



Marong township structure plan

June 2024

Acknowledgment of Country

Marong is on Dja Dja Wurrung Country.

The City of Greater Bendigo would like to acknowledge and extend appreciation for the Dja Dja Wurrung People, the Traditional Owners of the land where Marong is today.

Today, we pay our respects to leaders and Elders past, present and future for they hold the memories, the traditions, the culture and the hopes of all Dja Dja Wurrung Peoples.

We express our gratitude in the sharing of this land, our sorrow for the personal, spiritual and cultural costs of that sharing and our hope that we may walk forward together in harmony and in the spirit of healing.



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The City of Greater Bendigo would like to thank the Marong community, particularly members of the Marong Community Action Group, for their enthusiastic contribution to the Marong Township Structure Plan (TSP).

The value of the project has increased through active participation and has created a sense of ownership of the work.

Many other groups, companies, agencies and departments were consulted and participated in preparing the Township Structure Plan. A full list of these stakeholders can be found in Appendix 6 of the TSP's Background Report.

Adopted September 16, 2020. Revision Adopted June 24, 2024.

Introduction

This document is the Marong Township Structure Plan (TSP). The TSP has been developed with extensive input from the community and relevant government agencies and departments.

Role of the TSP

The TSP is a long-term plan for future urban development in Marong. It describes how the land is expected to be developed, and how and where services are planned to support development. Generally, the TSP:

- Sets out a plan to guide the development of the growth of the Marong township in accordance with relevant State Government guidelines and legislation
- Provides direction on the transition of future urban growth areas in Marong
- Outlines the vision for how the township should be developed and the outcomes achieved
- Identifies the infrastructure projects required to ensure that future residents, visitors and workers within Marong can be provided with timely access to services and the improved transport connections necessary to support a liveable community
- Sets out objectives, guidelines and requirements for land use and development
- Provides certainty about future development
- Will be used to guide investment and funding decisions
- Will be used to guide future plans, policies and decision making by Council

The TSP will become a background document in the Greater Bendigo Planning Scheme and is to be read in conjunction with the Marong Township Structure Plan Background Report and the future Marong Township Development Contributions Framework.

Background information

Background information on the Marong TSP area including its history, demographic profile, climate profile, community facilities and public spaces is provided in the Marong Township Structure Plan Background Report. This report also references the various technical studies and community

engagement that have informed the preparation of the TSP. These include:

- Bullock Creek Flood Study 2018
- Marong Heritage Citations 2018
- Marong Land Capability Study 2012
- Marong Recreation Land Need Study 2012
- Marong Township Bushfire Development Report 2018
- Marong Township Economic Assessment 2019
- Marong Township Intersection Analysis Transport Assessment 2019
- Marong Township Movement and Access Strategy 2017
- Marong Township Stormwater Management Strategy 2017

Development Contributions Scheme

The Marong TSP and future Marong Township Development Contributions Framework will guide the preparation and implementation of future Shared Infrastructure Funding Plans for each precinct.

The Marong Township Development Contributions Framework (DCF) will provide transparency to Council, landowners, developers and the community regarding future infrastructure and funding sources for infrastructure to service Marong's growth.

The Township Infrastructure Plan (see pages 55-58) provides information on the critical infrastructure projects that will be included in a future Marong Township Development Contributions Framework and inform future Shared Infrastructure Funding Plans.

Land to which the TSP applies

The Marong TSP covers an area of 782 hectares and is located approximately 15 kilometres to the west of the Bendigo City Centre.

Marong is located on Dja Dja Wurrung Country. The box ironbark forests, regionally significant flora and fauna, Bullock and Fletchers Creeks contribute to the tangible cultural heritage of the Dja Dja Wurrung people.

The study area and township features are illustrated on Plan 2 (see page 8).

How to read the TSP

The Marong TSP guides land use, development and the provision of infrastructure where a planning permit is required or another decision is to be made.

These permit applications and decisions must implement the outcomes of the TSP, expressed as the vision and guiding principles.

Each element of the TSP contains objectives, requirements and guidelines as relevant. It also identifies how each element is linked to the Marong and Districts Community Plan which has been prepared by the Marong community.

Requirements must be adhered to in developing land. Where they are not demonstrated in a permit application, requirements will usually be included as a condition on a planning permit whether or not they take the same wording as in this TSP. A requirement may reference a plan, table or figure in the TSP.

Guidelines express how discretion will be exercised by the responsible authority in certain matters that require a planning permit. If the responsible authority is satisfied that an application for an alternative to a guideline implements the outcomes, the responsible authority may consider the alternative. A guideline may reference a plan, table or figure in the TSP.

Requirements and guidelines are to be considered by developers at the planning stages. This includes public developers such as the City of Greater Bendigo or State departments and agencies.

It is important to note that the requirements and guidelines in this TSP need to be read in conjunction with other provisions within the planning scheme.

For example the provisions of Clause 56 (Liveable and Sustainable Communities) also apply to applications for subdivision.

The land to which the TSP applies is separated into precincts, where specific design guidelines are provided. These outline the preferred character and land use



Wide road reserve of High Street and Bullock Creek

outcomes, design objectives that will help to achieve these outcomes, and a time-frame for development.

An implementation plan is included in the TSP to identify the full range of actions, responsibilities, and how each action relates to Council's and Marong's Community Plans.

Not every aspect of the area's use and development is addressed in the TSP and the responsible authority may manage development and issue permits as relevant under its general discretion.

Monitoring and review

The City of Greater Bendigo will monitor the implementation of the TSP. Its effectiveness will be evaluated regularly, at least every five years. As part of this process, Council will continue to monitor population growth and the demand for and supply of residential land within the Marong township and future residential development areas in Marong. The TSP may be revised and updated following review.

Implementation overview

A planning scheme amendment will be prepared for the Greater Bendigo Planning Scheme immediately after the TSP is adopted.

This amendment will reference the TSP, include a local area plan for Marong, amend planning zones and overlays for the existing township area and outline the requirements for rezoning and developing future growth areas in the township.

The details of this first amendment are listed as action A1 in the Action Implementation Plan on page 77 of this document.

To ensure an orderly sequence of development and land supply meets demand, the rezoning of future growth areas will be planning scheme amendments led by private proponents. These are shown as Precincts 1-4 on Plan 16 (see page 61).

A clear set of infrastructure projects, rezoning requirements, subdivision and development requirements, guidelines and actions for each growth precinct are included in the TSP.

Regional and township context

Marong is located on Dja Dja Wurrung Country and the western edge of the City of Greater Bendigo, approximately 15 kilometres from the centre of Bendigo. The original one-mile square township is centred at the intersection of the Calder, and Calder Alternative Highways. The town retains a number of important historic buildings, many with a civic and community function, such as the former Marong Shire offices.

Marong has always served a larger catchment than the township itself. Its various functions and services such as the primary school, hotel, doctor's clinic, and Malone Park support the wider region of western Bendigo.

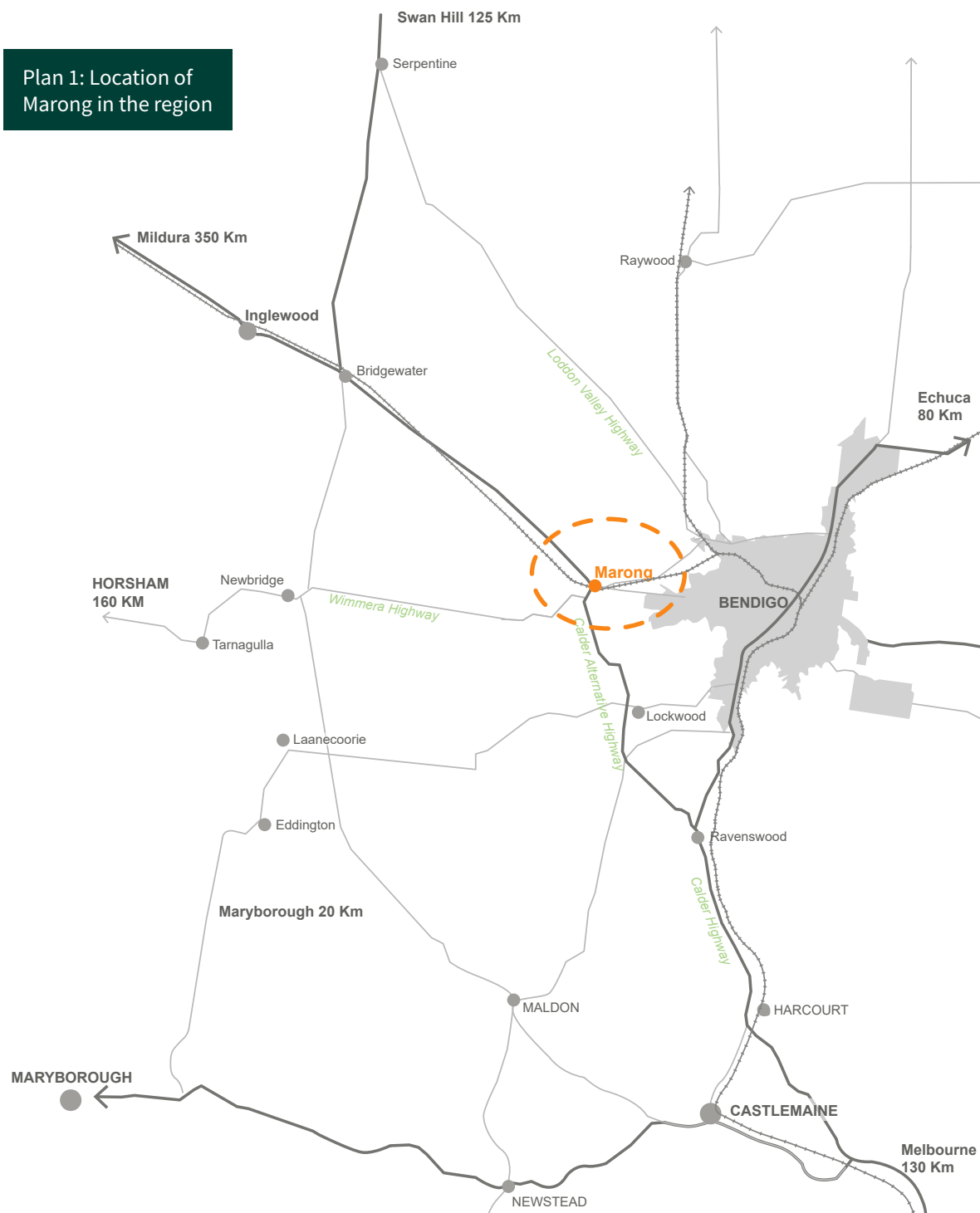
The two highways together with the Wimmera Highway provide links to Bendigo, Melbourne and to the north west and west of the state. With the progressive development of the Calder Alternative Highway Marong has become a more important link in the development of the state's highway network. The junction of these three highways severely compromises the role of the town centre because of high and growing volumes of traffic. Truck traffic in particular is compromising the function, amenity and safety of the town.

The Bendigo to Inglewood broad gauge railway runs east-west through the centre of Marong, necessitating two major railway level crossings within the township. However, passenger and freight trains no longer travel on the section of the rail network. Marong's rail station adjacent to the town centre has been decommissioned and demolished.

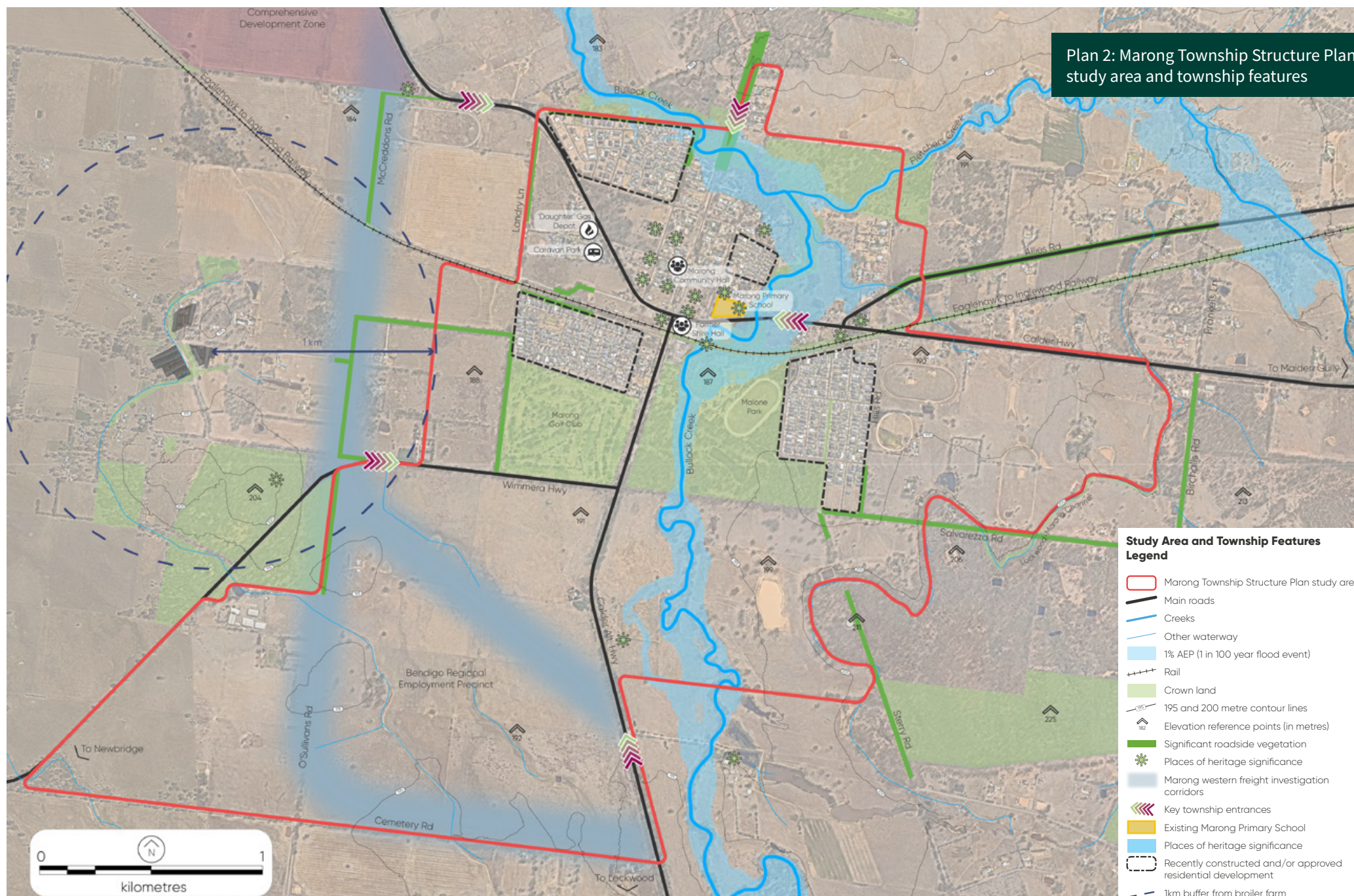
Bullock Creek is a significant place for the Dja Dja Wurrung people. The creek flows from Ravenswood south east of Marong into the Pyramid Creek west of Leitchville near the Murray River traverses much of the town. It flows south- north and forms an important feature of the town. The reserve along Bullock Creek has contributed to the valuable network of public space in the town and has provided a habitat for the iconic large river red gums that create a sense of arrival into Marong. Areas surrounding the creek are subject to severe flooding. The protection, health and accessibility of the Bullock Creek environs to the Dja Dja Wurrung people remains an important connection to Country.

The setting of the township is generally flat, land peaks to the east near Birchalls Road at 213m above sea level, falls to 188m where the Calder Highway and Bullock Creek intersect, and rises to 205m at the peak of Wilsons Hill to Marong's west.

Plan 1: Location of Marong in the region



Plan 2: Marong Township Structure Plan study area and township features



Policy context: a snapshot

State and regional context

Loddon Mallee South Regional Growth Plan

Marong has the opportunity to grow up to 8,000 people

This plan describes Marong as a town with the opportunity to grow up to a population of 8,000 depending on further planning.

Plan Melbourne 2017-2050

Supports growth in regional areas and confirms State Government will continue to support economic growth in regional areas by funding infrastructure projects.

Dhelkunya Dja Country Plan (2014- 2034)

The Country Plan provides direction for the Dja Dja Wurrung Clans Aboriginal Corporation and the Traditional Owner Land Management Board, and outlines goals based on nine key themes to achieve the aspirations of the Dja Dja Wurrung people. It provides direction to those with responsibility for managing Djandak; it represents the goals and priorities of DJAARA.

Local context

Greater Bendigo Community Plan 2017-2021

Commits Council to complete and implement structure plans for dedicated growth areas.

Bendigo Residential Development Strategy (2004)

Marong to be planned for 8,000 people

This was the first strategy that recommended Marong to be planned as a larger satellite, self-contained township with a population of 8,000. The strategy stated that the delivery 'should be based upon the outcome of extensive research and preparation and approval of a structure plan'.

The Marong Plan (2011)

The first modern plan that addressed Marong's growth

By 2010 there was a strong demand for housing within the existing township area. To outline priorities for the community, to address the immediate demand and to investigate potential growth areas, a Marong Plan was prepared and adopted by Council in 2011. The Marong Plan recommended that the development of a structure plan and the consequential land rezoning were medium priorities.

Greater Bendigo Residential Strategy (2014)

Prepare a Structure Plan for Marong

This strategy outlined that the focus of residential growth will be within the urban growth boundary and in Greater Bendigo's townships, in particular Marong, Elmore, Axedale and Heathcote. Implementing recommendations from this strategy included preparing a precinct structure plan for Marong (among others), while recognising the early planning initiatives undertaken at that stage (Marong Plan 2011).

Connecting Greater Bendigo – Integrated Transport and Land Use Strategy

Marong needs better public transport and a Structure Plan

Given the projected population growth in Marong, this strategy recommended new railway stations in the Marong township, as well as a new bus service from Marong to Bendigo via Maiden Gully. This strategy also recommended the development of a detailed precinct structure plan in the short term.

Commercial Land and Activity Centre Strategy

A structure plan will help determine how much commercial land is needed in Marong

This strategy acknowledges that the Marong [Township] Structure Plan (TSP) will be used to provide a more detailed floorspace demand. The strategy also recommended that the TSP should have a town centre urban design framework component to guide the development of the projected commercial floorspace required. While further work was to be completed at the time of this strategy's adoption, there was still a recommendation that 2,900m² of supermarket floorspace and 500m² of specialty retail floorspace will be needed by 2031.

Municipal Planning Strategy (Greater Bendigo Planning Scheme)

Marong to be planned for 8,000 people

Marong was identified in the Bendigo Residential Development Strategy (2004) as a "Satellite" township that will have an ultimate population of 8,000 people and limited background investigations have been undertaken ahead of the preparation of a comprehensive structure plan.



Greater Bendigo Housing Strategy (2016)

Structure plan is currently being developed for Marong

Identified the development and the preparation of the structure plan that was underway in Marong at the time.

Greater Bendigo Environment Strategy 2016- 2021

Outlines One Planet Living action areas and uses them to guide actions from the strategy

Municipal wide strategy outlining one planet living action areas that influence how we plan for future areas in Greater Bendigo. This strategy proposes actions relating to carbon emissions, waste, transport, buildings, food, water, landscapes and ecosystems, communities, economy, and health and happiness.

Greater Bendigo Planning Scheme Review

Provides recommendations on planning tools and gaps in strategic work

While subject to a planning scheme amendment, the 2018 Greater Bendigo Planning Scheme Review makes recommendations about the application of certain zones and overlays. These include the Mixed Use Zone, Township Zone, and Vegetation Protection Overlay, which are relevant to the Marong TSP.

The review recommends an Environmental Significance Study to review and protect the environmental assets in the municipality. It also recommends a Settlement Strategy for the City to provide guidance for future settlements.

Greater Bendigo Public Space Plan (2018)

Specific precinct plan for Marong identifying future priorities

The specific projects for Marong include upgrades to Malone Park, the delivery of a new sporting facility and public realm upgrades to the town centre and creek corridors. As well as these specific actions, the Public Space Plan addressed the topic for the whole city. As such, a context of community expectations was provided, as well as the plan's goals and guiding principles for improving public space.

Greater Bendigo Industrial Land Development Strategy

Identifies a future need for industrial land over and above the existing supply

The strategy identifies there will be an additional 3,300 additional jobs provided in industry to 2036 based on having sufficient available land.

Greater Bendigo currently has less than 100 hectares of available industrial land. The strategy identifies a minimum pipeline for the next 30 years of an additional 170 hectares of industrial land over and above the existing supply.

Providing a supply of industrial land close to Marong to meet some of these needs would provide much needed employment for a growing residential population.

Vision

The long-term vision for Marong is a satellite township of 8,000 people built around a vibrant community town centre and civic focus with a well serviced railway station and an outstanding public space network.

Marong has the potential to progressively develop a vibrant community based town centre. The township has the structure to be a highly liveable place to reside, contributing to the City of Greater Bendigo's vision of becoming the world's most liveable community.

The layout of the town centre and close proximity to the railway, the extensive public space network, the relatively flat landscape, and the short distance to Bendigo all contribute to its clear potential. The vision is that Marong can raise the bar for townships that are growing and can progressively develop as a benchmark for well-planned country towns.

Future development will respond to bushfire and flooding risks, preserve environmental features, create a diverse range of housing options, maximise opportunities for local employment, contribute to a safe and well connected town, attract a broad range of people and reinforce Marong's character as a semi-rural township.

Semi-rural

Throughout this Plan, Marong is referred to as a semi-rural township. This means that while neighbourhoods in Marong have an increasingly urban character, rural land surrounds the entirety of Marong.

Other aspects of this semi-rural character include large expanses of public open space, large remnant trees, wide road reserves, and outlooks to the surrounding rural land.

While Marong grows with urban development, these aspects of a semi-rural township will be retained.



Former Marong Shire Hall, Adams Street



Guiding principles for key elements

The growth of the Marong Township is guided by a set of key objectives for each element within the Marong TSP.

Bushfire management

Future development is directed to areas with a lower bushfire risk without the need for widespread vegetation removal. Marong is comprised of safe neighbourhoods that have addressed the relevant bushfire risk.

