and review to update Council's Road Asset Management Plan to establish long term strategic direction to achieve a sustainable road asset condition state.

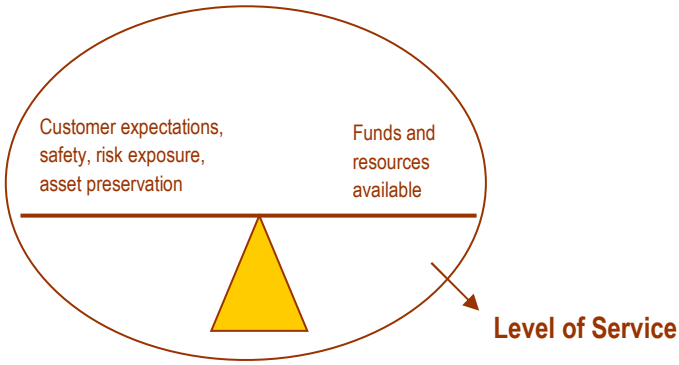


Figure 3: Development of Level of Service

The level of performance is developed from the demands of community expectation, safety, risk exposure and asset preservation balanced against the funds available and ability to pay. These levels of service are subject to a process of public consultation before adoption.

3.0 ASSET MANAGEMENT FRAMEWORK

3.1 Roads Hierarchy

All of Council's Roadways and pathways have been classified by a hierarchal system which looks at the function and importance of particular road or pathway, thus determining the level of service provided.

Rural / Urban Roadways

Council road assets are classified on a Rural / Urban functional basis:

Rural Roads:

- Rural Link - (RL)
- Rural Collector – (RC)
- Rural Industrial Access (RIA)
- Rural Access 1 – (RA1)
- Rural Access2 – (RA2)
- Rural Access Track – (RAT)
- Limited Access Tracks – (LAT)
- Not Maintained – (NM)

Urban Streets:

- Urban Link – (UL)
- Urban Collector – (UC)
- Urban Industrial Access (UIA)
- Urban Access 1 – (UA1)
- Urban Access 2 – (UA2)
- Urban Access Laneway - (UAL)
- Urban Parking – (UP)

The hierarchal classifications reflect the relative community importance of roads and enables Council to efficiently define an appropriate level of service to all roads in the network. A brief description of each hierarchy class and associated design and maintenance levels of service are detailed in *Appendix A.*

Pathways

A separate hierarchy system has been established for the management of Council's pathways which include both footpaths and bike paths. Pathways are classified into:

- Commerce (CO)
- Business (BU)
- Residential (RE)
- Rural (RU)
- Shared Path (SP)

A brief description of each hierarchal class is detailed in *Appendix B.*

3.2 Levels of Service

Two types of levels of service apply for each hierarchal class of road. These are:

- Maintenance service levels associated with defects on the road, and
- Design service levels detailing such physical criteria as road widths, design speeds, etc.

Maintenance Levels of Service

Consist of:

- Minimum safety standards - establishing intervention levels
- Safety Review – requiring scheduled periodic inspections
- Customer requests – requiring investigation and response.
- Maintenance standards – determining cost effective defect rectification.
- Response prioritisation – requiring risk assessment criteria.
- Defect response – requiring monitoring, fault rectification and hazard delineation.

A broad description of maintenance service level standards for each of the roadway and pathway hierarchies are detailed in *Appendices B & C* and should be read in conjunction with the road hierarchy map.

Design Level of Service

Consist of:

- Desirable design standards – surface type, speed, width, sight distance.
- Vehicle access - bridge widths and heavy vehicles load designs.
- Condition assessments – scheduled periodic condition surveys.
- Acceptable condition state – roughness, shape loss, failures.
- Rehabilitation standards – cost effective rehabilitation / replacement methods.
- Prioritisation – risk assessment criteria.
- Works response – monitor / upgrade / hazard delineation.

Typical design service level standards for each of the roadway and pathway hierarchies are detailed in *Appendices A & B*. These guidelines provide the basis for the standard of infrastructure to be provided for all new capital works and the justification for the upgrade of existing infrastructure where base standards are not currently being met.

Target "Base" Level of Service

The target "base" level of service represents what Council currently believes it can provide to the road user, based on historic information, available funding and resource allocations. These are discussed in more detail in *Section 5*.

Subject to community involvement, service levels are adjusted to correspond with affordable community expectations relating to each hierarchal classification of roadway or pathway. The adopted standards reflect the expected usage of the road in terms of vehicle types, daily traffic volumes and nominal vehicle speeds. Design standards consider minimum safety requirements specified in published design manuals.

3.3 Demand

Demand in relation to the provision of capital / upgrade works for services and associated infrastructure is a dynamic process used to cater for the changes in population, demographics, and expectations of the community into the future. Council has identified anticipated demand drivers, and costed the associated capital / upgrade works, to form a list of works, (Demand Register) to allow planning for the provision and funding of the works so they can be undertaken.

Demand management strategies are also used to provide alternatives to the creation of new assets and examine ways of modifying customer demands to allow optimum asset utilisation and thereby defer or reduce the need for new assets. Such strategies are:

- Transportation strategies;
- Load limits (restricting use by heavy vehicles);
- Traffic controls;
- Traffic bylaws;
- Community Strategies / Public Education;
- Reduced level of service; and
- Development of policies.

3.4 Risk Assessment

Renewal / replacement and maintenance works on the road network are identified, quantified, costed and prioritised based on established risk assessment criteria. These are then put on a prioritised order list, enabling the higher risk sites to be programmed for completion first. The extent of the work programs (Risk Reduction Plans), are solely based on the level of funding made available to each of the risk assignment plans via Council's annual budget process.

Jobs included on the risk assignment plans are under constant reassessment based on follow up inspections which may identify new hazards/jobs or altered site conditions. Unless directed explicitly by Council in the community interest, there can be no certainty that, a job included on a risk assignment plan, can be completed in a given time without sufficient funds being available.

The risk assessment criteria adopted by Council considers the **likelihood** and **consequence** of an event occurring. A priority score is then given by **likelihood x consequence.** Full details of the risk assessment criteria relating to each asset class are included in Council's *Operational Roads Asset Management Plan*.

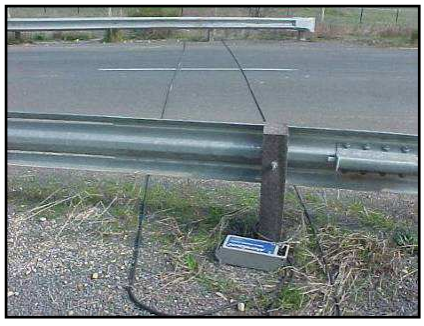
3.5 Traffic Counts

Council operates traffic counter units on a rolling basis at strategic locations for the purposes of identifying:

- Road usage / traffic volumes
- Vehicle classifications / Heavy vehicle usage
- Traffic speeds

The outcomes of the traffic counts are used for a range of purposes, including:

- Establishment / review of Road Hierarchies
- Design criteria
- Maintenance demand
- Grants commission returns
- Bituminous seal applications
- Growth demands
- Level of Service review



4.0 Central Goldfields Shire's Roads

4.1 Public Road's

Council has adopted a policy in which roads are declared 'public roads' and are included in the Register of Public Roads. The *Public Road Register Policy* is available for perusal. In summary, Council has included all 'roadways' and 'pathways' that are reasonably required for general public use. Key criteria for inclusion in the register are:

- Council must be able to be deemed the Responsible Road Authority,
- The public road includes infrastructure listed on Council asset registers,
- Provides strategic access to points of industry, commerce or residential development,
- Provides access to rateable land holdings that are not otherwise serviced by a state controlled arterial or non arterial road,
- Provides unrestricted public access,
- Provide emergency access.

Refer to the *Public Road Register Policy* for full details.

4.2 Demarcation of Responsibility

The Road Management Act defines the general functions and Powers of Road Authorities. In this regard, a Road Authority may take the role of a coordinating road authority and / or responsible road authority in the relation to the management of public roads.

- Coordinating road authority – is the owner of the land; and
- Responsible road authority – is the owner and maintainer of the road assets.

Public roads, under the RM Act, may be classified as:

- Freeway
- Arterial State Road
- Non-Arterial State Road
- Municipal Road

Where the public road is classified as a municipal road, then Council is the relevant Road Authority in relation to roads within its municipal district.

Boundary Roads:

In the instance of boundary roads with neighbouring municipal councils, Council has to enter into arrangements for the management functions in the form of Memoranda of Understanding between the relevant municipalities listed as follows:

- Pyrenees Shires Council
- Northern Grampians Shire Council
- Loddon Shire Council
- Mount Alexander Shire Council
- Hepburn Shire Council

Arterial State Roads:

For arterial roads through towns, the operational function is shared between Council and VicRoads. Generally in towns, VicRoads has the authority for the through traffic lanes only, with the balance of operational responsibility allocated to Council (eg. Footpaths). In rural areas, VicRoads has the responsibility of all assets within the full width of the road reserve. (Refer to the Code of Practice "Operational Responsibility for Public Roads" and VicRoads Township Demarcation Plans and additional *Demarcation Agreement* for a full description of the limits of responsibility.)

The arterial roads throughout the Central Goldfields Shire, which can be seen in figure 4:

- Pyrenees Hwy
- Wimmera Hwy

- Ballarat Maryborough Rd
- Bendigo Maryborough Rd
- Bridgewater Dunolly Rd
- Dunach Eddington Rd
- Dunolly Eddington Rd
- Dunolly Moliagul Rd
- Gladstone St
- Lexton Talbot Rd
- Maryborough Dunolly Rd
- Maryborough St Arnard Rd

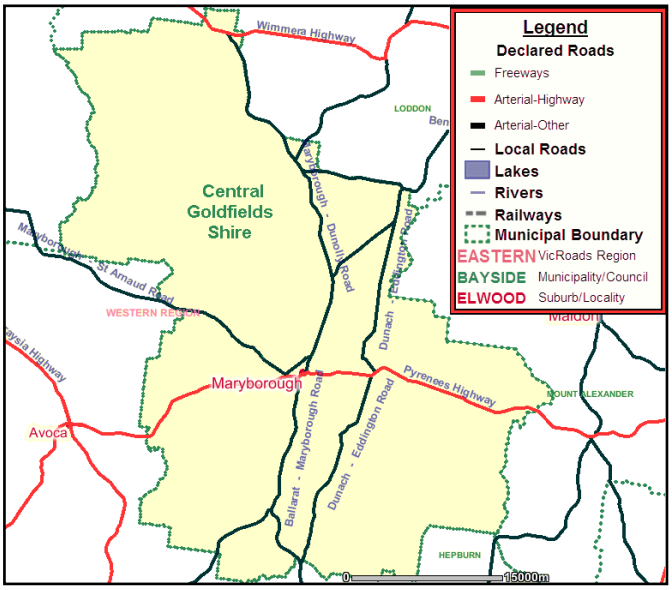


Figure 4: Arterial Roads throughout the CGS[1]

Non Arterial State Roads:

Non-arterial State roads throughout the municipality are generally administered by the Department of Environment Land Water & Planning in relation to the network of forest tracks within areas of crown land and state forest. Where Council has a municipal interest in a road traversing crown land or state forest, a Memorandum of Understanding with the relevant state road authority will be establish the management functions over the road alignments concerned. (In accordance with the Code of Practice "*Operational Responsibility for Public Roads*")

Freehold land agreements:

Municipal roads traversing freehold land require formal agreements between council and the freehold land owner. Most instances involve the siting of municipal off street car parks on freehold land.

Miscellaneous agreements:

Miscellaneous agreements also involve the following agencies:

- Electricity Supply Authority – Street Lighting;
- State Rail Authority – Rail crossings and associated bridges;
- Dept. Environment Land Water & Planning – Roadside vegetation management;
- Goulburn Murray Water – Tullaroop Reservoir Embankment and Rodborough Road;

[1] Maps of Declared Roads, VicRoads, 2017, http://vicroadsmaps.maps.arcgis.com/apps/webappviewer/index.html?id=e8fa54687853433eb58e51584b36f681

- Country Fire Authority – Fire Access Tracks defined under the Municipal Emergency Management Plan; and
- Public Transport Victoria – Bus Stops.

4.3 Road Names

The "Guidelines for Geographic Names 2010" provide guidance to the public and Council when adopting or changing a road name. The naming and signposting of roads is an important service for the public and emergency services.

4.4 Rail Crossing Coordination

Currently all maintenance and road construction at level crossings and for a distance of 3 metres from each side of the railway lines is the responsibility of rail authority. The rail authority is also responsible for the erection and maintenance of railway crossing position signs together with other signs, warning devices, gates, boom barriers, lights etc, located at the crossing. Council is responsible for the erection and maintenance of advance warning signs and all pavement markings associated with crossings on roads under their control.

