

15 DIRECTOR ASSETS AND OPERATIONS REPORTS

AO.1	RIDDELLS CREEK MOVEMENT NETWORK STUDY (STAGE 2A) - UPDATE
Officer:	Eng Lim, Manager Engineering and Resource Recovery
Council Plan relationship:	1. Connecting communities
Attachments:	Riddells Creek Movement Network Study - Draft Recommendation Report (under separate cover) ↗

Summary

This report updates Council on the Stage 2A 'Draft Recommendation Report' outcome for the Riddells Creek Movement Network Study (RCMNS) (attachment 1). This report also highlights the next steps for Stage 2B activities in the new financial year.

Recommendation

That Council notes this report on the outcome of Stage 2A of the Riddells Creek Movement Network Study and the next steps for Stage 2B in the next financial year 2023/2024.

Background

Council initiated the Riddells Creek Movement Network Study (Study) in 2021 to guide the provision and upgrade of transport infrastructure in Riddells Creek. The community initially raised concerns regarding the township growth's impact on future infrastructure needs and traffic management through budget submissions.

This Study aims to create a strategic transport plan to address the local community's existing concerns and propose relevant supporting infrastructure to accommodate long-term population growth within the Riddells Creek township boundary.

The four objectives and related tasks to achieve this were:

Objectives	Tasks
Network aspiration	<ul style="list-style-type: none"> • Create an ultimate movement network plan that outlines the vision for the transport network in Riddells Creek • Analyse all inputs to the ultimate movement network, including council documents, planning schemes and community feedback
Gap Analysis	<ul style="list-style-type: none"> • Identify gaps between this plan and the existing infrastructure in Riddells Creek.
Identify Projects	<ul style="list-style-type: none"> • Identify projects that will close the identified gaps and upgrade existing transport infrastructure to meet the specifications of the ultimate movement network.

Prioritise Projects	<ul style="list-style-type: none"> • Define criteria to rank the list of projects in order of priority. • Prioritise projects to assist Council with a multi-year capital works program
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Discussion

Officers completed Stage 1 of this Study in financial year FY21/22, presenting it to Council at the 24 August 2022 Scheduled Council Meeting. That report provided the initial consultation's outcome and detailed the community's concerns about traffic and transport Infrastructure.

The initial Stage 1 consultation feedback is summarised below:

- Congestion
- Lack of pedestrian crossings
- Parking issues at Station Street around Foodworks
- Lack of parking in the township and around schools
- Minimum consideration for cyclists
- Lack of accessible parking spaces
- Turning lanes on Main Road
- Safety concerns at Sutherlands Road, Amess Road and Riddell Road
- Speeding issues
- Safety around school
- Congestion within the township
- Poor quality and conditions of roads
- Lack of parking
- Geese holding the traffic on Main Road
- Missing links and lack of footpaths
- Poor traffic management on Main Road
- Increase in heavy vehicles.

This second stage update (Stage 2A) focuses on developing a strategic transport infrastructure plan, which includes the Township's ultimate transport network. In turn, this identifies future infrastructure projects in Riddells Creek to update the transport network within Riddells Creek.

The Victoria's Movement and Place Framework underpins the transport infrastructure plan and provides a broad framework to guide future infrastructure development of the Riddells Creek Township over the next 30 years. The plan will account for the current and future developments within the Township (e.g. Amess Road development) and any State infrastructure projects nearby.

This Study has produced a draft aspirational movement network plan for the Riddells Creek township based on these objectives, acknowledging the community concerns in Stage 1 and

recognising other relevant information. Refer to the attached Stage 2A 'Draft Recommendation Report' for the Study.

Many improvements are recommended, based on the Study's third objective (Identify Projects) and categorised as follows:

- Pedestrian facility upgrades
- Cycling facility upgrades
- Intersection upgrades
- Speed limit reduction
- Streetscape and Amenity Improvements

The following table provides key recommendations for each category:

Transport Category	Issues raised in Stage 1 by the community	Proposed Recommendations and Engineering Treatments in Stage 2A
<i>Pedestrian</i>	<ul style="list-style-type: none"> • Lack of pedestrian crossings • Missing links and lack of footpaths 	<ul style="list-style-type: none"> • Wombat crossings at Station Street, Sutherlands Road and Whittakers Lane • Refuge Crossings at the Intersection of Kilmore Road/Amess Road and Kilmore/ Gap Road • Pedestrian Operated Signal Crossing at Sutherlands Road outside Property no:5 • Bridge Crossing at Sutherlands Road near Racecourse Road
<i>Cycling</i>	<ul style="list-style-type: none"> • Minimum consideration and Infrastructure for cyclists 	<ul style="list-style-type: none"> • Shared path (within road reserve) on Kilmore Road, Sandy Creek Road, Gap Road and many more • Bike Sharrows at Parkview Drive, Whittakers Lane, Somerville Lane, Range View Drive and many more. <ul style="list-style-type: none"> ○ A sharrow is not a bike lane, it is a positioning tool that tells a bike rider where they won't be squeezed in a lane too narrow for cars and bikes together • Extension of Regional Trails

Transport Category	Issues raised in Stage 1 by the community	Proposed Recommendations and Engineering Treatments in Stage 2A
<i>Intersections</i>	<ul style="list-style-type: none"> • Congestion • Safety concerns at Sutherlands Road, Amess Road and Riddell Road • Poor traffic management on Main Road 	<ul style="list-style-type: none"> • Traffic lights or new roundabout at Riddell Road / Kilmore Road • New roundabout at Kilmore Road / Sandy Creek Road • Traffic lights at Kilmore Road / Station Street to a signalised intersection • Reverse priority intersection at Sutherlands Road / Station Street • Intersection upgrade at Raws Lane, including turn lanes • New roundabout at Kilmore Road / Gyro Close intersection with future access into the northern part of Amess Road development
<i>Speed Limit Reductions</i>	<ul style="list-style-type: none"> • Speeding issues throughout the township 	<ul style="list-style-type: none"> • Reduce the speed limit on Main Road between Walter J Smith Reserve at the southern entrance to the town to Sexton Street from 50 km/h to 40 km/h • Reduce the speed limit on Main Road between Sexton Street and the north of the Amess Road development to 60 km/h • Implement an area-wide 30 km/h speed zone within the Riddells Creek town centre • Implement an area-wide 40 km/h speed zone within the residential areas of the township
<i>Amenity and Streetscape</i>	<ul style="list-style-type: none"> • Poor quality of roads • Poor traffic management on Main Road 	<ul style="list-style-type: none"> • One-way traffic flow along Station Street between the Railway Station and Sutherlands Road • Kerb outstands, sharrow line marking and speed humps to slow traffic speeds • Potential to implement a 10 km/h shared zone, supported by landscaping, raising the road to footpath level and removing kerbs, and other interventions to enforce the slow environment

Note: The detailed and comprehensive summary of all recommendations is in Appendix 2 on page 60 of the Stage 2A 'Draft Recommendation Report' for the Study (refer to the attachment).

Next Steps

After receiving this feedback, officers will continue to complete the Stage 2A Riddells Creek Movement Network Study by defining appropriate criteria to rank the list of draft recommendations projects in order of priority.

In Stage 2B, in financial year FY23/24, officers will undertake detailed traffic and parking studies, traffic analysis and further investigations to refine the draft recommendations. As an outcome, an implementation plan will be developed based on established criteria to inform the prioritisation of projects and to assist Council in setting a multi-year program of future capital works.

Officers are planning for community consultation in February 2024. After consultation, officers may refine the Implementation Plan and recommendations. The implementation plan's project prioritisation will be based on immediate needs and then reference growth trigger points.

Officers will present the final Riddells Creek Movement Network Study at a Scheduled Council Meeting before the end of FY23/24.

Consultation and engagement

Officers undertook two rounds of community consultation during the last financial year for Stage 1, with another round of community consultation planned during Stage 2B.

Collaboration

This Study is a collaboration between Council and the community. Officers prepared this report with the assistance of external stakeholders (feedback obtained from the consultation and engagement process with the Riddells Creek community members and key selected stakeholders) and internal staff, including key contributions from the Strategic Planning team.

Innovation and continuous improvement

The Riddells Creek Movement Network Study reflects Council's commitment to identify and address the community's concerns to guide the future of the Riddells Creek township and address growing concerns relating to transport, infrastructure development and population growth in Riddells Creek now and into the future.

Relevant law

In accordance with the *Gender Equality Act 2020*, a Gender Impact Assessment has been conducted relating to the subject matter of this report. The gender impact assessment recommends that, as far as it is practical, the provision of services and upgrades shall be planned to provide equity of access for all current and future users. Any projects arising from this study will be subject to a Gender Impact Assessment.

The Study applies to all Riddells Creek residents and visitors. It also endeavours to provide equity of consideration of issues and opportunities to all, including gender considerations. Officers will seek gender-specific feedback as a part of the final consultation process.

Relevant regional, state and national plans and policies

- *Victorian Road Safety Strategy 2021-2030*

Relevant Council plans and policies

Officers identified the following documents as important to the development of the Riddells Creek Movement Network Study; these include:

- *Council Plan 2021-2031*
- *Macedon Ranges Planning Scheme*
- *Community Engagement Policy 2021*
- *Engineering Requirements for Infrastructure Construction Policy 2010*
- *Open Space Strategy 2014*
- *Visitor Economy Strategy 2019*
- *Victorian Cycling Strategy 2018-28;*
- *Pedestrian Access Strategy 2010;*
- *Macedon Ranges Shire Walking and Cycling Strategy 2014.*

Financial viability

The funding for Stage 2B is subject to final funding decisions for the FY23/24 budget process.

Regarding the final implementation plan, projects will be developed based on established criteria to inform the prioritisation of projects and to assist Council in setting a multi-year program of future capital works. Officers will rely on multiple funding sources, including council budget allocation for future financial years and tapping into State and Federal grants that are applicable based on the grant selection criteria specific to each funding source.

Sustainability implications

Any project arising from the Study's recommendations will consider any social and/or environmental impact specific to each project.

Officer declaration of conflicts of interest

All officers involved in preparing this report have declared that they do not have a conflict of interest relating to the subject matter.



Draft Recommendation Report

Movement Network Study, Riddells Creek Township

Project Number 220073

Revision Report 25/05/2023

Client Macedon Ranges Shire Council



Document control record

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Document control

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Client	Macedon Ranges Shire Council
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Revision 25/05/2023



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1 Introduction

Trafficworks has been engaged by Macedon Ranges Shire Council to undertake a Movement Network Study for the Riddells Creek Township. This study provides guidance on the provision and upgrade of transport infrastructure in Riddells Creek, to address the impacts that township growth will have on infrastructure and traffic management.

Stage 1 of the study has been completed by Council, which involved consultation with the community to understand current concerns relating to infrastructure and transport.

This stage of the study (Stage 2A) focuses on the development of a strategic transport infrastructure plan, which includes the identification of the ultimate transport network for the township, and the identification of projects for Riddells Creek to address gaps in the transport network within Riddells Creek.

The transport infrastructure plan is underpinned by the methodology outlined in Victoria's Movement and Place framework and informs a broad framework to guide future infrastructure development of the township over the next 30 years. This will take into account current and future development within the township (e.g. Amess Road development) as well as any State infrastructure projects in the vicinity.

Stage 2B, which will be undertaken later, will include detailed traffic and parking studies, analysis and investigations to refine the recommendations. An implementation plan will be developed based on an established set of criteria to inform the prioritisation of projects and to assist Council in the program of capital works.



2 Project background

2.1 Context

Riddells Creek is a township of approximately 3,000 residents, located in the Macedon Ranges Shire Council.

Surrounding towns include:

- Gisborne located approximately 8 km to the south-west
- Sunbury located 15 km to the south
- Romsey located 14 km to the north-east.

See Figure 2 below for the study area.

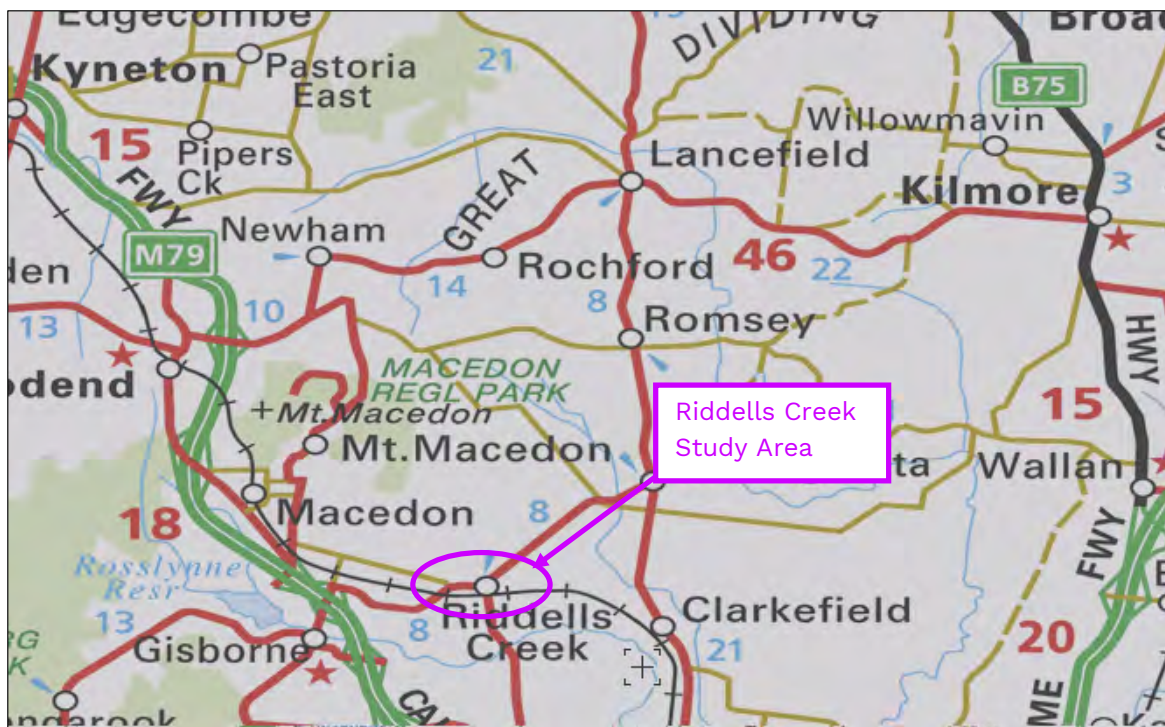


Figure 1: Riddells Creek study area

2.1.1 Existing land use

The majority of the township is low density housing zoned as a Neighbourhood Residential Zone (NRZ). Within the town centre, there is a mixture of commercial, community and recreation use.

Land surrounding the township is zoned as a mixture of Rural Living Zone (RLZ), Low Density Residential Zone (LDRZ), and Farming Zone (FZ) (refer Figure 2).

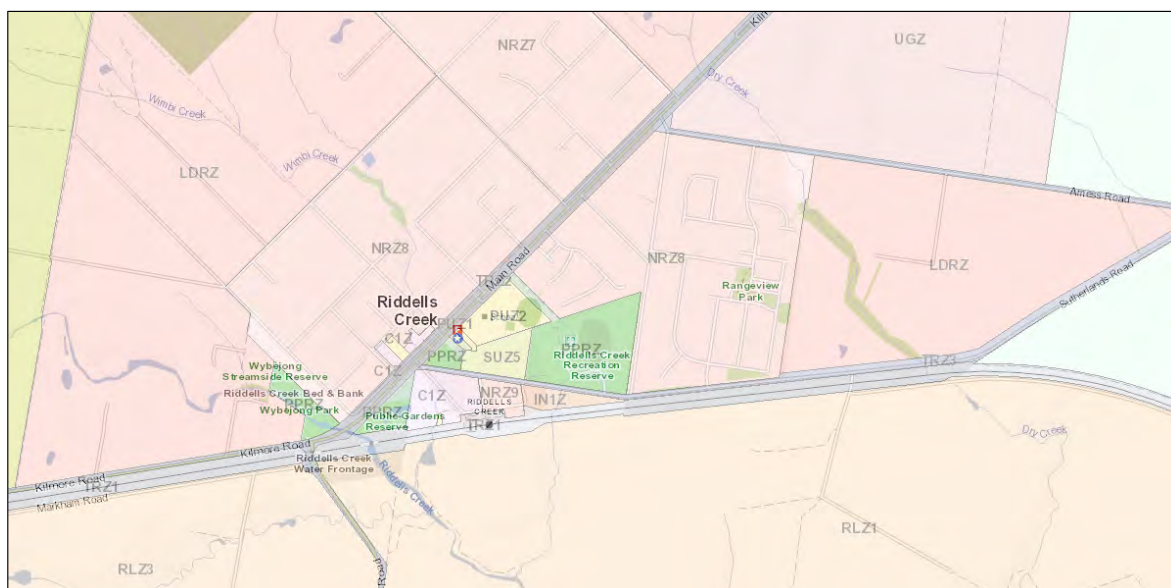


Figure 2: Land Use in Riddells Creek

Amess Road precinct

The Amess Road precinct is located to the north-east of the town centre and is currently within an Urban Growth Zone (UGZ). This precinct is identified by Macedon Ranges Shire Council as a proposed new urban extension area to Riddells Creek.

Riddells South precinct

The Riddells South Precinct is located south of the town centre and is currently within a Rural Living Zone (RLZ1). This precinct has been identified by Council as a potential urban extension to Riddells Creek.

2.1.2 Existing road network

Two declared arterial roads run through Riddells Creek, as follows:

- Gisborne-Kilmore Road runs in a southwest to north east direction between Gisborne and Melbourne Lancefield Road. In the vicinity of the Riddells Creek township, Gisborne-Kilmore Road is an undivided road in a Transport Zone 2 (TRZ2). It has an approximate sealed carriageway width of 7 m, accommodating one lane in each direction (refer Figure 3)



Figure 3: Gisborne-Kilmore Road

- Riddell Road runs in a south to north direction between Sunbury and the Gisborne-Kilmore Road. In the vicinity of the Riddells Creek township, Riddells Road is an undivided road in a Transport Zone 2 (TRZ2). It has an approximate sealed carriageway width of 7 m, accommodating one lane in each direction (refer Figure 4).



Figure 4: Sunbury-Riddells Creek Road

Other roads within the township that fall within the Transport Zone include:

- Amess Road, within a Transport Zone 3 (TRZ3). Within the vicinity of the Riddells Creek township, Amess Road has a speed limit of 60 km/h. It is an undivided road with an approximate sealed carriageway width of 6 m, accommodating one lane in each direction.
- Sutherlands Road, within a Transport Zone 3 (TRZ3). Within the vicinity of the Riddells Creek township, Sutherlands Road has a speed limit of 60 km/h. It is an undivided road with an approximate sealed carriageway width of 6 m, accommodating one lane in each direction.



Figure 5 shows the hierarchy of roads within the Township, including TRZ2 roads managed by the Department of Transport and Planning, and TRZ3 roads managed by Council.