Integrated water management

High quality infrastructure is provided that increases the quality of water flowing into the Bullock Creek, and limits flows to pre-development levels to reduce flooding risk.

Negative impacts on the environment and the community are reduced through the incorporation of best practice water sensitive urban design in all new development.

Image and character

Vegetation continues to be valued and celebrated as a defining element as the township grows. Planned growth is facilitated while retaining and, where possible reinforcing the semi-rural character of Marong.

Aboriginal cultural heritage

Future development is designed to protect and respect Aboriginal cultural heritage places and values. Consider Aboriginal cultural values in the design of new development.

Employment

Regional employment land is critical for the success of Marong, the City of Greater Bendigo, and the broader region.

The Bendigo Regional Employment Precinct is located south-west of the township along the Wimmera Highway. It is 294ha in size and is being master planned by the Victorian Planning Authority. It will provide additional industrial land in the short-medium term.

The Marong Business Park is located north west of the township along the Calder Hwy. It is 311ha in size, is in a Comprehensive Development Zone, and has its own Development Contributions Plan. The site was rezoned in 2017 and as at the date of this document, remains undeveloped farmland. It will provide additional industrial land in the long term.

Housing

Sufficient land is provided through staged rezoning to accommodate a population of approximately 8,000 people. The impact on the surrounding farmland and farming operations is limited by containing future development within the identified area.

Community facilities and public space

A range of community facilities is provided, including a new education facility, that can support the growing population. Marong features a high quality, accessible public space network, including Bullock Creek, by using public land and land subject to flooding.

Marong town centre

Sufficient zoned commercial land is provided to meet the needs of a growing population. An attractive, climate resilient, and people friendly town centre.

Movement and access

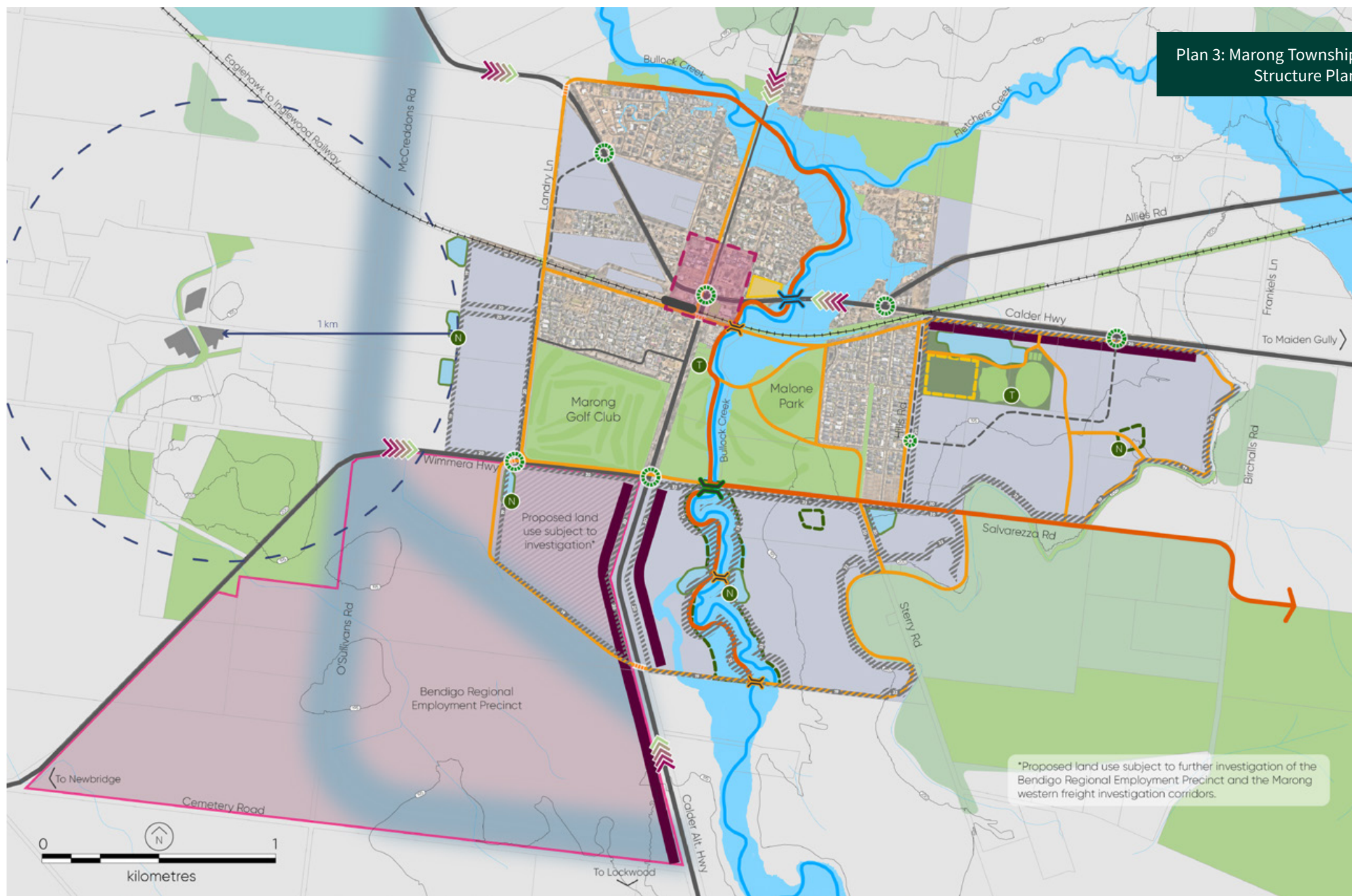
New and upgraded transport infrastructure is provided to support a town of 8,000 people. As part of this transport infrastructure, a freight network is also to be provided to support the success of the Bendigo Regional Employment Precinct.

The freight network is currently being considered and planned by the Department of Transport and Planning as part of the Freight Alignment and Multi-modal Connections Assessment for the Bendigo Regional Employment Precinct.

Township Infrastructure Plan and development staging

Development staging is coordinated with the delivery of key local and state infrastructure.

Plan 3: Marong Township Structure Plan



Marong Township Structure Plan Legend

-  Future residential development areas
-  Required bushfire setback and distance in metres
-  Town centre
-  Private vegetated areas
-  Crown land
-  Encumbered land to be used as open space
-  Potential site for new education facility and sports fields
-  Indication of potential education facility size
-  Existing Marong Primary School
-  Proposed Bendigo Regional Employment Precinct
-  Comprehensive Development Zone
-  Neighbourhood and township parks
-  1% AEP (1 in 100 year flood event)
-  No land use changes proposed
-  Key township entrances
-  Intersection upgrade
-  Key interface with rural highway
-  Rail
-  Marong western freight investigation corridors
-  Existing arterial and sub-arterial road
-  Existing collector road
-  Proposed collector road
-  Proposed railway station
-  Primary public space network (district)
-  Secondary public space network (local)
-  Creeks
-  Proposed retarding basin
-  1km buffer from broiler farm
-  195 and 200 metre contour lines

Marong Uniting Church



Land use budget

Property no.	Proposed landuse	Total MTSP area (Ha)	Native vegetation to be retained (NV)	Education site	Retarding basin	Recreation reserve and local parks	Land required for connector roads	Land required for intersections upgrade	Net developable area (NDA) (Ha)
1A	Residential	7.98					0.44		7.54
1B	Residential	6.50				0.40	0.44		5.66
1C	Residential	6.44					0.44		6.00
1D	Residential	6.44					1.17	0.29	4.98
2B	Residential	22.17			1.19		0.37	0.34	20.27
3A	Residential	11.70	0.50				1.31		9.89
3B	Residential	30.91			1.10				29.81
3C	Residential	7.49			1.01		0.40		6.08
4A	Residential	0.55							0.55
4B	Residential	11.97		3.50	4.36	3.50			0.61
4C	Residential	4.05						0.10	3.95
4D	Residential	4.05					0.48	0.21	3.36
4E	Residential	24.16					1.68		22.48
4F	Residential	6.25			0.50	4.50			1.25
4G	Residential	6.31							6.31
4H	Residential	24.39	1.00			0.40	0.77	0.32	21.90
4I	Residential	3.70							3.70
4J	Residential	0.35							0.35
4K	Residential	2.33							2.33

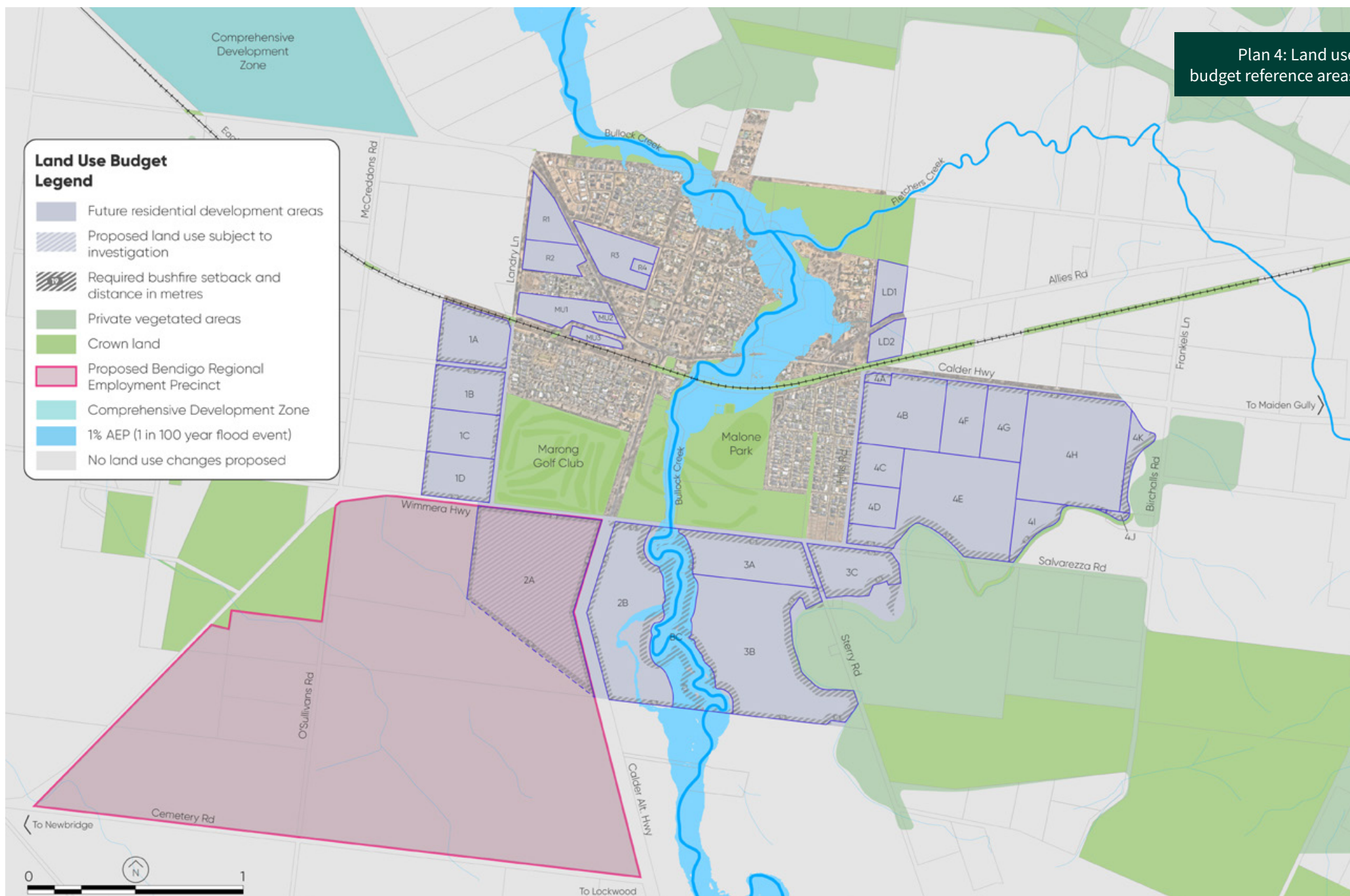
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Property no.	Proposed landuse	Total MTSP area (Ha)	Native vegetation to be retained (NV)	Education site	Retarding basin	Recreation reserve and local parks	Land required for connector roads	Land required for intersections upgrade	Net developable area (NDA) (Ha)
R1	Residential	4.11					0.25	0.48	3.38
R2	Residential	3.70							3.70
R3	Residential	5.88						0.12	5.76
R4	Residential	0.51							0.51
MU1	Mixed Use	5.12						0.10	5.02
MU2	Mixed Use	0.40							0.40
MU3	Mixed Use	1.04							1.04
LD1	Low Density Res	3.52							3.52
LD2	Low Density Res	2.43							2.43
Residential		214.44	1.50	3.50	8.16	8.80	7.75	1.96	182.78
2A #	Investigation Area	32.17							-

Total	Township structure plan study area	Area
Existing development	Existing developed areas, including town centre	117.19 ha
Community areas	Malone Park including golf course and creek reserve	66.41 ha
	Existing primary school	1.1 ha
	Existing creek corridor not including Malone Park	26.24 ha
	New creek corridor (encumbered open space) - "BC" (see Plan 4 on page 18)	16.11 ha
Transport	Rail and associated land	8.10 ha
	Main roads (Calder Highway, Calder Alternative Highway, Wimmera Highway, High Street, Allies Road)	29.38 ha
	Other roads (Landry Lane, Filcock Road, Salvarezza Road, Adams Street, Fletchers Creek Road, Murdoch Lane)	8.81 ha
Other	Existing caravan park	4.04 ha

Notes

- The summary does not include existing dwellings and population in Marong. The potential population growth has been determined using 2.6 people per dwelling
- The land use budget applies to the land in the study area only (see page 8)
- All measurements are approximate
- The intent of this land use budget is to inform the Development Contributions Framework and to provide an indication of how much land is allocated to each land use
- Except where specified, development areas include land that will be or is already allocated for local streets and parks
- Parcels 2A forms part of the BREP and will be master planned by the VPA. This process will determine appropriate land use response for the entire precinct, having regard to the Marong Western Freight Corridor alignment



Bushfire management

Guiding principles

Future development is directed to areas with a lower bushfire risk without the need for widespread vegetation removal.

Marong is comprised of safe neighbourhoods that have addressed the relevant bushfire risk.

Key issues and considerations

There are areas of high bushfire risk in the Marong area, some of these being adjacent to proposed growth areas. Planning must consider the protection of human life as the top priority.

Township context

Due to the amount of forested land, Greater Bendigo, including Marong has a high bushfire risk. The entire study area for this project is within a designated bushfire prone area.

Considering landscape risk, Marong can be described as a Broader Landscape Type One and Two.

Considering landscape risk, some Parts of Marong can be described as a Broader Landscape Type One as:

- There is little vegetation beyond 150 metres of the site (except grasslands and low-threat vegetation)
- Extreme bushfire behaviour is not possible
- The type and extent of vegetation is unlikely to result in neighbourhood scale destruction of property
- Immediate access is available to a place that provides shelter from bushfire

However, some other parts of Marong can be described as a Broader Landscape Type Two as:

- The type and extent of vegetation located more than 150 metres from the site may result in neighbourhood-scale destruction as it interacts with the bushfire hazard on and close to a site
- Bushfire can only approach from one aspect and the site is located in a township or urban area managed in a minimum fuel condition
- Access is readily available to a place that provides shelter from bushfire. This will often be the surrounding developed area

Objectives

O1 - To reduce the impact of bushfire on existing and proposed essential and community infrastructure, industry, the economy and the environment.

O2 - To ensure appropriate defensible space around development can be achieved through an appropriate development response and management of vegetation.

O3 - To provide a comprehensive approach to designing the layout of development to incorporate principles of bushfire risk mitigation.

Requirements

R1 - A development plan must be prepared which shows a BAL rating of 12.5 achieved for all new residential developments in 'future residential development areas' as shown on Plan 5 (see page 20). This can be achieved by siting buildings according to the following setback distances of vegetation:

- 33 metres from woodland vegetation.
- 20 metres from roadside vegetation.
- 19 metres from grassland vegetation and agricultural land

R2 - The urban structure adopted at the subdivision stage must provide a well-defined boundary between the residential area and vegetated area.

R3 - The road network must provide each lot with access to at least two north-south routes towards safer areas to escape a fire threat. Safer areas, shown on Plan 5 (see page 20), are 150 metres from a bushfire threat, including grasslands.

Bushfire Attack Level (BAL)

This is a rating system used to define the level of exposure a bushfire will have on a building. It is measured in terms of the radiant heat exposure or the direct flame contact from a bushfire as well as considering the impact from burning embers. The BAL rating for a dwelling

takes into account a number of factors including predicted fire danger, the slope of land, types of surrounding vegetation and its proximity to any building.

Apart from having no rating (BAL low), there are five different BAL ratings: 12.5, 19, 29, 40, and FZ (<40). These ratings relate to their corresponding number in heat flux density units in kilowatts per square metre (kW/m²).

Defendable space

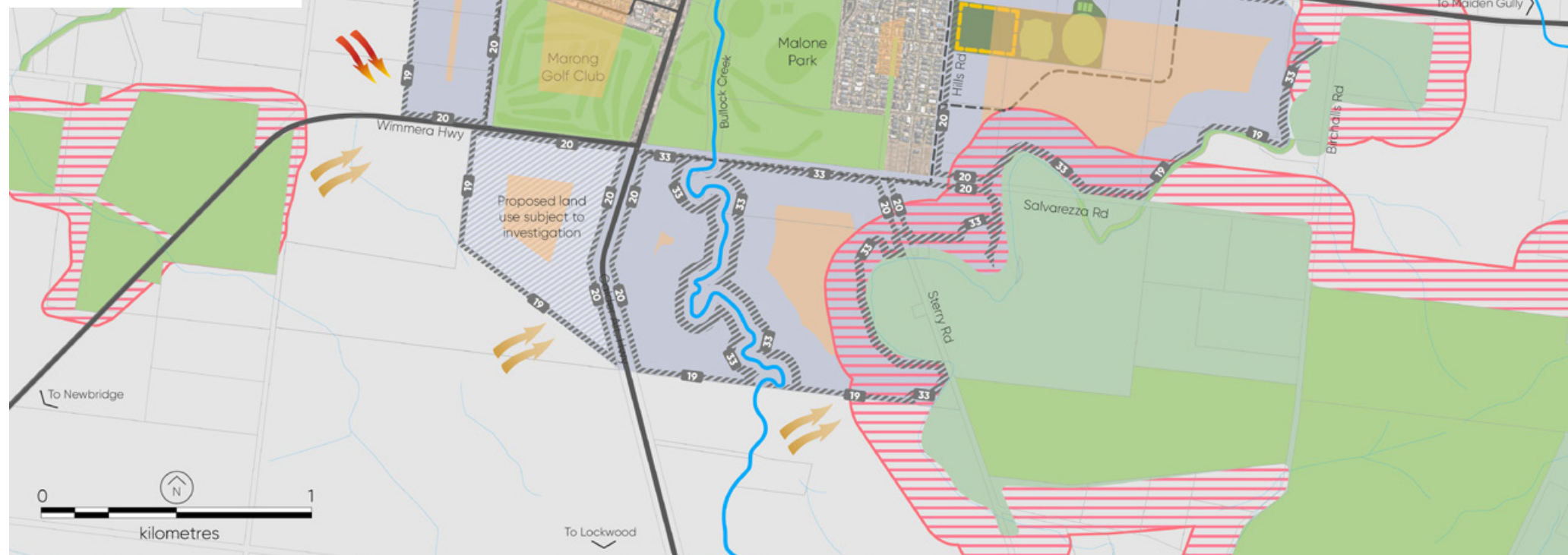
Defendable space is an area of land between the bushfire hazard (i.e. vegetation) and a building which is managed to reduce fuel loads and reduce potential radiant heat levels, flame, ember and smoke attack. Defendable space also provides an area from which buildings can be actively defended.

Defendable space is made up of two components; an inner zone (to eliminate direct flame contact), and an outer zone (to reduce fire intensity). The inner zone is more intensively managed than the outer zone.



Marong Township Structure Plan Bushfire Planning - Legend

-  Future residential development areas
-  Required bushfire setback and distance in metres
-  Existing Bushfire Management Overlay
-  Safer areas (150 metres from bushfire threat)
-  Private vegetated areas
-  Crown land
-  Potential site for new education facility and sports fields
-  Indication of potential education facility size
-  Existing Marong Primary School
-  No land use changes proposed
-  Existing emergency services (CFA & SES)
-  Prevailing northerly winds
-  South-westerly winds (typical wind direction change in Victoria)
-  Existing arterial and sub-arterial roads
-  Existing collector road
-  Proposed collector road
-  Rail
-  Creeks



Plan 5: Bushfire
Management in Marong

Integrated water management

Guiding principles

High quality infrastructure is provided that increases the quality of water flowing into the Bullock Creek, and limits flows to pre-development levels to reduce flooding risk.

Negative impacts on the environment and the community are reduced through the incorporation of best practice water sensitive urban design in all new development.

Protection of Aboriginal cultural heritage places along Bullock and Fletchers Creeks.

Key issues and considerations

Some areas of Marong are flood-prone, particularly around the Bullock and Fletchers Creeks. Future development cannot increase this risk.

Bullock and Fletchers Creeks are significant areas of Aboriginal cultural heritage. Future planning and development must have regard to this.

Some areas are very flat and providing adequate stormwater drainage can be a challenge.

Increasing urban land uses around significant waterways can affect the health of these systems. However, with increased development, there is an opportunity to improve the health of the Creeks.

Marong is in a dry, warm climate with limited water security. Water pressure for Marong's potable supply is currently poor; this will require investment in new water infrastructure as the town develops.

Township context

Marong was surveyed around the Bullock Creek, a significant waterway that flows over 100 kilometres, from south of Ravenswood to west of Leitchville. The Bullock Creek forms a spine of public space and significant vegetation, contributing to the character of the area.

The Bullock and Fletchers Creek waterways remain central to the cultural identity of the Dja Dja Wurrung people.

Today, the land and its waterways remain central to our cultural identity and aspirations for community and economic development. Our rivers are the veins of Country, and provide food and medicine, and places to camp, hunt, fish, swim and hold ceremonies. They are places that are central to our creation stories, and many of our cultural heritage sites are associated with waterways – burial sites, birthing sites and middens. Our waterways are places that we connect with our ancestors and pass traditional knowledge on to our children and grandchildren. - Dhelkunya Dja Country Plan 2014-2034, page 20.