Council is entered into a Rail Level Crossing Safety Interface Agreements in line with the Rail Safety Act, delegating responsibility between the responsible authorities (Rail and Road). Rail Authority is also responsible for all railway bridges, which in the Central Goldfields shire are the Moolort Baringhup Road Bridge and Tuaggra / Sutton road underpass

5.0 MANAGEMENT SYSTEMS

Council's functional organisation structure for the management of road infrastructure is detailed in Figure 5. Currently, all functional areas are conducted internally with the capacity to outsource where resource and/or specific expertise requirements necessitate. *Section 50a* of the Road Management Act states - "to establish a management system for the road management functions of a road authority which is based on policy and operational objectives and available resources".

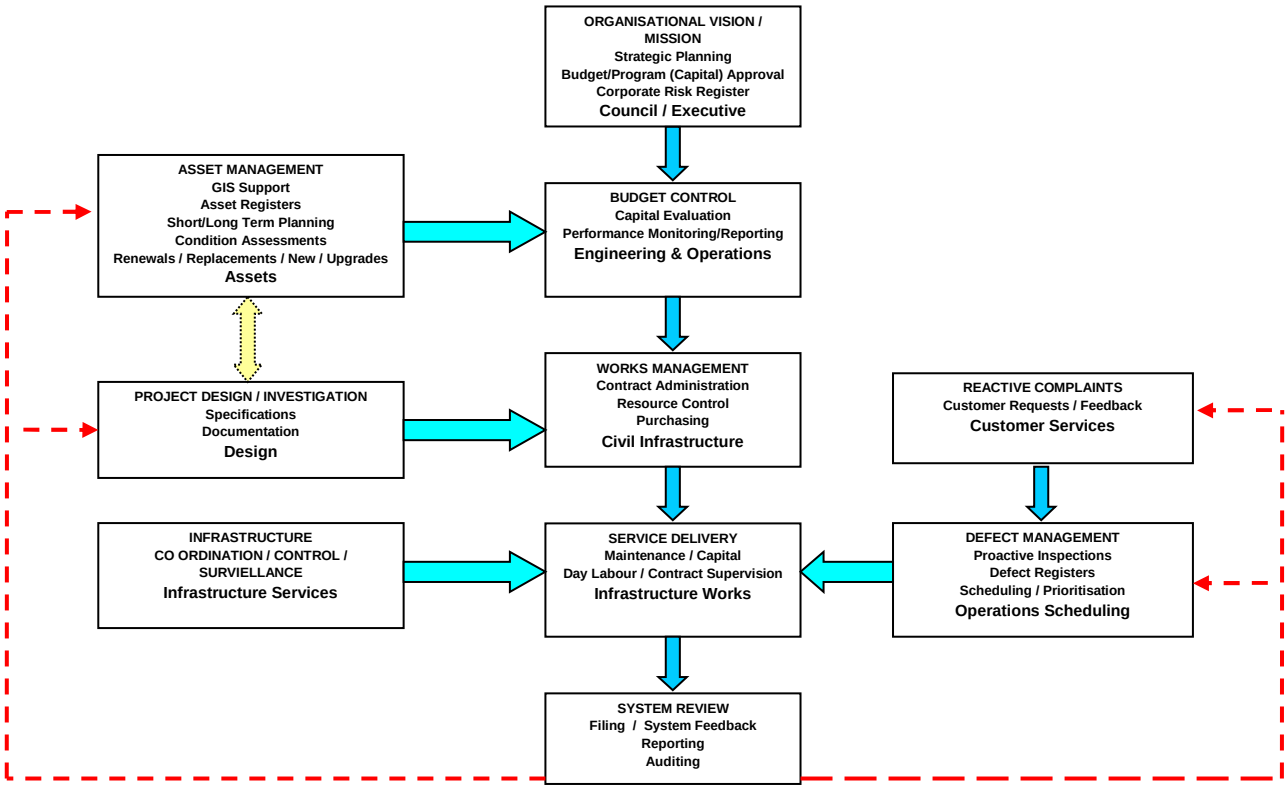


Figure 5: Infrastructure Management System

In terms of the management of asset defects, Council's Management System for assets involves a process of:

- Inspection.
- Prioritising of works.
- Action (works programming).

The processes undertaken to inspect, prioritise and act is detailed in Figure 6.

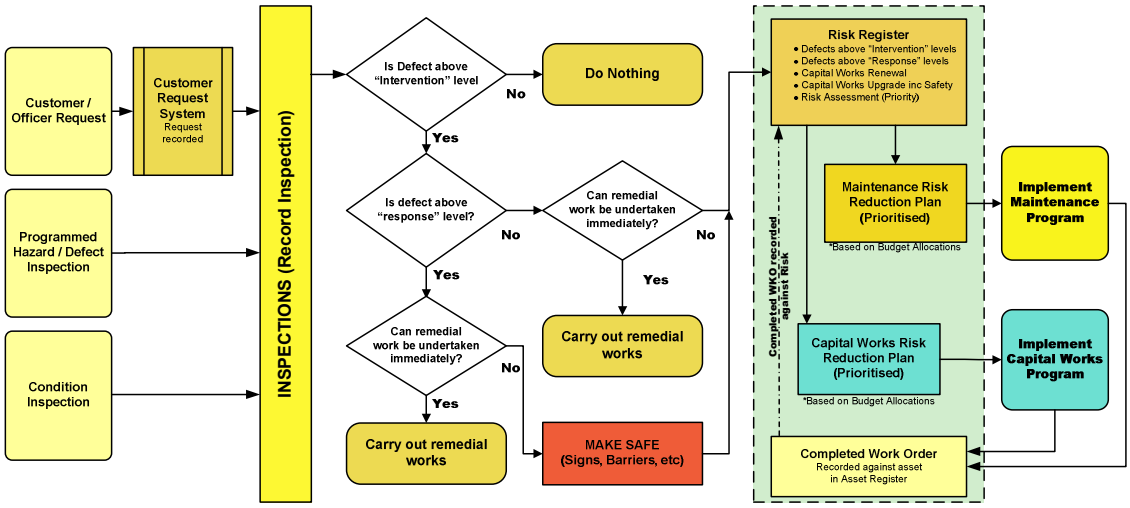


Figure 6: Inspection, Prioritisation and Action System

5.1 Customer Requests

Council operates a commercially supplied customer request system. The system utilises a computer database which records details of the person making the request, the location and the problem details.

If the customer service officer cannot respond to the request at the point of contact, the system then allocates the investigation of the problem to a specified staff member who must determine an action. The person making the request should be advised that the request has been entered into the database for follow up action. If required, they are also advised of the outcome of the investigation and the action proposed, ie:

- no action
- referred to forward programs
- to be corrected within a certain timeframe

Response times to investigate are set out in *Appendix E* which aligns the level of responsiveness to the type and hierarchical classification of the asset.

The processes undertaken to address customer requests is detailed in Figure 7.

A person who intends to take court proceedings in relation to a claim for damages arising out of the condition of a public road or infrastructure must first lodge a written notice with the Council. This notice must be lodged with the Council within 30 days of the incident occurring. Upon receiving such written notice, an inspection may be arranged and a report prepared.

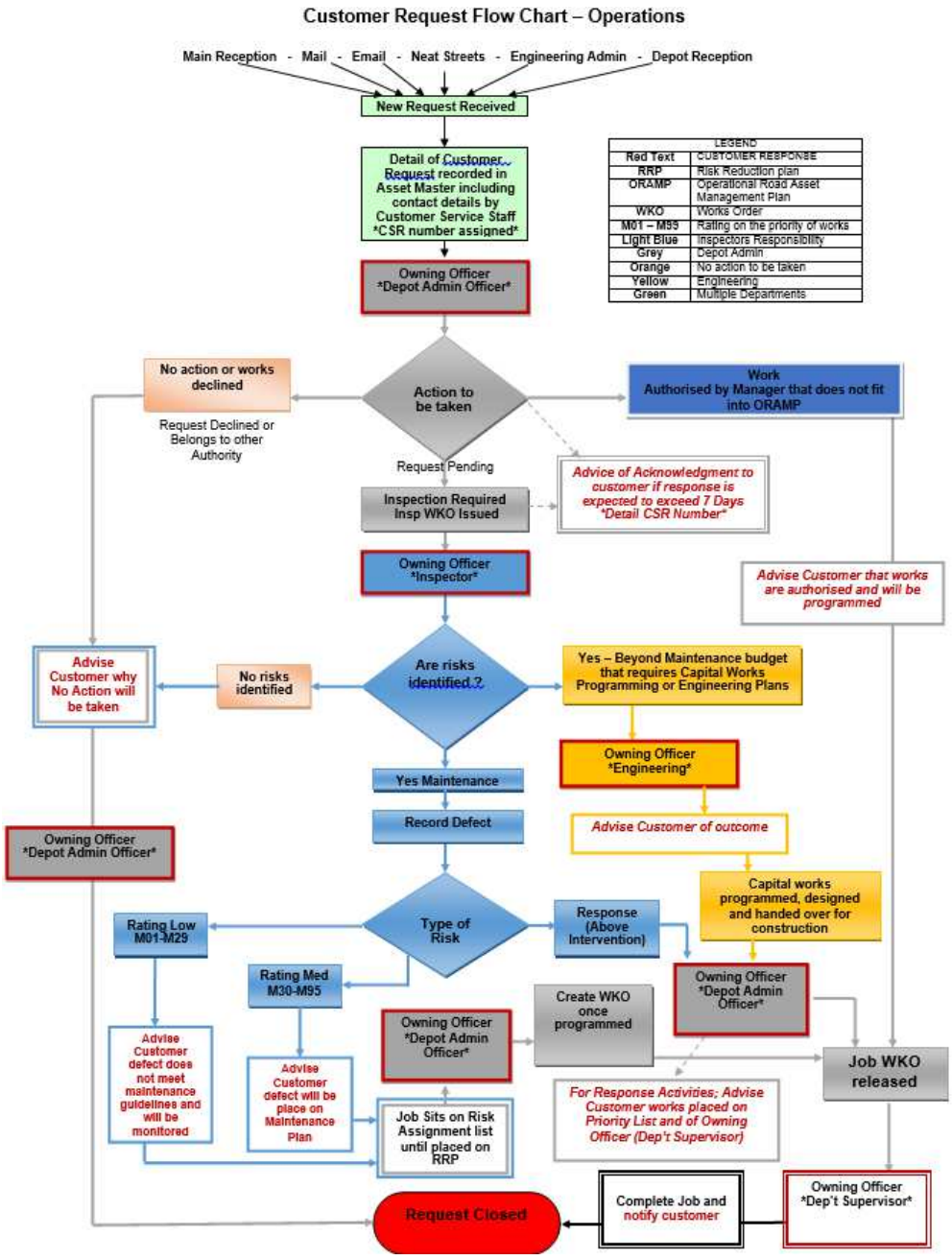


Figure 7: Customer Request Flow Chart

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5.2 Records

Council operates an Asset Management and Works Management software System which records details for all road related assets of:

- inspection frequencies;
- customer requests referred by the customer request system;
- inspection outcomes which identify defects which exceed intervention levels;
- risk assessments associated with each defect to enable prioritisation;
- proposed maintenance activities and cost estimates to rectify the defects; and
- works orders which have initiated or enabled defect rectification.

5.3 Inspections

Council schedules a recurring program of inspections and surveys of the road network aimed at identifying instances where the target intervention levels are not achieved. The frequency of inspections varies depending on the usage and level of importance of the asset. These frequencies are detailed in *Appendix F*. The process is figure 6.

The council conducts two types of inspections:

Defect / Hazard Inspections:

To satisfy the requirements of the Road Management Act Defect / Hazard inspections are undertaken to identify and prioritise hazards and defects. This is achieved by measuring the level of defect against established intervention and response levels. A summary of intervention levels and response times are detailed in *Appendix G*.

Site specific Defect / Hazard inspections also occur after a customer identifies a hazard or defect through the customer request process and periodically or unscheduled inspection, as identified in *Appendix E* and detailed in the *Operational Road Asset Management Plan*.

Condition Inspections:

Council's condition inspection program identifies where the significant road assets are in their life cycle, and highlights those assets which are beyond their condition intervention. This information is analysed to establish a program of renewal / replacement works required for each asset group.

A condition inspection program for roads and road related assets is detailed in *Appendix F* with inspection frequencies. The Asset Management software is used to manage condition inspections and renewals / replacement works processing.

5.4 Prioritisation and Funding of Works

Council's works program is split into three main categories including:

- Maintenance / operational
- Capital - Renewal / replacement
- Capital - New / Upgrade

Works within each of the categories are prioritised and funded as follows:

Maintenance / operational

Maintenance works involve activities which remedy defects or arrest premature deterioration of an asset. These works are essential for an asset to achieve life cycle expectations and vary in nature and extent depending where the asset is in relation to its life cycle. Older assets generally require significantly more maintenance.