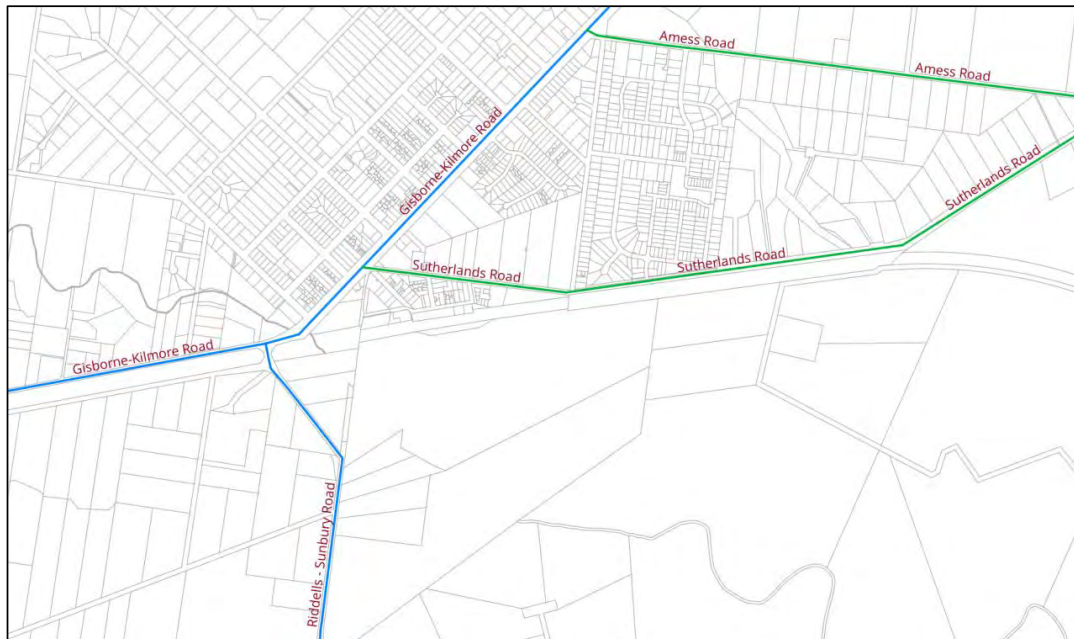


Figure 5: Declared roads in Riddells Creek - TRZ2 roads in blue and TRZ3 roads in green

2.1.3 Riddells Creek neighbourhood character

Neighbourhood character profiles were developed for the Residential Neighbourhood Character Precincts as part of the Riddells Creek Structure Plan 2013. The profiles are split into six different precincts, as follows:

- Garden setting
- Modern residential
- Town centre residential
- Rural bushland A
- Rural bushland B
- Rural bushland C.

These character profiles inform the lot size and frontage, as well as front setbacks and the characteristics of the road reserve, including drainage types (kerb and channel or swale drains), footpaths, verge widths.

Table 1 below shows the preferred future character relating to the road reserve for each character profile.

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Table 1: Character profile - preferred features

Character profile	Preferred features – Road network
Garden setting	<ul style="list-style-type: none"> • Retain wide verges and swale drains
Modern residential	<ul style="list-style-type: none"> • concrete kerb and channel • footpaths and bicycle paths • Permeable network of streets • softer streetscape to encourage active transport
Town centre	<ul style="list-style-type: none"> • minimise crossovers onto the street • multi-dwelling development • wider footpaths • minimal planting of street trees
Rural bushland A, B, C	<ul style="list-style-type: none"> • Swale drain edging • Swale drain edging • informal planting of indigenous trees along roadside • wide verges

The character profiles within Riddells Creek are shown in Figure 6.

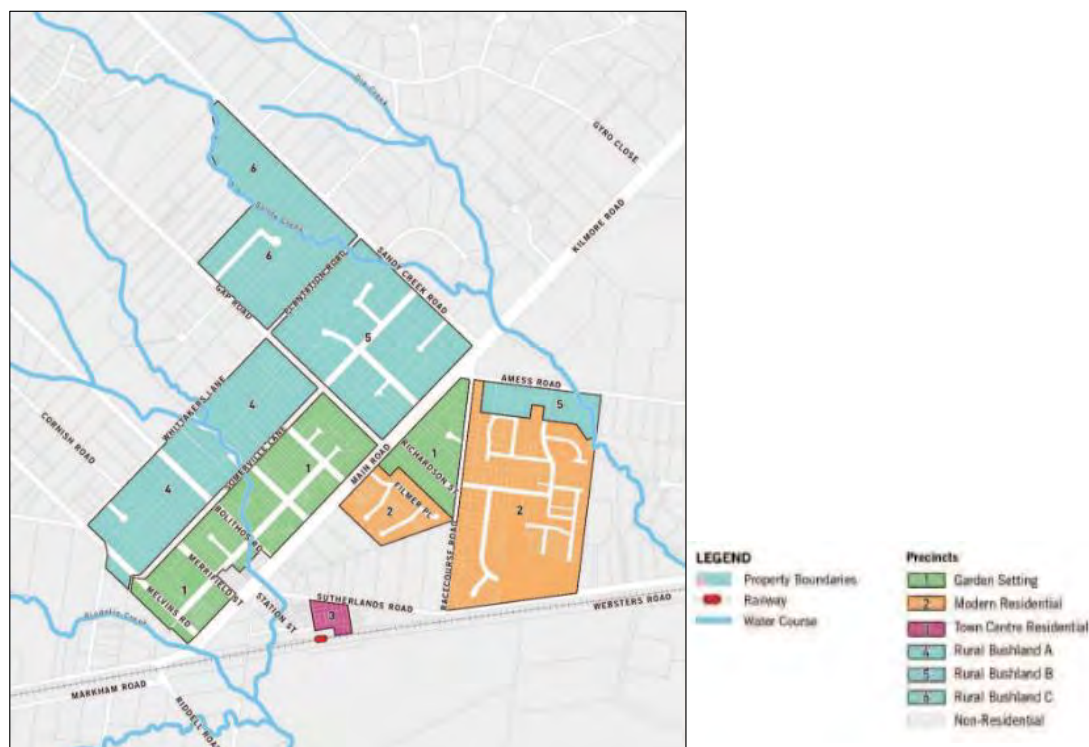


Figure 6: Riddells Creek Neighbourhood Character Precincts



2.2 Objectives

The objective of the Movement Network Study is to create a strategic transport plan to address the existing concerns from the local community and to propose supporting infrastructure to accommodate long term population growth in Riddells Creek. The four objectives to achieve this were:

- Create an ultimate movement network plan, that outlines the vision for the transport network in Riddells Creek.
- Identify gaps between this plan and the existing infrastructure in Riddells Creek.
- Identify projects that will plug the gaps and upgrade existing transport infrastructure to meet the specifications of the ultimate movement network.
- Develop a method to prioritise these projects for Council.

2.2.1 Alignment with Macedon Ranges Council plan

The Macedon Ranges Council Plan has outlined 4 strategic objectives to shape the future of the community.

The following Table 2 outlines how the Movement Network Study (MNS) will deliver on each of these strategic objectives.

Table 2: Strategic Alignment to Council Plan

Strategic Objective	How the Movement Network Plan will deliver on the objectives
<p><u>Connecting communities</u></p> <p>We will maintain our built environment – including roads, paths, buildings, open space and other assets – in a fiscally, environmentally and socially sustainable way. This includes effective land-use planning, which has a direct impact on the liveability of our shire.</p>	<p>The MNS will develop an ultimate transport network which will improve connectivity to key destinations, encourage the uptake of active transport and guide future land use planning to improve the liveability of the Riddells Creek township.</p>
<p><u>Healthy environment, healthy people</u></p> <p>The community prioritises the protection of the natural environment and recreational facilities. There is also strong community support for initiatives to minimise our shire’s impact on the earth and its resources. Resilient communities and robust economies rely entirely on a healthy environment.</p>	<p>The MNS will deliver on this objective in the following ways:</p> <ul style="list-style-type: none"> • Encourage a mode shift to active transport, and reduce reliance on private vehicles, and reducing carbon emissions • Encouraging better lifestyle choices to improve health through travelling by active transport • Improving amenity of the town centre to attract social interactions and events
<p><u>Business and Tourism</u></p> <p>Business and tourism is about prioritising and promoting the people, resources, services and our regional identity, to ensure economic</p>	<p>The MNS will deliver on interventions to encourage people that are currently travelling through the township to stop and support the local businesses.</p>

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Strategic Objective	How the Movement Network Plan will deliver on the objectives
<p>growth. Economic development is crucial for the continued growth of the economy of the Macedon Ranges Shire.</p>	
<p><u>Deliver Strong and Reliable Government</u> We will demonstrate the qualities of good governance, including a clear vision and culture, transparency, respect, consistency, accountability and responsiveness.</p>	<p>The MNS will develop an implementation plan to ensure the strategic allocation of resources and the equitable prioritisation of infrastructure improvement works over the next 10 years. The MNS also identifies advocacy projects and opportunities for improvements funded by the State Government.</p>

2.3 Study methodology

The project was conducted in four stages:

- network aspiration
- gap analysis
- identify projects
- prioritise projects

Refer to Figure 8 for the study methodology.

These stages correspond to the first three modules of the Movement and Place Framework Methodology (refer Figure 7).

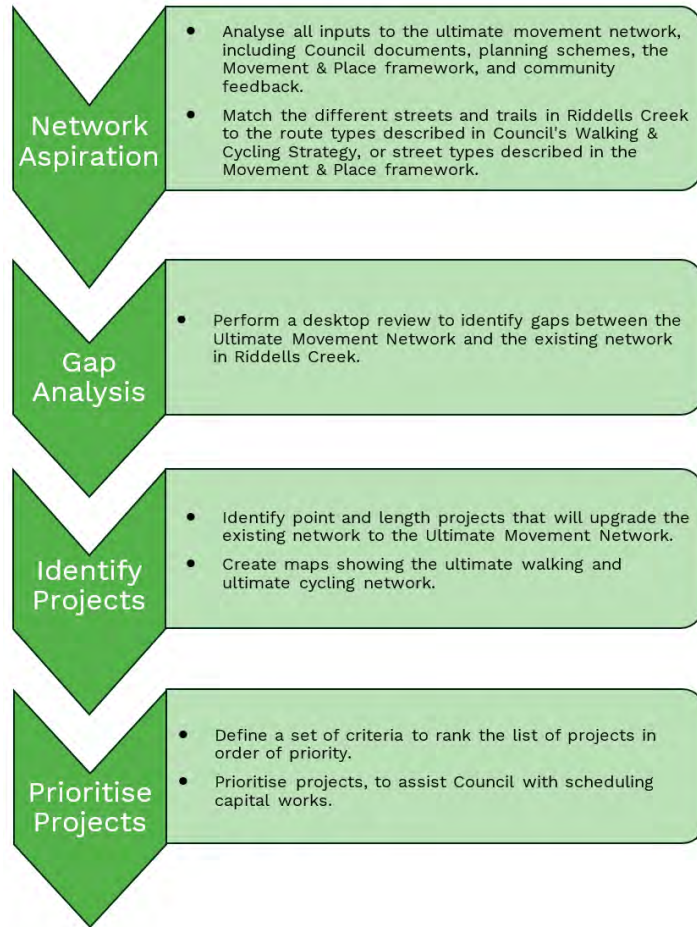


Figure 8: Project methodology

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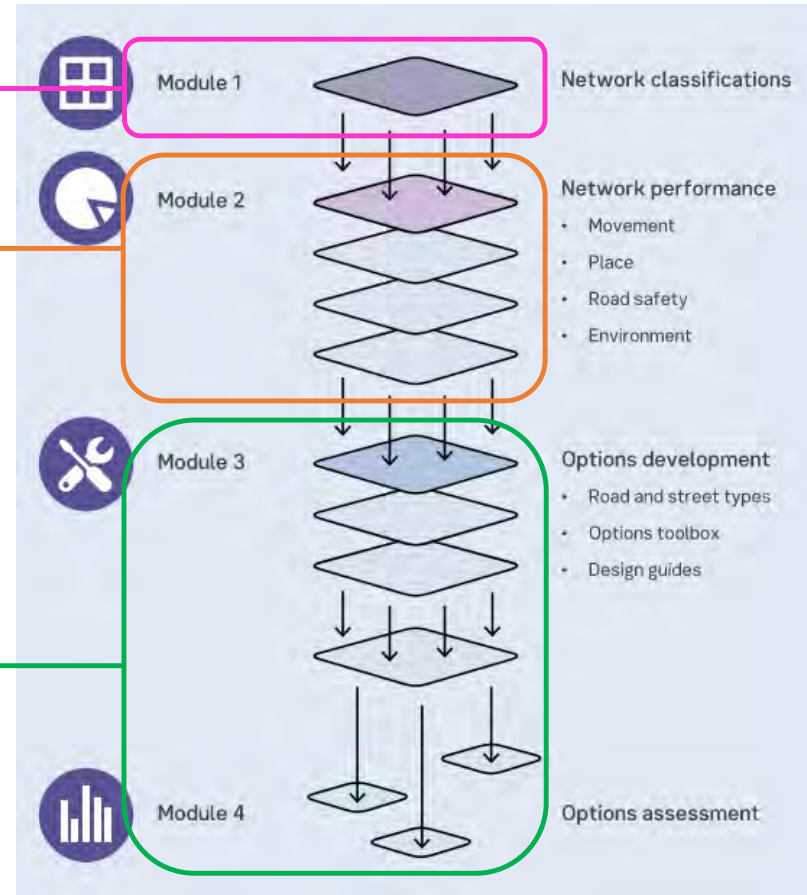


Figure 7: Movement and place framework methodology



3 Ultimate Movement Network

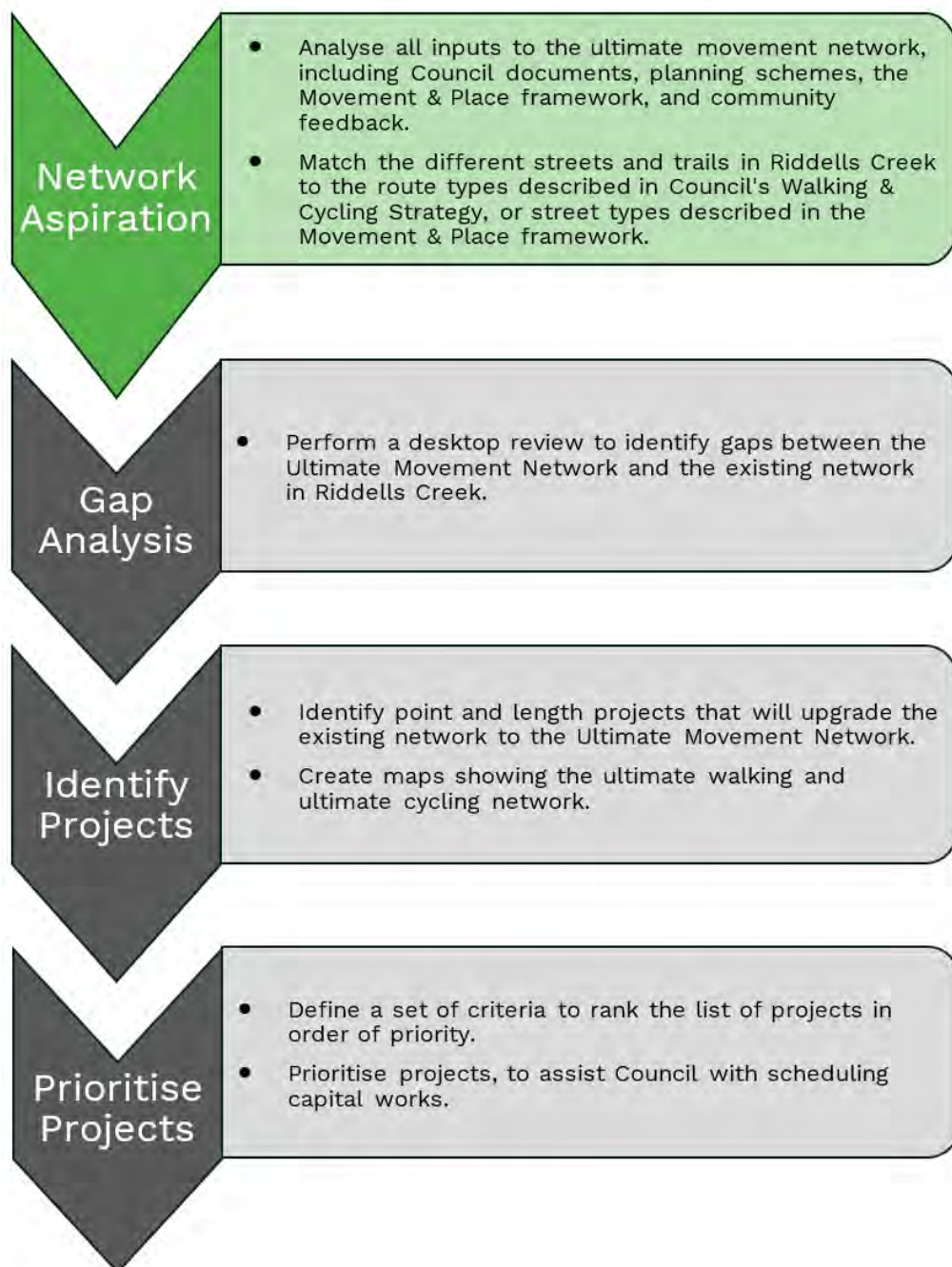


Figure 9: Project methodology



3.1 Study Inputs

To ensure the Ultimate Movement Network is responsive to local policy and strategy as well as State guidelines, the Riddells Creek Ultimate Movement Network has been informed by the following:

- Riddells Creek Structure Plan 2013
- Amess Road Precinct Structure Plan
- Riddells Creek Town Centre Opportunities Summary Paper
- Macedon Ranges Shire Council Walking and Cycling Strategy 2014
- Macedon Ranges Shire ‘Participate’ Positive Aging Strategy 2020
- Macedon Ranges Shared Trails
- Macedon Ranges Shire-wide Footpath Plan
- Movement and Place in Victoria
- Riddells Creek Movement and Network Study Community Consultation Report.

A brief description of these documents, and details of how they informed the development of the Riddells Creek ultimate movement network, are outlined in Table 1.



Figure 10: Inputs to the Riddells Creek Ultimate Movement Network



Table 3: Inputs to the Riddells Creek Ultimate Movement Network

Input Document	Description	Input to the Ultimate Movement Network
Riddells Creek Structure Plan 2013	<p>Provides the long-term vision for the future development of Riddells Creek until 2036, including:</p> <ul style="list-style-type: none"> • Character and role of the town centre • Residential development and housing choice • Employment, commercial and industrial development • Open space, natural systems and heritage features • Utilities and infrastructure • Environmental sustainability <p>The Structure Plan includes maps designating areas of the township as an open space corridor, priority residential development area, and area with residential infill potential (refer Figure 26: Riddells Creek Development Framework Plan and Figure 27: Riddells Creek Residential Framework Plan in Appendix 1).</p>	<ul style="list-style-type: none"> • Areas characterised as higher density or with infill potential were prioritised when determining priority walking & cycling routes. • Access to commercial land, the train station, and primary school were prioritised in the Ultimate Movement Network. • The notional future pedestrian/cycling routes were included in the Ultimate Network Plan. • Open space corridors were identified as future potential recreational walking/cycling routes.
Amess Road Precinct Structure Plan	<p>Land use and infrastructure plan for the development of the Amess Road area in the north-east of the Riddells Creek township, including:</p> <ul style="list-style-type: none"> • Preferred location for residential land, open spaces, and community hub • Guidelines for transport, parking, and urban design 	<ul style="list-style-type: none"> • Walking and cycling routes in the Amess Road PSP area were included in the Ultimate Movement Network. • Population growth in the Amess Road PSP area, and the resulting increased demand on the road network, was considered when classifying roads and identifying projects.