Areas of Marong are flood-prone. Two large rain events in the last ten years have helped the community understand the severity of the risk.

These events have helped inform suitable locations where future development may be appropriate. The North Central Catchment Management Authority have prepared a flood study that assists the planning for Marong. The recommendations from this study will be implemented alongside the TSP.

All stormwater flows into the Bullock Creek. This has implications for flow rates and water quality.

Retaining stormwater in designated locations in new subdivisions prior to entering the Creek can help mitigate the issues of flow rates, water quality, and flooding extents.

Land west of Landry Lane is very flat and presents a challenge for adequate stormwater drainage. As such, only a portion of land to the west of the existing township boundary is suitable for residential development.

Coliban Water is undertaking works to upgrade the reticulated potable water system for Marong to meet current needs. Supply to new development areas can be accommodated and will likely require additional infrastructure, which Coliban Water will determine at the appropriate time.

Objectives

04 - To manage and enhance existing waterway corridors, including Bullock and Fletchers Creeks and reduce detrimental impacts on native flora and fauna.

05 - To provide permeable surfaces and less hard surfaces in new development.

06 - To retain stormwater to irrigate new and existing public spaces, especially where this infrastructure is co-located (e.g. at the proposed education facility and neighbourhood sporting facility).

07 - To recognise, celebrate and protect areas of Aboriginal cultural significance.

Requirements

R4 - Development staging must provide for the delivery of the ultimate waterway and drainage infrastructure network, including stormwater quality treatment. Where this is not possible, development proponents must demonstrate how any interim solution adequately manages and treats stormwater generated from the development and how this will enable delivery of an ultimate drainage solution, all to the satisfaction of the responsible authority.

R5 - If basins and wetlands are bound by residential development, the two uses must have an active interface.

R6 - Basins and wetlands must be integrated as part of a larger, useable public space.

R7 - Basins and wetlands must support local area walkability and safety by including wide easements, shade trees and a walking path where a connection is needed.

R8 - Basins and wetlands must be not be labelled as 'reserves' on any subdivision plans.

R9 - Require a cultural values assessment be prepared early in strategic planning processes that has regard to waterways and their cultural heritage significance to inform future land use and development.

Guidelines

G1 - Basins and wetlands that are integrated as part of a larger public space should contribute to the irrigation of the space.

Planning Scheme Amendment action

Apply the Land Subject to Inundation Overlay and Floodway Overlay to land impacted by the 1% AEP area.

Average Recurrence Interval (ARI)

Average recurrence interval for rain event. For example, 1 in 100 year ARI is equivalent to a 1% AEP.

Average Exceedance Probability (AEP)

Annual exceedance probability for rain event. For example, a 1% AEP is equivalent to a 1 in 100 year ARI.

Retarding basins



Or detention basins are excavated reserves serving a rainfall catchment of developed land. Because developed land has more hard surfaces, this results in more stormwater run-off into nearby creeks or their tributaries.

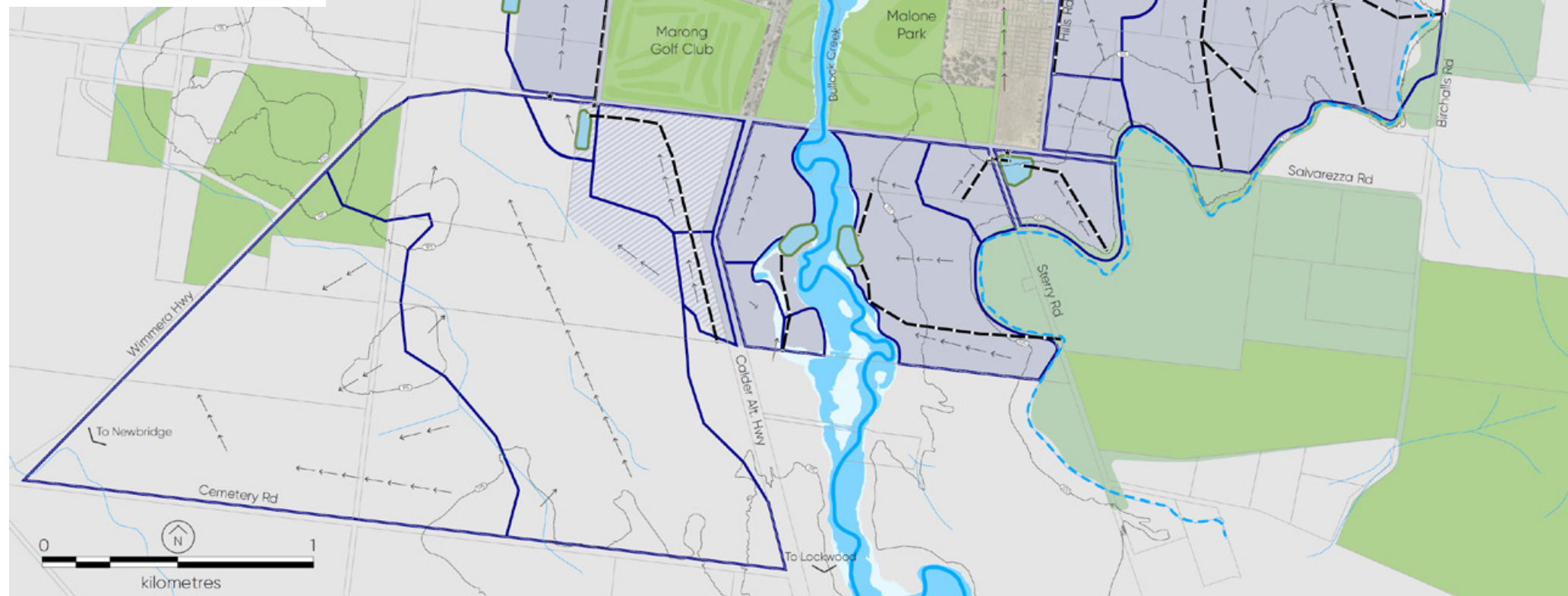
Retarding basins store this additional stormwater and discharge it at the same rate as pre-development. This infrastructure reduces flooding risk and reduces downstream erosion of creek lines.



Bullock Creek flooding in 2016

Marong Township Structure Plan Water Management - Legend

-  Future residential development areas
-  Proposed land use subject to investigation
-  Private vegetated areas
-  Crown land
-  Flooding deeper than 350mm (1% AEP)
-  Flooding shallower than 350mm (1% AEP)
-  No land use changes proposed
-  Proposed retarding basin/wetland
-  Proposed pipe
-  Proposed culvert
-  Subcatchments
-  Approximate drainage directions
-  Rail
-  Creeks
-  Lockwood-Marong Channel
-  195 and 200 metre contour lines



Plan 6: Integrated Water Management in Marong



Canary Island date palm in High Street

Image and character

Guiding principles

Vegetation continues to be valued and celebrated as a defining element as the township grows.

Box ironbark forests and the natural landscape of Marong in public reserves and forests are valued and contain Aboriginal cultural heritage places.

Planned growth is facilitated while retaining and, where possible, reinforcing the semi-rural character of Marong.

Key issues and considerations

Maintaining Marong's semi-rural character will be a challenge as the town develops.

Cultural and built heritage will need to be considered as the town develops. Forested and vegetated areas, including Bullock and Fletchers Creeks are culturally significant areas. Future planning and development must have regard to this to ensure the protection of Aboriginal cultural heritage places.

Significant vegetation and the interface with Bullock and Fletchers Creek could be threatened by new development.

Marong's individual identity needs to be retained into the future.

Vegetation and built-form surrounding Marong's township entrances/gateways will need protecting and emphasis as the town develops.

Township context

There are several elements that contribute to the iconic character of the town:

- The various heritage buildings and structures scattered throughout the town provide a visual commentary of the history of the area. These include the former Shire Hall, various churches, various pieces of infrastructure, the original school building and a number of houses in the area
- The large river red gums that line Bullock Creek create an iconic entrance to the town, as well as the palm trees on Adams and High Streets which mark the town centre. These not only contribute to an attractive streetscape but tell a story of the history of the place, including their importance to the Dja Dja Wurrung people
- High Street, as a 60 metre wide boulevard, contributes to the public space network of the town as well as providing space for established palms and eucalypts. The street provides a sense of openness within the town centre
- The unique public space network that is formed with the spine of Bullock Creek which flows northwards and is met with Fletchers Creek at the town's northern edge. Malone Park and the Marong Golf Course are major features of the town, providing large amounts of community space and for various sporting facilities and activities

Through extensive community engagement, there is extensive support for the Township Structure Plan to maintain and enhance these elements as the town grows into the future.

Township entrances

Objectives

O8 - To enhance the entrances to the township.

O9 - To create a strong 'sense of arrival' to Marong from Maiden Gully/Eaglehawk, Lockwood, Bridgewater and Newbridge/St Arnaud.

Requirements

R10 - At township entrances identified on Plan 7 (see page 27), the retention of vegetation must be maximised to emphasise entry points.

Guidelines

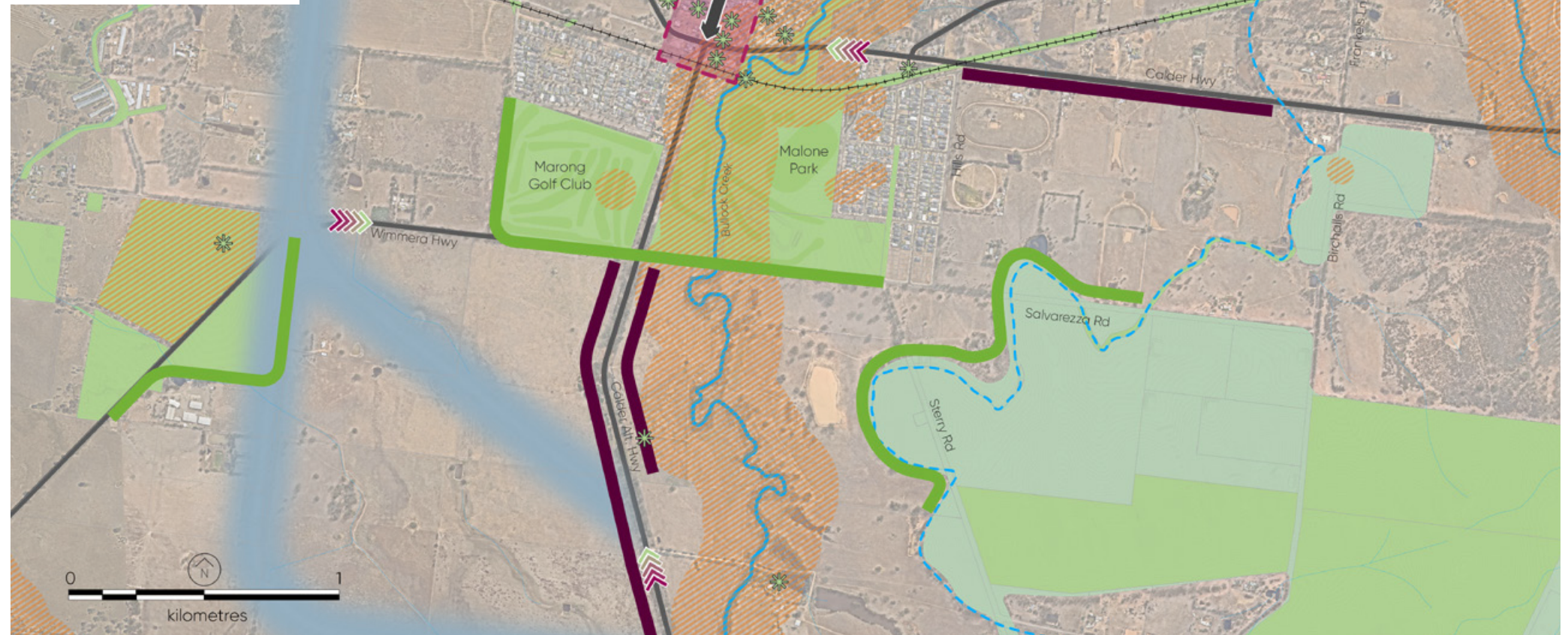
G2 - Subdivision and building design should create landmark or gateway sites at main road entry points and at intersections which provide visual markers and signature buildings and spaces at key locations.

Planning Scheme Amendment action

Apply the Heritage Overlay to places of heritage significance.

Marong Township Structure Plan Image and Character - Legend

-  Private vegetated areas
-  Crown Land
-  Town Centre
-  Key township entrances
-  Rail
-  Existing arterial road
-  Marong western freight investigation corridors
-  Creeks
-  Lockwood-Marong Channel
-  High Street road reserve
-  Key interface with rural highway
-  Key interface with forest or public space
-  Place of heritage significance
-  Aboriginal Cultural Heritage Sensitivity area
-  0.5 metre contour intervals



Plan 7: Image and character features in Marong

Vegetation

Objectives

- O10** - To retain existing vegetation on private land where possible.
- O11** - To retain existing vegetation in road reserves.
- O12** - To ensure that Marong's tree canopy coverage increases with new development.
- O13** - To protect Aboriginal cultural heritage significant places and vegetation.

High and medium significance values

A comprehensive assessment was undertaken by the North Central Catchment Management Authority in 2005 for roadside vegetation in Council managed road reserves. Each roadside area assessed was given a roadside conservation value of low, medium, or high.

This work provides justification to apply a Vegetation Protection Overlay to these roadside areas in situations where they would normally be vulnerable due to residential development; Landry Lane, for example. These areas of roadside vegetation can be retained by widening the road reserve where appropriate and constructing the sealed road beside the corridor of vegetation.

It is proposed to continue this method where similar situations arise. It is important to specify that residential properties should front these corridors, rather than having a rear fence interface. This is not only because these corridors provide an attractive outlook for the properties, but an active frontage can provide passive surveillance for the users.

Requirements

R11 - Street tree planting must:

- Support the desired character of the surrounding area. Palms will be encouraged to complete town centre streetscapes; however, in other areas trees that maximise natural shade will be preferred
- Include native species of understorey
- Form strong avenues and canopies to provide shade and definition to the streetscape
- Be suitable for local soil and changing climate conditions
- Positioned and planted to allow clear sightlines along streets and across different mode paths
- Place lighting poles and lamps away from tree canopies, verandas, and overhead wires

R12 - Nature strips of arterial, sub-arterial, and collector roads must be wide enough to support large canopy trees to provide shade. Nature strips on these roads must be at least 5.5 metres wide.

R13 - High significance roadside vegetation must not be removed. A widened road reserve will be provided by the developer if the required sealed road cannot be accommodated within the existing road reserve.

R14 - Require a cultural values assessment be prepared early in strategic planning processes that has regard to vegetation and its cultural heritage significance to inform future land use and development.

Planning Scheme Amendment action

Apply the Vegetation Protection Overlay to significant vegetation.



Guidelines

G3 - Tree species in new developments should be consistent with those in adjoining areas.

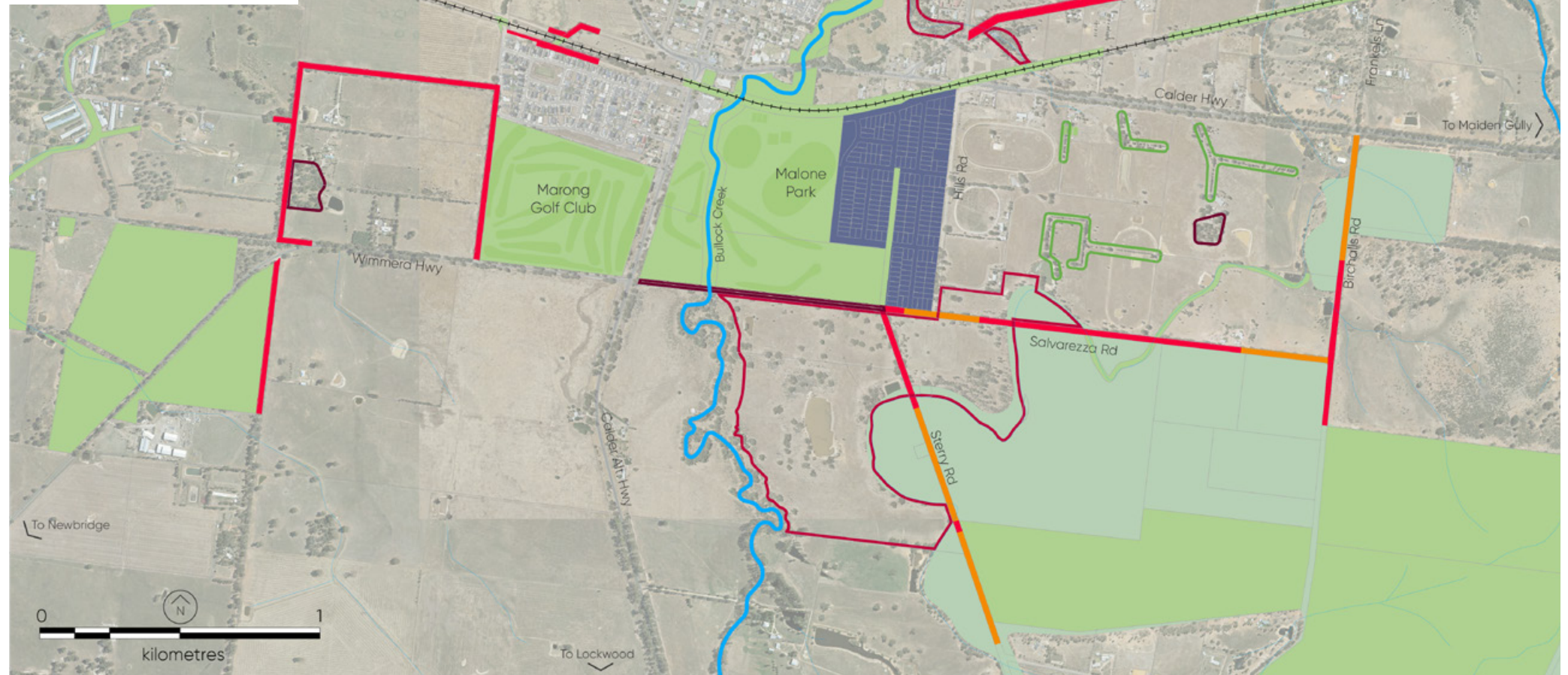
G4 - Roadside vegetation of medium significance should not be removed. A widened road reserve should be provided by the developer if the required sealed road cannot be accommodated within the existing road reserve.

G5 - New road reserves should incorporate as many existing trees as possible. In Marong, many trees on private land currently form screens that can be conveniently integrated with a new street. These are shown on Plan 8 (see page 29).

G6 - Road reserves, public and private vegetated areas should retain vegetation that has Aboriginal cultural significance.

**Marong Township Structure Plan
Existing vegetation - Legend**

- Current development areas (approved)
- Private vegetated areas
- Crown land
- No land use changes proposed
- Medium significance roadside vegetation
- High significance roadside vegetation
- Vegetation retention is desired
- Vegetation retention is strongly encouraged
- Vegetation which will be further assessed for retention
- Existing trees on private land planted in screens
- Rail
- Creeks



**Plan 8: Areas of existing
vegetation in Marong**

Interface areas

Objectives

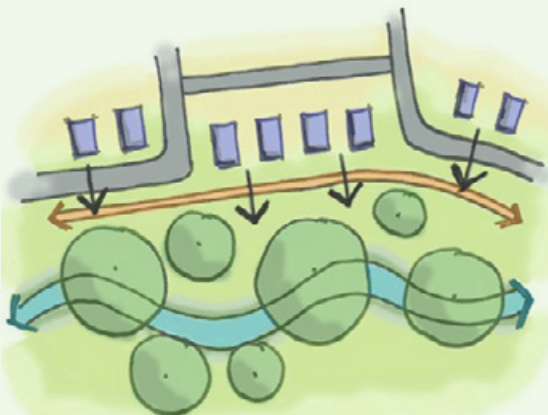
O14 - To retain the semi-rural feel that surrounds Marong, including maintaining a rural break from Maiden Gully and outlooks to rural areas.

O15 - To holistically plan for the future of the Bullock Creek with the Bullock Creek Improvement Project. This will:

- Encourage usage, access and appreciation of the Bullock Creek corridor
- Collaborate with DJAARA to identify and protect sensitive cultural places as well as providing opportunities to share the Dja Dja Wurrung culture
- Improve the appearance of Bullock Creek
- Strengthen the role of Bullock Creek

O16 - To maintain Marong's identity as a self-contained township.

Figure 1: appropriate urban interface with a waterway corridor



Requirements

R15 - Subdivision and development that abuts forest, public land (including streets), waterways, and rural areas, should retain and protect Aboriginal culturally significant places and vegetation. Additionally they must be orientated to face the relevant feature with a perimeter road or shared path, rather than back fences separating the land uses.

R16 - Open space areas must be provided adjacent to waterway corridors to protect and enhance the conservation area, Aboriginal cultural heritage and maximise the safe access and utilisation of open space in a high quality environment.

R17 - Subdivision layout and siting of new buildings in conventional density residential neighbourhoods adjacent to rural areas must:

- Include perimeter roads to provide a buffer between residential and farming uses
- Integrate remnant native vegetation and minimise the need for removal

R18 - A continual green corridor (such as canopy of trees in road reserves, landscaped shared path reserves, retarding basins) must be retained along the length of highway sections in Marong that meets the Department of Transport's clear zone requirements.

R19 - In areas identified on Plan 7 (see page 27) as key interfaces with rural highways, setbacks of at least 30 metres must be provided from the building to the property boundary fronting the highway, and a minimum block width of 30 metres.

R20 - At identified township entrances, maximise vegetation retention and emphasise entry points through street plantings.

R21 - Future residential development must be orientated to face significant roadside vegetation. Rear and side fences facing this vegetation will be discouraged.

Guidelines

G7 - Where dwellings are adjacent to or abut public space, including streets, there should be:

- Provision of no front fence; or
- A low, visually transparent front fence may be provided to a maximum height of 1.2 metres and if the lot is rear-loaded, then the frontage abutting public space should be set back by no more than three metres

G8 - Provide a combination of road and housing land uses that are rear loaded adjacent to waterway corridors (see Figure 1).