- Prioritisation of maintenance works within each asset category is based on the risk assessment of defects identified in the inspection process.
- Response works are undertaken immediately and planned works are listed in priority order.
- Works from the Planned Works List are then scheduled monthly based on allocated funds, priorities and optimised in specific work areas.

Capital (Renewal / replacement)

Renewal works involve the rehabilitation of the current asset base to as like new.

- Renewal / replacement works programs within each asset category are prioritised on the risk assessment of projects identified in the condition inspection process and allocated according to the available budget.
- Planning of projects is undertaken to design and determine cost.
- Projects are scheduled based on available resources and seasonal construction conditions.

Capital (New / Upgrades)

Capital expansion works involve the addition to or expansion of the current asset base. Requires significant allocation of Council rates;

The Capital Evaluation Process of prioritising capital works, emanating from each service function, is currently under development. The basis of the process will consider a number factors and weighting criteria which may involve:

- Best Value community expectations.
- Economic benefit.
- Improvement in safety
- Cultural enhancement
- Environmental benefits
- Life Cycle Costing and funding arrangements

5.5 States of Emergency

Established response standards recognise that Council has limited resources which can be accessed during normal operational circumstances. This standard of responsiveness however, does not extend to states of emergency which consume resource pools. In these circumstances, the Chief Executive Officer will nominate a state of emergency and establish the period of duration and standards of service to be applied to the relevant asset group during the emergency event.

5.6 Auditing

Council is currently subjected to external compliance auditing in relation to:

- Tendered works subject to competitive tendering arrangements
- Annual financial audits in relation to asset valuations and annual depreciation amounts
- Public Liability Auditing by Council insurance providers "MAV Insurance"

A pre-requisite of insurance cover, requires annual audits to establish the achievement of minimum system requirements in terms of asset management practices.

System audits may include:

- System appropriateness and effectiveness;
- System procedures current and in circulation;
- Validation records available and complete;
- Target level of service (KPI's detailed in *Appendix F*);
- Responsiveness standards achieved and achievable; and
- Reporting requirements completed and acknowledged.

System audits will be conducted at least annually.

6.0 ROAD ACTIVITY COORDINATION

6.1 Utility Coordination

Management of Utility Infrastructure in Road Reserves

The Road Management Act imposes specific duties and powers onto Council in relation to the co-ordination of the placement and management of road and non-road related infrastructure within road reserves.

The Code of Practice – Management of Infrastructure in Road Reserves and Road Management (Works and Infrastructure) Regulations documents provide the basis for the orderly exchange of information between Council and Utility Authorities to enable coordination of all activity via the road authority. Regulated fee structures enable the Coordinating Road Authority to recoup the cost of administering the requirements of the RM Act from the Utility Authorities.

Dial Before You Dig Applications

Council administers enquires in relation to the location of its infrastructure via the Dial Before You Dig program. Requests for information are emailed to Council via this source by which a response back to the applicant is expected within two days after issue.

6.2 Road User and Land Owner Coordination

Access Control

Under the provisions of the Road Management Act, a Road Authority may make a decision concerning access onto a public road in relation to:

- Location
- Restrictions of use
- Conditions
- Works

VicRoads may specify requirements in relation to the access to arterial roads, whilst Council is the authority in relation to the access to the municipal road network.

Under Council Road and Public Places Permit process, Council may impose conditions on a permit for the use or development of land in relation to:

- Vehicle crossings
- Driveway dimensions
- Turning lanes
- Bus stopping areas
- Roadside marketing and advertising
- Use of the road reserve for storage
- Use of the road reserve for construction.

Vehicle Crossings and In-fills

Appendix H details the demarcation responsibility between Council and landowner in relation to crossovers and in-fills.

The initial capital cost and ongoing maintenance requirements are generally funded entirely by the landowner. A Vehicle Crossing permit to install, alter or remove a property entrance crossover or in-fill must be obtained from Council prior to works being undertaken to ensure entrance arrangements satisfy Council standards in terms of type, suitability and performance.

In circumstances where an existing property entrance becomes a safety hazard, or ceases to perform as required in terms of access suitability or drainage problems, the responsibility to satisfactorily correct the problem rests with the landowner.

Extenuating circumstances may implicate Council where it can be established that adjacent works, commissioned by Council, have contributed to the change in condition or performance of the property entrance.

Where a defect in a property entrance is detected by Council officers, as a part of day-to day activities, the land owner will be advised of the defect and instructed to correct the problem. Council may undertake the works required at the land owners cost, if works are not completed satisfactorily within a reasonable time frame.

Overhanging Limbs

Overhanging limbs are maintained in accordance with Council's Vegetation Clearance Guidelines contained within the *Operational Road Asset Management Plan*, which stipulates a clearance template that can be applied. *Appendices I & J* summarise this information. Templates vary depending on the hierarchy classification of the roadway or pathway.

Council will endeavour to remove all overhanging limbs which encroach into clearance templates on all Council roadways and pathways, based on available funds and priority ranking. Movement of transport on roadways, which may require removal of overhanging limbs, may incur a cost to the transport operator where works are not listed in the current program of works.

Council is responsible for the clearance of overhanging limbs within pathway clearance zone templates in relation to trees planted within the public road. It is the land owner responsibility to maintain overhanging limbs within clearance zones which are from vegetation planted within their property.

During routine inspections, Council officers, identifying clearance zone intrusions from adjoining freehold land, will forward a reminder to the land owner to undertake necessary lopping. If works are not completed to a satisfactory standard within a reasonable time frame, Council may arrange the works and seek reimbursement of costs from the land owner.

Nature Strips

Nature strips are shaped, top soiled and grassed as part of urban street construction works, to form a landscaped appearance to streets which soften the harsh paved surfaces of roadways and pathways. Nature strips also contain street trees and service infrastructure such as poles and underground service lines.

Nature strips are not recognised as a road related asset and are therefore not formally inspected or maintained to a standard defined under Council's Road Asset Management Plan. Consequently, Council may only undertake works on nature strips where an obvious safety or significant amenity issue may be present as reported by a customer complaint or identified during routine inspection of road related assets.

Council has insufficient funds available to maintain nature strips other than at public focal points. Historically, the landowners have undertaken mowing and up-keep on the front or side nature strip as a part of the presentation of their property and general appearance of the street scape. Service authorities have an obligation to reinstate disturbed nature strips to a satisfactory standard following excavation works in relation to the installation or maintenance of their administered infrastructure.

Road Opening Permits

All works carried out on the road reserve, including those by service authorities, are registered on the Road Openings Database.

For private individuals, upon payment of the appropriate fee, a Road Opening Permit is issued. The permit stipulates the standard of reinstatement work and conditions relating to the carrying out of the works. Reinstatement works may be carried out by Council on behalf of the applicant or by the applicant, most likely in the case of nature strips or gravel roads.

Council inspects the works upon completion to ensure that the reinstatement works have been carried out in an appropriate manner and that the area of the works did not exceed the permit application. The procedure is fully described in the *Road Openings Procedure.*

Road Occupation Permit

Residents, businesses or local community groups may occupy a municipal controlled road reserve to conduct special events or business activities subject to the issue of a Road Occupation permit.

As part of the permit process, Council may consider one or a number of the following points when determining whether to grant approval and conditions which will apply.

- Location and duration of activity;
- Interference with other road users;
- Traffic Management Plans;
- Public Liability Insurance Cover;
- Potential damage to road or non-road related infrastructure;
- Consequence in relation to effect on other road occupation activities planned or in progress;
- Traffic volume; or
- Environment.

Higher Mass and/or Oversize Vehicles

Council may issue approval, subject to conditions, for the access of higher mass limit and/or oversize vehicles onto the municipal road network. Approval is generally subject to the restriction of the vehicles along defined routes considering the adequacy of the roadway alignments to accommodate the safe passage without detrimental effect on other road users or the roadway infrastructure.

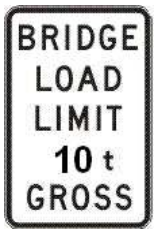
In this regard, approval may be subject to:

- Farm gate access requirements;
- Periods of time during the year;
- Times of Day;
- Speed limits and/or accompanying support vehicles;
- Repetition of movement along the route; or
- Fitting of road friendly suspension.

Subject to clear zone requirements, Council may require the applicant to fund the clearance of vegetation overhang along the approved route to enable passage of the vehicles involved. "Guidelines for assessing the suitability of Heavy Vehicles for Local Roads" published by the National Road Transport Commission is referenced under this approval process.

Load/Dimensional Limits on Roadways

Council has the authority under *Section 207* of the Local Government Act, to impose load / dimensional limits on roadways.



Circumstances where load/Dimensional limits will apply include:

- Permanent or temporary restriction to reflect the width and/or structural capacity of bridges or culverts.
- Permanent or seasonal restriction on roads to reflect the load carrying capacity of pavements and/or sealed surfaces.
- Permanent or periodic restriction to protect the amenity of local communities/residents.

Load restrictions are communicated to road users via roadside signage which may be in the form of:

- Specified restrictions applicable to all vehicles exceeding the limits.
- Specified restrictions applicable to through traffic only. Exemptions applicable to enable deliveries to/from abutting landowners.

The enforcement of load / dimensional restrictions is subject to procedural applications to VicRoads for consideration by the Truck Operations Committee, to reflect the nature of the restriction as a Major Traffic Control Item.

7.0 REVIEW

Review Process

This Road Management Plan will be reviewed to coincide with the periodic review of linked *Road Asset Management Plan* and *Operational Road Asset Management Plan* if there has been a substantial change in service levels standards or the management system requiring formalisation through the Road Management Plan gazettal process. The Road Management Plan will be scheduled to be reviewed following each Council election and as required. The review shall reflect changes in AM Policies, Standards, Processes and Practices implemented or changes in level of service standards adopted since the last review.

Referenced documents such as Acts, Regulations or Design Standards listed in *Section 8*, which do not cause an alteration to the defined Level of Service or management system, and which are updated during the application of this Road Management Plan version, will be the applied reference in terms of Council's operation at any point in time.

Adoption and Amendments

Before adopting or amending this plan Council must undertake a process of:

- Giving notice of the Plan or amendment,
- Allow 28 days for submissions,
- Consider any submissions,
- Give notice of intention to adopt the plan or amendment

The notice must be published in the Government Gazette and a local daily newspaper.

Upon review of the Plan, Council must also give notice of the review and the proposed Plan amendments and where copies may be inspected or obtained. The final phase of review involves Council publishing a notice of intention to adopt the plan amendments in the Government Gazette.

During exhibition phases, copies of the draft version of the plan will be located at the following locations:

- Central Goldfields Shire Office – 12 - 22 Nolan Street Maryborough
- Online on the Council's web site www.centralgoldfields.com.au.

A hard copy of both the Road Management Plan and Public Road Register is available for inspection at the Central Goldfields Shire Office during normal working hours. Both documents may also be viewed on the Council web site www.centralgoldfields.com.au under Council Services - Transport.

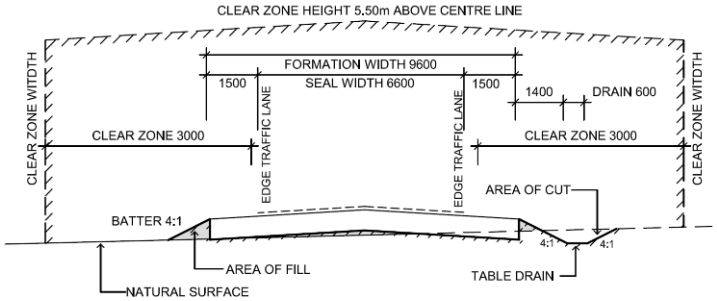
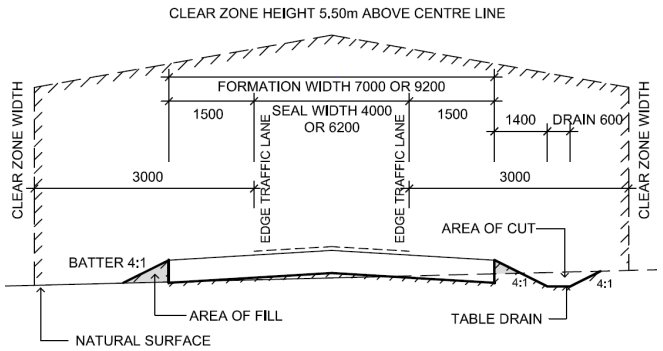
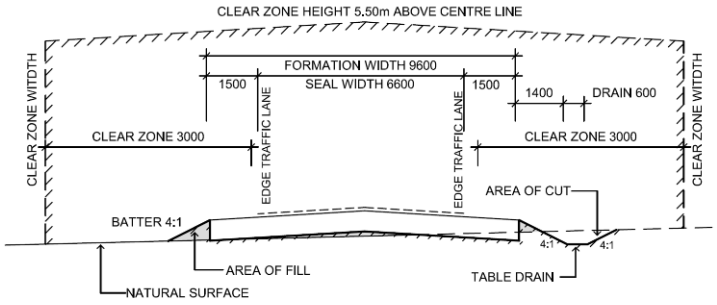
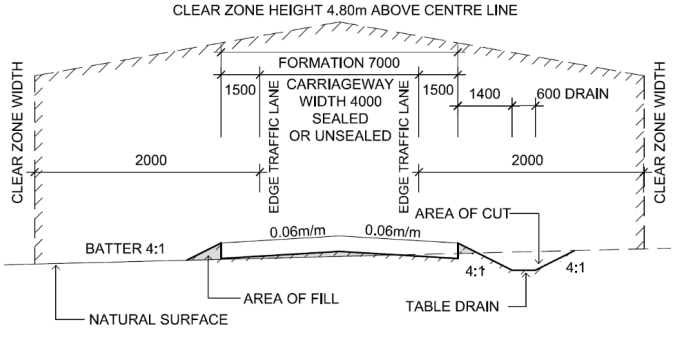
8.0 REFERENCED DOCUMENTS