Input Document	Description	Input to the Ultimate Movement Network
<p>Riddells Creek Town Centre Opportunities Summary Paper</p>	<p>This document, prepared as part of the development of the Amess Road Precinct Structure Plan, identifies opportunities to improve the town centre as the community grows and changes over the coming years. This document identifies where resources could be invested in the town centre, particularly in regards to infrastructure or streetscape upgrades that can be implemented by Council.</p> <p>Refer to:</p> <ul style="list-style-type: none"> • Figure 19 in Appendix 1 for Township arrival and streetscape opportunities identified • Figure 20 in Appendix 1 for Walking and Cycling opportunities identified • Figure 21 in Appendix 1 for additional Town Centre Development opportunities 	<ul style="list-style-type: none"> • The Walking and Cycling opportunities, township arrival and streetscape opportunities presented in this paper are considered and included in the Ultimate Movement Network Plan.
<p>Macedon Ranges Walking and Cycling Strategy 2014</p>	<p>Provides Council with a strategic plan to increase participation in, and improve the supportive infrastructure for, walking and cycling in the shire. Includes descriptions of different walking and cycling route types, and maps showing pedestrian and cycling networks (refer Figure 31: Riddells Creek Primary Pedestrian and Cycling Network Plan and Figure 32: Macedon Ranges Shire Preferred Cycling Network Between Towns in Appendix 1).</p>	<ul style="list-style-type: none"> • Council’s primary pedestrian and cycling network in Riddells Creek was included in the Ultimate Movement Network. • Council definitions of different walking/cycling routes were used to match street types to walking/cycling route types. • Council standards for walking and cycling path infrastructure were used to identify projects (for example, upgrading footpaths that do not meet Council’s minimum standards).



Input Document	Description	Input to the Ultimate Movement Network
Macedon Ranges Shire 'Participate' Positive Aging Strategy 2020	Provides an action plan for Council to support older residents in the Shire, which was heavily informed by a survey of older Shire residents. Transport was the second most commented on concern in the survey (after health).	<ul style="list-style-type: none"> • Feedback from older residents informed the development of the Ultimate Movement Network and the identification and prioritisation of projects. Common suggestions included: <ul style="list-style-type: none"> ○ Improving/extending footpaths, to increase accessibility and opportunities for exercise. ○ Reducing speed limits, including introducing 40 km/h speed limits within towns, to improve safety. ○ Expanding the GisBus service so that it services all towns, to improve accessibility.
Macedon Ranges Shared Trail Stage 3	A plan for a shared trail along Markham Road	<ul style="list-style-type: none"> • The shared trail along Markham Road has been included as part of the regional cycling trail network
Macedon Ranges Shire-wide Footpath Plan	Contains plans showing the location and priority of footpaths in towns in the Shire, including in Riddells Creek (refer Appendix 1)	<ul style="list-style-type: none"> • Council's footpath plan for Riddells Creek informed the creation of the Ultimate Walking Network.
Movement and Place in Victoria	Describes the Movement and Place framework used for street design in Victoria. This includes a four-module framework used for planning transport networks, and classifications of different types of streets based on their significance as a destination ('place' function) and their importance as a transport corridor ('movement' function).	<ul style="list-style-type: none"> • The methodology for creating the Ultimate Movement Network was based on the four-part Movement and Place framework. • Movement and Place classifications for Riddells Creek informed the classification of streets within the township. • Streets were classified into street types described in the Urban Road and Street Design Guide. These classifications were used to identify appropriate treatments and identify projects for Council.



Input Document	Description	Input to the Ultimate Movement Network
<p>Riddells Creek Movement and Network Study Community Consultation Report</p>	<p>Describes the result of a face-to-face workshop and online survey of Riddells Creek residents. The 4 key themes were:</p> <ul style="list-style-type: none"> • Maintenance and improvement of sealed and unsealed roads • Improvements along the main road strategic corridor, including to car parking and pedestrian connectivity. • Intersection analysis to inform future capital works programs. • Pedestrian connectivity, including formal crossing improvements 	<ul style="list-style-type: none"> • Residents’ comments helped to identify and prioritise programs in the Ultimate Movement Network. Common suggestions included: <ul style="list-style-type: none"> ○ Maintaining the rural character of the Township, and preventing overdevelopment ○ A 40 km/h speed zone on Main Road ○ More footpaths and pedestrian crossings ○ More parking, including disabled parking, in the town centre. ○ Improved safety around schools, including a pedestrian crossing treatment on Main Road. ○ Improved intersections, including adding turning lanes and restricted turning movements to the busier intersections.



3.2 Movement and place classifications

The Department of Transport and Planning (DTP) has determined the movement and place classifications for streets throughout Victoria, including in Riddells Creek. Classifications for general traffic, walking, freight, and place in Riddells Creek are shown in Figure 11 to Figure 14.

There are currently no cycling classifications mapped within Riddells Creek. For off-road trails which have not been assigned a movement and place classification, a classification has been assigned as part of this study.

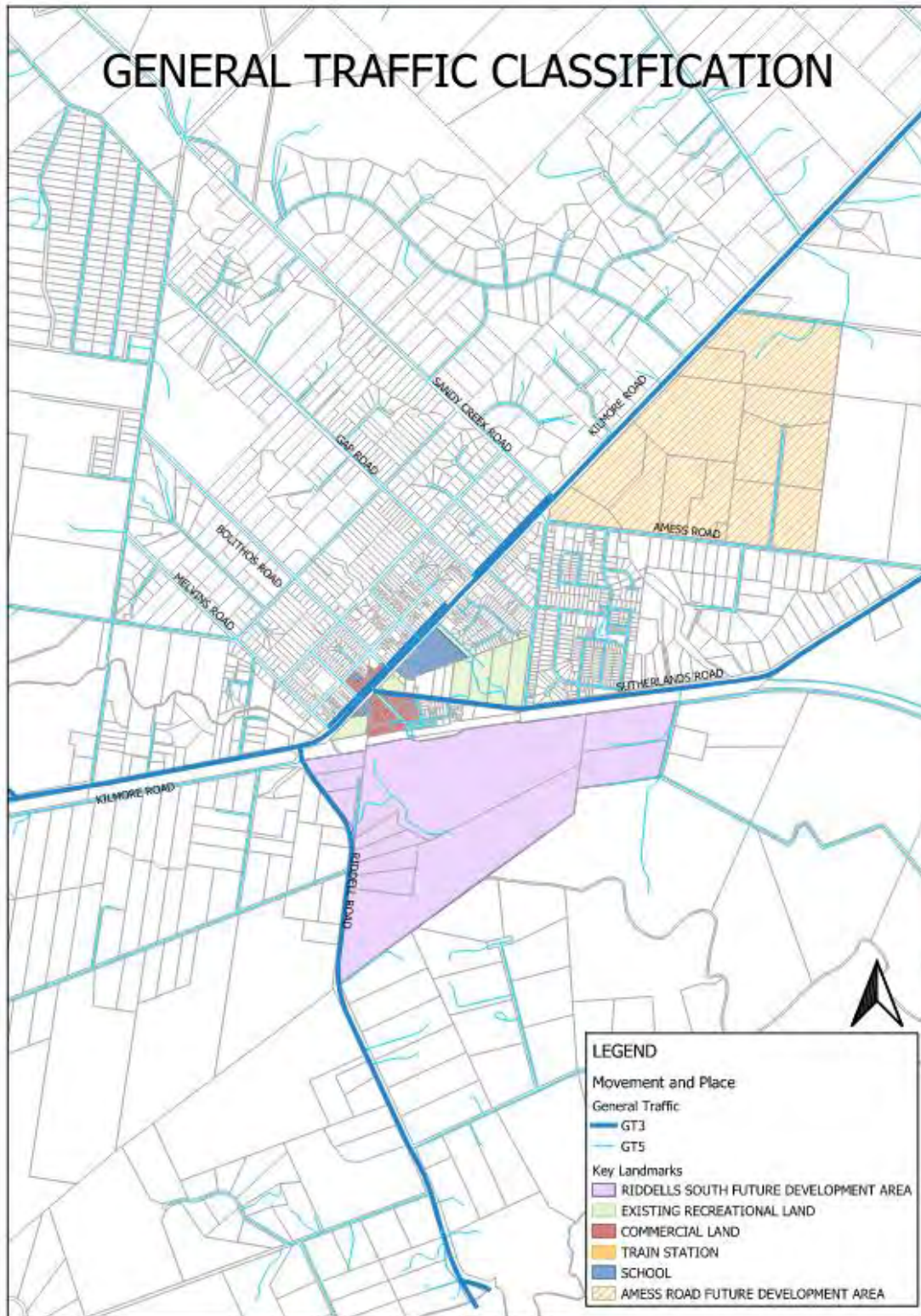


Figure 11: General traffic classifications in Riddells Creek

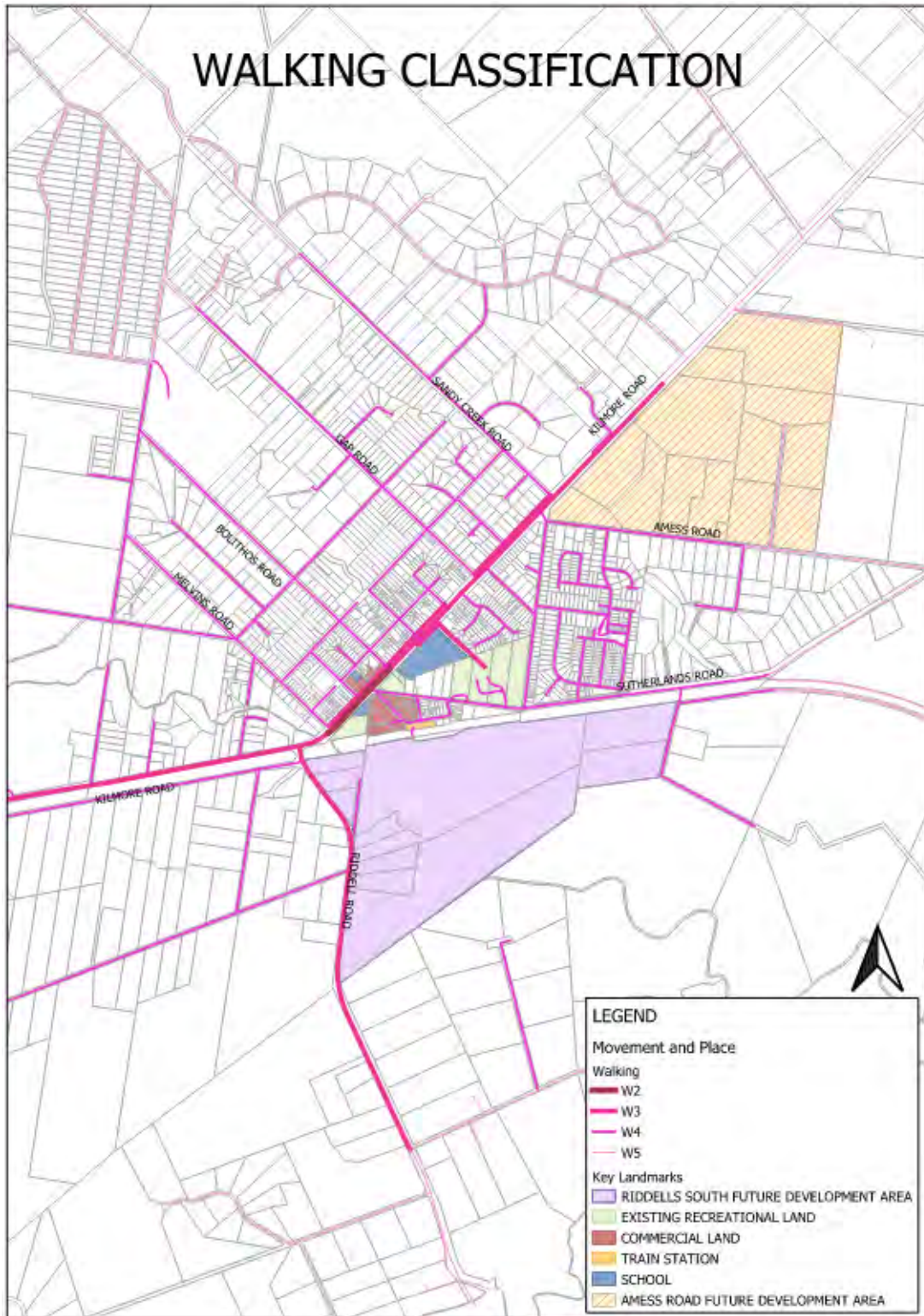


Figure 12: Walking classifications in Riddells Creek

18

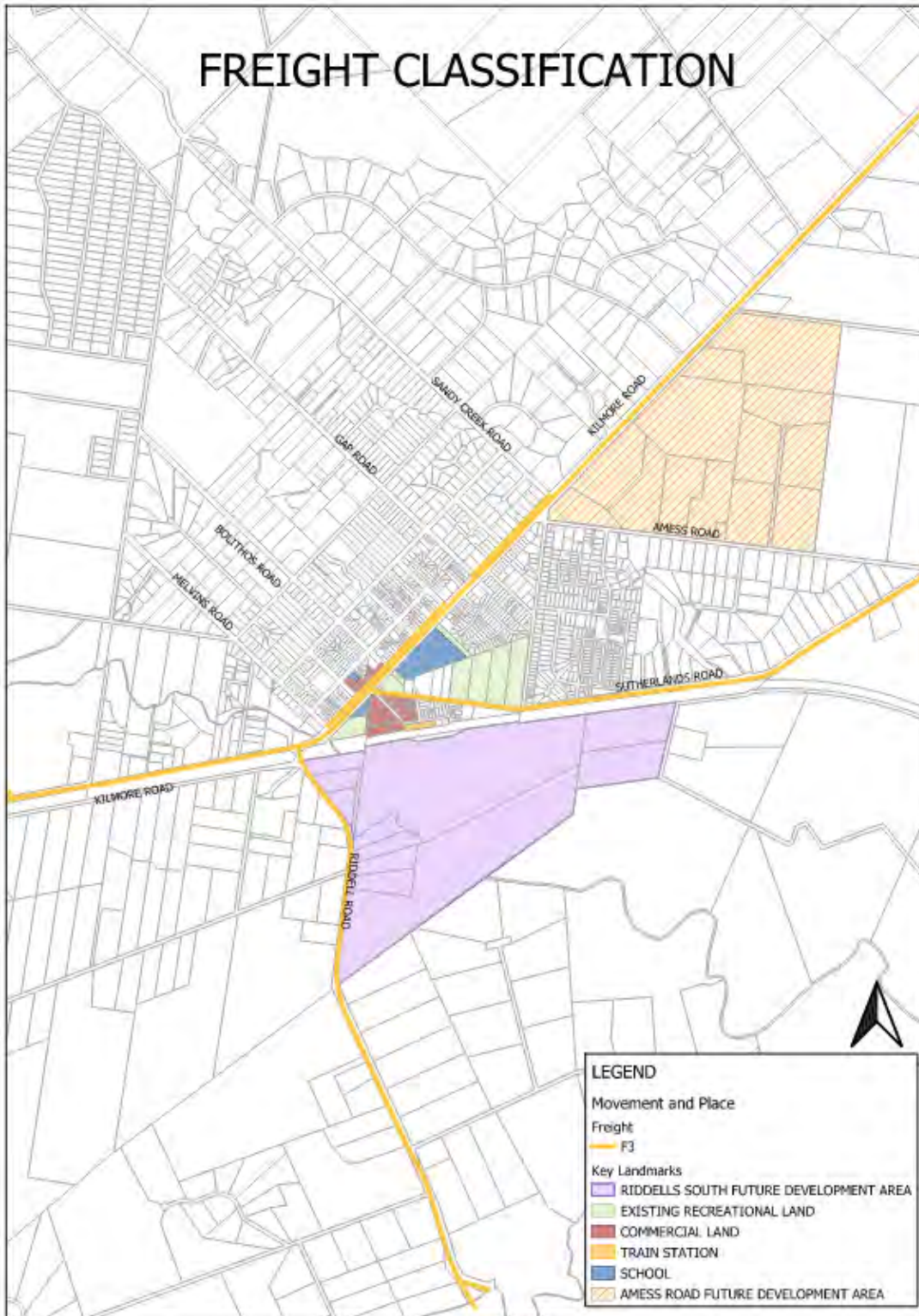


Figure 13: Freight classifications in Riddells Creek

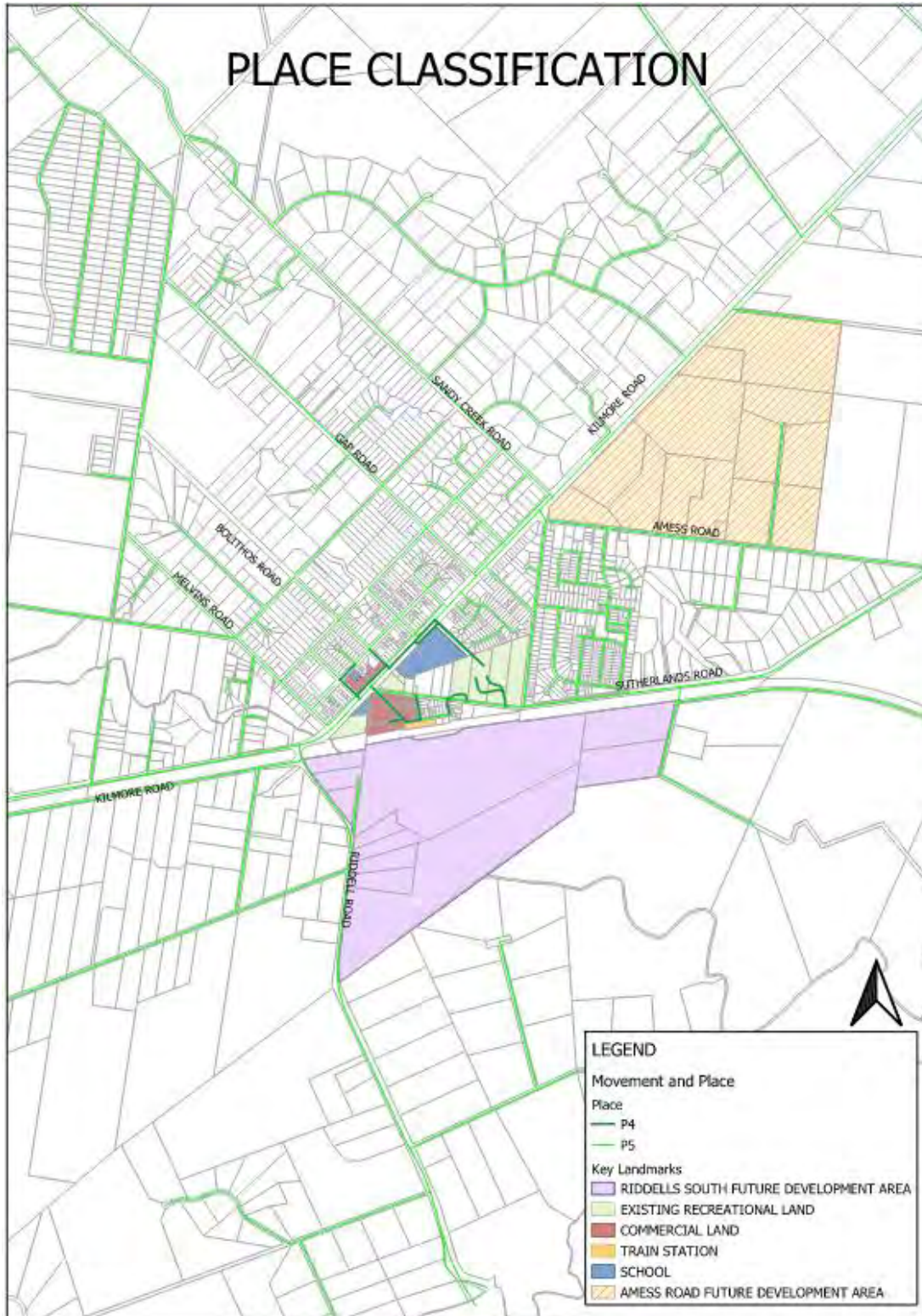


Figure 14: Place Classifications in Riddells Creek

20



3.3 Street types

The vision for the Riddells Creek Ultimate Network Plan reflects the strategic role of a street in the wider street network. This study recognises the role streets play as destinations in their own right, providing a corridor for people to move through as well as a place for the community to enjoy for leisure and recreational purposes. This led to the development of a street and path hierarchy, and the categorisation of the streets within Riddells Creek into street types.