G9 - Subdivision and building design should create landmark or gateway sites at main road entry points and at intersections which provide visual markers and signature buildings and spaces at key locations.

G10 - Where lots have a direct frontage to public space, a footpath should be provided along the front boundary to provide passive surveillance and a sense of street address.

Planning Scheme Amendment action

Apply the Design and Development Overlay to future growth areas.

Passive surveillance

This is in relation to the interface between public and private (including commercial) land. Rather than active surveillance (security cameras), passive surveillance refers to people seeing and being seen by other people.

Queensland Police have been encouraging planners and developers to consider the impact of passive surveillance on crime for over ten years. "Crimes against people and property are less likely to occur if other people are around. The presence of other people, for example, provides them with an opportunity to:

- Prevent a crime
- Intervene in a crime that has started and limit its extent
- Help apprehend the criminal
- Summon help from others
- Report the crime and act as a subsequent witness

In Marong, passive surveillance can be achieved by orientating houses towards public spaces such as streets and parks, ensuring shop fronts and fences are transparent, and encouraging medium density housing in the town centre.



Rear access to the lots
in the image below



A quality interface treatment
between houses and Jackass Gully

Housing

Guiding principles

Sufficient land is provided to accommodate a population of approximately 8,000 people. The impact on the surrounding farmland and farming operations is limited by containing future development within the identified area.

Key issues and considerations

There are several areas around Marong where residential development is not suitable due to environmental constraints.

It is important that future growth is sequenced to help maintain a compact town and help retain a semi-rural character.

Current housing is dominated by larger detached dwellings. There is a need to encourage a greater range of housing types and sizes to cater for a range of households. This includes future growth areas.

Township context

In 2016, there were 393 dwellings with an average household size of 2.8 people. Since then, development has continued in a relatively fast pace, with a population growth rate of approximately 9.5% per annum.

The majority of new housing in Marong has occurred as part of larger subdivisions which can be referred to as 'greenfield' subdivisions. Although some new housing have been developed on vacant lots closer to the town centre. There are currently two large subdivisions being developed on Malone Park Road and Goldie Street.



These recent greenfield developments deliver a housing density of approximately 8-10 dwellings per hectare.

There are very few units or semi-detached dwellings in Marong; 96.1% of all dwellings are detached - stand alone homes. These are generally large homes, with an average of 3.4 bedrooms per dwelling. The majority of housing in Marong is owned or being purchased with lower numbers of private rental dwellings than other suburbs in Bendigo.

There are several constraints for planning new residential areas in Marong. Environmental factors such as flooding, slope of the land and bushfire risk, as well as avoiding conflicting land uses are among the constraints for future growth precincts.

An existing broiler farm, located west of the township, has been in operation since 1992. New residential development must be located an appropriate distance from the broiler farm, having regard to the relevant legislation and Environment Protection Guidelines, to ensure the broiler farm operations are not impacted by future residential land.

Conventional density housing

For the purposes of this plan, conventional density housing is generally 8-15 dwellings per hectare (lots ranging from 500-1,000 square metres).

Medium density housing

For the purposes of this plan, medium density housing is generally 15-25 dwellings per hectare (lots ranging from 200-500 square metres).

Low density housing

For the purposes of this plan, low density housing is less than 8 dwellings per hectare (lots greater than 1,000 square metres).

All new residential development

Objectives

O17 - To achieve an overall average density of 11 dwellings per net developable hectare (NDHa) throughout the Township Structure Plan area.

Conventional and low density housing

Requirements

R22 - New conventional density residential neighbourhoods must avoid dead-end or cul-de-sac streets. Where a cul-de-sac is necessary, the street must be a maximum of 75 metres in length.

Guidelines

G11 - Provide a permeable and functional urban structure of blocks and streets where:

- The street layout is interconnected with regular block sizes
- New streets align with existing streets where possible
- Blocks should be generally no more than 240 metres long and 120 metres wide
- Streets follow contours to align with key natural features such as creeks, and straight in other areas where this is not applicable

G12 - Lots are to be designed to enable rear accessed garages on narrow fronted lots.

G13 - The Bendigo Regional Employment Precinct should appropriately respond to residential amenity through zoning and/or appropriate land use controls.



Permeability (access)

The extent to which the layout of urban forms enables people or vehicles to move in different directions. In planning Marong, permeability will be increased by discouraging dead end streets and providing additional paths for pedestrians through town centre blocks.

Good permeability allows users of a space navigate easily without feeling lost; this can encourage more activity in an area such as the town centre.

Watch this video to find out other benefits of a permeable neighbourhood.

Planning Scheme Amendment action

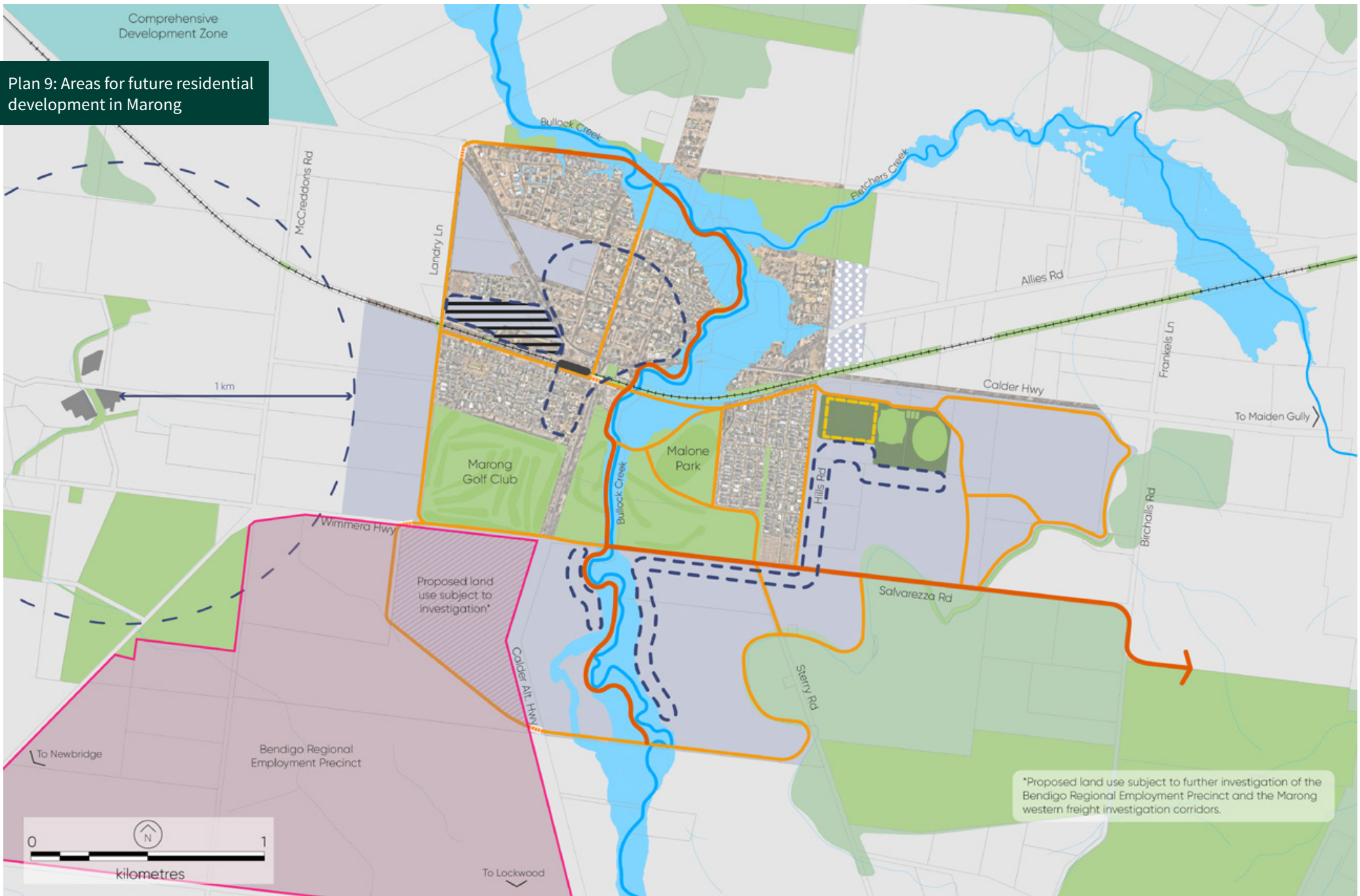
Apply the Development Plan Overlay to future growth areas.

Apply the Low Density Residential Zone to areas of low density housing.
















Apply the Neighbourhood Residential Zone to areas of conventional density housing and areas appropriate for medium density residential development, as shown on Plan 9.

Apply the Mixed Use Zone to areas where medium density housing residential development is required, as shown on Plan 9.

Plan 9: Areas for future residential development in Marong



Marong Township Structure Plan Housing - Legend

-  Future residential development areas
-  Areas appropriate for medium density residential development
-  Medium density residential development required
-  Low density residential area
-  Bendigo Regional Employment Precinct
-  Comprehensive Development Zone
-  Private vegetated areas
-  Crown land
-  Potential site for new education facility and sports fields
-  Indication of potential education facility size
-  1% AEP (1 in 100 year flood event)
-  No land use changes proposed
-  Rail
-  Proposed railway station
-  Primary public space network (district)
-  Secondary public space network (local)
-  Creeks
-  1km buffer from broiler farm

Rendering of appropriate medium density housing. Image: *theinteriorsaddict.com*

Medium density residential development

Objectives

O18 - To provide medium density housing in the following locations:

- Within or at the edge of the Marong town centre
- Overlooking local and/or linear open space
- Within close proximity to schools
- Adjacent to the proposed Marong Railway Station
- In other areas as approved during the detailed development stages

O19 - To co-locate medium density residential development with fine grain commercial and retail uses in the identified location adjacent to the proposed Marong Railway Station.

Fine-grained (in urbanism)

A fine-grained environment is one with small blocks with many buildings and narrow street frontages. This environment creates more opportunities for business owners and is a more interesting place for people.

Integrated housing

Integrated housing is the provision of housing to cater for a range of income types in a single development.

Shop-top housing

Shop-top housing is a building with a commercial use on the lower floors and a residential use on the upper floors, ideally situated in commercial centres or a town centre environment.

Requirements

R23 - Medium density housing must be provided on Mixed Use Zone land to satisfy objective O17.

R24 - Medium density residential neighbourhoods must not include dead-end or cul-de-sac streets.

R25 - Lots must be designed to maximise frontage to the public realm, including streets, parks, and creek/ watercourse corridors.

Guidelines

G14 - Streets linking dwellings within medium density neighbourhoods should give pedestrians a higher priority to encourage walking.

G15 - Medium density housing developments should include communal open space that has access to the winter sun.

G16 - Rear access is encouraged where lots have direct frontage to recreational spaces, or streets with recreational frontages. These lots should be designed to ensure:

- The rear lane access to garages lessens the visual impact on the streetscape
- Strong built form along park edges provides an interface with open space
- Wide pathways are provided along frontages to ensure a sense of 'address' for dwellings

Guidelines - applicable to aged care facilities/ retirement villages/other support housing

G16 - The design of retirement villages should not compromise the permeability and accessibility of neighbourhoods, particularly for pedestrians

Marong town centre

Guiding principles

Sufficient commercial land is provided to meet the needs of a growing population.

An attractive, climate resilient, and people friendly town centre.

Key issues and considerations

A high amount of freight traffic passes through the town centre, creating an unsafe environment. In the absence of alternatives, the amount of traffic will grow as the town grows.

Marong currently lacks some basic retail and commercial services. A suitable amount of land needs to be provided for these uses.

Future development in the town centre can provide opportunities for beautification projects.

Township context

The layout of the town centre provides enormous potential for the future planning of the town. The four main corners are a defining element of the town centre, with the Marong Family Hotel, the former Shire Offices (now used for community purposes), the former railway station site, and a large vacant area previously occupied by a garage/service station.

Wide road reserves provide the opportunity to extend footpaths, plazas, and parkland, and provide high quality walking and cycling paths. However, given that this is currently where the Calder and Calder Alternative Highways meet, it is currently dominated by a large

volume of traffic including trucks creating an unsafe and noisy environment for all road users, particularly pedestrians trying to cross the road.

Marong's key sites for public space are in close proximity to the town centre and the Primary School, Bullock Creek, Malone Park, and the golf course are all within walking distance; however, few connections for pedestrians are made to these areas.

There are a small range of existing commercial and retail services in the town centre. These include a post office, hotel, general store, doctor's clinic, dentist, neighbourhood house, church and two community halls.

Public spaces

Objectives

O20 - To capitalise on the wide High Street reserve and significantly improve the streetscape.

O21 - To encourage on-street dining and trading.

O22 - To contribute to the existing town centre's character of planted palm trees.

Requirements

R26 - A central town square or similar public space must:

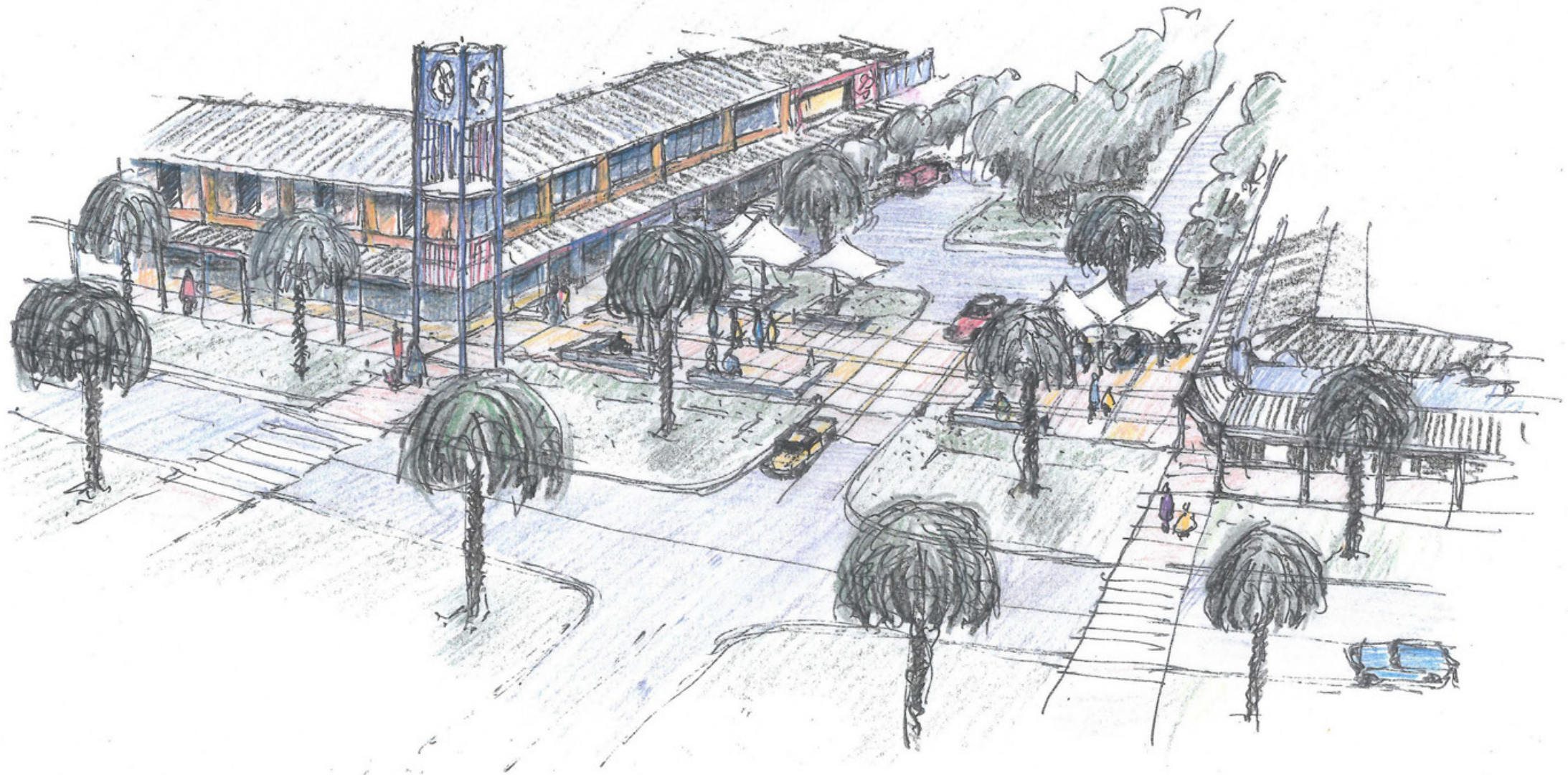
- Be provided in the High Street road reserve in scale with the role of the commercial centre
- Be edged with the active frontages of specialty shops and be directly accessed by shop frontages to encourage outdoor dining
- Be well located in an area with high levels of pedestrian activity and where multiple paths or pedestrian desire lines intersect
- Have good solar orientation
- Be designed consistent with the Urban Design Guidelines for Victoria

R27 - The commercial centre (including car park areas) is to be landscaped with clean-trunked canopy trees and low-lying vegetation to provide shade and safety.

R28 - Suitable lighting must be provided to maintain a sense of safety in the commercial centre.

Guidelines

G18 - Additional street trees should be planted to strengthen the character of Marong. Natives and various palms will be highly encouraged. Additional palms should be planted in High Street and Adams Street to create a symmetrical layout.



Artist's impression of the
future Marong town centre

Structure, land use and built form

Objectives

O23 - To plan for the appropriate provision of commercial facilities in line with the forecast floor areas set out in the Marong Township Economic Analysis 2019 (3,000m² of supermarket floorspace and 2,250m² of specialty retail and other commercial floorspace).

O24 - To retain the Marong town centre and adjacent mixed use area as the focal point for the community.

Requirements

R29 - Commercial buildings must have

- No setbacks from the road reserve
- Provide weather protection to footpaths with verandas or awnings
- A building height of no more than ten metres

R30 - Prominent locations (including corner sites at High Street and Adams Street) must be developed to provide buildings with a greater scale.

R31 - Signage is to be integrated within the built form.

R32 - Windows at ground floor are to be at least 75% transparent to ensure treatments do not impair passive surveillance to and from premises.

Planning Scheme Amendment action

Apply the Design and Development Overlay to the High Street environs.

Apply the Commercial 1 Zone to 31-33 High Street and 30-32 High Street.

Amend the Schedule to the Commercial 1 Zone to specify maximum floor spaces for the Marong Town Centre.

Guidelines

G19 - Buildings should have a fine grained street frontage with multiple shop fronts, doorways, and windows.

G20 - As the town centre evolves and intensifies, future development should front laneways or pedestrian routes.

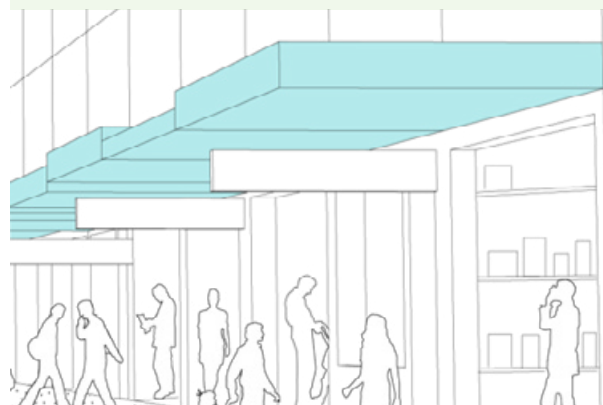
G21 - Prominent locations (including corner sites at High Street and Adams Street) are critical development sites and are not suitable for single-storey fast food outlets or service stations.

G22 - Blank walls should not face streets or public space. Where unavoidable, they must not be more than 10 metres in length or account for no more than 50% of any one side of a building (whichever is smaller).

G23 - Increase water harvesting opportunities and improve water quality discharge.

Figure 2: Walkable environment

Buildings in the Marong town centre can contribute to a walkable environment if they have no setbacks (built on the front lot line) and verandas over footpaths.



Movement and car parking

Objectives

O25 - To support the potential future development of a Marong western freight corridor to remove through traffic and improve town amenity.

O26 - To carefully design a safe and vibrant Marong town centre fronting Adams Street (Calder Highway).

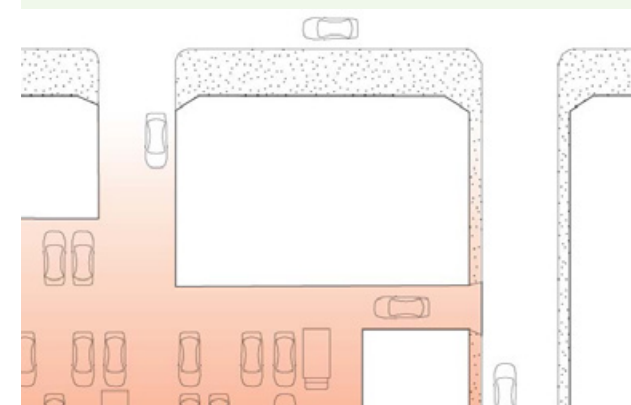
Requirements

R33 - The road and pedestrian network must be well integrated with existing and planned surrounding areas providing multiple route options that enable safe and accessible movement to, from and within the commercial centre, particularly for pedestrians.

R34 - Wide pathways of at least two metres must be provided.

Figure 3: Larger car parking lots

Locating larger car parking lots between the street and the building may reduce street amenity and compromise pedestrian access to buildings.



R35 - Pedestrian crossings, slow zones, pedestrian priority areas and clearly indicated shared spaces must be used to deliver a pedestrian friendly environment. This applies to public roads and internal development roads.

R36 - Larger car parking lots must be located to the rear of the buildings they serve (see Figure 3).

R37 - Where car parking lots interface with sensitive uses such as residential lots, car parking lots must be designed to mitigate against noise and fumes with appropriate acoustic and screening treatments.