TITLE	DATE / VERSION
Ministerial Acts & Regulations	
Road Management Act	2004
Local Government Act	1989
Road Safety Act	1986
Local Government (Best Value Principles) Act	1999
Road Management (Works & Infrastructure) Regulations	2005
Road Management (General) Regulations	2005
Disability Discrimination Act	1992
Ministerial Codes of Practice	
Worksite Safety – Traffic Management	2010
Operational Responsibility for Public Roads	2004
Road Management Plan - content	2004
Clearways on Declared Arterial Roads	2004
Management of Road and Utility Infrastructure in Road Reserves	2008
Guidelines for Geographic Names	2010
Australian Standards	2010
AAS27 Approved Accounting Methods	1996
Risk management - Principles and guidelines AS/NZS ISO 31000	2009
External Sourced Documents	
VicRoads Township Demarcation Plans	2010
International Infrastructure Management Manual	2006
Accounting for Infrastructure Assets – A Guide Dept. Victorian Communities	2004
MAV Asset Management Improvement STEP Program – Road Asset Management Plan Framework	2003
Guidelines for Assessing the Suitability of Heavy Vehicles for Local Roads – National Road Transport Commission	2002
Traffic Engineering Manual - VicRoads	2014
Infrastructure Design Manual	2016
Council Documents	
Council's Bicycle Strategy	Sep 2004
Council's Local Laws	Various
Corporate Asset Management Policy	2003, 2011
Corporate Asset Management Strategy	2003, 2011
Central Goldfields Council Plan	2013-2017
Municipal Public Road Register	2016
Public Road Register Policy	2011
Risk Management Policy & Procedure	2015
Municipal Emergency Management Plan	2017
Fire Management Plan	2012-2017
Linked Council Documents	
Operational Road Asset Management Plan (ORAMP)	June 2017Draft
Road Asset Management Plan (RAMP)	2017 Draft

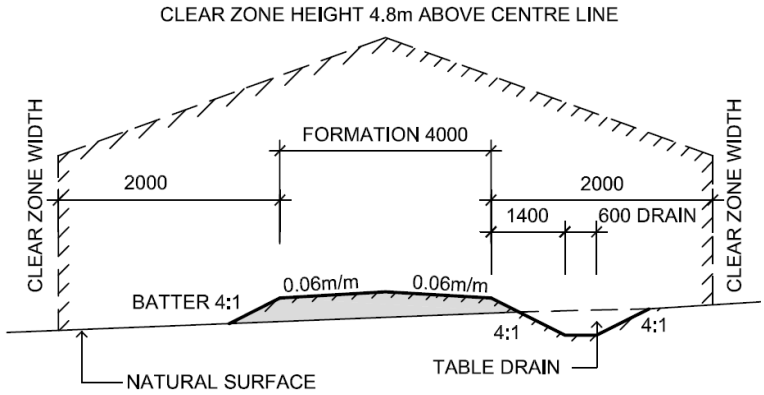
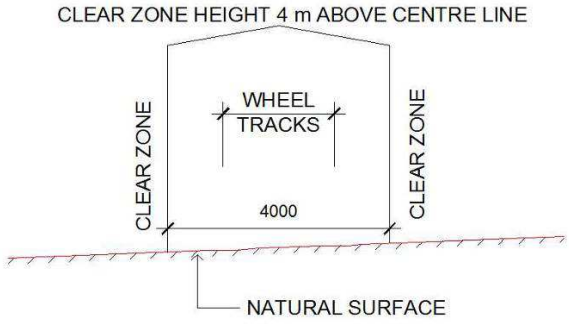
APPENDIX

Appendix A – Road Hierarchy Classification & LOS

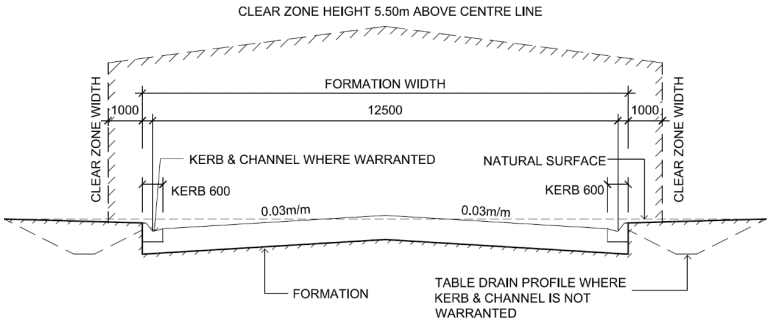
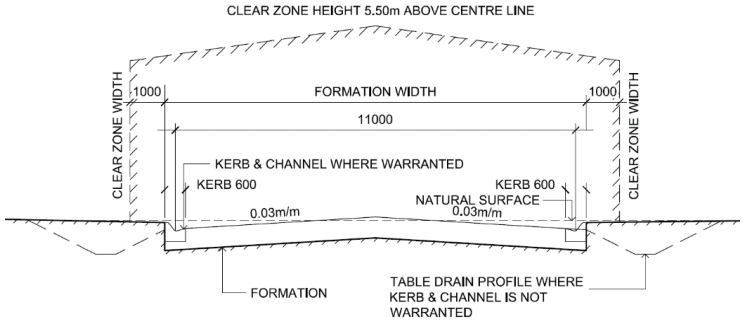
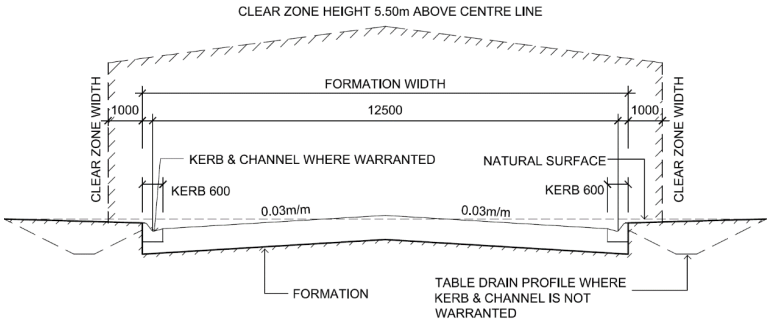
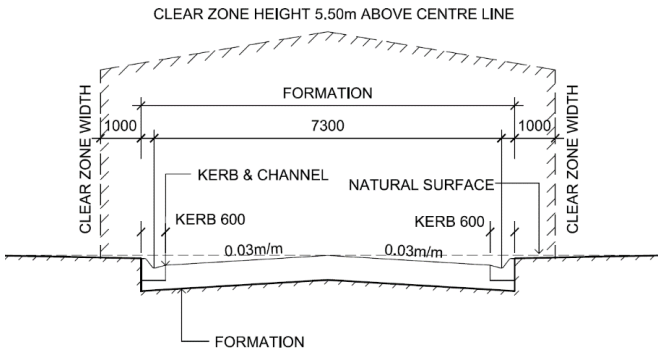
RURAL ROAD NETWORK			DESIGN SERVICE LEVEL STANDARDS				
Hierarchy Type	**Hierarchy Category**	**Primary Function**	**Base Profile Standard**	**Typical Daily Traffic Volumes**	**Design Speed**	**Austroads Vehicle Class (Refer Appendix D)**	**Bridging Standards**
LINK ROADS	Rural Link (RL)	High usage strategic Freight linkage routes. ❖ Heavy vehicle linkage from the State Arterial Road network to local commercial or industrial focal points. ❖ Also includes heavy vehicle bypass routes of major urban centres.	Two lane sealed road.	> 100 vpd With 6% CV content	100 kph	❖ 1 to 11 ❖ Higher mass limit permit exempt.	❖ Two lane structure. ❖ SM1600 loading.
COLLECTOR ROADS	Rural Collector (RC)	High usage strategic Collector routes. ❖ Rural collector routes from local access roads to community centres or popular focal points. ❖ High usage connector routes to the Arterial road network.	Single lane sealed road with seal widening on crests and curves. Widened were traffic counts indicate >150vpd	>100 vpd With 6% CV content	100 kph	❖ 1 to 9 ❖ Higher mass limit permit required. ❖ Class 10 to 11 prohibited.	❖ Two lane structure. ❖ T44 loading.
INDUSTRIAL ACCESS ROADS	Rural Industrial Access (RIA)	Direct access to Industrial/Agribusiness development in Rural Areas. ❖ Heavy vehicle access from Link Road network or pre-approved heavy vehicle network to industrial focal points.	Two lane sealed road.	>With 10% CV content	100Kph	❖ 1 to 11 ❖ Higher mass limit permit exempt.	❖ Two lane structure. SM1600 loading.
ACCESS ROADS	Rural Access 1 (RA1)	Medium usage property access routes. ❖ Provide property access to rural developed areas incorporating at least 5 permanent tenements. ❖ Medium usage access to rural properties generating regular and consistent vehicle usage. ❖ Bus Route minimum standard.	Single lane gravel sheeted road or single lane sealed road where traffic conditions warrant.	>30 vpd	80 kph	❖ 1 to 9 ❖ Higher mass limit permit required. ❖ Class 10 to 11 prohibited.	❖ Single lane structure. ❖ 20 tonne load limit or side track provision.

MAINTENANCE SERVICE LEVEL STANDARDS	TYPICAL DESIGN (*Note this is the desired LOS but not always reasonably practicable)	
Base Access and Response Standards	**Typical Standard**	**Diagrams**
❖ All weather access, else alternate routes identified. ❖ Inspection frequencies and response times in line with Operational Road Management Plan specifications. ❖ Hazards rectified or delineated to enable safe driver response times at sign posted speed limit.	❖ Seal width - 6.6m ❖ 1.5m wide Shoulders ❖ Pavement Depth - 300mm Minimum ❖ Pavement design required.	
❖ All weather access, else alternate routes identified. ❖ Inspection frequencies and response times in line with Operational Road Management Plan specifications. ❖ Hazards rectified or delineated to enable safe driver response times at sign posted speed limit.	❖ Seal width - 4.0m or 6.2m on bends and crests; or ❖ Seal width - 6.2m on High AADT Roads >150vpd ❖ 1.5m wide Shoulders ❖ Pavement Depth - 300mm Minimum ❖ Pavement design required	
❖ All weather access, else alternate routes identified. ❖ Inspection frequencies and response times in line with Operational Road Management Plan specifications. ❖ Hazards rectified or delineated to enable safe driver response times at sign posted speed limit.	❖ Seal width - 6.6m ❖ 1.5m wide Shoulders ❖ Pavement Depth - 300mm Minimum ❖ Pavement design required.	
❖ All weather access - delays during/ following extreme weather events may be experienced. ❖ Vehicle speed adjustment required to accord with road surface conditions. ❖ Inspection frequencies and response times in line with Operational Road Management Plan specifications. ❖ Hazards rectified or delineated when driver awareness notification required.	❖ Unsealed 4.0m wide road with 1.0m Shoulders with gravel surface ❖ Seal width - 4.0m 1.5m wide shoulders on High AADT Roads ❖ Pavement Depth - 250mm Minimum ❖ Pavement design required	