The Urban Roads and Streets Design Guidelines (Draft Issue June 2020) was utilised to provide guidance on determining street types. These guidelines identify 4 broad groups called 'Street Families'. Within each Street Family are a number of street types. The street type is primarily determined by the Movement and Place classifications of the street, with a particular consideration of its modal priorities.

By defining streets into certain types, a clear vision and direction can be formed for all stakeholders to collectively work towards and understand. Modal priorities can provide a second layer of detail in defining the desired outcomes.

Four different street types and 2 path types were identified in Riddells Creek:

- neighbourhood residential streets
- residential connectors
- high activity streets
- boulevards
- off-road recreational trails
- off-road trails – preferred routes between towns.

The 4 street types can be mapped into the Movement and Place matrix. Their location within the matrix assists to demonstrate the role that the street plays within the wider network of the Riddells Creek township. See Figure 15.

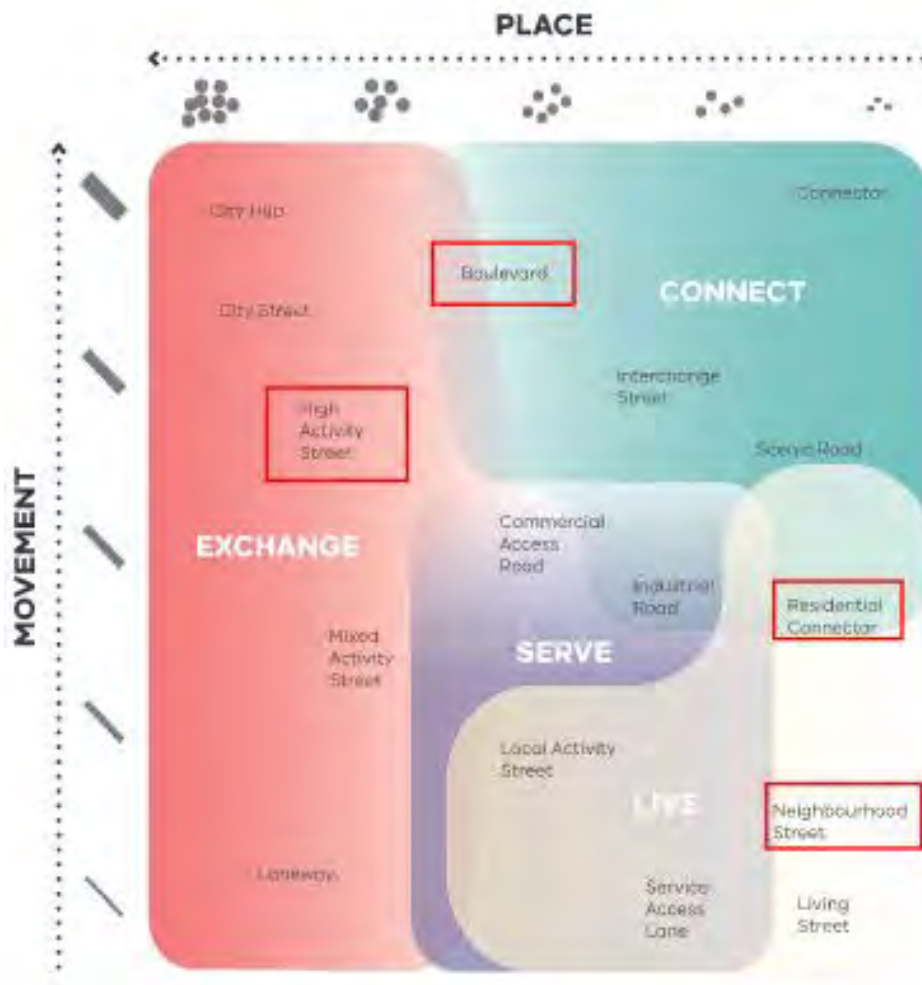





Figure 15: Street types mapped onto Movement and Place matrix

Table 4 provides a description for each of these street and path types, their target speeds, some examples of each type within the Riddells Creek township and photos showing some examples.


Figure 16: Street Types in Riddells Creek shows the location of the different street types in Riddells Creek.





Table 4: Street Types in Riddells Creek

Street Type	Description	Movement and Place Classification	Target Speeds	Street Examples	Example photos
Neighbourhood Residential Street	<p>These are local living streets where people inhabit. They support residential life with a low intensity of on street activity. Neighbourhood streets operate at a slower pace and support local movements.</p> <p>In the Riddells Creek context, these will be characterised by wide verges, softer streetscape and a footpath on one side of the street. Bicycle facilities will be provided via sharrows in the pavement to encourage lane sharing.</p>	<p>M5 W4 GT5 No freight classification</p> <p>P5 – Place of local significance</p>	50 km/h	<ul style="list-style-type: none"> — Merrifield Street — Eucalypt Court — Sexton Street 	
Residential Connector	<p>Residential connectors are access corridors that move high volumes of people. These residential streets are both places where people live and thoroughfares where people move through.</p> <p>Within Riddells Creek, these are characterised with wider streets, shared path on one side of the street and wide verges.</p>	<p>M5 W4 GT5 No freight classification</p> <p>P5 – Place of local significance</p>	60 km/h	<ul style="list-style-type: none"> — Merrifield Street — Bolithos Road 	
High Activity Street	<p>High activity streets are multi-modal destinations for people to visit, work and live. They play a central role for the community, supporting a concentration of commercial, civic and community land use. They are high amenity places that facilitate social interaction and high on-street activity.</p> <p>Each of the key street located within the Riddells Creek town centre can be categorised into this street type. These streets should reinforce the village feel in the Town Centre and enhance the main street as a people focused local destination, with the following characteristics:</p> <ul style="list-style-type: none"> • wider footpaths • increasing street tree canopy 	<p>M3 W3 GT3 F3</p> <p>P4 – Place of neighbourhood significance</p>	30 km/h or lower	<ul style="list-style-type: none"> — Station Street — Stephen Street 	



Street Type	Description	Movement and Place Classification	Target Speeds	Street Examples	Example photos
	<ul style="list-style-type: none"> activating the street at night with feature lighting more people meeting places with landscaped areas a slow speed environment, reinforced with traffic calming. 				
Boulevard	<p>Boulevards are grand, ceremonial movement corridors with a high movement function, forming the backbone of the Riddells Creek township. Boulevards are major gateways that contribute to the township’s identity, and provide a sense of arrival, encouraging visitors to travel slower through the town and to stop and visit the township.</p> <p>Kilmore Road can be categorised into a Boulevard and provides visitors with a first impression of Riddells Creek. Characteristics of a Boulevard include:</p> <ul style="list-style-type: none"> increasing tree canopy Along the service roads introducing a boulevard of trees in the centre carriageway between Station Street and the Primary School provide place specific markers and gateway entry statements create a slower speed environment between Station Street and the primary school additional pedestrian crossing points along Kilmore Road north of the town centre improved pedestrian and cycling facilities. 	<p>M3 W2 GT3 F3</p> <p>P4 – Place of neighbourhood significance</p>	50 km/h	<p>— Kilmore Road between Melvins Road and Bolithos Road</p>	



Street Type	Description	Movement and Place Classification	Target Speeds	Street Examples	Example photos
Off-Road Trail – Recreational	<p>The recreational off-road trails are scenic paths which support communities to access creek corridors, open spaces, parks as well as local and regional destinations. These paths are used for recreational walking and cycling and provides an attraction for tourists.</p> <p>These will be used by a range of users, including walkers, mountain bikers, joggers, and people of all ages and abilities, and are important to encourage physical activity and improved health.</p>	<p>M5 P4¹ – Place of neighbourhood significance</p>	20 km/h	— Proposed trail along Sandy Creek	
Off-Road Trail – Preferred Route Between Towns	<p>This provides a network of key off-road paths to create important walking and cycling connections between the regional towns in the municipality.</p> <p>The Macedon Ranges Walking and Cycling Strategy identifies 4 inter-town projects:</p> <ul style="list-style-type: none"> • Kyneton – Gisborne Trail • Woodend – Hanging Rock Trail • Romsey – Hanging Rock Trail • Riddells Creek – New Gisborne Trail. 	<p>M3¹ P5¹ – Place of local significance</p>	30 km/h	— Riddells Creek to New Gisborne Rail Trail	

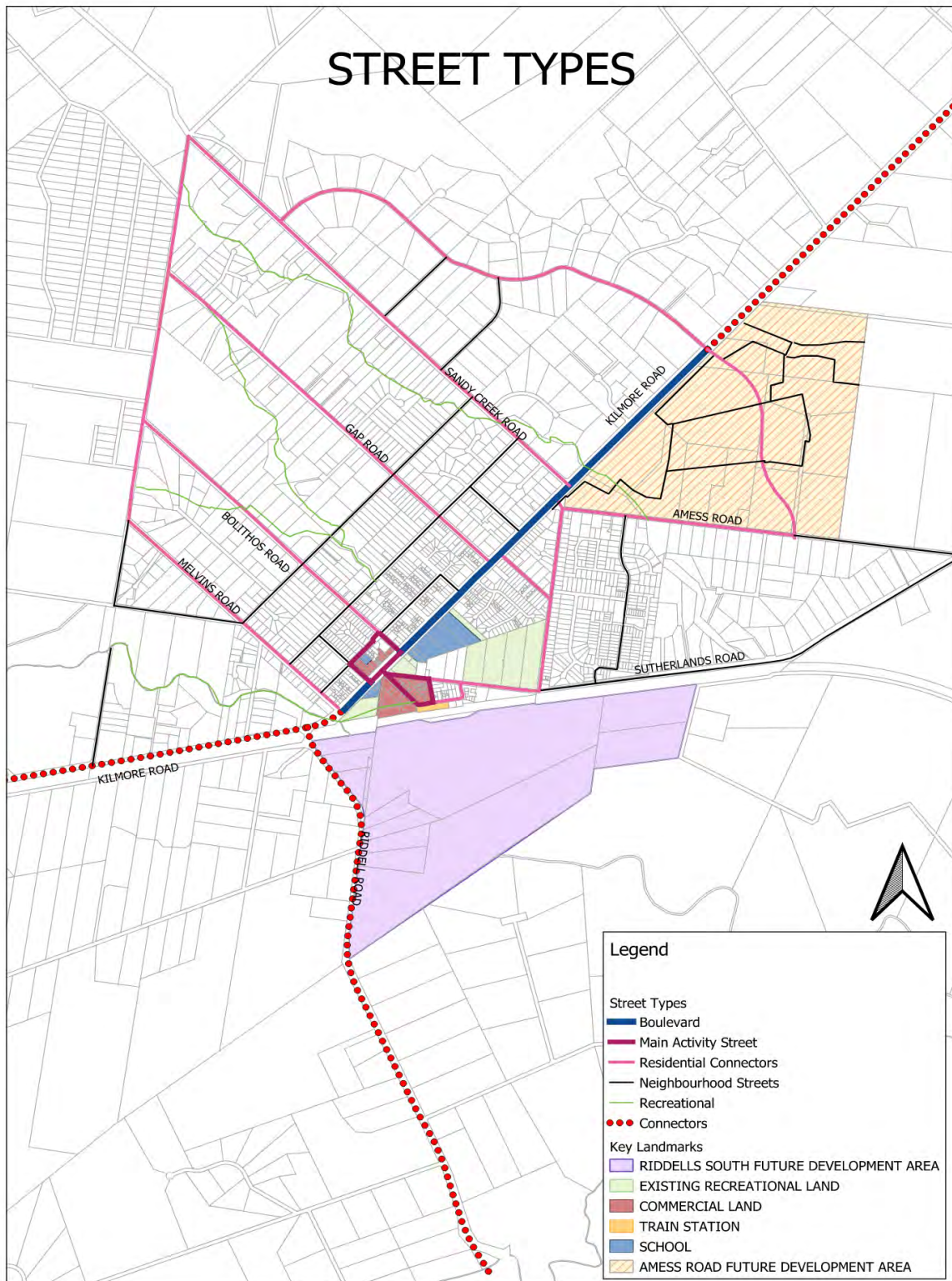


Figure 16: Street Types in Riddells Creek

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3.4 Aspirational movement network

The aspirational movement network is the overall vision for walking, cycling, and public transport in Riddells Creek. This has been developed by establishing a hierarchy of streets and paths based on the street type and the Movement and Place framework. Table 5: Walking Route Types and Table 6: Cycling Route Types describe these route types for walking and cycling respectively, and Figure 16: Street Types in Riddells Creek and Figure 17: Walking Routes in Riddells Creek show their locations within Riddells Creek.

3.4.1 Walking

The following hierarchy of walking routes have been developed to accommodate for the different reasons for walking within the township:

- primary walking routes
- secondary walking routes
- local walking routes
- recreational routes



A description of each of these routes, including appropriate treatments, are found in Table 5. Figure 17: Walking Routes in Riddells Creek shows a map of these walking routes in Riddells Creek.



Table 5: Walking Route Types

	Description	Street Types	Treatments	Photo
<p>Primary Walking Route (W2/W3)</p>	<p>Regionally significant walking links near key activity generators with existing and/or potential demand.</p> <p>This includes the Riddells Creek town centre, educational institutions, railway stations, and employment precincts.</p>	<ul style="list-style-type: none"> — Boulevard — High activity street 	<ul style="list-style-type: none"> — Wider sealed footpaths on both sides of the road — Wombat crossings — Pedestrian operated signals (POS) 	
<p>Secondary Walking Route (W4)</p>	<p>Municipal walking links that support pedestrian movements to and around activity generators such as activity centres and schools.</p>	<ul style="list-style-type: none"> — Residential Connector 	<ul style="list-style-type: none"> — Sealed footpaths on one side of the road — Wombat crossings 	



	Description	Street Types	Treatments	Photo
Local Walking Route (W4 / W5)	Neighbourhood walking links along residential streets.	<ul style="list-style-type: none"> Neighbourhood Residential Street 	<ul style="list-style-type: none"> Sealed footpaths on one side of the road Informal crossings with kerb ramps Wombat crossings 	
Recreational Route	<p>Primarily used for leisure. May be windier and have a lower target speed than other routes, with a greater focus on scenery and recreational use.</p> <p>These routes don't need to be sealed and peak usage will typically occur on weekends.</p>	<ul style="list-style-type: none"> Off-Road Trail - Recreational 	<ul style="list-style-type: none"> Sealed or unsealed shared paths 	

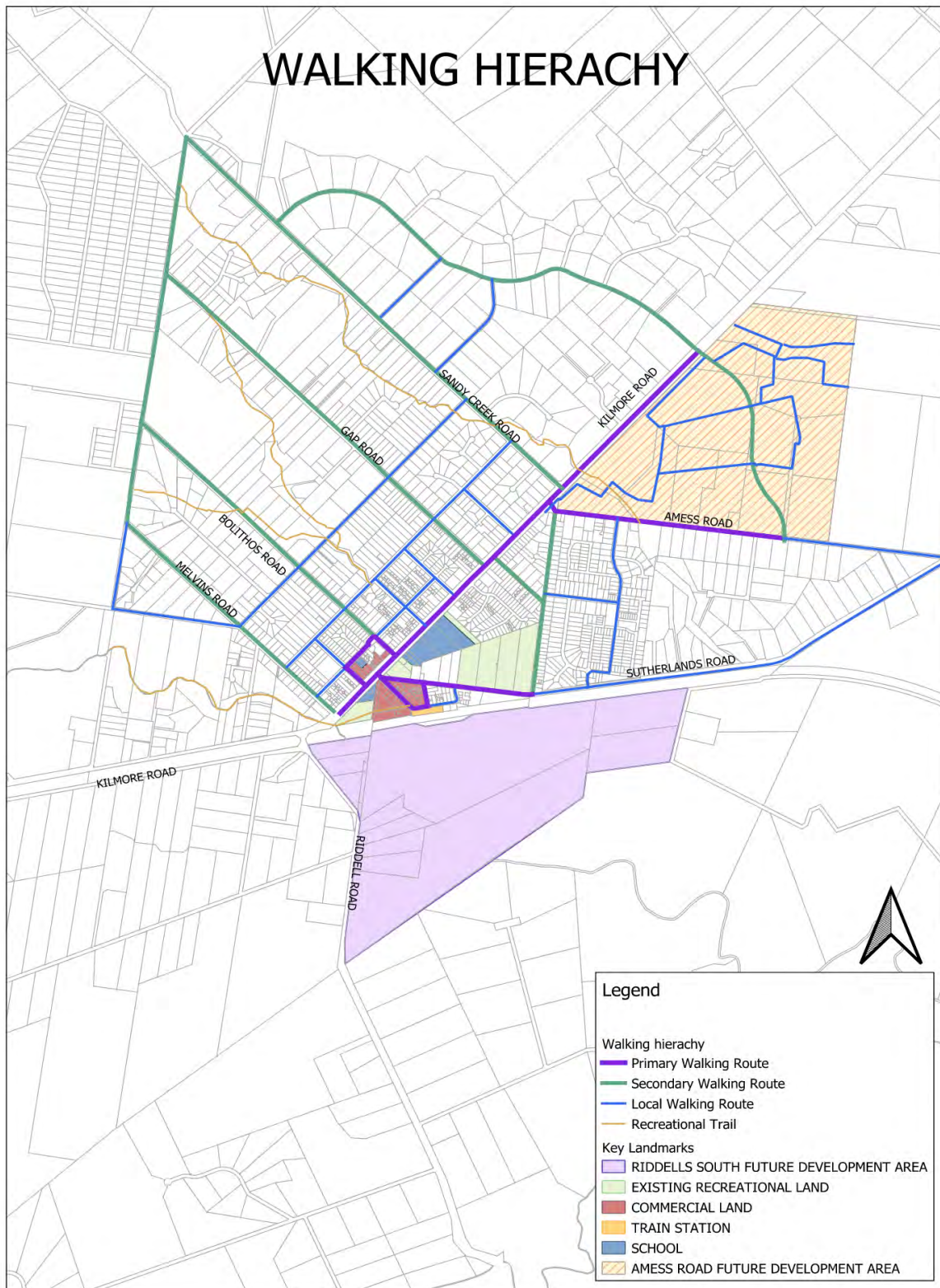


Figure 17: Walking Routes in Riddells Creek

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3.4.2 Cycling

Five types of cycling routes have been developed to accommodate for the different types of cyclists within the township:

- primary cycling routes
- secondary cycling routes
- local cycling routes
- preferred cycling routes between towns
- recreational cycling trails.