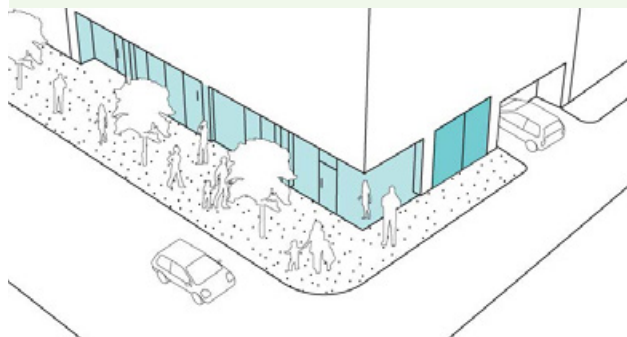
R38 - Landscape a minimum of 15% of the parking surface area, with greater concentrations of natural soil to support large canopy trees to provide natural shade for car parking facilities (see Figure 5).

- 50% of the parking facility must receive shade from canopy trees

R39 - In large car parking lots, position dedicated direct paths to take pedestrians from car parking spaces to main building entries.

Figure 4: Side service access

Side (or rear) service access minimises the disruption to an active street frontage. People prefer to walk along streets where there is activity, visual interest and perception of being visible from nearby windows.



R40 - Locate trees clear of lighting to allow direct illumination of paths and vehicle lanes.

R41 - Provide for water harvesting and other on- site water re-use and treatment systems (see Figure 6).

R42 - Service areas are to be internalised wherever possible. Where internalised service areas cannot be provided, they are to be secured and screened at the rear of buildings or at the side where rear servicing cannot be achieved.

Guidelines

G24 - Street blocks are to be permeable enabling easy transport for pedestrians and cyclists through and within the commercial centre. Pedestrian routes should be provided wherever possible.

G25 - Use of slip lanes within the commercial centre are to be avoided.

G26 - Site access to future buildings fronting High Street

Figure 5: Adequate tree canopy over car parking



should only be provided by side lanes, where the majority of vehicular traffic can access sites via Leslie and Cathcart Street.

G27 - The use of roundabouts to manage traffic flow is to be avoided wherever possible.

G28 - Where a road is designed as a 'shared space', it should be generally characterised by continuous at-grade paving treatment from frontage to frontage.

G29 - Site servicing access and public car parking access should be separated. Where they cannot be separated, a secure façade must be provided.

G30 - Limit new vehicle crossovers in areas where on-street parking is essential.

Figure 6: On-site water harvesting

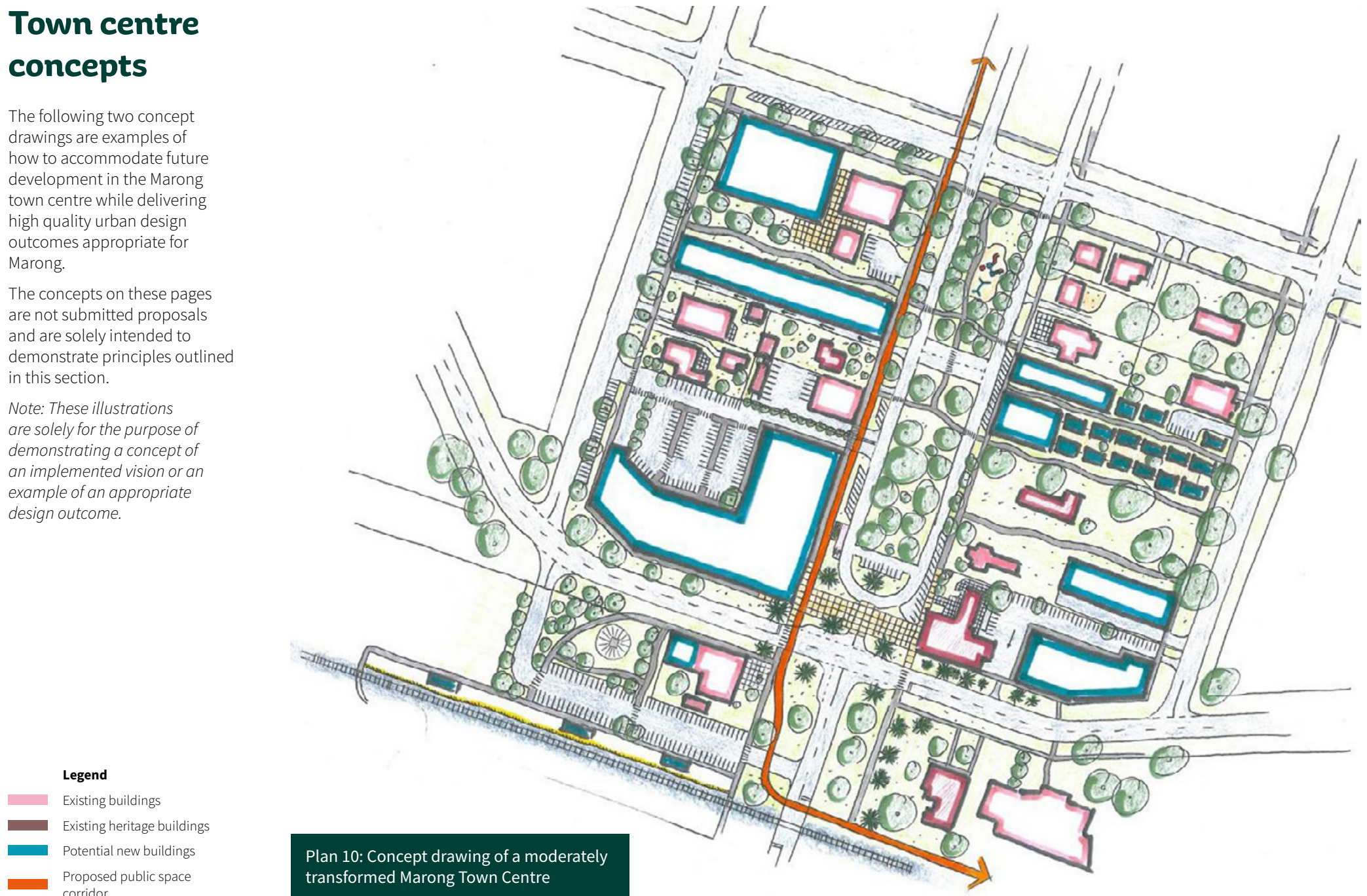


Town centre concepts

The following two concept drawings are examples of how to accommodate future development in the Marong town centre while delivering high quality urban design outcomes appropriate for Marong.

The concepts on these pages are not submitted proposals and are solely intended to demonstrate principles outlined in this section.

Note: These illustrations are solely for the purpose of demonstrating a concept of an implemented vision or an example of an appropriate design outcome.



Plan 10: Concept drawing of a moderately transformed Marong Town Centre

Plan 11: Concept drawing of a highly transformed Marong Town Centre



Community facilities and public space

Guiding principles

A range of community facilities is provided, including a new education facility, that can support the growing population.

Marong features a high quality, accessible public space network, including Bullock Creek, by using public land and land subject to flooding.

Key issues and considerations

As Marong grows, improved facilities, and new parks and play spaces will be needed in appropriate locations.

With an expected population of 8,000, Malone Park will not meet the needs of the community. There is also poor connection with the park and the surrounding neighbourhoods.

Marong Primary School will continue to serve the community and State Government will monitor enrolments. Sharing with the Marong Preschool and Maternal Child Health Centre, the school has 1.1 hectares of land.

The existing community halls are outdated spaces and need to be updated and expanded. Given the location in the Marong town centre and available land, there are strong opportunities to redevelop the Marong Community Hall.

Township context

Due to Marong's history of a self contained township, the community has enjoyed a wide range of facilities in the township. These include (in no particular order):

- A government primary school with approximately 180 enrolments
- A preschool with kindergarten and pre- kindergarten sessions
- Two community halls available for hire - the former Marong Shire Hall and the Marong Community Hall
- Marong Neighbourhood House including a meeting space and op shop
- Marong and District Mens Shed
- Marong Uniting Church
- A medical practice, including pathology, diabetes education, psychology services, and a dental practice
- Country Fire Authority and State Emergency Service Brigades
- Malone Park with various user groups and facilities, including an 18 hole golf course and 25 metre swimming pool
- Various commercial uses, including a hotel, post office and general store

Planning Scheme Amendment action

Amend errors in planning zones by rezoning land to reflect their public land management status.

Objectives

O27 - To co-locate any future education facility with sporting facilities that are available for the wider community to use.

O28 - To locate future central community gathering hubs within the Marong town centre or co-locate with an education/ sporting site.

O29 - To plan and design for community facilities to reflect high quality architecture and flexible design for a range of uses to accommodate changing community needs over time.

O30 - To ensure that future public spaces are consistent with the principles and directions of the Greater Bendigo Public Space Plan.

O31 - To design future local community facilities to be climate resilient.

Requirements

R43 - Parks and open spaces must contain extensive planting of large canopy native trees or palms in suitable locations.

R44 - All parks must be located, designed and developed to in accordance with Plan 12 and the table on page 45. An alternative provision of land for a neighbourhood park is considered to be generally in accordance with that illustrated on Plan 12, provided:

- The location does not reduce walkable access to neighbourhood parks demonstrated on Plan 12
- The design does not diminish the quality or usability of the space for passive recreation
- The area is equal to or more than the park provision outlined in the table on page 45

R45 - Fencing of public spaces where required, whether encumbered or unencumbered, must be:

- Low-scale and visually permeable to facilitate public safety and surveillance
- Designed to guide appropriate movement and access
- Constructed using materials that complement the park setting

Guidelines

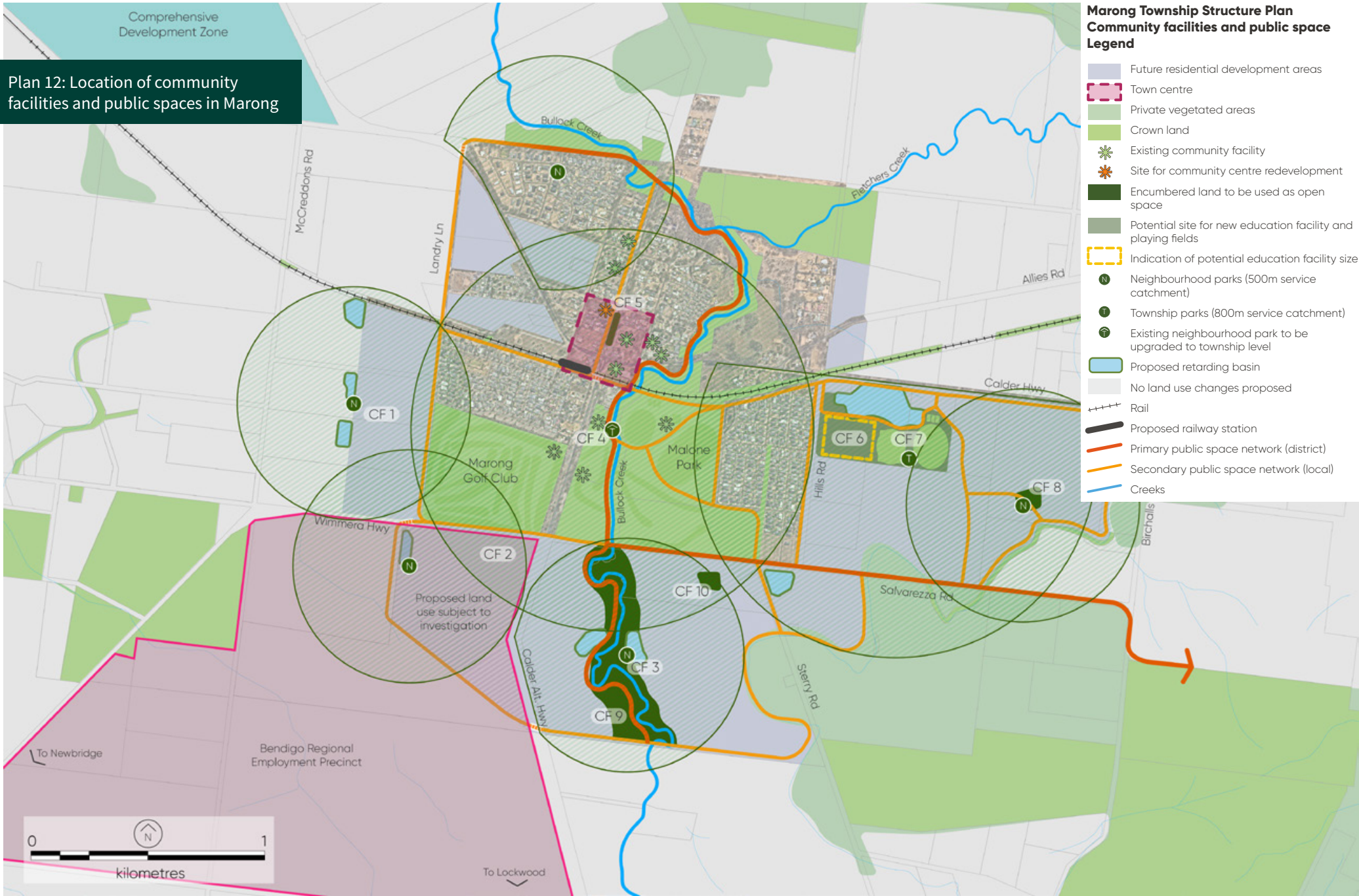
G31 - Neighbourhood parks should cater for a broad range of users by providing a mix of spaces and planting to support both structured and unstructured recreational activities and play opportunities for all ages and abilities.

G32 - Open spaces should have a road frontage to all edges except when adjoining the drainage network, abutting community facilities or where housing fronts the space.

G33 - The Bendigo Regional Employment Precinct should plan for appropriate open space to meet the needs of a best practice employment precinct.



Plan 12: Location of community facilities and public spaces in Marong





Cricket at Malone Park

Community facilities and public space delivery guide

ID - plan reference	Type	Area (Ha)	Attributes	Responsibility
CF 1	Neighbourhood park	0.4	Neighbourhood, adjoining drainage network	City of Greater Bendigo
CF 2*	Neighbourhood park	0.4	Neighbourhood, adjoining drainage network	City of Greater Bendigo
CF 3	Neighbourhood park	0.4	Neighbourhood, Bullock Creek corridor	City of Greater Bendigo
CF 4	Upgraded existing neighbourhood park to township level	NA	Township, Malone Park	City of Greater Bendigo
CF 5	Community hub	0.61	Township	City of Greater Bendigo
CF 6	Education facility	3.5	Township, adjoining neighbourhood sports facility	Department of Education and Training
CF 7	Neighbourhood sports facility, including township park	12	Township, adjoining government primary school	City of Greater Bendigo
CF 8	Encumbered open space	1	Neighbourhood, existing remnant vegetation	City of Greater Bendigo
CF 9	Encumbered open space	22.14	Neighbourhood, floodplain, Bullock Creek corridor	City of Greater Bendigo
CF 10	Encumbered open space	0.5	Neighbourhood, existing remnant vegetation	City of Greater Bendigo
CF 11	Neighbourhood park	0.4	Neighbourhood, existing remnant vegetation	City of Greater Bendigo

*Subject to ultimate land use following investigation as part of Bendigo Regional Employment Precinct.

Movement and access

Guiding principles

New and upgraded transport infrastructure is provided to support a town of 8,000 people. As part of this transport infrastructure, a freight network is also to be provided to support the success of the Bendigo Regional Employment Precinct.

The freight network is currently being considered and planned by the Department of Transport and Planning, as part of the Freight Alignment and Multi-modal Connections Assessment for the Bendigo Regional Employment Precinct.

Key issues and considerations

High volumes of freight movement on all highways have created wide, noisy, and unsafe roads acting as barriers to movement.

The main intersection of Adams and High Streets is difficult to use for all users - motorists, cyclists and pedestrians.

Marong currently consists of a limited and disconnected path network:

- Lack of pedestrian crossing points
- New subdivisions have good footpaths, but no connection elsewhere
- Poor pedestrian connection at school crossing
- A lack of footpaths in the 'older' areas of Marong, the neighbourhoods surrounding the town centre
- Wide roads and narrow footpaths indicate vehicle priority

There is currently a very limited bus service that operates in Marong. Only two buses operate each weekday in either direction to Bendigo.

There are very few safe routes for cyclists around the township, and no safe route for cyclists to Bendigo.

Township context

The Marong township is in a unique situation with a three way State Highway intersection and a railway all close to the town centre. While this provides a major opportunity to Marong in a regional context, this infrastructure creates barriers for the residents who need to move around the township.

Transportation is a major concern for residents. Being a satellite township with limited commercial facilities, many Marong residents rely on private transport to carry out their day to day needs.

The growth to occur as a result of recommendations in this Township Structure Plan is estimated to generate an additional 16,300 daily vehicle movements. This does not include through traffic and existing traffic.

This will create the need to plan for appropriate intersection and road upgrades. It also highlights the need to create safe and accessible alternative travel mode options such as a strong walking and cycling network and the provision of quality public transport connections.

Public transport

Objectives

O32 - To establish a bus network that connects areas in the Marong township with key destinations such as Maiden Gully and Bendigo. The possibility of expanding the network to connect Marong with Kangaroo Flat and Eaglehawk should also be considered into the future.

Requirements

R46 - Clearly marked, direct and safe connections must be provided for pedestrians travelling between movement modes. This includes:

- In car parking lots
- Crossings of collector and arterial roads
- From residential neighbourhoods

R47 - Public transport stops and their approach paths must be located where they are visible from nearby buildings.

Guidelines

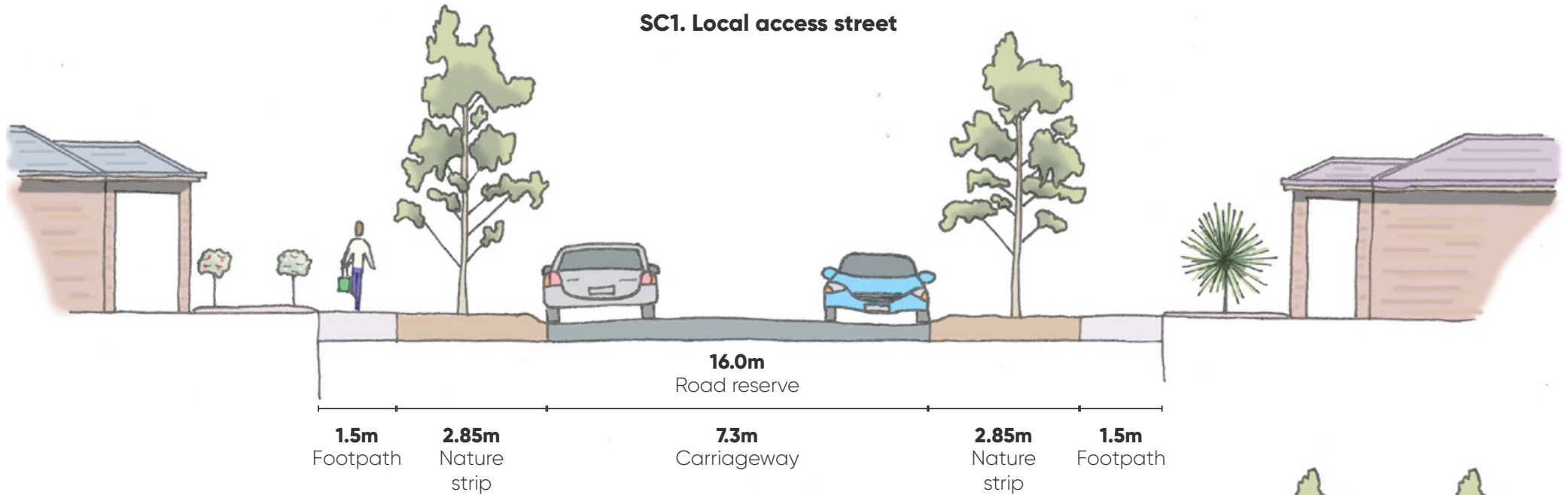
G34 - Locate public transport stops and pedestrian approach paths on major roads where there are opportunities for informal surveillance.

G35 - Where possible, integrate shelters for public transport stops into the facade of adjacent buildings.

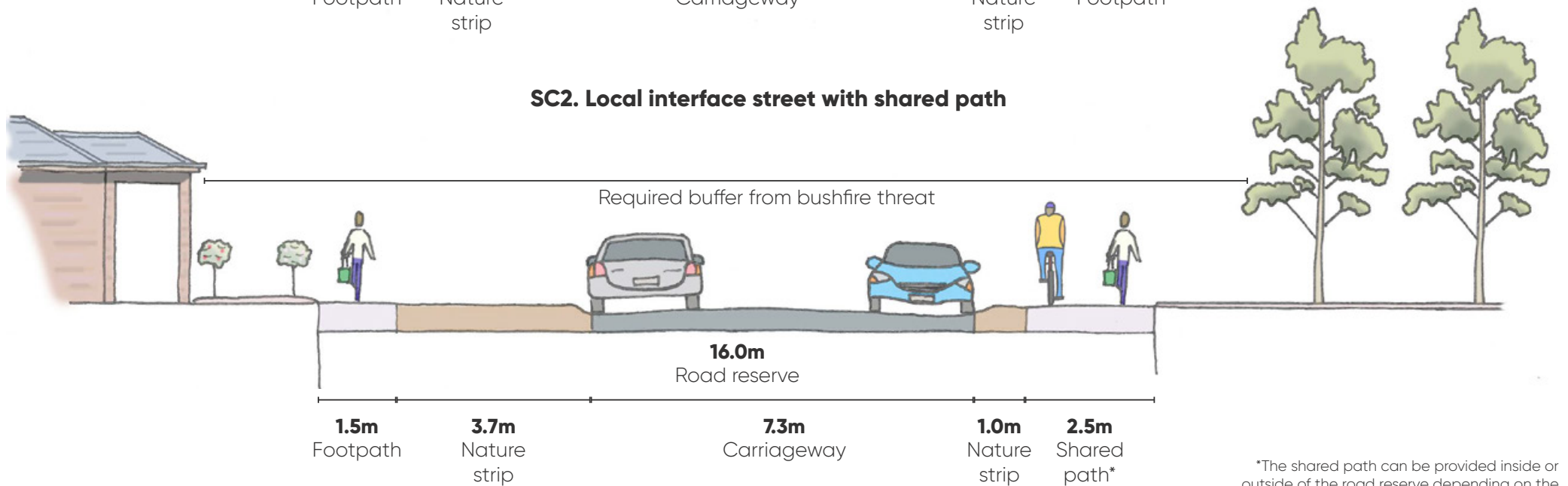
G36 - Position bus stops at locations that have higher numbers of passers-by.