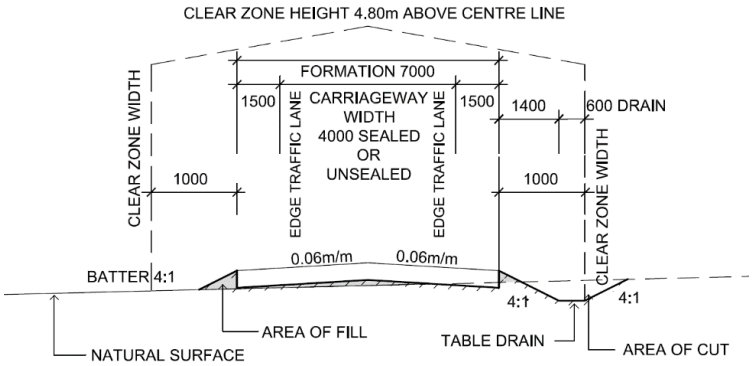
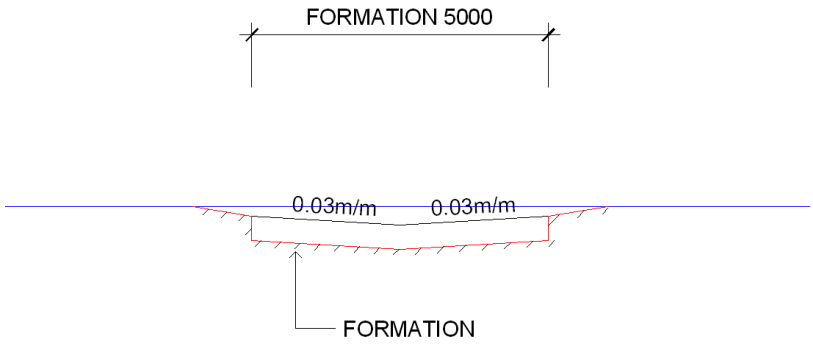
RURAL ROAD NETWORK			DESIGN SERVICE LEVEL STANDARDS				
Hierarchy Type	**Hierarchy Category**	**Primary Function**	**Base Profile Standard**	**Typical Daily Traffic Volumes**	**Design Speed**	**Austroads Vehicle Class (Refer Appendix D)**	**Bridging Standards**
ACCESS ROADS Cont.	Rural Access 2 (RA2)	Low usage property access routes. ❖ Provide property access to rural developed areas incorporating up to 5 permanent tenements. ❖ Low usage access to rural properties generating spasmodic vehicle usage.	Single lane formed road providing all weather access.	10 to 30 vpd	50 kph	❖ 1 to 5 ❖ 6 to 9 ❖ Subject to available height and width clearances. ❖ Higher mass limit permit required. ❖ Class 10 to 11 prohibited.	❖ Single lane structure or low level crossing. ❖ 20 tonne load limit or side track provision.
	Rural Access Track (RAT)	Occasional usage property access routes. ❖ Occasional usage access to rural properties generating spasmodic vehicle usage. ❖ Strategic fire access routes or emergency access points. ❖ Strategic access to state forest or crown land areas.	Single lane unformed road providing dry weather access	<10 vpd	N/A	❖ 1 to 5 ❖ 6 to 9 ❖ Subject to available height and width clearances. ❖ Higher mass limit permit required. ❖ Class 10 to 11 prohibited.	❖ Low level crossing.
	Limited Access Tracks (LAT)	Specific purpose access tracks not intended for General access. ❖ Strategic fire access.	Single lane flat bladed tracks	N/A	N/A	❖ Standards defined by others	❖ Standard defined by others
OBSELETE	Not Maintained (NM)	Road Reserve not intended for General access (All NM roads are currently under review, Refer *section 7.0*)	N/A	N/A	N/A	❖ Standards defined by others	❖ Standard defined by others

MAINTENANCE SERVICE LEVEL STANDARDS	TYPICAL DESIGN (*Note this is the desired LOS but not always reasonably practicable)	
Base Access and Response Standards	**Typical Standard**	**Diagrams**
❖ All weather access - delays during / following extreme or wet / dry weather events may be experienced. ❖ Vehicle speed adjustment required to accord with road surface conditions. ❖ Inspection frequencies and response times in line with Operational Road Management Plan specifications. ❖ Hazards rectified or delineated when driver awareness notification required.	❖ Formed only – 4m ❖ No Shoulders	
❖ Dry weather access – road closure during / following extreme or wet weather periods may be experienced. ❖ Vehicle speed adjustment required to accord with road surface conditions. ❖ Inspection frequencies and response times in line with Operational Road Management Plan specifications. ❖ Hazards rectified when conditions permit access.	❖ Unformed road	
❖ Respond as directed following external authority requisition (CFA). ❖ Dry weather access only. ❖ Passable by Fire Truck or 4 wheel drive vehicle. ❖ Inspection frequencies and response times in line with Operational Road Management Plan specifications.	❖ N/A	N/A
❖ Not Maintained by Council	❖ N/A	N/A

URBAN STREET NETWORK			DESIGN SERVICE LEVEL STANDARDS				
Hierarchy Type	**Hierarchy Category**	**Primary Function**	**Base Profile Standard**	**Typical Daily Traffic Volumes**	**Design Speed**	**Austroads Vehicle Class (Refer Appendix D)**	**Bridging Standards**
LINK STREETS	Urban Link (UL)	High usage strategic Freight linkage routes. ❖ Heavy vehicle linkage from the State Arterial Road network to local commercial or industrial focal points. ❖ Also includes heavy vehicle bypass routes of major urban centres.	Two lane sealed road.	> 1000 vpd	To accord with guidelines	❖ 1 to 11 ❖ Higher mass limit exempt.	❖ Two lane structure. ❖ SM1600 loading.
COLLECTOR STREETS	Urban Collector (UC)	High usage strategic Collector routes. ❖ Urban collector routes from urban access streets to community, school or commerce centres or popular focal points. ❖ High usage connector routes to the Arterial road network.	Two lane sealed street with access to a designated on or off street car parking area.	>1000 vpd	To accord with guidelines	❖ 1 to 9 ❖ Higher mass limit permit required. ❖ Class 10 to 11 prohibited.	❖ Two lane structure. ❖ T44 loading.
INDUSTRIAL ACCESS ROADS	Urban Industrial Access (UIA)	Direct access to Industrial development in Urban areas. ❖ Heavy vehicle access from Link Road network or pre-approved heavy vehicle network to industrial focal points.	Two lane sealed road.	>With 10% CV content	To accord with guidelines	❖ 1 to 11 ❖ Higher mass limit exempt.	❖ Two lane structure. ❖ SM1600 loading.
ACCESS STREETS	Urban Access 1 (UA1)	Property access streets. ❖ Provide property frontage access to residential developed allotments. ❖ Bus Route minimum standard.	Two lane sealed street with sealed on street parking provision (K&C and underground drainage site dependant)	>30 vpd	50 kph	❖ 1 to 5 ❖ 6 to 9 subject to local access controls ❖ Higher mass limit permit required. ❖ Class 10 to 11 prohibited.	❖ Two lane structure. ❖ 20 tonne load limit

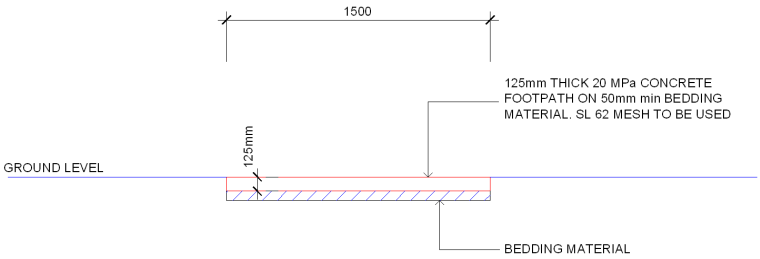
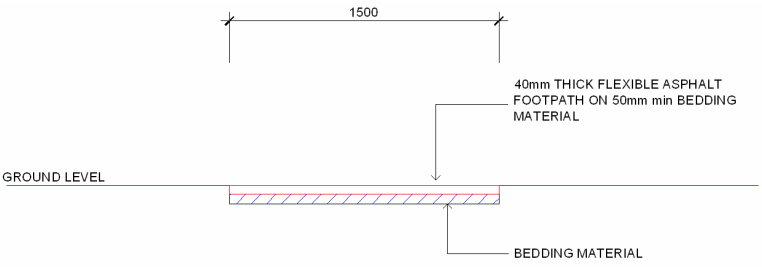
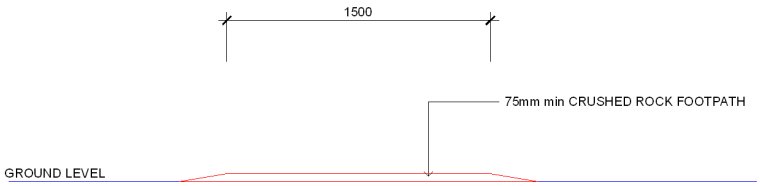
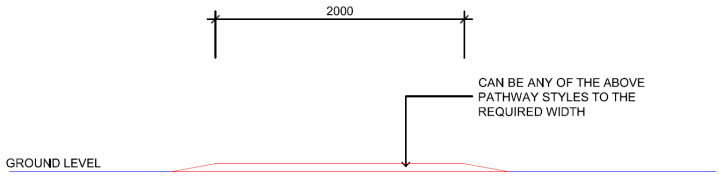
MAINTENANCE SERVICE LEVEL STANDARDS	TYPICAL DESIGN (*Note this is the desired LOS but not always reasonably practicable)	
Base Access and Response Standards	**Typical Standard**	**Diagrams**
❖ All weather access, unless alternate routes identified. ❖ Inspection frequencies and response times in line with Operational Road Management Plan specifications. ❖ Hazards rectified or delineated to enable safe driver response times at sign posted speed limit.	❖ Seal width - 11.9m kerb, 12.5m no kerb ❖ Pavement Depth - 350mm Minimum ❖ Pavement design required	
❖ All weather access, unless alternate routes identified. ❖ Inspection frequencies and response times in line with Operational Road Management Plan specifications. ❖ Hazards rectified or delineated to enable safe driver response times at sign posted speed limit.	❖ Seal width – 10.4m with kerb, 11m no kerb ❖ Pavement Depth - 300mm Minimum ❖ Pavement design required	
❖ All weather access, unless alternate routes identified. ❖ Inspection frequencies and response times in line with Operational Road Management Plan specifications. ❖ Hazards rectified or delineated to enable safe driver response times at sign posted speed limit.	❖ Seal width - 11.9m kerb, 12.5m no kerb ❖ Pavement Depth - 450mm Minimum ❖ Pavement design required	
❖ All weather access, unless alternate routes identified. ❖ Inspection frequencies and response times in line with Operational Road Management Plan specifications. ❖ Hazards rectified or delineated to enable safe driver response times at sign posted speed limit.	❖ Courtbowls 6m seal width with kerb ❖ Seal width – 6.7m with kerb ❖ Pavement Depth - 250mm Minimum ❖ Pavement design required	

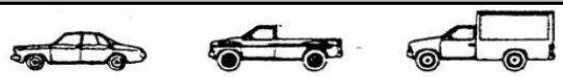
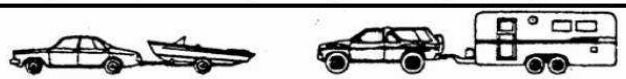
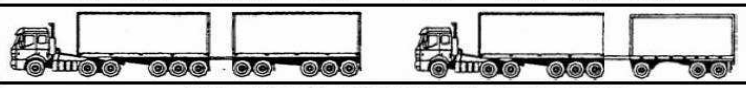
URBAN STREET NETWORK			DESIGN SERVICE LEVEL STANDARDS				
Hierarchy Type	Hierarchy Category	Primary Function	Base Profile Standard	Typical Daily Traffic Volumes	Design Speed	Austroads Vehicle Class (Refer Appendix D)	Bridging Standards
	Urban Access 2 (UA2)	Property access streets. ❖ Provide property frontage access to residential developed allotments.	Signel lane gravel road to Rural Access or Single lane sealed street with	>10 vpd	50 kph	❖ 1 to 5 ❖ 6 to 9 subject to local access controls ❖ Higher mass limit permit required. ❖ Class 10 to 11 prohibited.	❖ Single lane structure. ❖ 20 tonne load limit
	Urban Access Lane (UAL)	Low usage property access streets/lanes. ❖ Provide alternate side or rear property access to urban residential or commercial allotments.	Unsealed street	< 30 vpd	N/A	❖ 1 to 5 ❖ Higher mass limit permit required. ❖ Class 10 to 11 prohibited.	❖ Single lane structure or low level crossing. ❖ 20 tonne load limit

MAINTENANCE SERVICE LEVEL STANDARDS	TYPICAL DESIGN (*Note this is the desired LOS but not always reasonably practicable)	
Base Access and Response Standards	**Typical Standard**	**Diagrams**
❖ All weather access, unless alternate routes identified. ❖ Inspection frequencies and response times in line with Operational Road Management Plan specifications. ❖ Hazards rectified or delineated to enable safe driver response times at sign posted speed limit.	❖ Unsealed 4.0m wide road with 1.5m Shoulders with gravel surface ❖ Seal width - 4.0m 1.5m wide shoulders on High AADT Roads ❖ Pavement Depth - 250mm Minimum ❖ Pavement design required	
❖ All weather access - delays during/ following extreme or wet/dry weather events may be experienced. ❖ Vehicle speed adjustment required to accord with road surface conditions. ❖ Inspection frequencies and response times in line with Operational Road Management Plan specifications. ❖ Hazards rectified or delineated when driver awareness notification required.	❖ Formation width - 4m	