A description of each of these routes, including appropriate treatments for the routes, are found in Table 6. Figure 18 shows a map of these walking routes in Riddells Creek.




Table 6: Cycling Route Types

	Description	Street Types	Treatments	Photo
<p>Primary Cycling Route (C1 / C2)</p>	<p>Regionally significant cycling links near key activity generators with existing and/or potential demand. This includes strip shopping, educational institutions, railway stations, and employment precincts.</p>	<p>Boulevard High activity street</p>	<p>Sealed shared paths</p>	
<p>Secondary Cycling Route (C3)</p>	<p>Municipal cycling link which supports pedestrian movements to and around activity generators such as activity centres and schools.</p>	<p>Residential Connector</p>	<p>Sealed shared paths</p>	



	Description	Street Types	Treatments	Photo
<p>Local Cycling Route (C4)</p>	<p>Captures low-density residential areas to connect to primary and secondary cycling routes. Typically designed for lower target speeds than a secondary cycling route.</p>	<p>Neighbourhood Residential Street</p>	<p>Sharrows</p>	
<p>Preferred Cycling Route Between Towns (CR)</p>	<p>Recreational cycling route for cycling enthusiasts or those seeking a long-distance training route, catering for a higher speed than recreational cycling trails.</p>	<p>Connector</p>	<p>Sealed shared paths</p>	



	Description	Street Types	Treatments	Photo
<p>Recreational Cycling Trail (CR)</p>	<p>A cycling route that is used for leisure and prioritises scenery over a direct travel route.</p>	<p>Off-Road Trail - Recreational</p>	<p>Sealed or unsealed shared paths</p>	

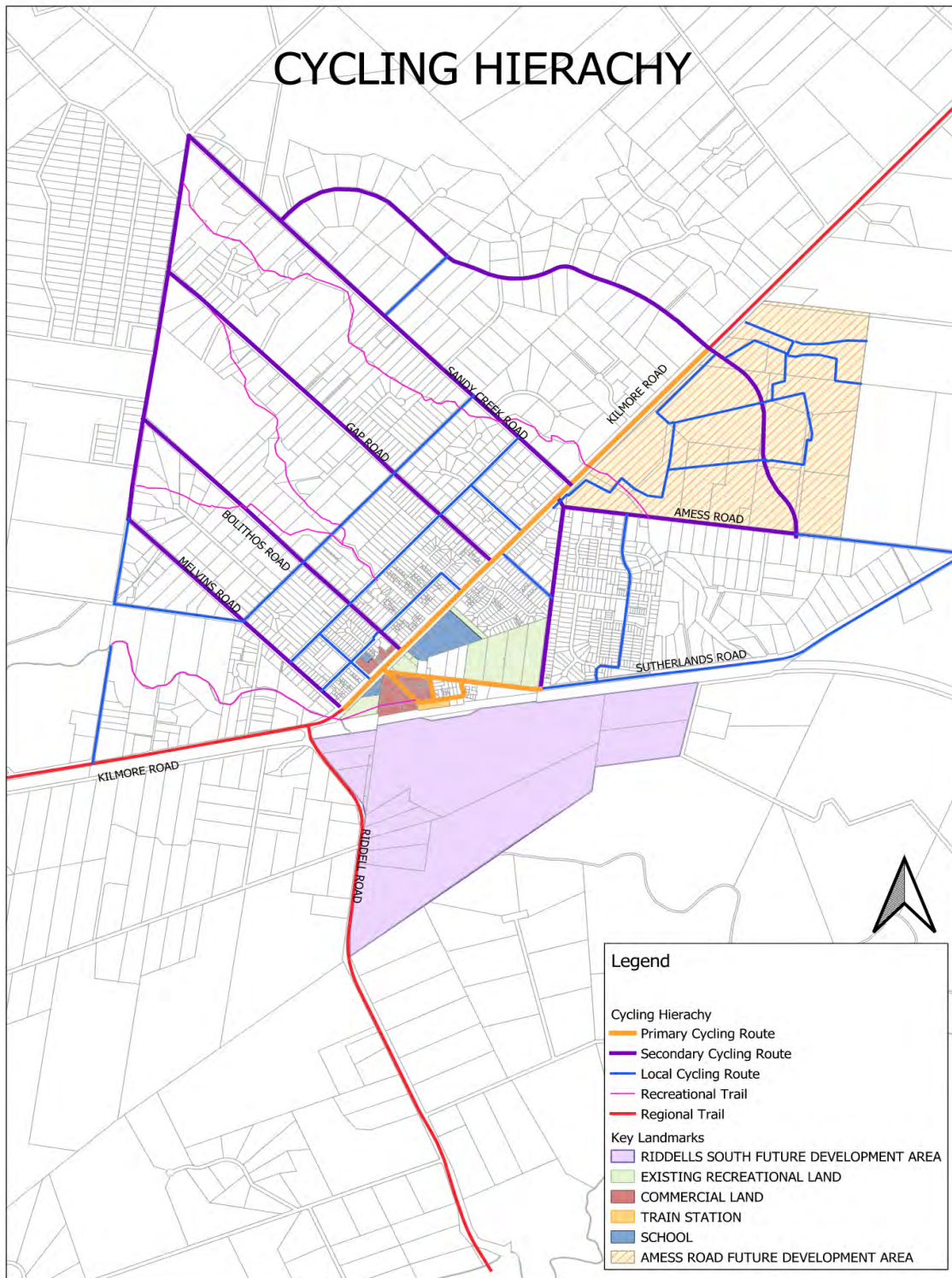


Figure 18: Cycling routes in Riddells Creek



3.4.3 Public Transport

Currently, public transport to and from Riddells Creek is provided via train, with services operated by V/Line. A V/Line bus service also connects Riddells Creek to Lancefield.

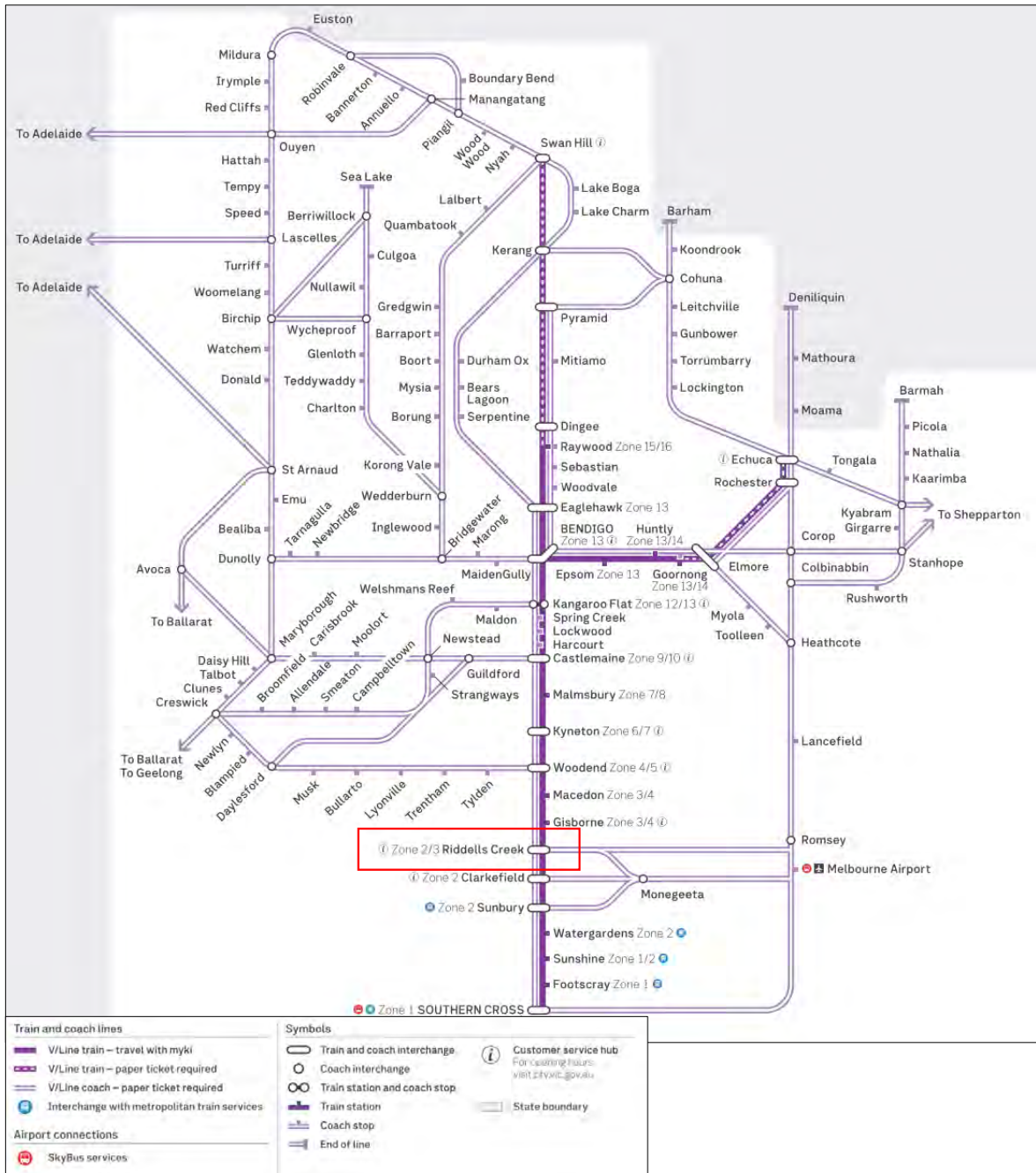


Figure 19: Northern Victoria Public Transport Map



In addition, school bus services operate to and from Riddells Creek Primary School, Holy Cross Primary School, and Gisborne Secondary College.

There are currently no local public bus services operating within the Riddells Creek township.

Since the introduction of the regional V/Line daily fare cap at the current Metropolitan fare, V/Line patronage data has shown an increase in passengers taking advantage of cheaper fares. More than 1.5 million people used public transport across regional Victoria in the first month of the new fares, including 210,000 passengers on the Bendigo Line. Patronage data shows an uplift in passengers on weekend and special services.

It is recommended that Council work with Department of Transport and Planning to:

- establish a bus route to Gisborne.
- establish local bus services to the train station and town centre.
- understand the trend of train ridership for the first few months at the Riddells Creek rail station and any impact to the usage of car parking spaces there.



4 Identification of projects

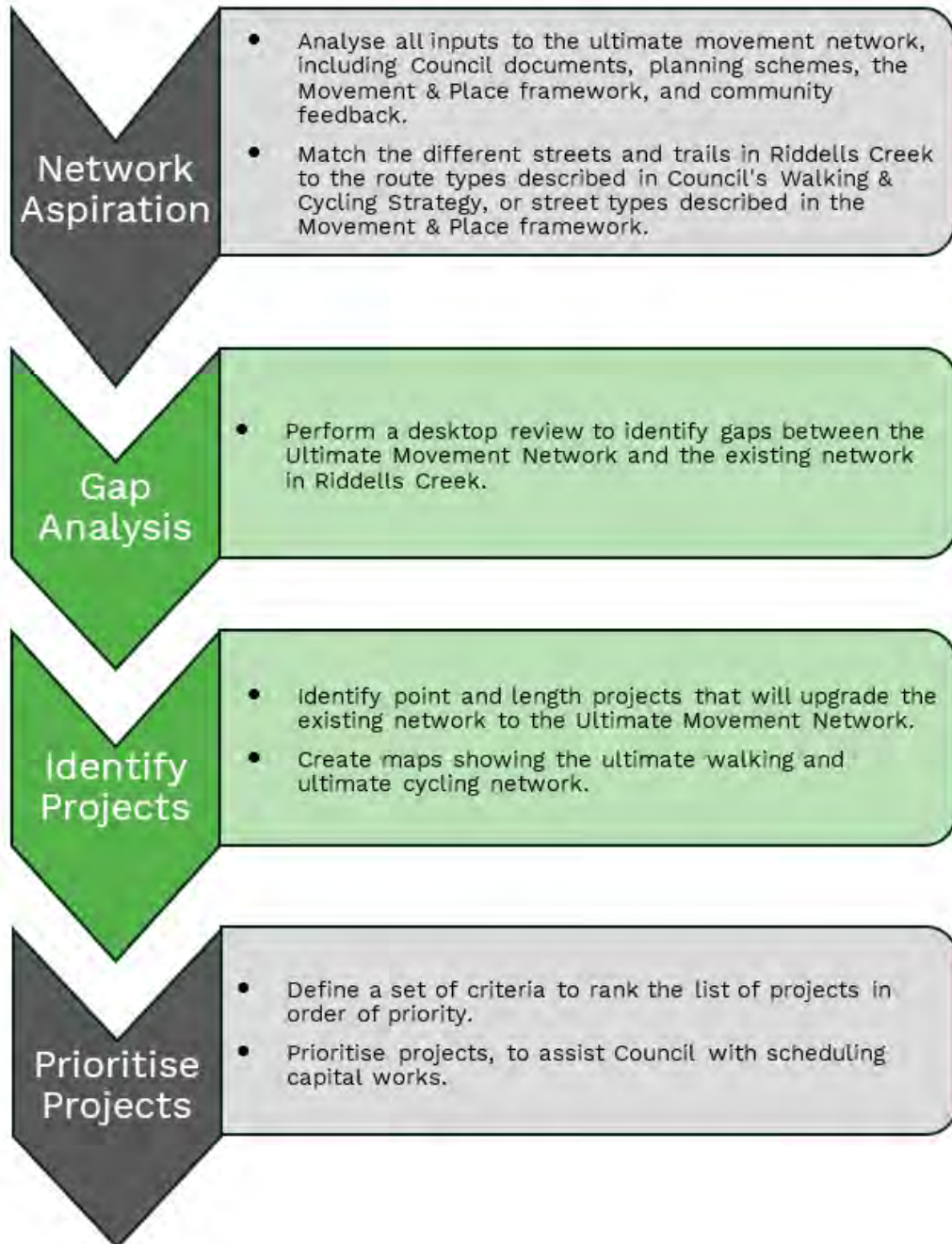


Figure 20: Project Methodology - Module 2



4.1 Gap analysis

A desktop study of the road network was undertaken to assess the existing network against the aspirations. Through the process of comparing the aspirations defined within the cycling and walking hierarchies to existing infrastructure in Riddells Creek, gaps in the network were identified.

The gap analysis then informed a series of infrastructure upgrade projects, ranging in scale, challenges and benefits, outlined in the following section.

4.2 Project types

To assist in the delivery of the aspirational movement network plan for the Riddells Creek township, a range of project types have been identified. These are categorised into the following:

- pedestrian facility upgrades
- cycling facility upgrades
- intersection upgrades
- speed limit reductions and streetscape projects.



4.2.1 Pedestrian projects

Project	Description	Design Parameters	Example Photo
Footpath	A sealed path for pedestrians to walk along.	<ul style="list-style-type: none"> Minimum 1.5 m width For commercial areas, as wide as possible Pram ramps to connect to the road 	
Shared Path	A sealed path that is shared between pedestrians and cyclists. Shared paths are wider, and cater for higher speeds, than a footpath.	<ul style="list-style-type: none"> Minimum 2.5 m width Desirable 3 m width Design speed 20 km/h 	
Recreational Shared Path	A sealed or unsealed path used by pedestrians and cyclists for leisure. They often prioritise scenery over a direct route. Peak usage on these paths typically occur on weekends.	<ul style="list-style-type: none"> Minimum 2.5 m width Desirable 3 - 4 m width 	
Regional Trail	A trail used by pedestrians and cyclists to travel between regional towns or points of interest.	<ul style="list-style-type: none"> Minimum 2.5 m width Desirable 3 m width 	



Project	Description	Design Parameters	Example Photo
Wombat Crossing	<p>A raised pedestrian crossing that provides priority to pedestrians crossing the road and encourages motorists to slow down when approaching the crossing. Appropriate in the following locations:</p> <ul style="list-style-type: none"> — where there is a need to reduce vehicle speeds at pedestrian crossings — on two-lane streets — at mid-block locations, especially near schools — on streets with low speed (less than 60 km/h) and traffic environments — where there is adequate street lighting to maximise visibility. 	<ul style="list-style-type: none"> — Profile of hump to consider types of vehicles — Desirable width of 3.6 m — Minimum width of 3 m 	
Refuge Crossing	<p>A section of pavement in the middle of a road where pedestrians can stop before finishing crossing the road.</p>	<ul style="list-style-type: none"> — Desirable width of 3 m — Minimum width of 2 m 	
Pedestrian Operated Signals (POS) Crossing	<p>A street crossing with traffic lights that activate a red light for motorists when a pedestrian pushes a button.</p>	<ul style="list-style-type: none"> — Minimum 2.5 m width, or 3 m for shared path crossing — Appropriate for roads with high volumes of traffic and locations with high volumes of pedestrians 	
New footbridge	<p>A bridge that provides pedestrians and cyclists with safe access over a road or railway line.</p>	<ul style="list-style-type: none"> — Minimum 3 m width — Desirable 5 m width — Ramps to be provided 	



4.2.2 Cycling Projects

Project	Description	Design Parameters	Example Photo
Sharrows	Markings that indicate a road is a shared environment for bicycles and cars and alert all road users to the presence of bicycles on the road.	<ul style="list-style-type: none"> Wayfinding signage Sharrow Line marking Traffic calming 	
Shared path (within road reserve)	A sealed path that is shared between pedestrians and cyclists. Shared paths are wider, and cater for higher speeds, than a footpath.	<ul style="list-style-type: none"> Minimum 2.5 m width Desirable 3 - 4 m width Design speed 20 km/h 	
Recreational Shared Path	A sealed or unsealed path used by pedestrians and cyclists for leisure. They often prioritise scenery over a direct route. Peaks on these paths typically occur on weekends.	<ul style="list-style-type: none"> Minimum 2.5 m width Desirable 3 m width Design speed 10 - 15 km/h 	
Regional Trail	A trail used by pedestrians and cyclists to travel between regional towns or points of interest.	<ul style="list-style-type: none"> Minimum 2.5 m width Desirable 3 m width 	



Additionally, specific projects have been identified at various locations. These are listed below.