Street cross sections

SC1. Local access street

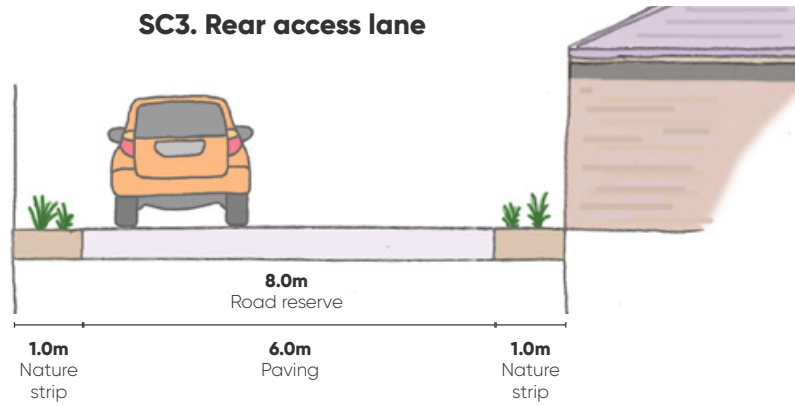


SC2. Local interface street with shared path

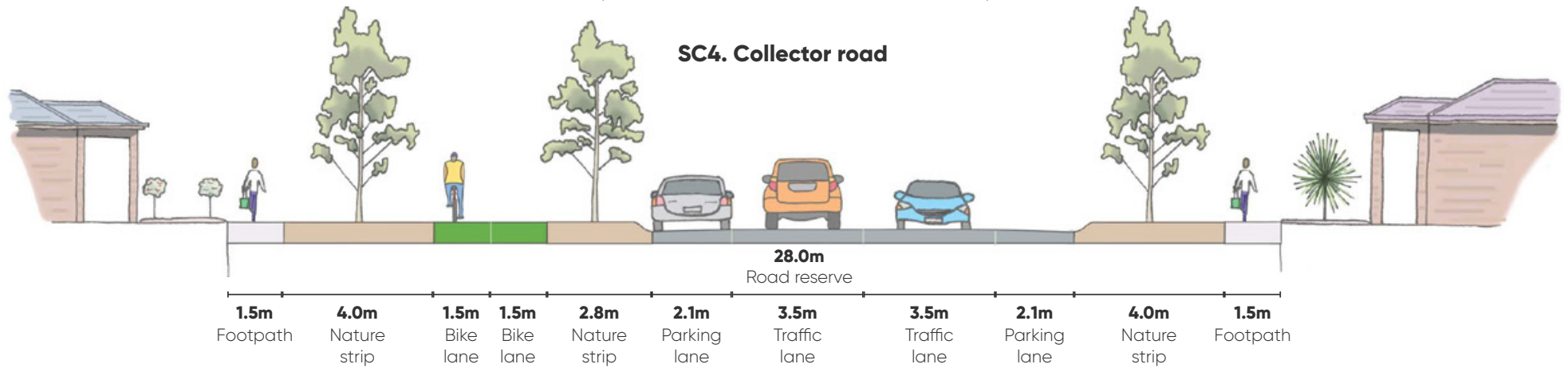


*The shared path can be provided inside or outside of the road reserve depending on the circumstances of the adjacent public space.

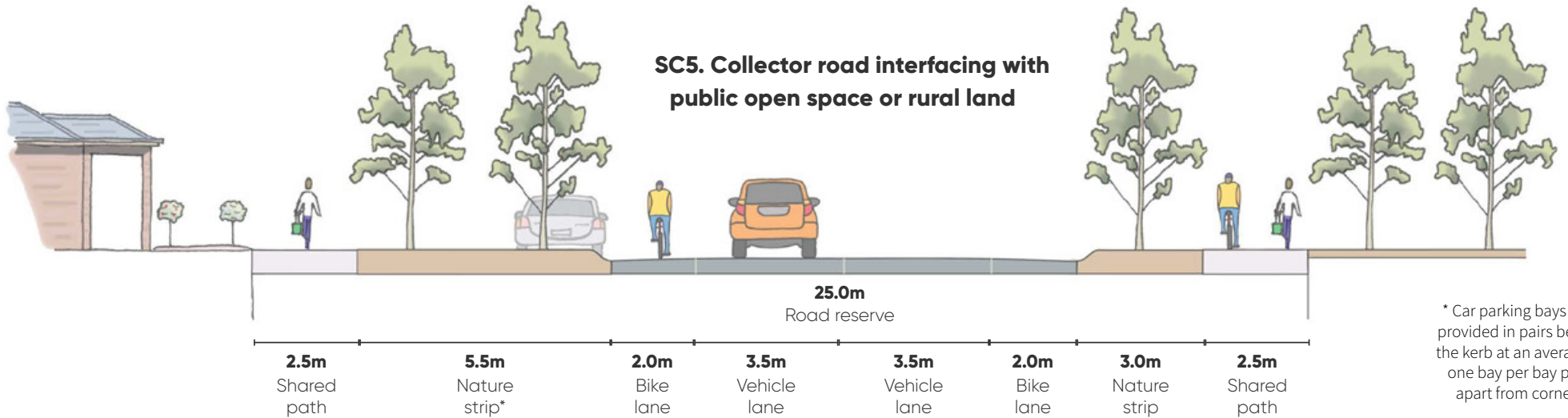
SC3. Rear access lane



SC4. Collector road

















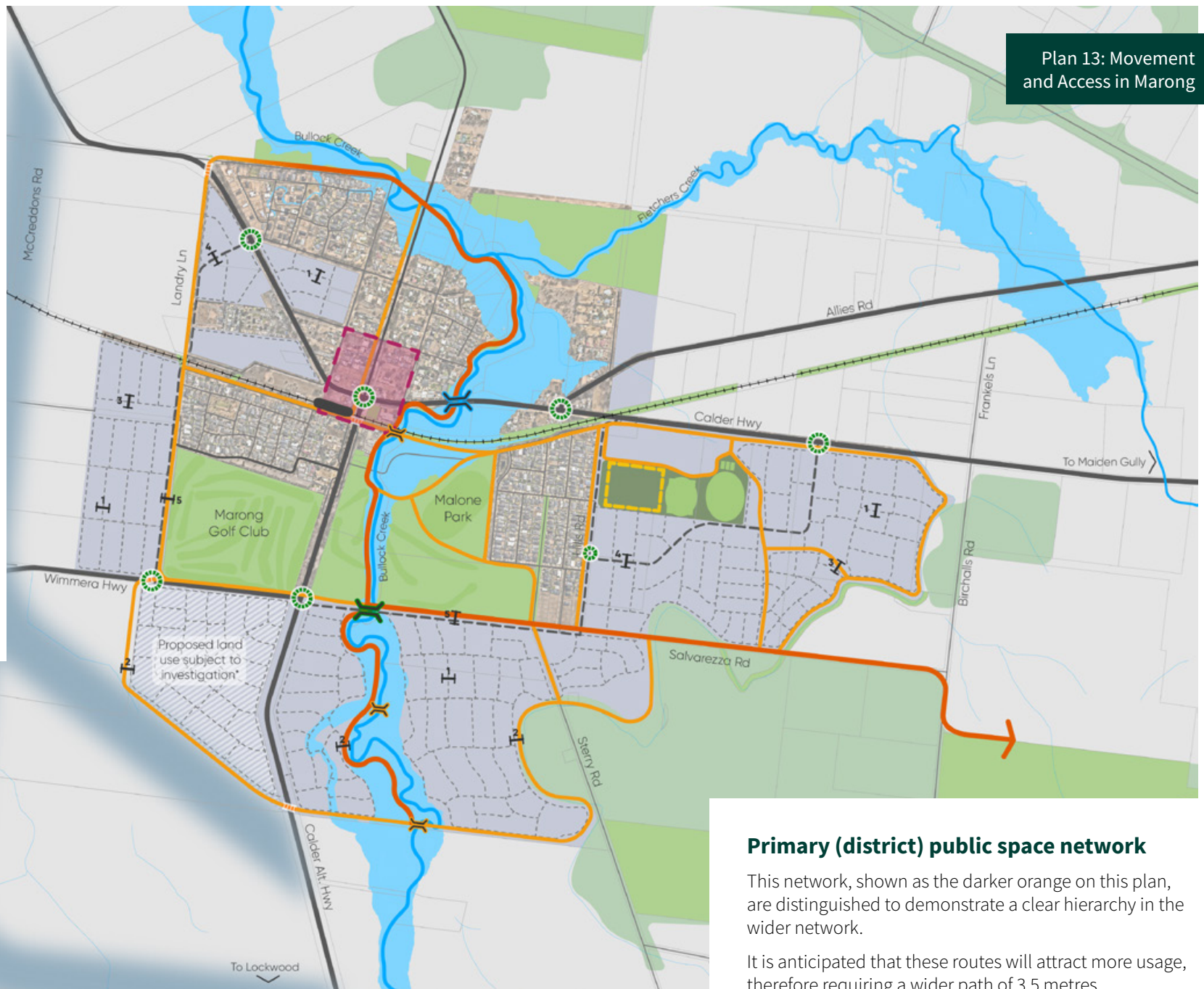
SC5. Collector road interfacing with public open space or rural land



* Car parking bays to be provided in pairs behind the kerb at an average of one bay per bay per lot apart from corner lots

Marong Township Structure Plan Movement and Access - Legend

-  Future residential development areas
-  Proposed land use subject to investigation
-  Town centre
-  Private vegetated area
-  Crown land
-  Potential site for new education facility and sports fields
-  Indication of potential education facility size
-  No land use changes proposed
-  Upgraded intersection
-  Rail
-  Marong western freight investigation corridors
-  Existing arterial and sub-arterial roads
-  Existing collector roads
-  Proposed collector roads
-  Proposed road bridge
-  Proposed pedestrian/cycle bridge
-  Proposed underpass
-  Existing local roads
-  Potential local roads
-  Proposed railway station
-  Primary public space network (district)
-  Secondary public space network (local)
-  Refuge crossing point
-  Creeks
-  Street cross section references



Plan 13: Movement and Access in Marong

Primary (district) public space network

This network, shown as the darker orange on this plan, are distinguished to demonstrate a clear hierarchy in the wider network.

It is anticipated that these routes will attract more usage, therefore requiring a wider path of 3.5 metres.

Walking and bicycle routes

Objectives

O33 - To promote the early provision of safe and efficient pedestrian and bicycle paths and links which are connected to the key features of the township and which link to regional networks outside the precinct. These include:

- A link to Bendigo via Maiden Gully as a priority
- A more completed Bullock Creek trail linking Marong north to south

Requirements

R48 - Design of all streets and roads must give priority to the requirements of pedestrians and cyclists by providing:

- Footpaths on both sides
- 2.5 metre wide shared path or separated lanes on collector streets and arterial roads
- Directed, low glare lighting to paths along streets, so that all lanes are illuminated, rather than just the roadway
- At grade crossings located on roads where pedestrians and cyclists can be seen by approaching drivers
- A clear space in busy crossing areas for pedestrians waiting to cross a road, separate from the through pedestrian path
- Safety strip width for opening car doors and the safe passage of cyclists where on-street parking is adjacent to on-road bicycle lanes
- Pedestrian and cyclist refuges where roadways are wide. These include kerb outstands, traffic islands, and median strips
 - Refuge spaces must be at least 1.8 metres wide
- Pedestrian and cyclist priority crossings on all slip lanes

R49 - Shared paths must incorporate the following design requirements:

- 3.5 metre wide paths on the primary (district level) routes identified on Plan 13 (see page 49), and 2.5 metre wide paths elsewhere
- Where shared paths curve, set an inside radius of at least 15 metres
- Where bordered by a fence, arrange paths to have a straight, or near straight alignment
- Lay out paths to allow pedestrians and cyclists clear sightlines for a distance of at least 15 metres ahead
- Grade the surface of paths to shed water readily and locate drainage pits outside of the travel path
- Provide formal seating placed at 400 metre intervals on primary routes
- Incorporate lighting on approaches to and at road crossings
- Clearly signpost upcoming crossings and intersections to alert pedestrians, cyclists and drivers
- Locate grade-separated crossings of railways, highways, or waterways on direct, desirable routes to schools, parks, and the town centre
- Paths delivered by development proponents must be consistent with the network illustrated on Plan 13 (see page 49)

R50 - Bicycle parking facilities, including way-finding signage must be provided by development proponents in convenient locations at key destinations such as in the town centre and throughout the community facilities and public space network.

Guidelines

G37 - Shared paths should be constructed to a high standard by incorporating the following design guidelines:

- Minimise abrupt level changes along paths
- Fences and barriers along bicycle routes should be designed to limit snagging handlebars or pedals, spearing injuries or collision (bollards, picket fences and log barriers pose a hazard to cyclists. Bollards should only be used at gateways points to restrict vehicular access)

G38 - Design of all streets and roads should give priority to the requirements of pedestrians and cyclists by providing:

- Clear sightlines to landmarks to assist pedestrians and cyclists to orient themselves and move around an area
- Kerb separated bicycle lanes on the kerbside of an on-street parking lane on busy roads
- Minimal vehicle crossovers on streets with shared paths
 - Locate essential vehicle crossovers on straight street sections in areas of high visibility to approaching pedestrians and cyclists
- Co-located pedestrian and cyclist crossings at major road crossings, but with separate paths
- Road pavement details in bicycle lanes at intersections
 - Detailing such as painted bicycle lanes or rumble strips can alert drivers

The street network

Objectives

O34 - To support the Department of Transport and the community in the planning and development of a Marong Western Freight Corridor.

O35 - To create a calm traffic environment in the Marong town centre once bypass routes are delivered.

Requirements

R51 - An interconnected, permeable local street layout must be created that provides a safe a low speed network that encourages walking and cycling.

R52 - The alignment of streets, pedestrian and bicycle paths must be continued from existing areas into new areas with direct roads, streets and paths.

R53 - Lots adjoining highways must provide a service road with lots to front the service road or provide rear lane access.

R54 - Streets must be constructed to parcel boundaries where an inter-parcel connection is intended or indicated in the TSP (see Figure 7).

R55 - Where a lot is 7.5 metres or less in width, vehicle access must be via rear laneway, unless otherwise approved by the responsible authority. Where rear access lanes are provided, they are to:

- Be no more than 150 metres long or 6 metres wide
- Have two access points
- Be designed with no alcoves or obscured places, to maintain safety and security
- Be straight to achieve a sightline from both access points
- Provide one way access
- Provide consistent setbacks from the road reserve
- Not be heavily landscaped to ensure sightlines are not obscured with vegetation



Corner of Calder and Calder Alternative Highways

R56 - Any collector or local street abutting infrastructure projects CF 2 and PS 5 (future government primary school and neighbourhood sports facility) must be designed to be generally consistent with the Figure 8 (see page 53).

R57 - Road networks and street types must be designed and developed in accordance with the street cross sections outlined on pages 47-48 of the TSP unless otherwise agreed by the responsible authority.

Guidelines

G39 - On predominately flat development sites, lay out street and block patterns with direct, straight or near straight streets.

G40 - On development sites with a varying topography use the area's topography, slope and contours to achieve an accessible movement network

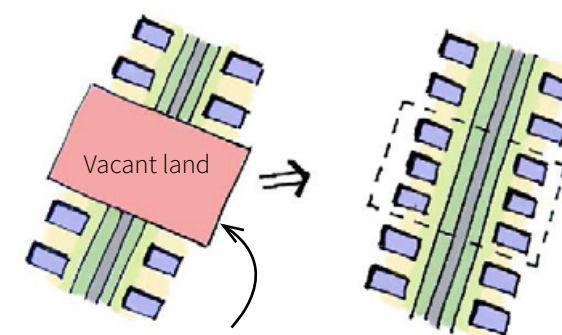
- Curving street alignments may increase pedestrian and cycling distances, and reduce sightlines. However in sloping topography, curving streets may be more appropriate to enable flatter travel path. Curved streets can also calm traffic

G41 - Create a permeable block layout with block dimensions ranging from 120 metres to 240 metres long and 60 metres to 120 metres wide.

G42 - Access to public spaces such as the Bullock Creek should be encouraged by creating obvious links such as perimeter streets and streets that lead into constructed pathways.

G43 - Where a cul-de-sac is necessary, limit the length to less than 75 metres, with a straight alignment or clear sightlines to the end.

Figure 7: Streets constructed to parcel boundaries where an interparcel connection can be achieved over time.



Street constructed to parcel boundary

Traffic calming

Deliberately using physical and other design practices to create a safer road and street environment for motorists, cyclists and pedestrians.

Some obvious measures to achieve this are to install speed bumps, chicanes, and raised pedestrian crossings and refuges. Less obvious measures are reducing lane widths and extending kerbs.

The use of road materials can also assist in calming traffic. An unfamiliar stone surface can encourage motorists to use more caution and give more attention to other users when driving through an area.

Separated bike lanes

Bicycle lanes that are in road reserves, but are physically separated from traffic and parking lanes. Separated lanes help create a safer environment for cyclists to move around a town and can encourage more people to use a bicycle as a safe mode of transport.

Safety strip

Space in an on-road bicycle lane that allows enough room for an open car door, a cyclist, a car and a one metre gap between the cyclist and the car.

The safety strip will depend on the street's traffic speed and type. Car and truck doors opening into bicycle lanes are one of the major causes of cyclist crashes.

Cul-de-sac

A street or passage closed at one end, typically with a bulging roadway (court bowl) or a three point turn opportunity at its terminus to allow u-turns.

Cul-de-sac streets offer residents very little street traffic, but effectively create more traffic elsewhere. Dead end streets make an area less walkable and make neighbourhoods difficult to navigate for motorists.

The structure of most cul-de-sac streets also leaves urban land poorly utilised. Lots for housing surrounding the court bowl usually have irregular shapes with tight corners, making it difficult to accommodate typical residential uses, such as dwellings and sheds.

Rail crossing near Malone Park Road



Streetscape design for community facilities

It is the streetscape that frames our community facilities. When planning for new community facilities, the design of the streetscape should be taken into consideration.

To encourage community use, the streetscape should:

- Provide safe access for all users
- Provide attractive wayfinding signage that is easily interpreted
- Form an attractive entrance that is inviting for all users
- Perform functionally when considering the specific activities of the facility

The adjacent sketch illustrates the planning and design guidelines for streetscapes surrounding community facilities.

- 1** Minimum 2.5 metre shared paths provided on both sides of the street.
- 2** Pedestrian crossings should be well lit.
- 3** Street trees to frame pedestrian crossings.
- 4** Provide street furniture and bins near the entrances to facilities.

- 5** Internal paths connect with street paths and crossings.
- 6** Street trees should provide 40% canopy coverage providing large amounts of shade.
- 7** Position street trees to maintain sightlines between adjacent properties and facility.
- 8** Play spaces are to be easily visible from the street to encourage wider community use outside of school hours.
- 9** Car parking lanes are broken to widen nature strips at regular intervals.
- 10** Pedestrian crossings are raised to be at grade with the path network, rather than at street level.
- 11** Crossing points protrude into the street past parking bays to allow for safe sightlines.
- 12** Provide rear access to lots adjacent to community uses and maintain an active frontage.
- 13** Provision of on- street parking.

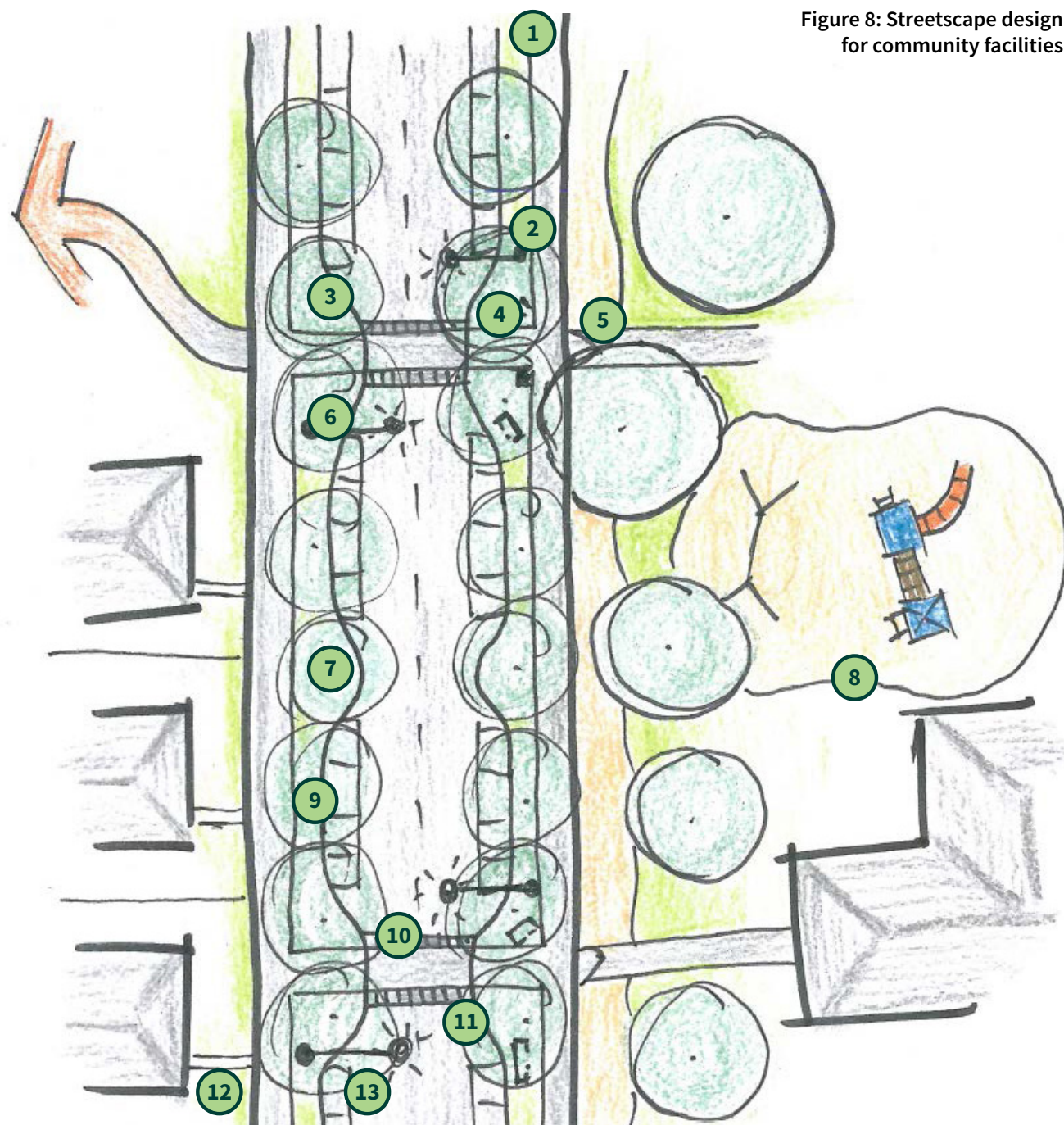


Figure 8: Streetscape design for community facilities

Township infrastructure plan and development staging



Guiding principles

Development staging is coordinated with the delivery of key local and state infrastructure.