Appendix B – Pathway Hierarchy Classification & LOS

HIERARCHY CLASS	PRIMARY FUNCTION	DESIGN SERVICE STANDARD	MAINTENANCE SERVICE STANDARD
Commerce (CO)	Main shopping areas / Transport hubs	Paved to achieve gently graded non slip surface from building line or shop frontage to back of kerb. Caters for high density parallel and transverse pedestrian movements. May consist of a variety of surface types to achieve aesthetic appeal in relation to colour and texture to harmonise with other streetscape features.	❖ All weather usage, generally assisted by covered walkways. ❖ Inspection frequencies and response times in line with Operational Road Management Plan specifications. ❖ Hazards rectified or delineated to warn or barricade against pedestrian access.
Business (BU)	Busy urban areas. Township main streets or zones immediately adjacent to or feeding schools, halls, churches etc.	Paved to achieve gently graded non slip surface. Caters for medium density parallel and transverse pedestrian movements. May vary in width to cater for local pedestrian movement requirements, but would generally extend from building line to back of kerb and consist of a uniform pavement material and surface texture.	❖ All weather usage, possibly assisted by covered walkways. ❖ Inspection frequencies and response times in line with Operational Road Management Plan specifications. ❖ Hazards rectified or delineated to warn or barricade against pedestrian access.
Residential (RE)	Formed paths through urban residential areas or parks.	Paved to achieve gently graded non slip surface. Generally 1.5m in width and located adjacent to and parallel with the building line. Caters for low density parallel pedestrian movements.	❖ All weather usage, rarely assisted by covered walkways. ❖ Inspection frequencies and response times in line with Operational Road Management Plan specifications. ❖ Hazards rectified or delineated to warn or barricade against pedestrian access.
Rural (RU)	Formed paths through rural residential areas or parks.	Paved or unpaved surface with undulating grade lines commensurate with the surrounding topography. Generally about 1.8m min. wide to cater for shared usage by both pedestrians and cyclists. Caters for very low density parallel pathway movements.	❖ Normal weather usage. Wet or extreme weather conditions not catered for. ❖ Inspection frequencies and response times in line with Operational Road Management Plan specifications. ❖ Hazards rectified or delineated to warn or barricade against pedestrian or cyclist access.
Shared Path (SP)	Shared use bicycle & Footpaths along defined Pathways delineated by pavement markings and roadside signs and furniture.	Paved surfaces – generally chip seal or asphaltic concrete. Generally 2.0m min.	❖ Normal weather usage. Wet or extreme weather conditions not catered for. ❖ Inspection frequencies and response times in line with Operational Road Management Plan specifications. ❖ Hazards rectified or delineated to warn or barricade against pedestrian or cyclist access.

TYPICAL DESIGN (*Note this is the desired LOS but not always reasonably practicable)	
Typical Standard	**Diagram**
Ridged Path - Concrete	
❖ Concrete width - 1.5m ❖ Concrete Depth - 125mm ❖ Bedding Depth - 50mm ❖ Reinforcement SL 72 Mesh	
Flexi Path - Asphalt	
❖ Asphalt width - 1.5m ❖ Flexible Asphalt Depth - 40mm ❖ Bedding Depth - 50mm	
UnSealed	
❖ Footpath width - 1.5m ❖ Crushed rock/Gravel Depth - 75mm	
Shared Path	
❖ Footpath width - 2.0m Min	

Level 1	Level 2		Level 3	AUSTROADS Classification		
Length (indicative)	Axles and Axle Groups		Vehicle Type			
Type	Axles	Groups	Typical Description	Class	Parameters	Typical Configuration
	LIGHT VEHICLES					
Short up to 5.5m		1 or 2	**Short** Sedan, Wagon, 4WD, Utility, Light Van, Bicycle, Motorcycle, etc	1	d(1) ≤ 3.2m and axles = 2	
	3, 4 or 5	3	**Short - Towing** Trailer, Caravan, Boat, etc	2	groups = 3 d(1) ≥ 2.1m, d(1) ≤ 3.2m, d(2) ≥ 2.1m and axles = 3, 4 or 5	
	HEAVY VEHICLES					
Medium 5.5m to 14.5m	2	2	**Two Axle Truck or Bus**	3	d(1) > 3.2m and axles = 2	
	3	2	**Three Axle Truck or Bus**	4	axles = 3 and groups = 2	
	> 3	2	**Four Axle Truck**	5	axles > 3 and groups = 2	
Long 11.5m to 19.0m	3	3	**Three Axle Articulated** Three axle articulated vehicle, or Rigid vehicle and trailer	6	d(1) > 3.2m, axles = 3 and groups = 3	
	4	> 2	**Four Axle Articulated** Four axle articulated vehicle, or Rigid vehicle and trailer	7	d(2) < 2.1m or d(1) < 2.1m or d(1) > 3.2m axles = 4 and groups > 2	
	5	> 2	**Five Axle Articulated** Five axle articulated vehicle, or Rigid vehicle and trailer	8	d(2) < 2.1m or d(1) < 2.1m or d(1) > 3.2m axles = 5 and groups > 2	
	≥ 6	> 2	**Six Axle Articulated** Six axle articulated vehicle, or Rigid vehicle and trailer	9	axles = 6 and groups > 2 or axles > 6 and groups = 3	
Medium Combination 17.5m to 36.5m	> 6	4	**B Double** B Double, or Heavy truck and trailer	10	groups = 4 and axles > 6	
	> 6	5 or 6	**Double Road Train** Double road train, or Medium articulated vehicle and one dog trailer (M.A.D.)	11	groups = 5 or 6 and axles > 6	
Large Combination Over 33.0m	> 6	> 6	**Triple Road Train** Triple road train, or Heavy truck and three trailers	12	groups > 6 and axles > 6	

Definitions:
Group: Axle group, where adjacent axles are less than 2.1m apart
Groups: Number of axle groups
Axles: Number of axles (maximum axle spacing of 10.0m)

d(1): Distance between first and second axle
d(2): Distance between second and third axle

Appendix D – Response Times

RESPONSE CODE	CONTROL MECHANISMS	RESPONSE TIME
A	Inspect and rectify if possible, or provide appropriate warning #	Within 1 working Day of Inspection
B	Inspect and rectify if possible, or provide appropriate warning #	Within 3 working Days of Inspection
C	Inspect and rectify if possible, or provide appropriate warning #	Within 1 Week of Inspection
D	Inspect and rectify if possible, or provide appropriate warning #	Within 1 Month of Inspection
E	Inspect and rectify if possible, or provide appropriate warning #	Within 3 Months of Inspection
F	Inspect and rectify if possible, or provide appropriate warning #	Within 6 Months of Inspection
G	Inspect and rectify if possible, or provide appropriate warning #	Within 1 Year of Inspection

*Response Times are from the time of inspection

Where, because of the nature of the repair required, level of resources required or workload, it is not possible to rectify within the time shown in Appendix D table, appropriate warning of the hazard is to be provided until the repair can be completed.

Appropriate warning could include, for example:

- Provision of warning signs
- Traffic control action
- Divert traffic around the site
- Install temporary speed limit
- Lane closure
- Closure of the road to certain vehicles (eg. Load limit)
- Road Closure

Appendix E – Request Inspections Timeframes

HIERARCHY	DESCRIPTION	INSPECTION TIME ^
UL, RL & CO	Link Roads & Commercial Pathways	A*
UC, RC, BU, UIA, RIA & SP	Collector Roads and Business & Shared Paths	B*
UA1, RA1 & RE	Access 1 Roads and Residential Paths	C
UA2, RA2 & RU	Access 2 Roads and Rural Paths	C
UAL, RAT & LAT	Lanes & Tracks	C

*Note Inspection timeframes are working days only.
^Inspection Time Response Code as per Appendix D table.

Appendix F – Routine Inspection Frequencies

ASSET CATEGORY		INSPECTION INTERVALS	
HIERARCHY TYPE	HIERARCHY CATEGORY	HAZARD INSPECTIONS	CONDITION INSPECTIONS
Roads			
Link	UL, RL	6 Monthly	3 Years
Collector	UC, RC, UIA, RIA		
Access	UA1, UA2, RA1		
	UAL, RA2		Not condition inspected
	RAT, LAT	Only inspect prior fire season, annually	Not condition inspected
Pathways			
Commerce	CO	6 Monthly	3 Years
Business	BU		
Residential	RE	Annually	
Rural	RU		
Shared Path	SP	Annually	
Bridges & Major Culverts			
All	All	Inline with Road or Path Inspection	5 Years
Minor Culverts			
All	All	Inline with Road or Path Inspection	5 Years
Kerb & Channel			
All	All	Inline with Road or Path Inspection	3 Years
Signs			
All	All	Inline with Road or Path Inspection	Not condition inspected
Traffic Control Facilities			
All	All	Inline with Road or Path Inspection	3 Years

*Note a tolerance of 1 month is acceptable between Hazard inspections.

Appendix G – Response Levels and Timeframes

DESCRIPTION & RESPONSE LEVEL	HIERARCHY				
	UL / RL / CO	UC / RC / UIA / RIA / UP / BU / SP	UA1 / UA2 / RA1 / RE	UAL / RA2 / RU	RAT / LAT
Sealed Roads	Response Timeframes (Appendix D)				
Potholes in the traffic lane of a sealed pavement >300mm in diameter & >100mm deep Edge drop offs onto an unsealed shoulder greater than 100mm Isolated edge breaks > 300mm	C	C	D	D	N/A
Materials fallen from vehicles, dead animals, wet clay and other slippery substances, hazardous materials, accumulation of dirt or granular materials on the traffic lane of sealed roads Ponding of water >300mm deep, fallen trees, oil spills, stray livestock	A	A	A	B	N/A
Unsealed Roads	Response Timeframes (Appendix D)				
Potholes in the traffic lane of a sealed pavement >450mm in diameter & >100mm deep Rutting in the traffic lane >100mm Corrugations > 90mm and over 20% of road length	N/A	N/A	D	E	N/A
Materials fallen from vehicles, dead animals, wet clay and other slippery substances, hazardous materials, accumulation of dirt or granular materials on the traffic lane of the roads Ponding of water >300mm deep, fallen trees, stray livestock	N/A	N/A	A	B	N/A
Tracks	Response Timeframes (Appendix D)				
Wash Outs & Impassable section of track in dry weather by a 4x4 vehicle	N/A	N/A	N/A	N/A	D
Ponding of water >300mm deep, fallen trees, stray livestock	N/A	N/A	N/A	N/A	C
Vegetation	Response Timeframes (Appendix D)				
Tree limbs or trees that are in danger of falling and causing a danger to the public	D	D	E	E	F

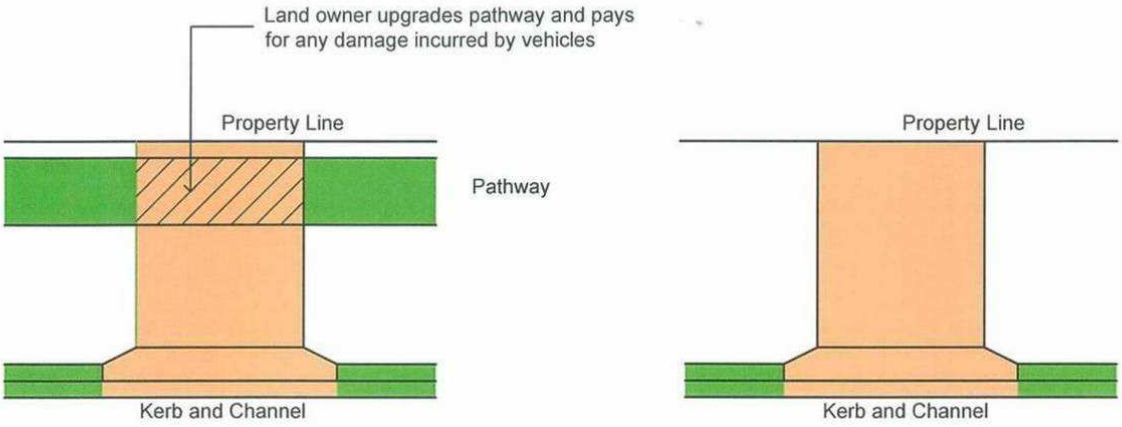
DESCRIPTION & RESPONSE LEVEL	HIERARCHY				
	UL / RL / CO	UC / RC / UIA / RIA / UP / BU / SP	UA1 / UA2 / RA1 / RE	UAL / RA2 / RU	RAT / LAT
Trees, shrubs or grasses that have grown to restrict design sight distance to intersections or restrict viewing of safety signs	E	E	E	F	G
Vegetation intruding within traffic lane and a minimum of 4.8m height clearance over pavement.	D	E	E	F	G
Road Furniture	**Response Timeframes (Appendix D)**				
Safety signs missing, illegible or damaged making them substantially ineffective	D	D	E	E	F
Structures	**Response Timeframes (Appendix D)**				
Damage affecting structural performance eg Bridges and Major Culverts	A	A	A	B	C
Kerb & Channel	**Response Timeframes (Appendix D)**				
Kerb & Channel displaced by 50mm	D	E	E	F	N/A
Pathways	**Response Timeframes (Appendix D)**				
Pathways and shared paths with a displacement > 50mm	C	C	D	D	N/A
Vegetation which presents a physical hazard to the public over pedestrian/bicycle paths, intruding into a clearance envelope between the edges of path and a minimum of 2.0m height clearance over path.	C	D	D	E	N/A