4.2.3 Intersection upgrades

The following intersection upgrades has been identified within the Riddells Creek township. These are subject to further traffic analysis:

- new roundabout at Riddell Road / Main Road
- new roundabout at Kilmore Road / Sandy Creek Road
- convert Kilmore Road / Station Street to a signalised intersection.
- investigate the feasibility of reversing the priority intersection at Sutherlands Road / Station Street, with full consultation of the nearby businesses and residents.
- investigate the feasibility of improving the traffic flow between the intersection of Kilmore Road/Bolithos Road and the intersection of Kilmore Road/Sutton Road with the turning movement interactions of the multiple accesses to the Police Station/Fire Brigade and Riddells Creek Primary School.
- intersection upgrade at Raws Lane, including turn lanes.
- new roundabout at Kilmore Road / Gyro Close intersection with future access into Amess Road development.

4.2.4 Speed limit reductions

The following potential speed limit reductions have been identified within the township, for further investigation (speed limit reductions will require the approval of the Department of Transport and Planning (DTP)):

- reduce the speed limit on Main Road between Walter J Smith Reserve at the southern entry to the town, to Sexton Street from 50 km/h to 40 km/h.
- reduce the speed limit on Main Road between Sexton Street to the northern extent of the Amess Road development to 60 km/h.
- investigate the feasibility of a 30 km/h speed limit within the town centre.
- investigate the feasibility of an area 40 km/h speed limits within the residential areas of the township.

4.2.5 Amenity and streetscape improvements

- Implement amenity improvements and streetscaping to enhance the township character and provide a safer environment for pedestrians along Station Street. This could include the following options:
 - one-way traffic flow along Station Street between railway station and Sutherlands Road
 - kerb outstands, sharrow linemarking and speed humps to slow traffic speeds.



- implementation of a 10 km/h shared zone, supported by landscaping, raising the road to footpath level and removal of kerbs, and other interventions to enforce the slow environment.

4.3 Project maps

Maps showing the proposed projects are shown in Figures Figure 21 -Figure 24.

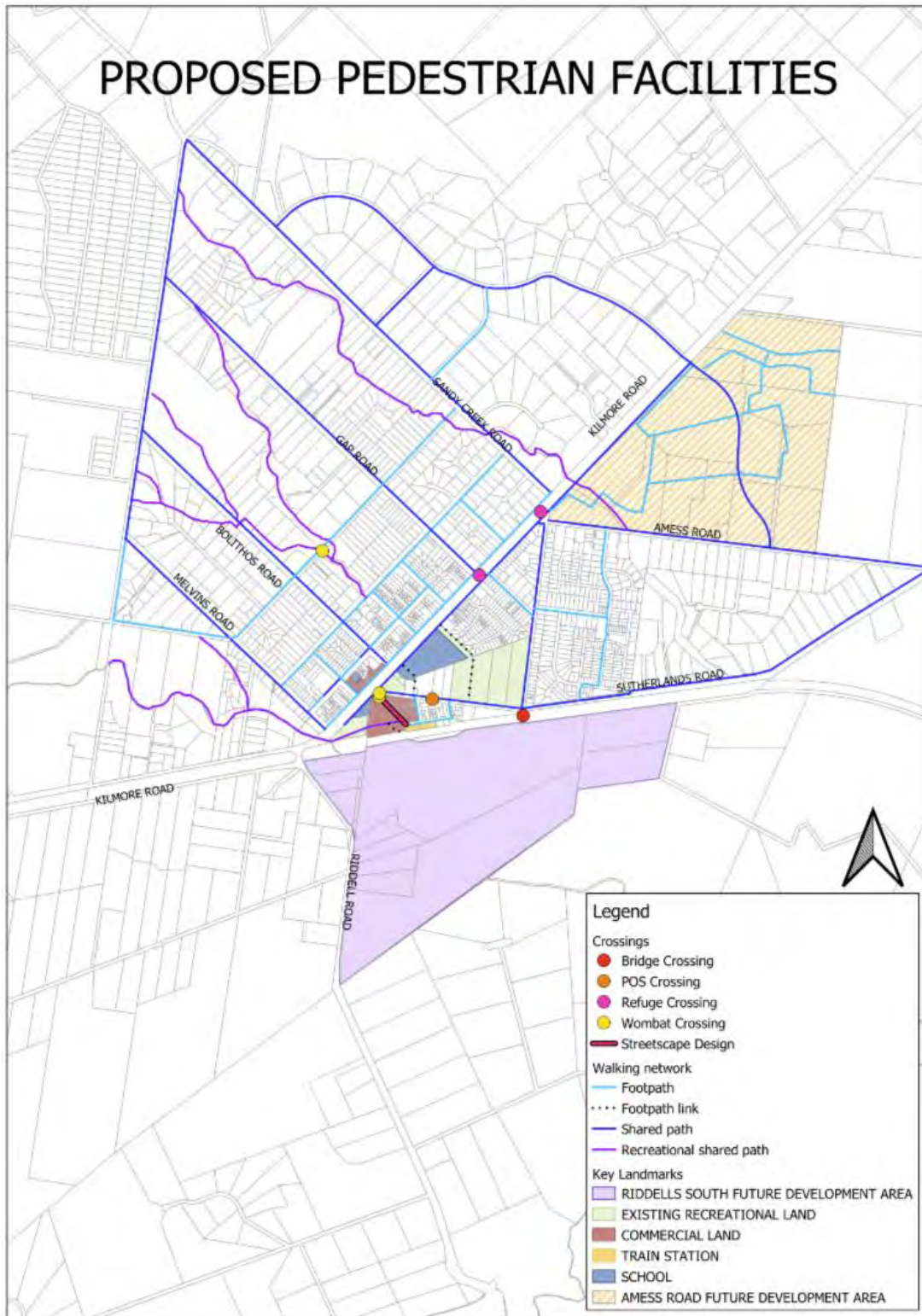


Figure 21: Proposed Pedestrian Facilities

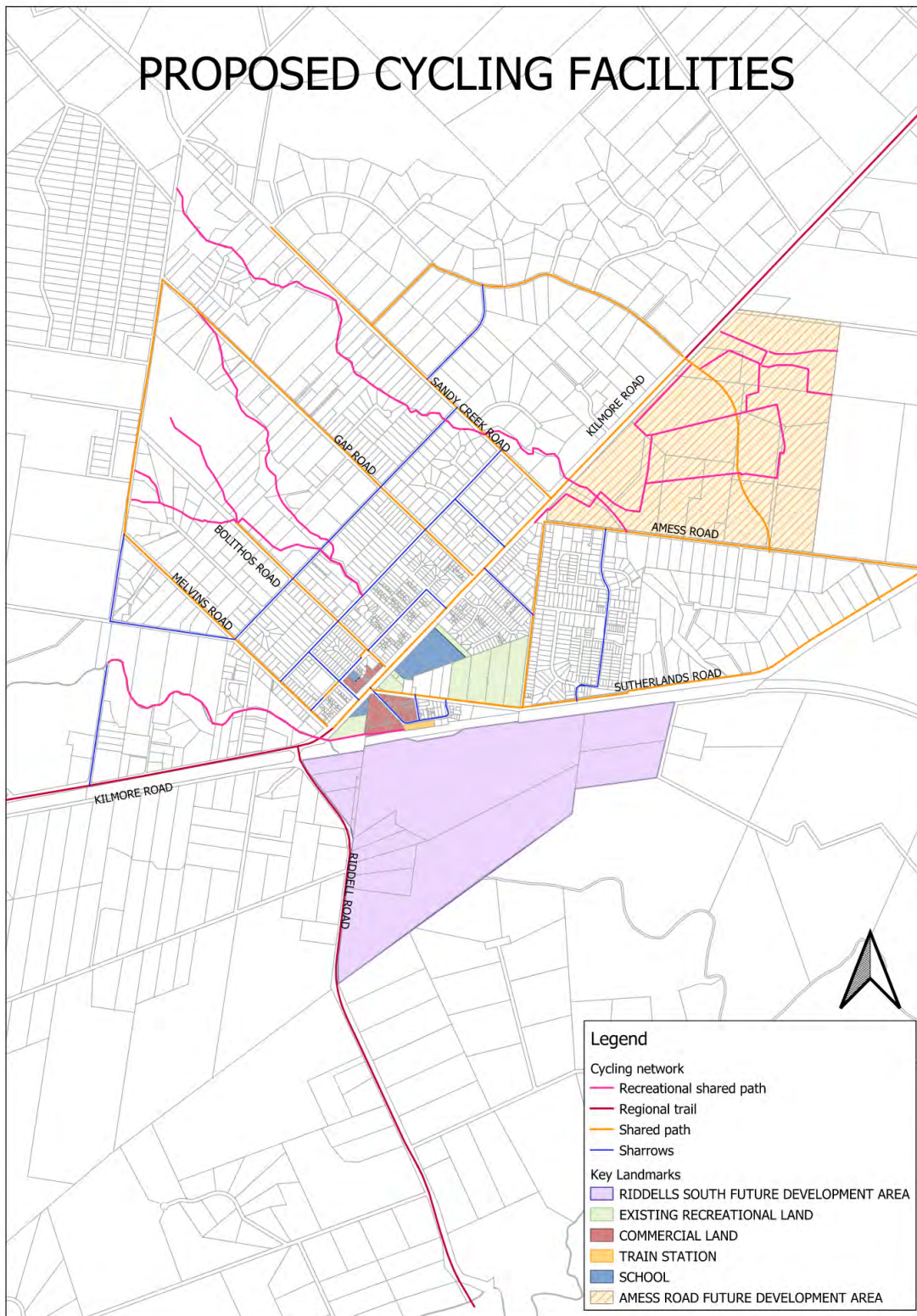


Figure 22: Proposed Cycling Facilities

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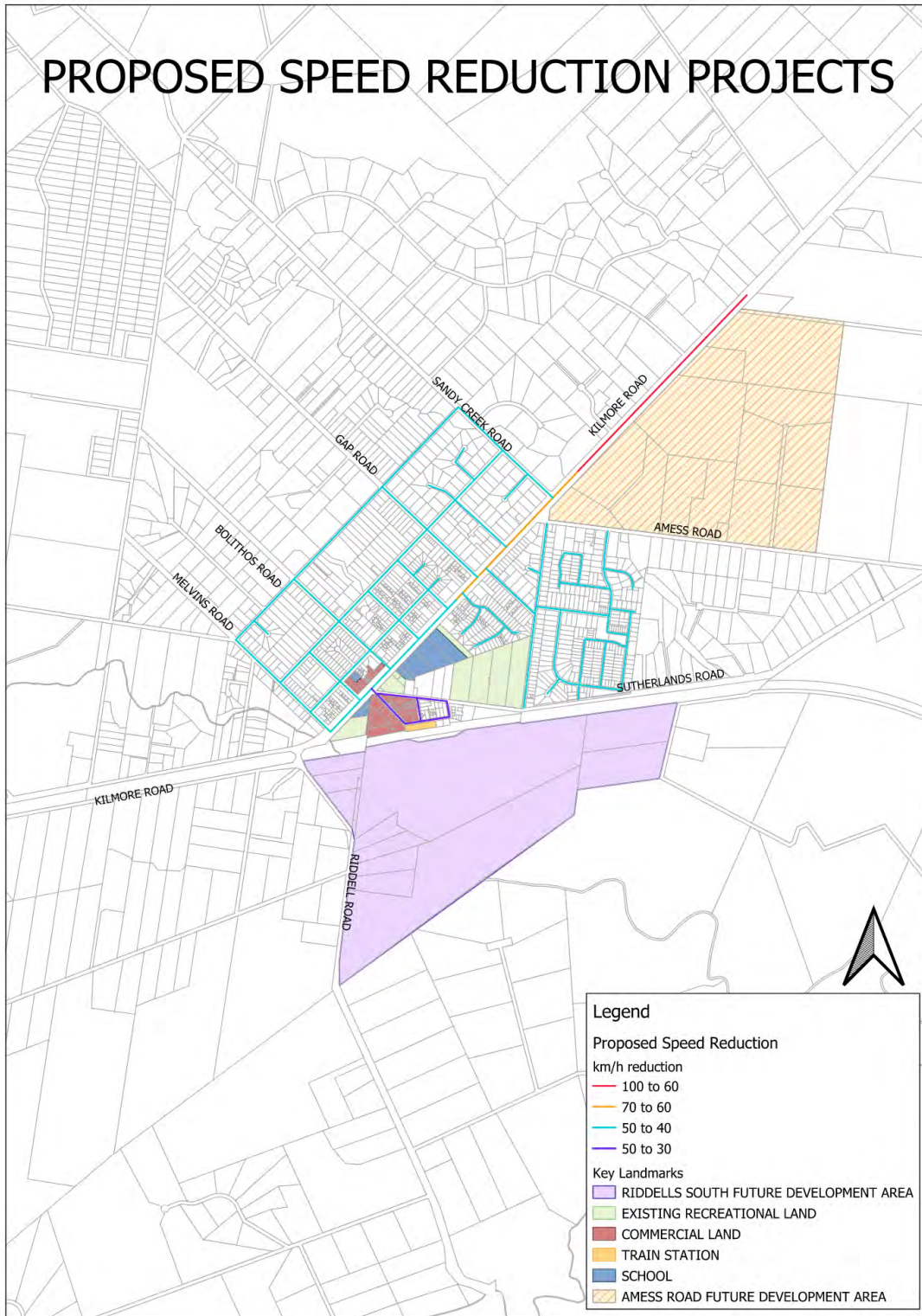


Figure 23: Proposed Speed Reduction Projects

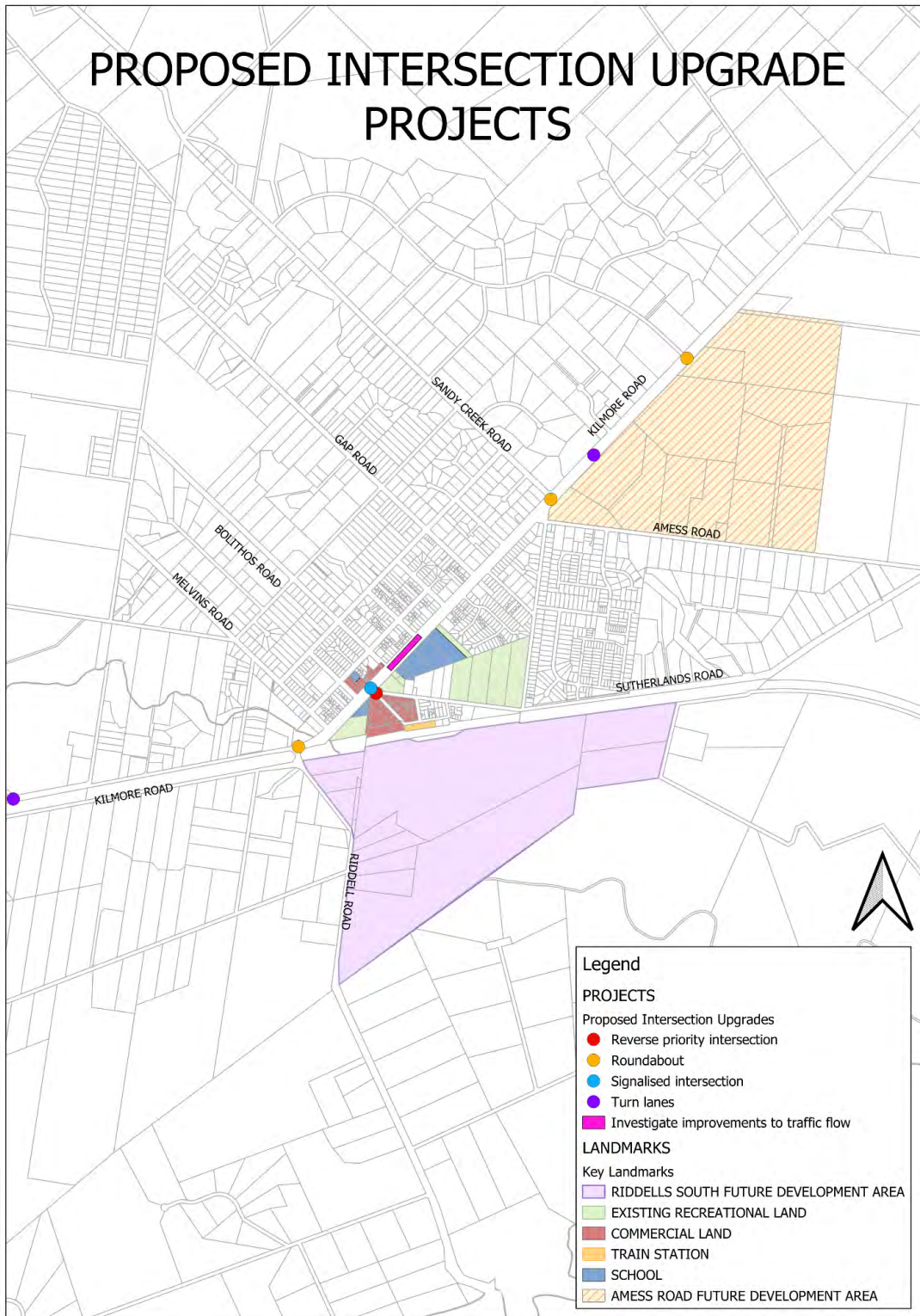


Figure 24: Proposed Intersection Upgrade Projects



5 Implementation plan

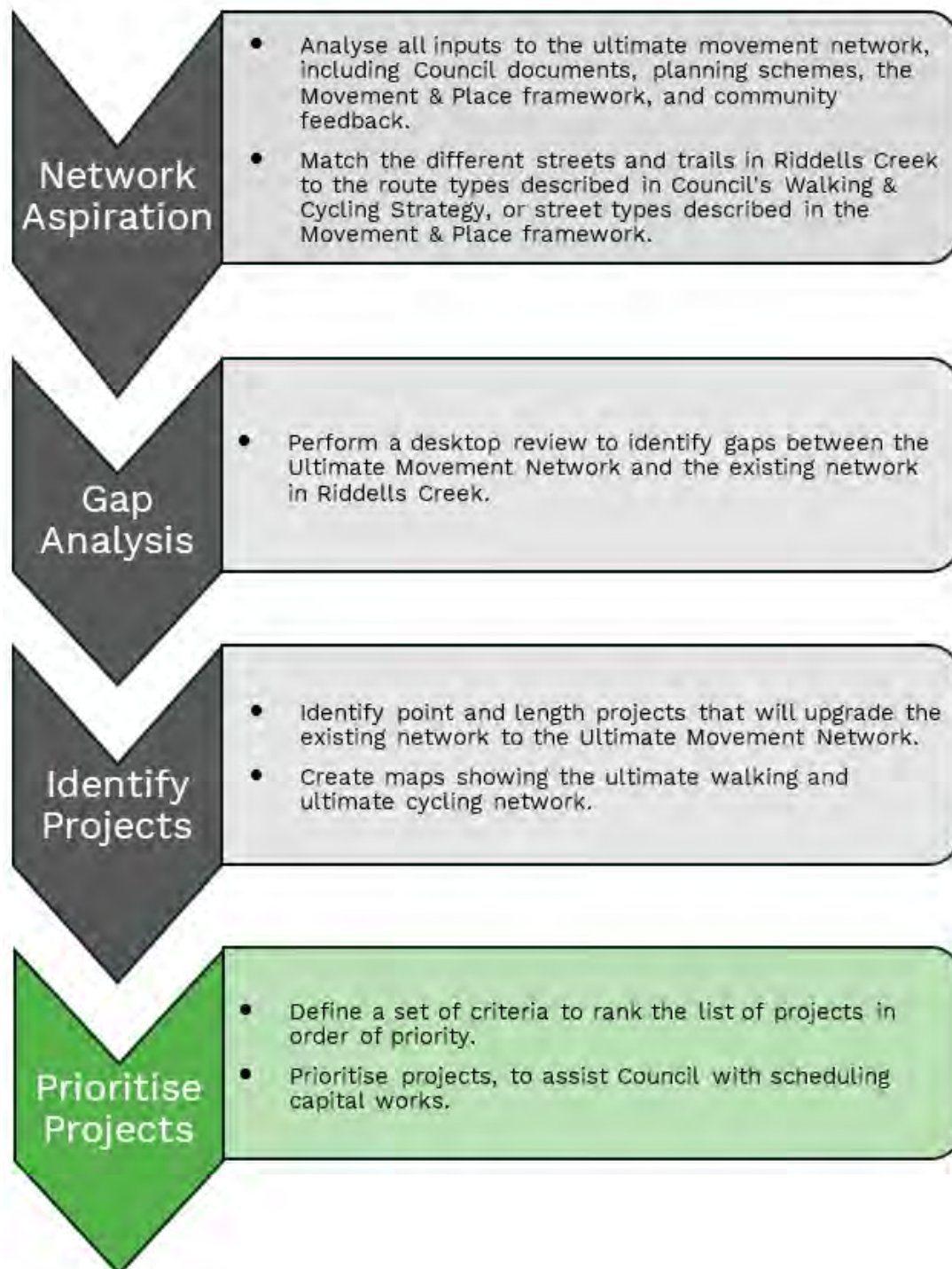


Figure 25: Project Methodology - Module 3



5.1 Criteria development

To assist in the categorisation of projects to be delivered in the short, medium and long term, a series of criteria was developed to prioritise projects.