Key issues and considerations

Development needs to be staged in accordance with the TSP to ensure an efficient and timely delivery of identified infrastructure.

Essential infrastructure will need to be delivered collaboratively by development proponents, Council and state government agencies and departments.

Organised sequencing of development will help retain Marong's unique character as a compact, self contained township.

Infrastructure delivery (subdivision works by developers)

Requirements

R58 - Subdivision of land within the township, including the growth areas, must progressively deliver each of the following applicable infrastructure items, except those included in the infrastructure plan, to adequately service new areas:

- Local streets and collector roads, including footpaths
- Local bus stop infrastructure
- Landscaping of all existing and future roads and local streets
- Intersection works and traffic management measures along roads
- Secondary shared paths including bridges and crossing points
- Bicycle parking
- Appropriately scaled lighting along all roads, major shared paths, and traversing public open space
- Local drainage system
- Local street crossings of waterways
- Infrastructure as required by utility service providers including water, sewerage, drainage, electricity, gas and telecommunications

R59 - All public open space (where not otherwise provided via a Development Contributions Framework or separate agreement) must be finished to a standard that satisfies the requirements of the responsible authority prior to the transfer of the public open space, including but not limited to:

- Removal of all existing disused structures, foundations, pipelines, stockpiles and soil contamination
- Clearing of rubbish, environmental weeds and rocks, and levelling, topsoiling and sowing with warm climate grass
- Trees and other plantings
- Vehicle exclusion devices (fence, bollards or other suitable methods) and maintenance access points
- Construction of pedestrian paths to a minimum of 2.5 metres wide circulating the perimeter of the public space and connecting to the surrounding path network
- Installation of park furniture

Township infrastructure plan

ID	Infrastructure category	Title	Project description	Lead responsibility	Indicative timing	Proposed Inclusion in Development Contributions Framework
RD 1	Roads	Salvarezza Road	Boulevard collector road: two lane collector road, 34 metre road reserve width, including land	City	M	Yes
RD 2	Roads	Hills Road (widening)	Widening: 8 metre widening to accommodate collector road	City	M	No
RD 3	Roads	East collector road	Boulevard collector road: two lane collector road, 34 metre road reserve width, including land	City	L	Yes
RD 4	Arterial road	Alternative freight routes	Re-routing of two highways: land and construction of bypass highways to the west and north of Marong (ultimate standard)	DTP*	L	No
BR 1	Bridges/structures	Salvarezza Road bridge	Construction of collector road bridge over Bullock Creek at Salvarezza Road (RD 1), including land	City	M	Yes
BR 2	Bridges/structures	Bullock Creek Trail underpass	Construction of Bullock Creek Trail (SP 1) underpass at Calder Highway (17m)	City	S	Yes
IT 1	Intersections	Landry Lane and Wimmera Highway	New intersection: Construction of four way intersection, including land	City	S	Yes
IT 2	Intersections	Wimmera Highway and Calder Alternative Highway	Intersection upgrade: Construction of four way intersection, including land (ultimate standard)	DTP *	S	Yes
IT 3	Intersections	Calder Highway and Calder Alternative Highway	Intersection upgrade: Construction of four way signalised intersection	DTP *	S M	Interim - Yes Ultimate - No
IT 4	Intersections	Goldie Street and Calder Highway	Intersection upgrade: Construction of four way roundabout, including land	City	S	Yes
IT 5	Intersections	Allies Road and Calder Highway	Intersection Upgrade: Construction of three way signalised intersection, including land	DTP *	M	No
IT 6	Intersections	New east collector road (RD 3) and Calder Highway	New intersection: Construction of three way signalised intersection, including land	City	M	Yes
IT 7	Intersections	Hills Road (RD 2) and new east collector road (RD 3)	New intersection: Construction of three way roundabout, including land	City	L	Yes
IT 8	Intersections	Landry Road/railway crossing	Level crossing upgrade: Landry Road/railway crossing	City VicTrack	M	Yes

* All future State Government projects are subject to an approved business case and project funding. ^ Utility projects are not referenced on Plan 14.

These projects are subject to ultimate land use following investigation as part of BREP.

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ID	Infrastructure category	Title	Project description	Lead responsibility	Indicative timing	Proposed Inclusion in Development Contributions Framework
IT 9	Intersections	Potential second collector road intersection with Calder Highway	Potential new Intersection: purchase of additional land surrounding intersection and construction of T-intersection	City	M	Yes
IT 10	Intersections	Calder Highway and Hills Road - Intersection augmentation	Intersection works: Augment the current intersection to limit the use of this intersection, and manage potential conflicts with future railway level crossing	City	M - L	Yes
PT 1	Railway station	Construction of platform, station building, car parking and associated track upgrades	Construction of platform, station building, car parking and associated track upgrades.	DTP * VicTrack *	L	No
SP 1a	Paths/trails	Bullock Creek Trail - Stage 1 (middle)	Bullock Creek Trail - Stage 1 (Middle - Salvarezza Road to Calder Highway) - District level shared path. Construction of 3.5 metre wide shared path along existing creek reserve and floodplain land (PS 7)	City	S	Yes
SP 1b	Paths/trails	Bullock Creek Trail - Stage 2 (south)	Bullock Creek Trail - Stage 2 (South - Salvarezza Road to southern boundary) - District level shared path. Construction of 3.5 metre wide shared path along existing creek reserve and floodplain land (PS 7)	City	M	Yes
SP 1c	Paths/trails	Bullock Creek Trail - Stage 3 (north)	Bullock Creek Trail - Stage 3 (North - Calder Highway to northern boundary) - District level shared path. Construction of 3.5 metre wide shared path along existing creek reserve and floodplain land (PS 7)	City	M	Partially
SP 2	Paths/trails	Marong to Bendigo Trail (Salvarezza Road) - From Bullock Creek east towards Maiden Gully	Bullock Creek east towards Maiden Gully: Marong to Bendigo Trail (Salvarezza Road) - District level shared path. Construction of 3.5 metre wide shared path along existing road reserves	City	M	Partially
RB 1a	Drainage/waterways	Northern Precinct 1 retarding basin	Retarding basin west of Precinct 1. Construction of basin and construction of piped drains connecting basin to discharge point, including land	City	S	Yes
RB 1b	Drainage/waterways	Pump station - outfall drainage	Potential stormwater pump station to manage Precinct 1 stormwater outfall discharge	City	S	Yes

* All future State Government projects are subject to an approved business case and project funding. ^ Utility projects are not referenced on Plan 14.

These projects are subject to ultimate land use following investigation as part of BREP.

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ID	Infrastructure category	Title	Project description	Lead responsibility	Indicative timing	Proposed Inclusion in Development Contributions Framework
RB 2	Drainage/waterways	Central Precinct 1 retarding basin	Retarding basin adjoining neighbourhood park (PS 1). Construction of basin and construction of piped drains connecting basin to discharge point, including land	City	S	Yes
RB 3	Drainage/waterways	Southern Precinct 1 retarding basin	Retarding basin west of Precinct 1. Construction of basin and construction of piped drains connecting basin to discharge point, including land	City	S	Yes
RB 4 [#]	Drainage/waterways	North-western Precinct 2 retarding basin	Retarding basin adjoining neighbourhood park (PS 2). Construction of basin and construction of piped drains connecting basin to discharge point, including land	City	S	Yes
RB 5	Drainage/waterways	Eastern Precinct 2 retarding basin	Retarding basin adjoining floodplain land (PS 7). Construction of basin and construction of piped drains connecting basin to discharge point, including land	City	S	Yes
RB 6	Drainage/waterways	Western Precinct 3 retarding basin	Retarding basin adjoining floodplain land and neighbourhood park (PS 3, PS 7). Construction of basin and construction of piped drains connecting basin to discharge point, including land	City	M	Yes
RB 7	Drainage/waterways	Eastern Precinct 3 retarding basin	Retarding basin adjoining Salvarezza Road and Sterry Road intersection. Construction of basin and construction of piped drains connecting basin to discharge point, including land	City	M	Yes
RB 8	Drainage/waterways	Precinct 4 retarding basin and pump	Water harvesting basin adjoining primary school and neighbourhood sports facility (CF 2, PS 5). Construction of basin, construction of piped drains connecting basin to discharge point and construction of pump and water tanks to serve neighbourhood sports facility (PS 5), including land	City	L	Yes
UT 1 [^]	Potable water and wastewater	Augmentation works	Upsizing of potable water and sewer infrastructure to serve existing development	Coliban Water	S	No
UT 2 [^]	Potable water and wastewater	Augmentation works	Upgrade of potable water and sewer infrastructure to serve development above the 195 metre contour line up to 200 metres	Coliban Water	M	No
C 1	Community facilities	Community hub	Community hub integrating kindergarten, maternal child health and general community spaces in the town centre. Construction of facility in two stages	City	S M	Stage 1 - No Stage 2 - Yes

* All future State Government projects are subject to an approved business case and project funding. ^ Utility projects are not referenced on Plan 14.

These projects are subject to ultimate land use following investigation as part of BREP.

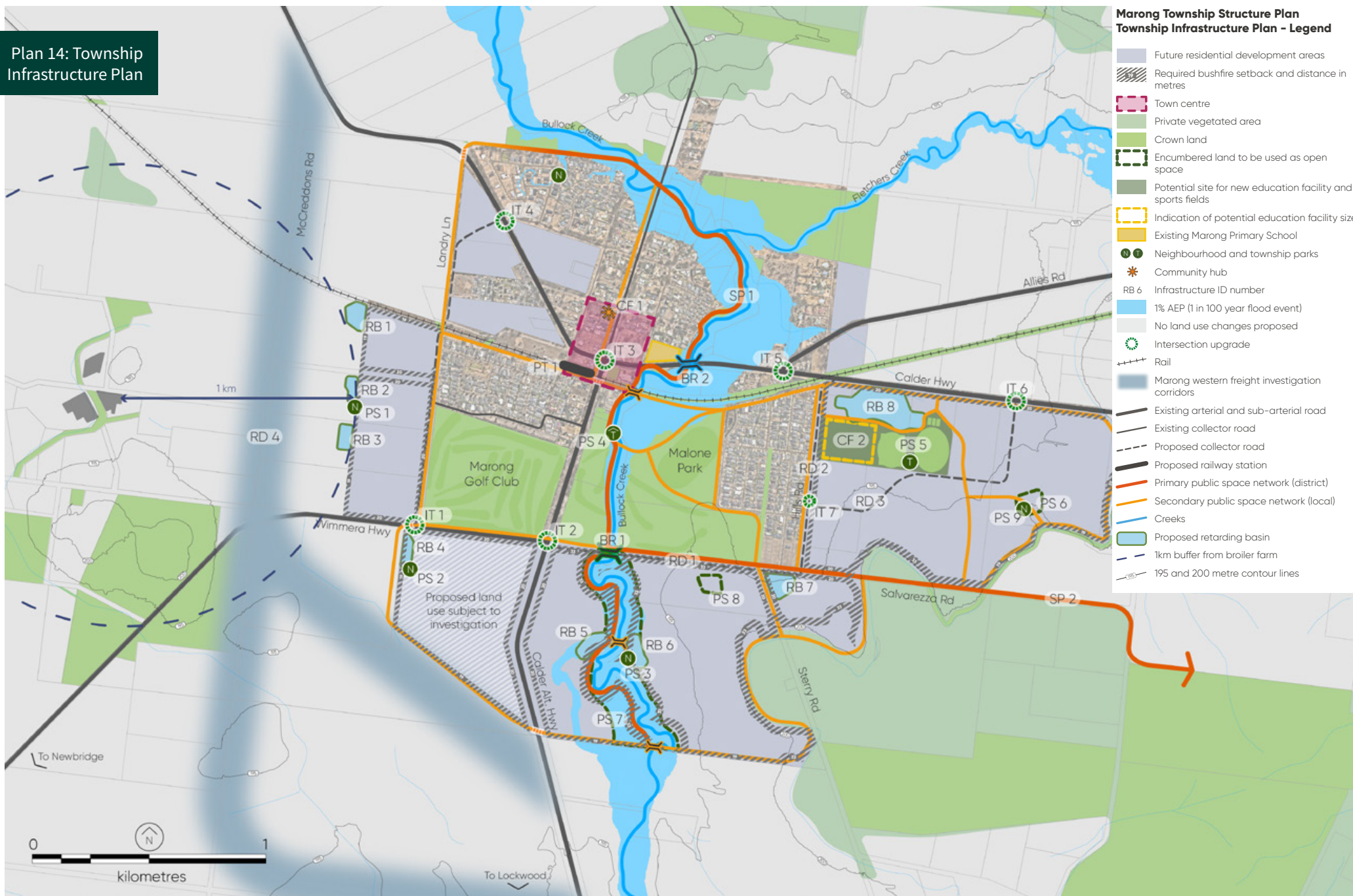
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ID	Infrastructure category	Title	Project description	Lead responsibility	Indicative timing	Proposed Inclusion in Development Contributions Framework
C 2	Education facility	Education facility	Education facility co-located with neighbourhood sports facility (PS 5). Construction of school and associated infrastructure, including land	DET * Private *	M	No
PS 1	Open space	Neighbourhood park (Precinct 1)	Neighbourhood level park and play space adjoining retarding basin (RB 2). Construction of park and play space, including land	City	S	Yes
PS 2 #	Open space	Neighbourhood park (Precinct 2)	Neighbourhood level park and play space adjoining retarding basin (RB 4). Construction of park and play space, including land	City	S	Yes
PS 3	Open space	Neighbourhood park (Precinct 3)	Neighbourhood level park and play space located in floodplain land (PS 7) and adjoining Bullock Creek Trail and retarding basin (SP 1, RB 6). Construction of park, basketball half court and natural play space features and installation of fitness equipment, including land	City	M	Yes
PS 4	Open space	Upgraded existing neighbourhood park to township level	Township level park located in Malone Park. Construction of play space and associated infrastructure.	City	M	No
PS 5 a	Open space	Neighbourhood sports facility	Neighbourhood sports facility co-located to primary school (CF 2). Construction of ovals, courts, pavilion, car parking and other associated infrastructure, including land	City	M	Yes
PS 5 b	Open space	Neighbourhood park (within sports reserve)	Neighbourhood park (within sports reserve)	City	M	Yes
PS 6	Encumbered open space	Encumbered open space (Precinct 4)	Public space with remnant native vegetation.	City	L	No
PS 7	Encumbered open space	Encumbered open space (Bullock Creek floodplain)	Public space in Bullock Creek floodplain adjoining retarding basins (RB 5, RB 6), ultimately facilitating delivery of Bullock Creek Trail (SP 1) and neighbourhood park PS 3), including land	City	M	No
PS 8	Encumbered open space	Encumbered open space (Precinct 3)	Public space in Bullock Creek floodplain adjoining retarding basins (RB 5, RB 6), ultimately facilitating delivery of Bullock Creek Trail (SP 1) and neighbourhood park PS 3), including land	City	M	No
PS 9	Open space	Neighbourhood park (Precinct 4)	Neighbourhood level park and play space adjoining encumbered open space (PS 6), including land	City	M-L	Yes

* All future State Government projects are subject to an approved business case and project funding. ^ Utility projects are not referenced on Plan 14.

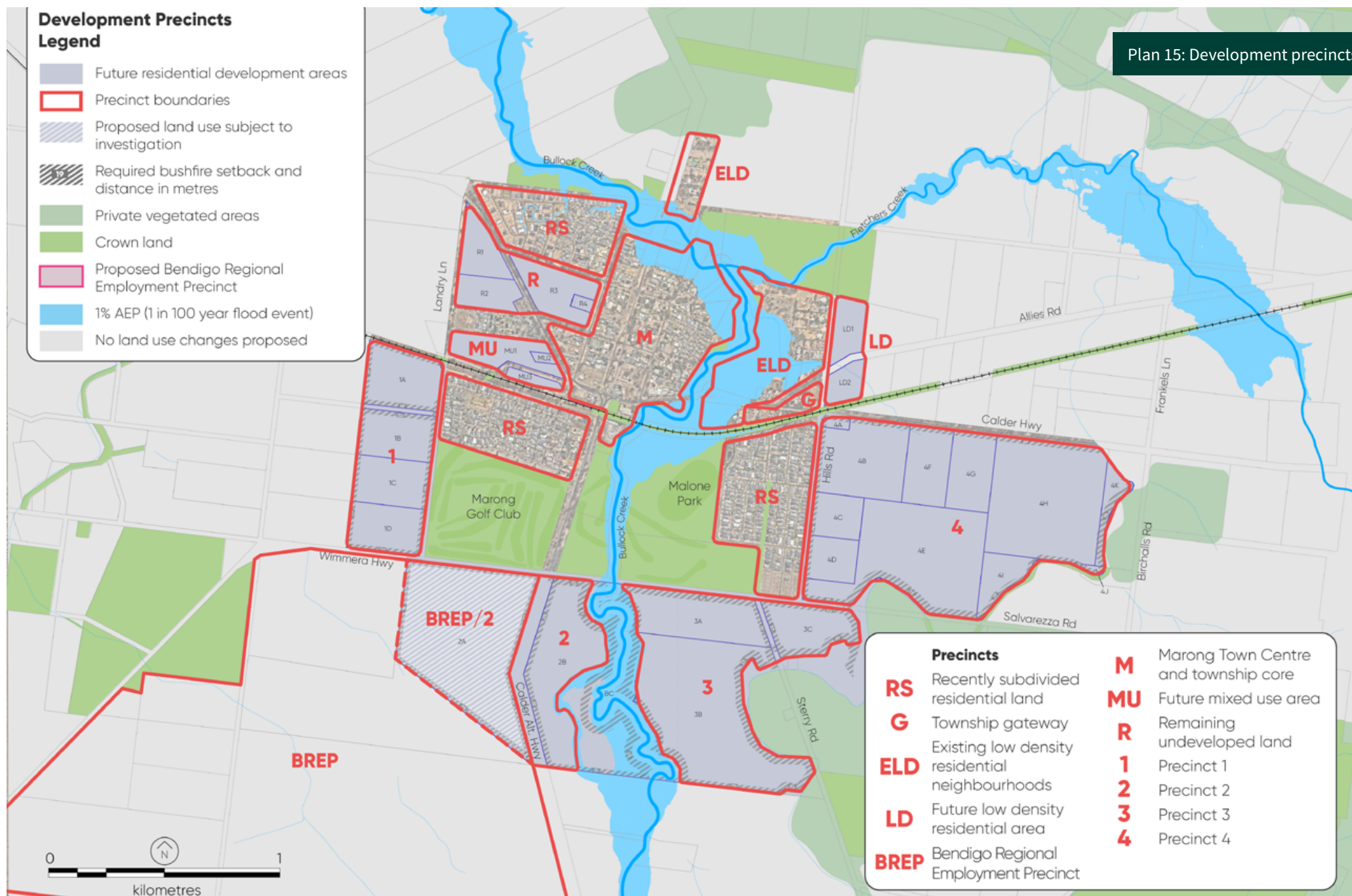
These projects are subject to ultimate land use following investigation as part of BREP.