Appendix H – Vehicle Crossings and Infills Responsibilities

URBAN / RURAL VEHICLE CROSSINGS AND INFILLS RESPONSIBILITIES

COUNCIL RESPONSIBILITY

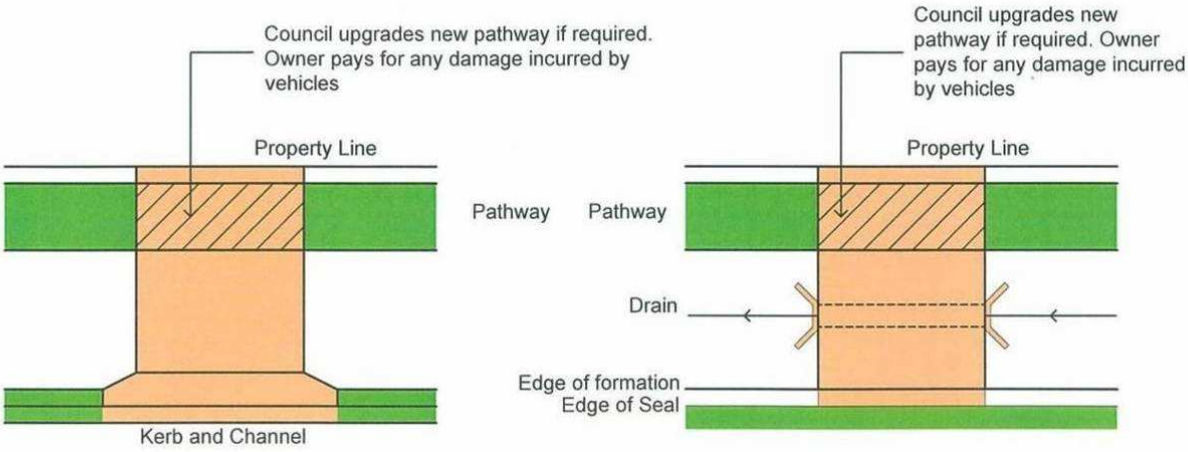
LAND OWNERS RESPONSIBILITY



EXISTING PATHWAY
NEW CROSSING (URBAN)

NO PATHWAY
NEW CROSSING (URBAN)

Note:
If new or existing steel plate crossing is required it is the landowner's responsibility for installation and maintenance.



NEW PATHWAY
EXISTING APPROVED CROSSING
(URBAN)

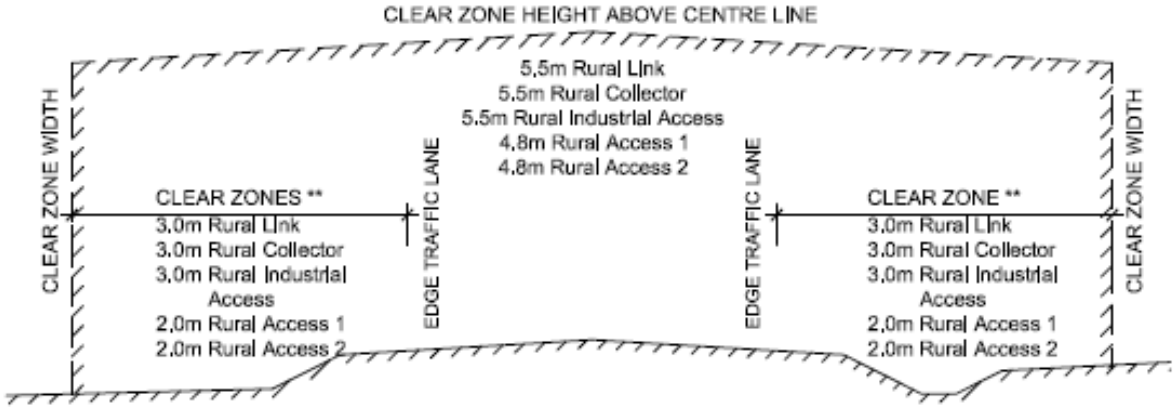
VEHICLE CROSSINGS (RURAL)

Note:
Where a Rural style vehicle crossing is sealed or asphalted the land owner is responsible to pay all costs for the installation and maintenance up to Councils sealed roadway

24 NOV 2004

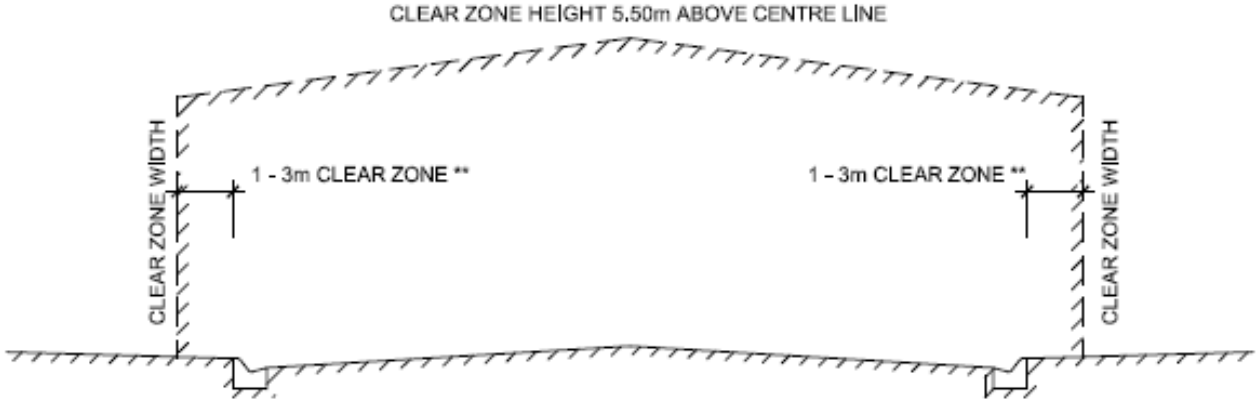
Appendix I – Vegetation Roadway Clear Zones

APPENDIX 6
RURAL / URBAN VEGETATION
ROADWAY CLEAR ZONES



RURAL ROADS

RURAL CLEARANCES :
Clear zones are based on speed zone of 100 km/h - < 1000 vpd.
Vertical clearances based on PowerCor line heights on road crossings
5.50m vertical clearance at centreline, 4.8m at edge of traffic lane,
Rural Track (RT) - Clearance zones will vary based on engineering
judgment of each road.



URBAN ROADS

URBAN CLEARANCES :
Clear zones are based on speed zone up to 60 km/h – < 1000 vpd.
Vertical clearances based on PowerCor line heights on road crossings.5.5m
vertical clearance at centreline, 4.8 at kerb.
Urban Lane (FUL) - Clearance zones will vary based on engineering
judgment of each road.

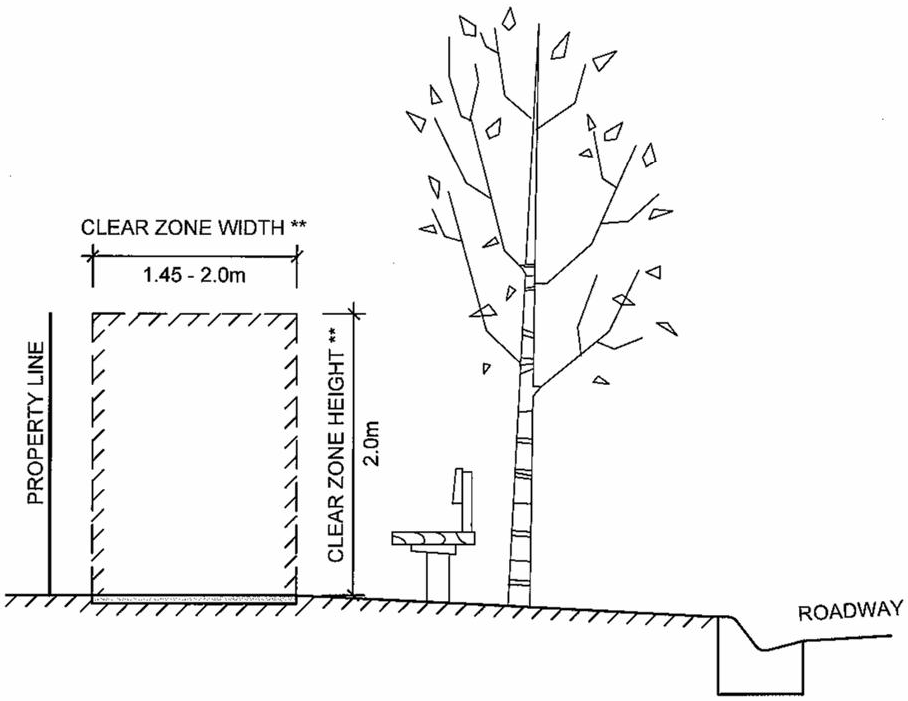
CLEAR ZONE AREAS
100 km zone - 3.0m edge traffic lane
80km zone – 3.0m edge traffic lane
60km zone - 1-2.0m from back of kerb
** Clearance zones may be varied due to engineering judgment

2 March 2017

Derived from Road Design Guidelines Fig 3.9.2 (Modified to achievable standard)

Appendix J – Vegetation Pathway Clear Zones

VEGETATION PATHWAY CLEAR ZONES



PATHWAYS

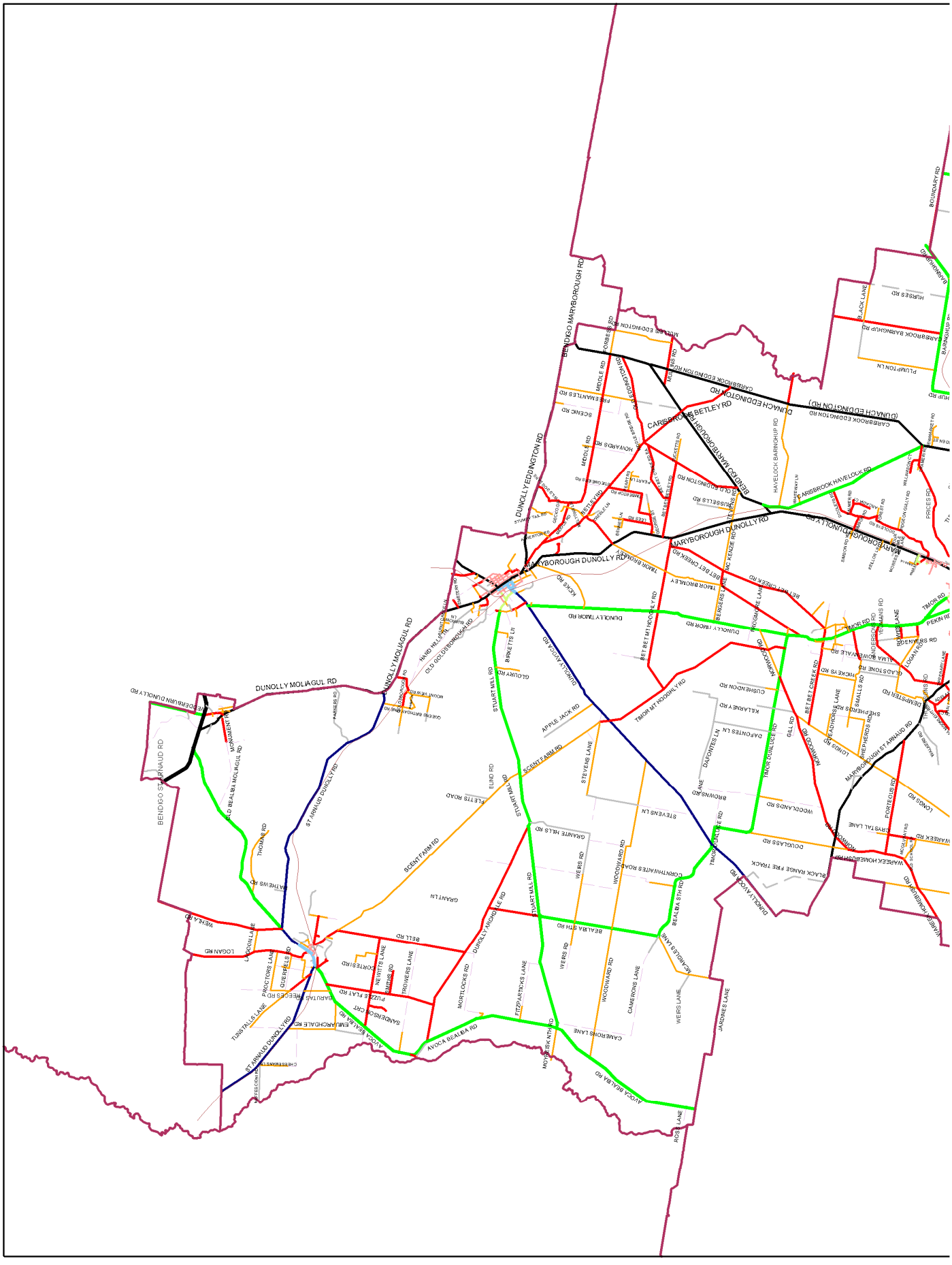
PATHWAY CLEARANCES :