The assessment criteria to prioritise projects include:

1. Feasibility
 - a. prioritise routes within Council land where Council has more control
 - b. environmental and cultural impacts
 - c. existing above and underground service impacts
 - d. impacts to traffic flow on traffic priority routes
2. Connectivity
 - a. prioritise routes which provide crucial missing links
 - b. prioritise projects within the town centre
 - c. Prioritise projects that provide connections to local destinations, such as schools, reserves etc.
3. Alignment with Movement and Place aspirations
 - a. prioritise projects which address the largest performance gaps
4. Alignment with local strategy and policy
 - a. prioritise projects which align with walking and bicycle strategy
 - b. prioritise projects within Amess Creek development
 - c. prioritise projects which have already been developed separately
 - d. prioritise projects which will enhance the township character
5. Social and economic benefit
 - a. Benefits to vulnerable road users
 - b. Economic impact
6. Stakeholder and community sentiments
 - a. prioritise projects which address the concerns raised in the Stage 1 consultation.

5.2 Multi-criteria assessment

Using the above criteria, a Multi-Criteria Assessment (MCA) will be undertaken to score each of the identified projects. A Multi Criteria Analysis (MCA) is a decision tool that compares quantitative and qualitative impacts by assigning weights and scores to various criteria.

For each key assessment criteria, key performance indicators (KPI) will be developed. Each key assessment criteria and key performance indicator will be assigned a weighting, based on its importance.



For each key performance indicator, a score between one and 5 is assigned, based on a scoring guide. Each of the criteria assessed encompass factors which reflect both the anticipated benefits of implementing the project, as well as the likely relative cost implications. Hence, the MCA ranking provides a comparative benefit cost assessment for each of the assessed segments.

The development of the KPIs and scoring guide, and the MCA will be undertaken as part of Stage 2b of the study.



Appendix 1 - Input Maps

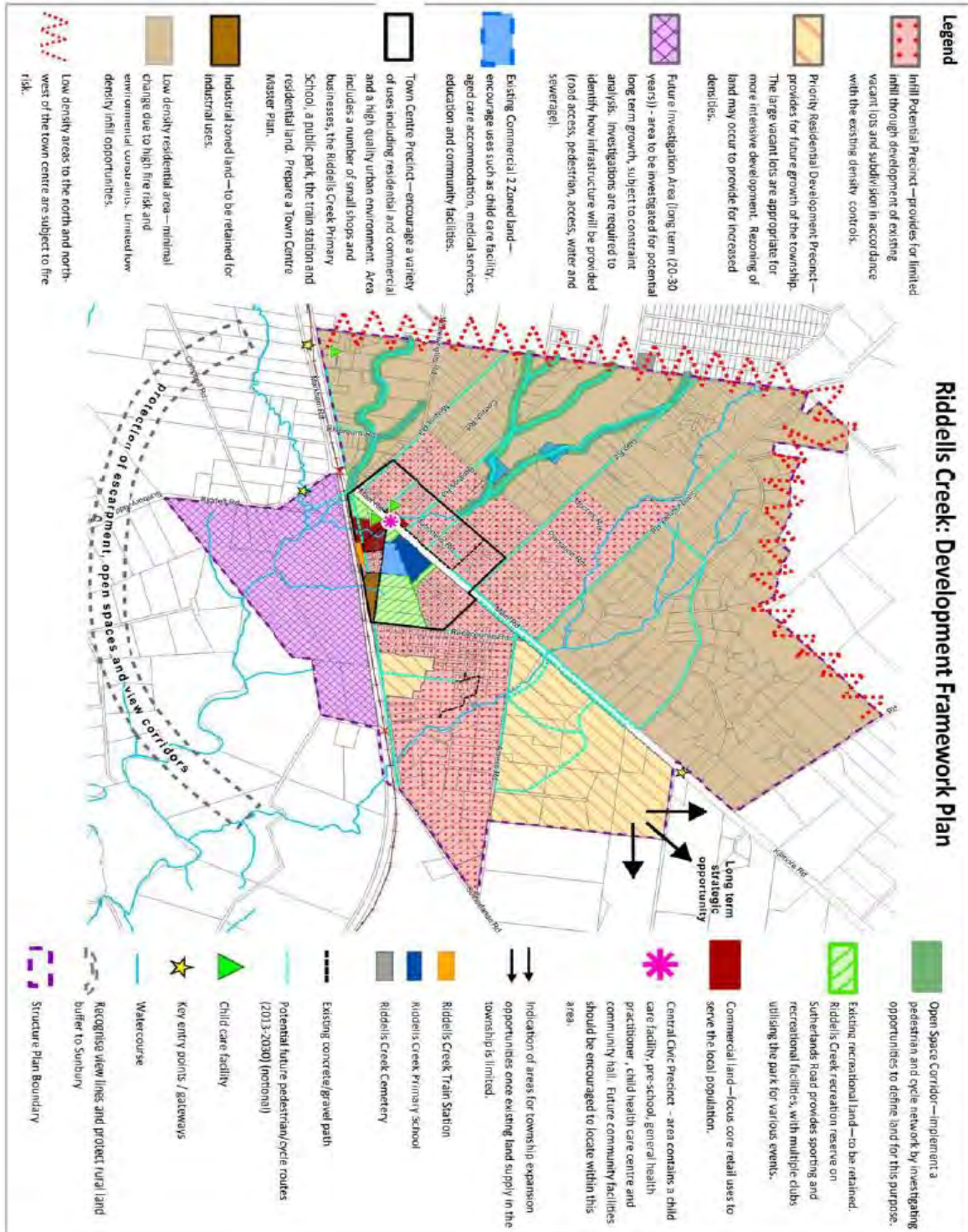


Figure 26: Riddells Creek Development Framework Plan

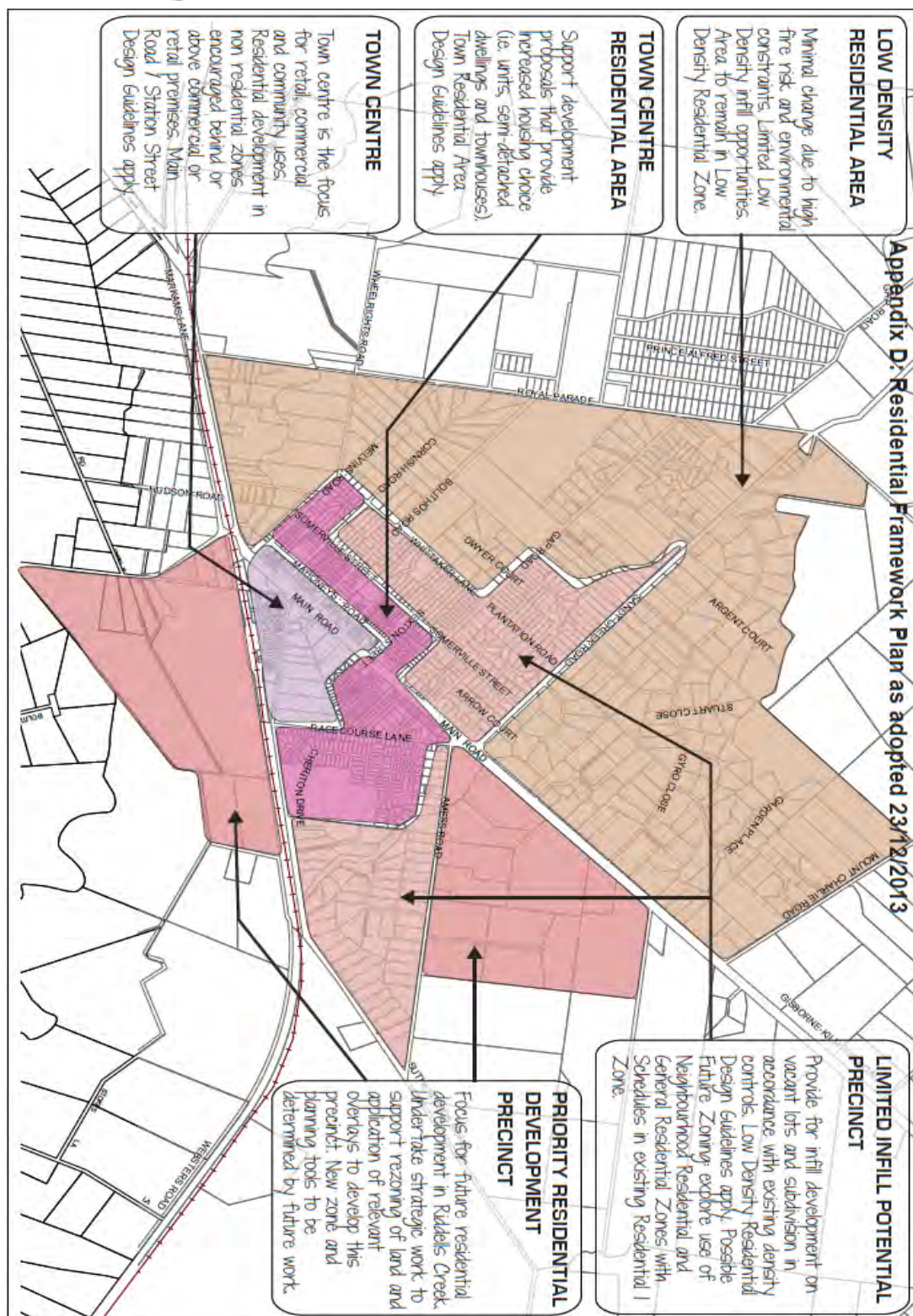


Figure 27: Riddells Creek Residential Framework Plan



Figure 5 Township Arrival & Streetscape Improvement Opportunities

- 1A 1B Kilmore Road Arrival Experience
- 2 Riddells Creek
- 3A 3B Heritage Rail Bridge
- 4 WJ Smith Reserve
- 5 Proposed Signalised Intersection
- 6 Riddells Creek Primary School
- 7 Drainage Corridor
- 8 Lions Park
- 9 Riddells Creek Train Station
- 10 Riddells Creek Hotel
- 11 Stephen Street On Street Dining

Figure 28: Riddells Creek Town Centre Opportunities Summary Paper - Township Arrive and Streetscape Opportunities



Figure 6 Proposed Walking and Cycling Links

- Existing Footpath
- ↔ Proposed Footpath/Shared Path
- ↔ Potential Links in the case of Future Development

- ① New section of footpath linking the Train Station (platform) to Station Street
- ② New section of shared path through the WJ Smith Reserve
- ③ Improved shared path treatment along northern side of Sutherland Road
- ④ Improved shared path treatment along the eastern side of Kilmore Road
- ⑤ Improved shared path treatment along the eastern side of Racecourse Road
- ⑥ Potential local access link between the Primary School and Recreation Reserve
- ⑦ Potential for mid block link (in the case of any future development)
- ⑧ Potential extension to Hamilton Street (in the case of any future development)

Figure 29: Riddells Creek Town Centre Opportunities Summary Paper – Proposed Walking and Cycling Links



Figure 9 Town Centre Development Opportunities

- Potential Residential Area
- Commercial Area
- Residential Area
- Industrial Area
- Future Expansion Area/Special Use Zone
- Potential Future Links
- ① Station Street fine grain retail precinct
- ② SUZ land - potential site for future retail (subject to detailed investigations)
- ③ Industrial precinct
- ④ Potential for boutique small lot/medium density housing

Figure 30: Riddells Creek Town Centre Opportunities Summary Paper – Town Centre Development Opportunities

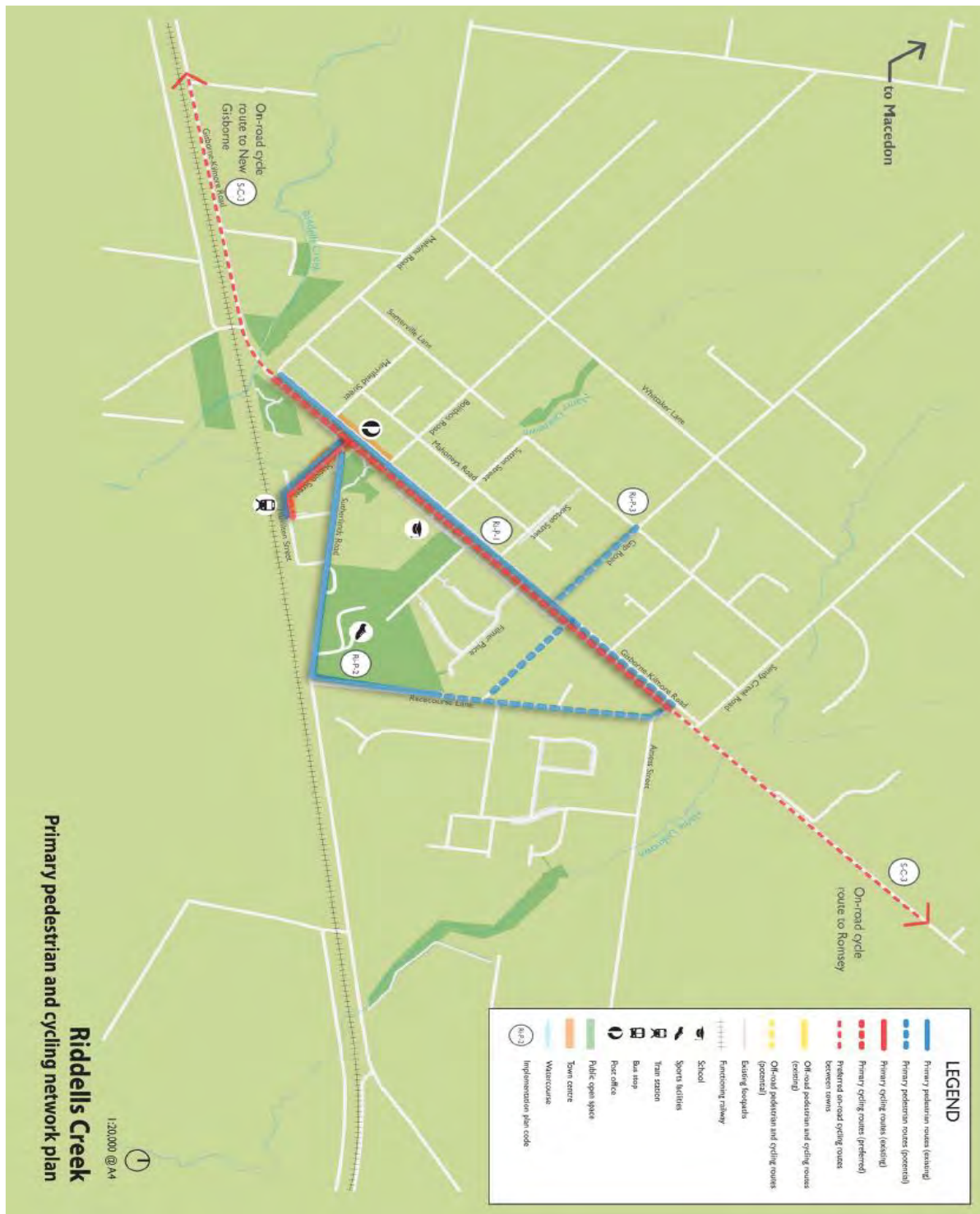


Figure 31: Riddells Creek Primary Pedestrian and Cycling Network Plan

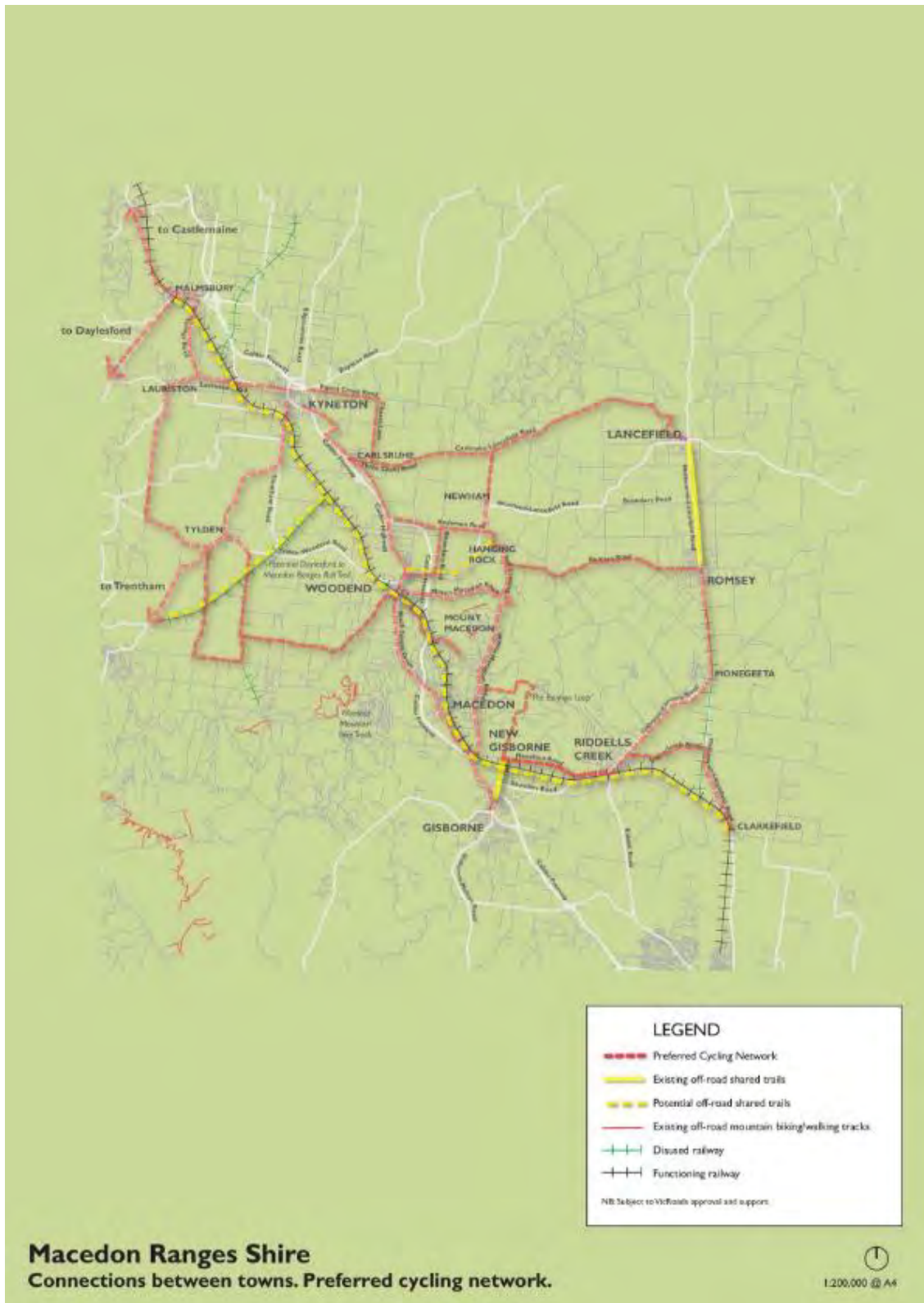


Figure 32: Macedon Ranges Shire Preferred Cycling Network Between Towns

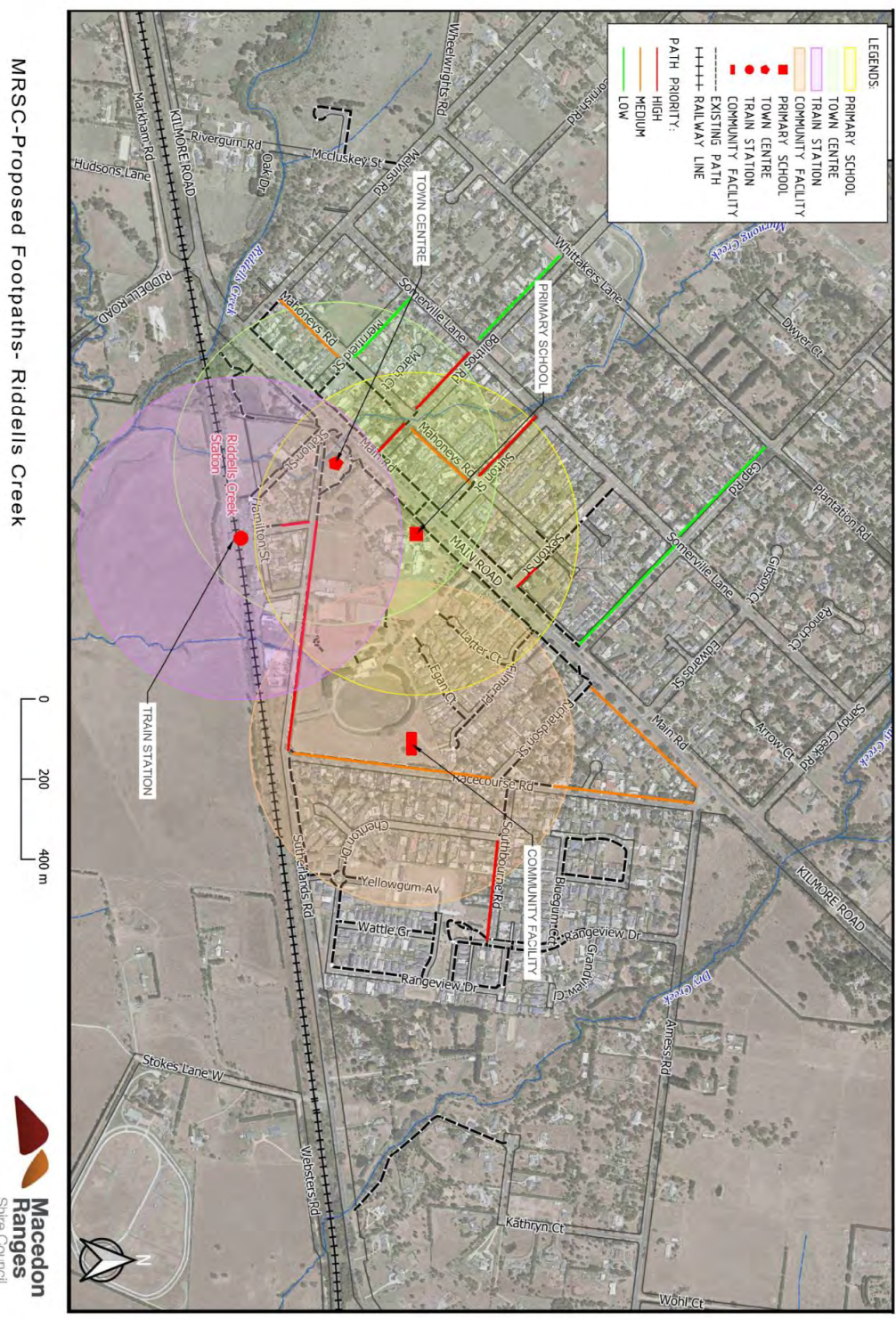


Figure 33: Macedon Ranges Shire Proposed Footpaths – Riddells Creek



Appendix 2 – Project list

Item Number	Project Category	Project Type (e.g. footpath, sharrows, crossing)	Location/Road Name	Road Name Start	Road Name End
1	WALKING	FOOTPATH	SOMERVILLE LANE	MELVINS ROAD	SANDY CREEK ROAD
2	WALKING	FOOTPATH	MERRIFIELD STREET	SOMERVILLE LANE	MAHONEY'S ROAD
3	WALKING	FOOTPATH	ROYAL PARADE	MELVINS ROAD	WHEELWRIGHTS ROAD
4	WALKING	FOOTPATH	SOUTHBOURNE ROAD	RACECOURSE ROAD	PARKVIEW TERRACE
5	WALKING	FOOTPATH	HAMILTON STREET / FITZGERAL STREET	STEPHEN STREET	SUTHERLANDS ROAD
6	WALKING	FOOTPATH	STEPHENS STREET	SUTHERLANDS ROAD	HAMILTON ROAD
7	WALKING	FOOTPATH	MAHONEY'S ROAD	MELVINS ROAD	NO.7
8	WALKING	FOOTPATH	RICHARDSON STREET	KILMORE ROAD	RACECOURSE ROAD
9	WALKING	FOOTPATH	MAIN ROAD SERVICE ROAD	SEXTON STREET	SANDY CREEK ROAD
10	WALKING	FOOTPATH	RANGEVIEW DRIVE	AMESS ROAD	GRANDVIEW CLOSE
11	WALKING	FOOTPATH	SEXTON STREET	NO. 13	KILMORE ROAD
12	WALKING	FOOTPATH	WHITTAKERS LANE	MELVINS ROAD	SANDY CREEK ROAD
13	WALKING	FOOTPATH	PARKVIEW DRIVE	PARKVIEW TERRACE PARK	PARKVIEW TERRACE PARK
14	WALKING	FOOTPATH	PARKVIEW TERRACE PARK	PARKVIEW TERRACE PARK	PARKVIEW TERRACE PARK

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Item Number	Project Category	Project Type (e.g. footpath, sharrows, crossing)	Location/Road Name	Road Name Start	Road Name End
15	WALKING	FOOTPATH	EDWARDS STREET	SOMERVILLE LANE	KILMORE ROAD
16	WALKING	FOOTPATH	STATION STREET	NO. 11	BUS STOP
17	WALKING	FOOTPATH	MAHONEYS ROAD	BOLITHOS ROAD	SEXTON STREET
18	WALKING	FOOTPATH	CUTEVAN CRESCENT	SANDY CREEK ROAD	GYRO CLOSE
19	WALKING	FOOTPATH	SUTTON STREET	SOMERVILLE LANE	MAHONEYS ROAD
20	WALKING	FOOTPATH	WHEELWRIGHTS ROAD	ROYAL PARADE	MELVINS ROAD
21	WALKING	FOOTPATH LINK	UNNAMED	STATION STREET	RIDDELLS CREEK STATION
22	WALKING	FOOTPATH LINK	UNNAMED	FIRE BRIGADE	SUTHERLANDS ROAD
23	WALKING	FOOTPATH LINK	UNNAMED	KILMORE ROAD	SUTHERLANDS ROAD
24	CYCLING	REGIONAL TRAIL	KILMORE ROAD	FLOUR MILL LANE	RIDDELLS CREEK
25	CYCLING	REGIONAL TRAIL	KILMORE ROAD	MULLALYS ROAD	GYRO CLOSE
26	CYCLING	REGIONAL TRAIL	KILMORE ROAD	HAMILTON ROAD	FLOUR MILL LANE
27	CYCLING	REGIONAL TRAIL	RIDDELL ROAD	KILMORE ROAD	NO. 1265
28	WALKING	SHARED PATH	KILMORE ROAD	AMESS ROAD	RICHARDSON STREET
29	WALKING	SHARED PATH	UNNAMED ROAD	SANDY CREEK ROAD	GYRO CLOSE
30	WALKING	SHARED PATH	SANDY CREEK ROAD	BUSH COURT	KILMORE ROAD



Item Number	Project Category	Project Type (e.g. footpath, sharrows, crossing)	Location/Road Name	Road Name Start	Road Name End
31	WALKING	SHARED PATH	KILMORE ROAD	GYRO CLOSE	AMESS ROAD
32	WALKING	SHARED PATH	GAP ROAD	ROYAL PARADE	SOMERVILLE LANE
33	WALKING	SHARED PATH	BOLITHOS ROAD	ROYAL PARADE	KILMORE ROAD
34	WALKING	SHARED PATH	RACECOURSE ROAD	AMESS ROAD	SOUTHBOURNE ROAD
35	WALKING	SHARED PATH	AMESS ROAD	KILMORE ROAD	WOHL COURT
36	WALKING	SHARED PATH	GAP ROAD	SOMERVILLE LANE	KILMORE ROAD
37	WALKING	SHARED PATH	MELVINS ROAD	ROYAL PARADE	MAHONEY'S ROAD
38	WALKING	SHARED PATH	MAHONEY'S ROAD	NO. 7	MERRIFIELD STREET
39	WALKING	SHARED PATH	MAHONEY'S ROAD	NO. 33	BOLITHOS ROAD
40	WALKING	SHARED PATH	GYRO CLOSE	UNNAMED ROAD	KILMORE ROAD
41	WALKING	SHARED PATH	GYRO CLOSE	SANDY CREEK ROAD	UNNAMED ROAD
42	WALKING	SHARED PATH	GAP ROAD	SANDY CREEK ROAD	ROYAL PARADE
43	WALKING	SHARED PATH	AMESS ROAD	WOHL COURT	SUTHERLANDS ROAD
44	WALKING	SHARED PATH	SUTHERLANDS ROAD	YELLOWGUM AVENUE	AMESS ROAD
45	WALKING	SHARED PATH	ROYAL PARADE	GAP ROAD	MELVINS ROAD
46	CYCLING	SHARROWS	STATION STREET	KILMORE ROAD	STEPHEN STREET
47	CYCLING	SHARROWS	PARKVIEW DRIVE	RANGEVIEW DRIVE	NO. 9



Item Number	Project Category	Project Type (e.g. footpath, sharrows, crossing)	Location/Road Name	Road Name Start	Road Name End
48	CYCLING	SHARROWS	WHITTAKERS LANE	MELVINS ROAD	GAP ROAD
49	CYCLING	SHARROWS	SOMERVILLE LANE	MELVINS ROAD	NO. 33
50	CYCLING	SHARROWS	RANGEVIEW DRIVE	AMESS ROAD	PARKVIEW TERRACE
51	CYCLING	SHARROWS	RICHARDSON STREET	KILMORE ROAD	RACECOURSE ROAD
52	CYCLING	SHARROWS	CUTEVAN CRESCENT	SANDY CREEK ROAD	GYRO CLOSE
53	CYCLING	SHARROWS	MAHONEYS ROAD	MELVINS ROAD	NO. 7
54	CYCLING	SHARROWS	MERIFIED STREET	SOMERVILLE LANE	KILMORE ROAD
55	CYCLING	SHARROWS	EDWARDS STREET	SOMERVILLE LANE	KILMORE ROAD
56	CYCLING	SHARROWS	WILLIAMS LANE	NO.52	KILMORE ROAD
57	CYCLING	SHARROWS	WHEELWRIGHTS ROAD	ROYAL PARADE	MELVINS ROAD
58	CYCLING	SHARROWS	HAMILTON STREET / FITZGERALD STREET	STEPHEN STREET	SUTHERLANDS ROAD
59	CYCLING	SHARROWS	PARKVIEW TERRACE PARK	PARKVIEW TERRACE PARK	PARKVIEW TERRACE PARK
60	CYCLING	SHARROWS	WATTLE GROVE / CHERITON DRIVE / YELLOWGUM AVENUE	YELLOW GUM AVENUE	SUTHERLANDS ROAD
61	CYCLING	SHARROWS	MAHONEYS ROAD	BOLITHOS ROAD	SEXTON STREET



Item Number	Project Category	Project Type (e.g. footpath, sharrows, crossing)	Location/Road Name	Road Name Start	Road Name End
62	CYCLING	SHARROWS	MAHONEY'S ROAD	MERRIFIELD STREET	NO. 33
63	CYCLING	SHARROWS	SOMERVILLE LANE	SUTTON STREET	SANDY CREEK ROAD
64	CYCLING	SHARROWS	SOMERVILLE LANE	SOMERVILLE LANE	SUTTON STREET
65	CYCLING	SHARROWS	WHITTAKERS LANE	PLANTATION ROAD	SANDY CREEK ROAD
66	CYCLING	SHARROWS	ROYAL PARADE	MELVINS ROAD	WHEELWRIGHTS ROAD
67	CYCLING	SHARROWS	STEPHENS STREET	SUTHERLANDS ROAD	HAMILTON ROAD
68	CYCLING	SHARROWS	SEXTON ROAD	MAHONEY'S ROAD	KILMORE ROAD
69	ROAD	100 to 70	KILMORE ROAD	FROST LANE	190m NORTH OF SANDRY CREEK ROAD
70	ROAD	70 to 60	KILMORE ROAD	190m NORTH OF SANDRY CREEK ROAD	FILMER PLACE
71	ROAD	50 to 40	KILMORE ROAD	FILMER PLACE	MELVIN ROAD
72	ROAD	50 to 40	NORTH WEST OF KILMORE ROAD	MELVINS ROAD / WHITTAKERS LANE / SANDY CREEK ROAD	KILMORE ROAD
73	ROAD	50 to 40	SOUTH EAST OF KILMORE ROAD	KILMORE ROAD	SUTHERLANDS ROAD / AMESS ROAD
74	ROAD	50 to 30	MAIN ACTIVITY AREA	STATION STREET / HAMILTON STREET / FITZGERALD STREET	



Item Number	Project Category	Project Type (e.g. footpath, sharrows, crossing)	Location/Road Name	Road Name Start	Road Name End
75	ROAD	50 to 30	STEPHEN STREET	SUTHERLANDS ROAD	HAMILTON STREET
76	ROAD	50 to 40	NORTH WEST OF KILMORE ROAD	MELVINS ROAD / WHITTAKERS LANE / SANDY CREEK ROAD	KILMORE ROAD
77	ROAD	ROUNDABOUT	MAIN ROAD	RIDDELL ROAD	
78	ROAD	ROUNDABOUT	KILMORE ROAD	GYRO COURT	
79	ROAD	ROUNDABOUT	KILMORE ROAD	SANDY CREEK ROAD	
80	ROAD	REVERSE PRIORITY INTERSECTION	SUTHERLANDS ROAD	STATION STREET	
81	ROAD	TURN LANES	KILMORE ROAD	RAWS LANE	
82	ROAD	TURN LANES	KILMORE ROAD	HAMILTON ROAD	
83	ROAD	SIGNALISED INTERSECTION	KILMORE ROAD	STATION STREET	
84	WALKING	WOMBAT CROSSING	STATION STREET	SUTHERLANDS ROAD	
85	WALKING	WOMBAT CROSSING	SUTHERLANDS ROAD	STATION STREET	
86	WALKING	WOMBAT CROSSING	WHITTAKERS LAND	NO. 63	
87	WALKING	BRIDGE CROSSING	SUTHERLANDS ROAD	RACECOURSE ROAD	
88	WALKING	P.O.S CROSSING	SUTHERLANDS ROAD	NO. 5	
89	WALKING	REFUGE CROSSING	KILMORE ROAD	AMESS ROAD	
90	WALKING	REFUGE CROSSING	KILMORE ROAD	GAP ROAD	

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91	WALKING	RECREATIONAL TRAIL	SANDY CREEK	GAP ROAD	AMESS ROAD
92	WALKING	RECREATIONAL TRAIL	RIDDELL CREEK MAIN DRAIN	GAP ROAD	SOMERVILLE LANE
93	WALKING	RECREATIONAL TRAIL	RIDDELL CREEK MAIN DRAIN	GAP ROAD	SOMERVILLE LANE
94	WALKING	RECREATIONAL TRAIL	TREETOPS MAIN DRAIN	GAP ROAD	WHITTAKERS LANE
95	WALKING	RECREATIONAL TRAIL	BETWEEN MELVINS ROAD AND BOLITHOS ROAD	ROYAL PARADE	BOLITHOS ROAD
96	WALKING	RECREATIONAL TRAIL	RIDDELLS CREEK	WILLIAMS LANE	STATION STREET
97	ROAD	TRAFFIC IMPROVEMENT	KILMORE ROAD	BOLITHOS ROAD	SUTTON ROAD