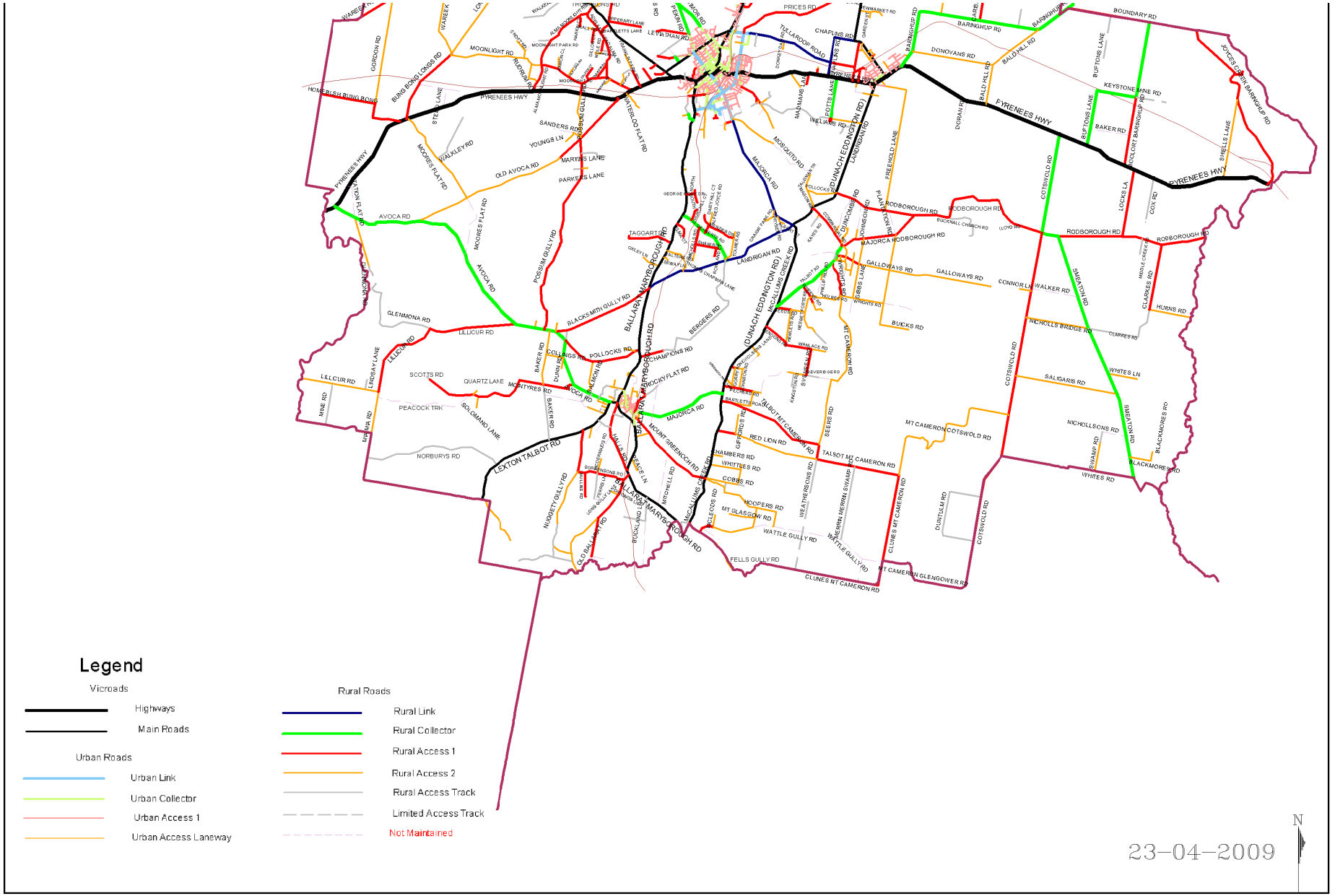
All clear zones for pathways are based the above diagram.

** Clearance zones may be varied due to engineering judgment.

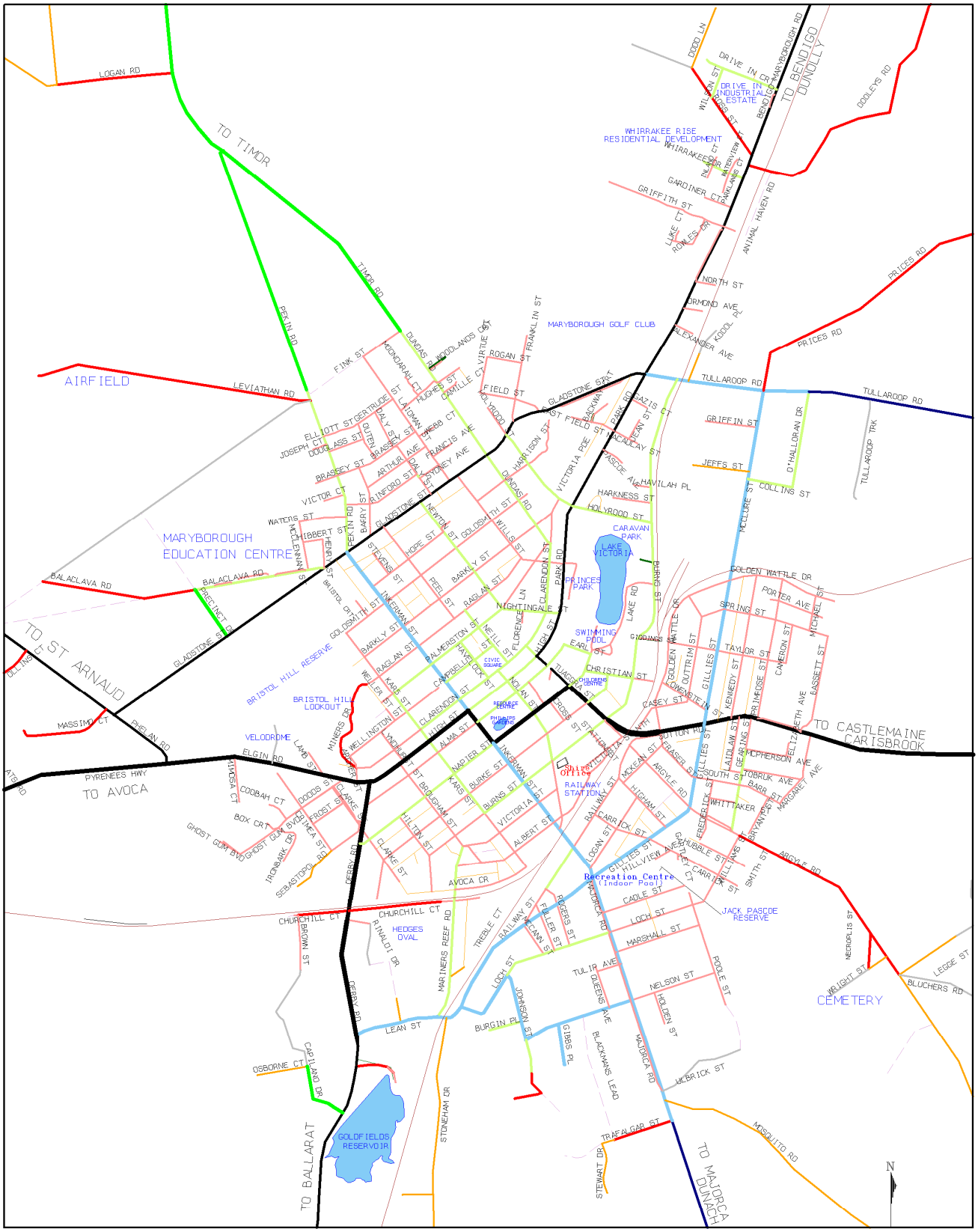
24 NOV 2004

Appendix K – Shire Road Hierarchy Map




Legend
Vicroads
Highways
Main Roads
Urban Roads
Urban Link
Urban Collector
Urban Access 1
Urban Access Laneway
Rural Roads
Rural Link
Rural Collector
Rural Access 1
Rural Access 2
Rural Access Track
Limited Access Track
Not Maintained
23-04-2009
N
SCALE 1:200000
-2.5 0 2.5 5 7.5 10
KILOMETRES
Central Goldfields Road Hierarchy

Appendix L – Maryborough Road Hierarchy Map



Legend

Vicroads
- Highways
- Main Roads

Urban Roads
- Urban Link
- Urban Collector
- Urban Access 1
- Urban Access Laneway

Rural Roads
- Rural Link
- Rural Collector
- Rural Access 1
- Rural Access 2
- Rural Access Track
- Limited Access Track
- Not Maintained

01-05-2009

Maryborough Road Hierarchy

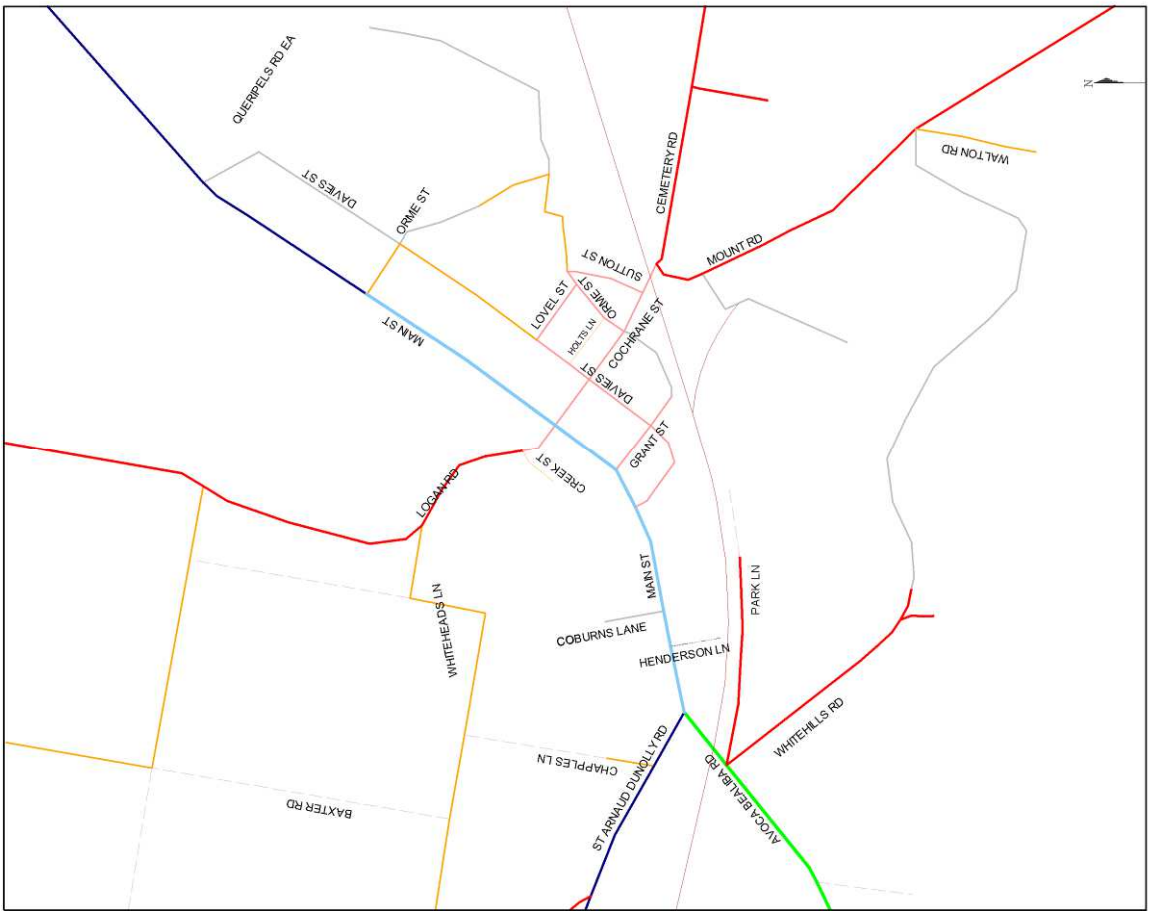
SCALE 1:25000

−250 0 250 500 750 1000

METRES

CENTRAL GOLDFIELDS SHIRE COUNCIL

Appendix M – Bealiba & Dunolly Road Hierarchy Maps



Appendix N – Carisbrook & Talbot Road Hierarchy Maps