Plan 14: Township Infrastructure Plan



Development Precincts Legend

-  Future residential development areas
-  Precinct boundaries
-  Proposed land use subject to investigation
-  Required bushfire setback and distance in metres
-  Private vegetated areas
-  Crown land
-  Proposed Bendigo Regional Employment Precinct
-  1% AEP (1 in 100 year flood event)
-  No land use changes proposed



Precincts	
RS	Recently subdivided residential land
G	Township gateway
ELD	Existing low density residential neighbourhoods
LD	Future low density residential area
BREP	Bendigo Regional Employment Precinct
M	Marong Town Centre and township core
MU	Future mixed use area
R	Remaining undeveloped land
1	Precinct 1
2	Precinct 2
3	Precinct 3
4	Precinct 4

Development precincts

Precincts 1-4 (future residential growth areas)

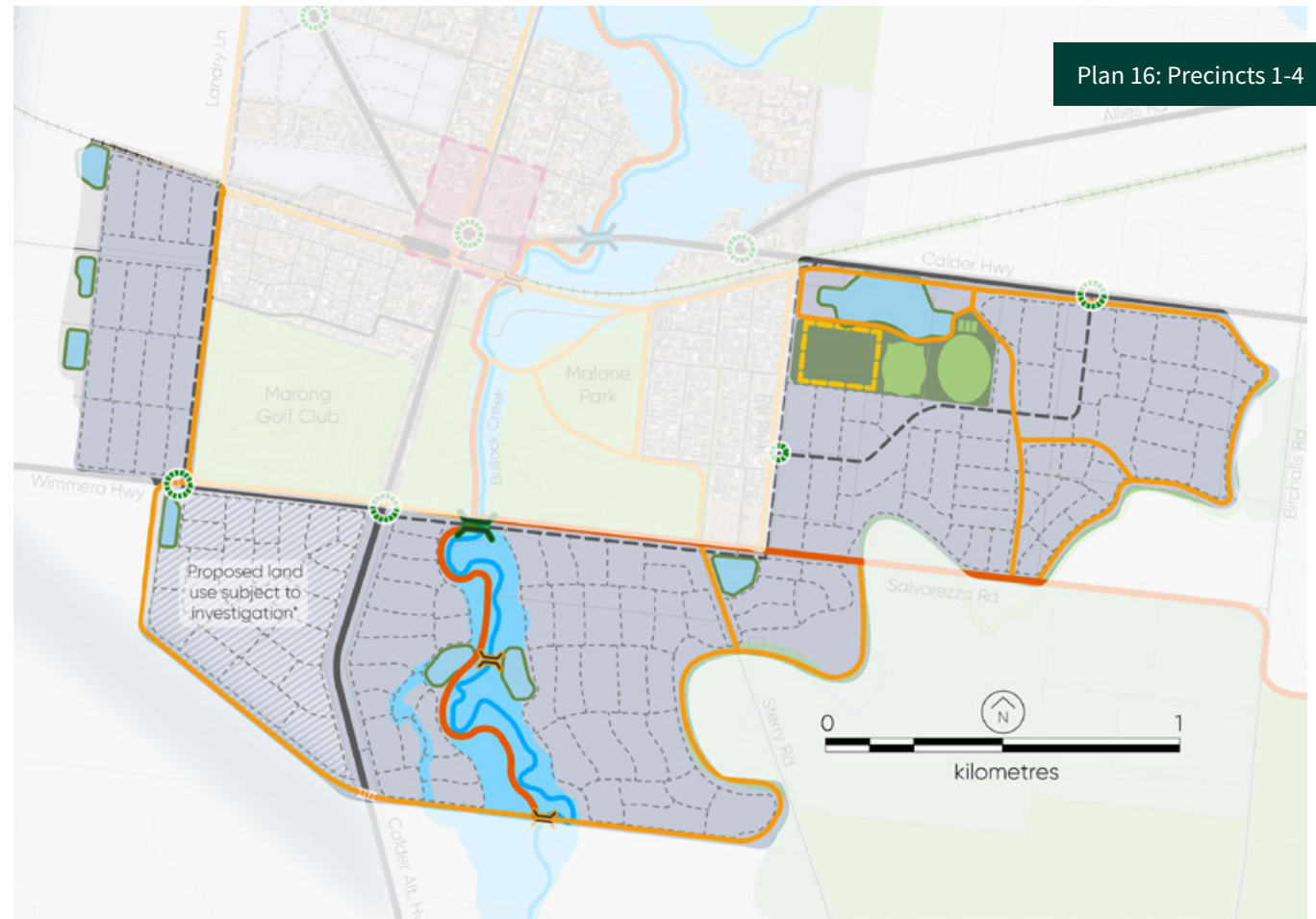
Preferred character/land use outcome

Precincts 1-4 currently comprises of 19 largely undeveloped/rural parcels of land zoned Farming Zone. The Township Structure Plan (TSP) seeks to establish new residential neighbourhood precincts that will accommodate the majority of population growth in Marong.

The neighbourhoods will be primarily developed at a conventional density; however small areas of medium density residential development will be encouraged in interface areas with public open spaces and community facilities.

Precincts will be based on an inter-connected local street network that responds to the topography and key site and amenity features.

Marong's extensive public open space network will be extended, creating new public open space along the Bullock Creek floodplain separating Precincts 2 and 3, and the construction of a township scale sporting facility.



Legend

- Future residential development areas
- Land use subject to further investigation of the Bendigo Regional Employment Precinct and the Marong western freight corridor
- Potential site for new education facility and sports fields

- Indication of potential education facility size
- 1% AEP (1 in 100 year flood event)
- Intersection upgrade
- Rail
- Existing arterial road
- Proposed collector road

- Potential local roads
- Proposed road bridge
- Proposed pedestrian/cycle bridge
- Primary public space network (district)
- Secondary public space network (local)
- Creeks
- Proposed retarding basin

Amendments

AM1 - Apply the Land Subject to Inundation Overlay to affected areas on Plan 6 (see page 24).

AM2 - Apply the Heritage Overlay to places of heritage significance as shown on Plan 7 (see page 27).

AM3 - Apply the Vegetation Protection Overlay as shown on Plan 8 (see page 29) to roadside vegetation and areas where further assessment has confirmed retention of vegetation is required.

AM4 - Amend the local policy in the Greater Bendigo Planning Scheme referencing the Marong Township Structure Plan which outlines requirements for developing in these areas.

AM5 - Progressively rezone future growth precincts to the Neighbourhood Residential Zone, apply a Development Plan Overlay and apply a Design and Development Overlay.

Requirements - Rezoning

R60 - Relevant retarding basins (RB 1, RB 2, RB 3) must be constructed in the first stages of a development plan for Precinct 1.

R61 - Upgraded intersection (IT 1) must be constructed in the early stages of a development plan for Precinct 2.

R62 - Subject to ultimate land use following investigation as part of BREP, retarding basin (RB4) must be constructed in the first stages of a development for Precinct 2A.

R63 - Upgraded intersection (IT 2) must be constructed in the first stages of a development plan for Precinct 2B.

R64 - Retarding basin (RB 5) must be constructed in the first stages of a development plan for Precinct 2B.

R65 - Bridge (BR 1) must be constructed in the early stages of a development plan for Precinct 3.

R66 - Potable water and wastewater augmentation works (UT 2) must be completed prior to the development of any land in Precinct 3 or 4 that is above the 195 metre contour line (or as agreed with Coliban Water).

R67 - Retarding basins (RB 6, RB 7) must be constructed in the first stages of a development plan for the relevant areas of Precinct 3.

R68 - Retarding basin (RB 8) must be constructed in the first stages of a development plan for Precinct 4.

R69 - Hills Road (RD 2) must be upgraded in the first stages of a development plan for Precinct 4.

R70 - Prior to rezoning Precinct 4, a land capability assessment must be prepared for the land identified in Plan 3 (see page 14), which shows that the land is suitable for residential development.

R71 - Prior to rezoning land for general residential purposes, the proponent must prepare a Development Plan for the entire precinct which responds to the design and development guidance contained in the objectives, requirements, guidelines and Township infrastructure plan of the Marong Township Structure Plan.

R72 - New residential areas and growth areas are required to progressively deliver required infrastructure to adequately service new development areas.

R73 - A Native Vegetation Precinct Plan must be prepared and approved as part of the rezoning of any precinct.

Note: Rezoning requirements R60-R69 (inclusive) area requirements that will be incorporated into the relevant planning controls for each future residential growth area (eg. the requirement will be specified in a Development Plan Overlay Schedule).

Requirements - Subdivision and development

R74 - An application to rezone land for a sensitive use (residential use, child care centre, pre-school centre or primary school) must be accompanied by an environmental site assessment of the land by a suitably qualified environmental professional to the satisfaction of the responsible authority which takes into account the 'Planning Practice Note: Potentially Contaminated Land' and provides information including:

- Further detailed assessment of potential contaminants on the relevant land
- Clear advice on whether the environmental condition of the land is suitable for the proposed use/s and whether an environmental audit of all, or part, of the land is recommended
- Further detailed assessment of surface and subsurface water conditions and geotechnical characteristics on the relevant land and the potential impacts on the proposed development including any measures required to mitigate the impacts of groundwater conditions and geology on the development and the impact of the development on surface and subsurface water
- Recommended remediation actions for any potentially contaminated land

R75 - Any development in Precinct 4 must not compromise the delivery of the education facility (CF 2) and neighbourhood sports facility (PS 5).

Guidelines - Rezoning

G44 - The Marong Western Freight Investigation Corridor (RD 4) should be completed so that the alignment is confirmed prior to rezoning Precinct 1 or the Precinct 2 (west of Calder Alternative Highway).

G45 - Upgraded intersection (IT 6) should be constructed or included in the first stage of a development plan prior to rezoning Precinct 4 subject to satisfaction of the Department of Transport.

G46 - Prior to rezoning, an Aboriginal Cultural Values Assessment must be prepared in consultation with DJAARA. The assessment should include identification of sensitive cultural places, Indigenous heritage values, places and vegetation for protection, and where there may be opportunities to share Dja Dja Wurrung culture.

Precinct R (remaining undeveloped land)

Preferred character/land use outcome

Precinct R currently comprises of four parcels of land, three of which are primarily undeveloped. They are currently zoned Township Zone.

The TSP encourages the completion of development within the existing township boundary. Development in this precinct will be primarily conventional density residential neighbourhoods.

Other uses may be supported on a case by case basis, as this precinct straddles the Calder Highway and abuts the Marong Town Centre.

Amendments - Precinct R

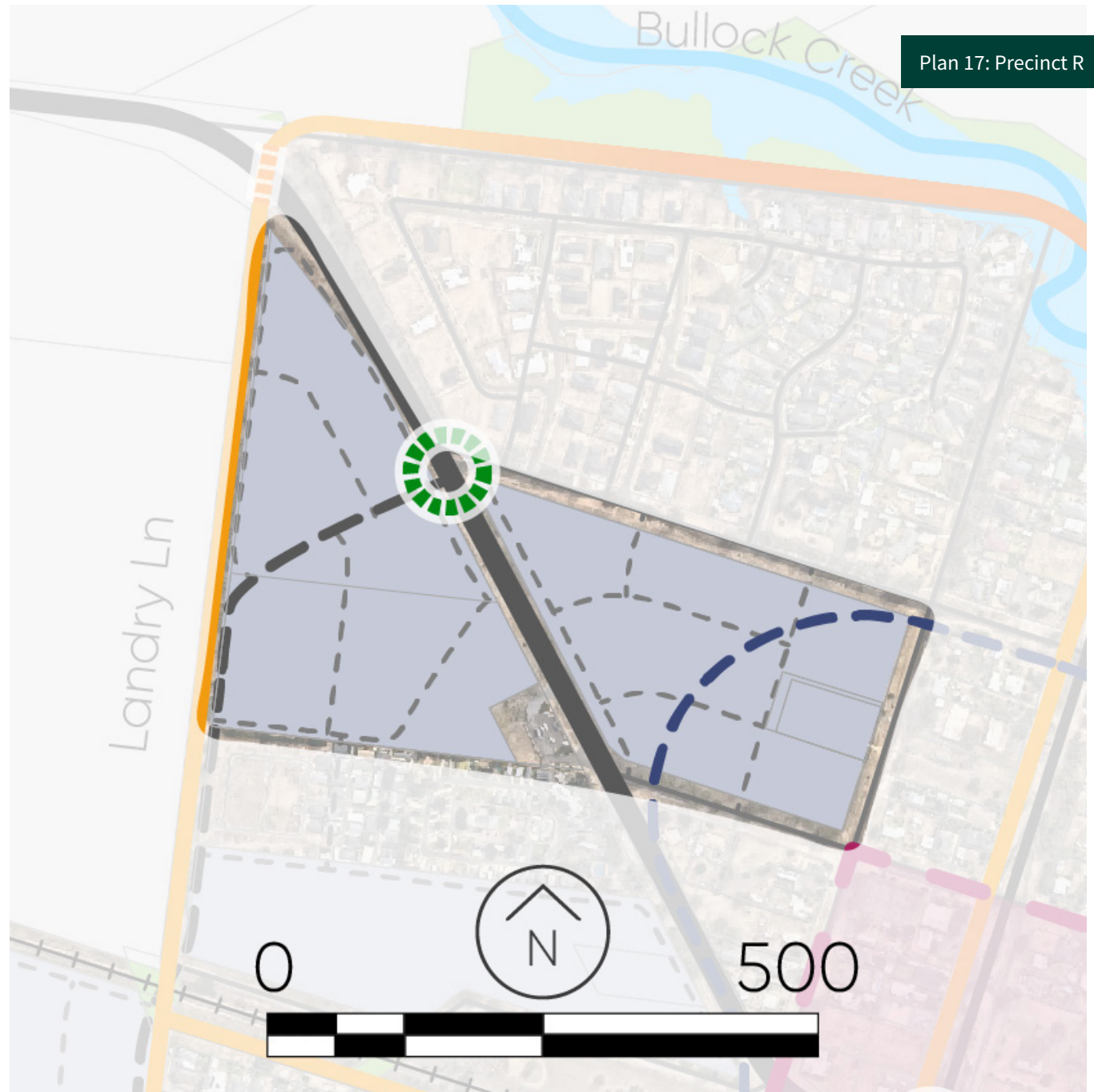
AM6 - Apply the Neighbourhood Residential Zone to the land, replacing the Township Zone.

AM7 - Apply a Development Plan Overlay to the precinct.

AM8 - Apply a Design and Development Overlay to the precinct.

Legend

-  Future residential development areas
-  Intersection upgrade
-  Existing arterial road
-  Proposed collector road
-  Potential local roads
-  Secondary public space network (local)
-  Areas appropriate for medium density residential development



Precinct MU (future mixed use area)

Preferred character/land use outcome

Precinct MU currently comprises of three primarily undeveloped parcels of land in a mixture of Industrial 3 Zone and Township Zone.

No industrial uses have been recorded on this land.

The precinct abuts the Marong Town Centre and land for the proposed Marong Railway Station.

The TSP seeks to establish a mixed use precinct with a combination of medium density housing and office land uses. Medium density housing will need to satisfy requirements R23-R25.

New buildings should be a mixture of semi-detached and apartments/units, while providing an appropriate scale for Marong. New buildings should provide active frontages to streets and public spaces.

Heavy industrial uses and conventional density residential development will not be supported in this precinct.

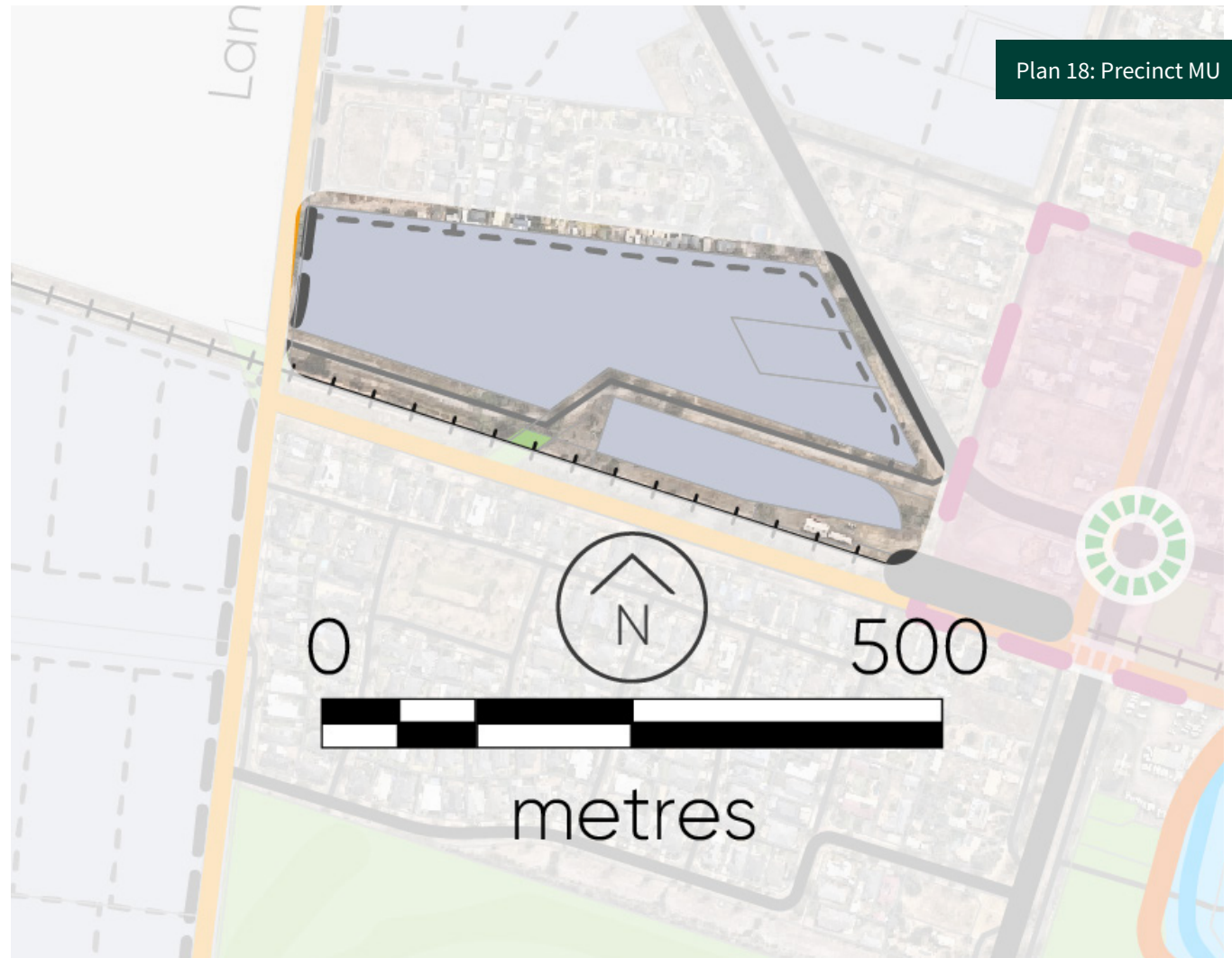
Amendments - Precinct MU

AM9 - Apply the Mixed Use Zone to the land, replacing the Industrial 3 Zone and Township Zone. Include a schedule with specific direction to this precinct, including the preferred character and land use outcomes.

AM10 - Apply the Vegetation Protection Overlay as shown on Plan 8 (see page 29) to roadside vegetation areas.

Requirements - Subdivision and development, Precincts MU

R76 - New residential development must reach a development density of at least 15 dwellings per hectare.



Plan 18: Precinct MU

Legend

- | | |
|--|--|
|  Future residential development areas |  Potential local roads |
|  Existing arterial road |  Rail |
|  Proposed collector road |  Proposed railway station |
|  Existing local roads |  Secondary public space network (local) |

Precinct M (Marong town centre and township core)

Preferred character/land use outcome

Precinct M has historically been the core of the Marong township, where the majority of services and older homes are located. The precinct has a strong diversity of land uses, including retail, office commercial, community services, education, recreation, health services and residential at a variety of densities.

The precinct features a large block grid street network that was included in the original surveyed plan of Marong, which includes a 60 metre wide road reservation where High Street is situated.

The precinct is currently zoned Township Zone for the most part, and others:

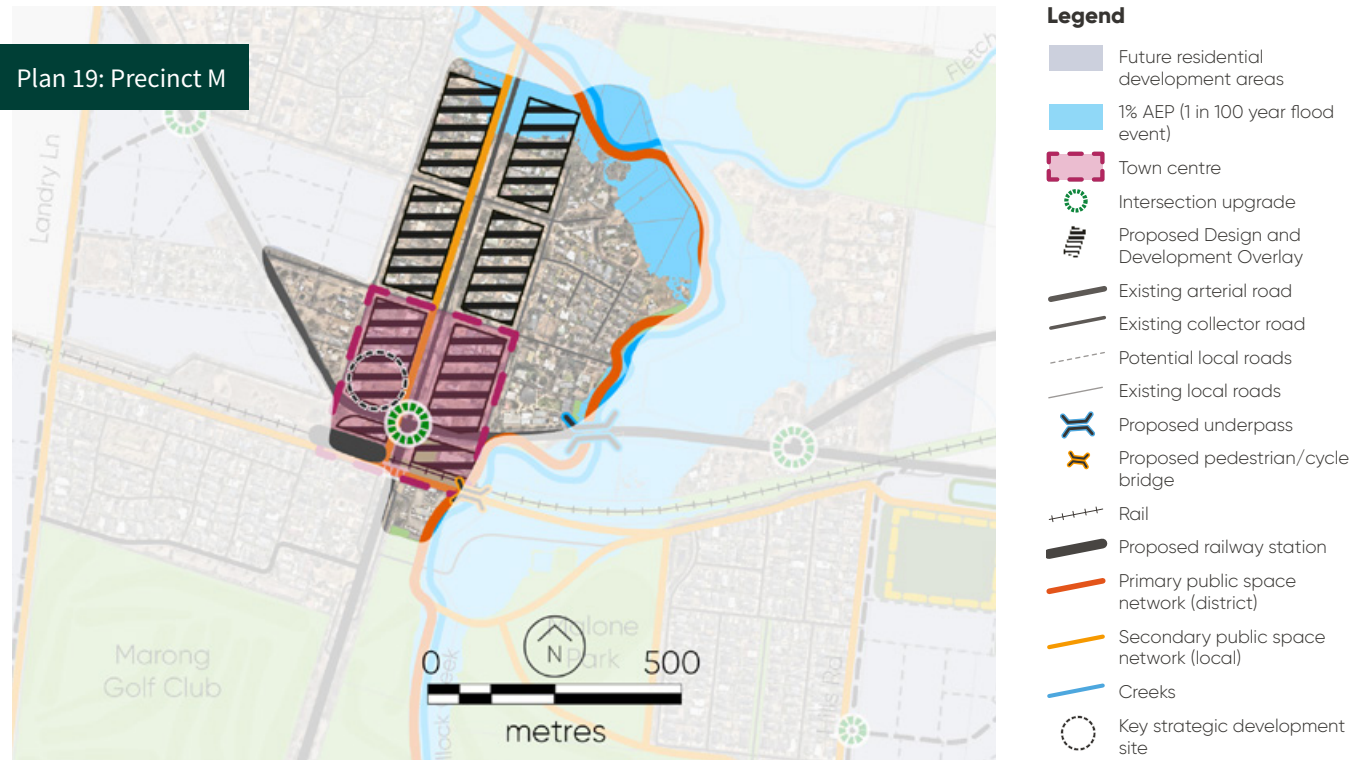
- Commercial 1 Zone on the four corners of the intersection of Adams and High Streets
- Commercial 2 Zone for the commercial uses south of the railway
- Public Use Zone 2 on the Marong Primary School land
- Rural Living Zone on the parcel at 7 Adams Street

The TSP seeks to encourage the diversity of land uses in this precinct, while focusing retail development within a compact town centre, encourage medium density residential development, and retain places of heritage significance.

Land at 36-40 Adams Street and 27-31 High Street is a key strategic development site. Any future development here must provide a supermarket and buildings of scale suitable for such a prominent location - at least two storeys and the integration of landmark architecture at the corner of Adams and High Streets.

Creating a more walkable area should be a focus for this precinct; mid-block connections for pedestrian movement will be encouraged.

Plan 19: Precinct M



There will be a specific emphasis on design for the blocks either side of the High Street corridor. It is important that development fronts the street, provides active frontages and the streetscape is not dominated by fences and garage doors.

Retention of existing native vegetation and further planting will be encouraged to contribute to the existing character. The planting of more palms to create a symmetrical layout around the intersection of Adams and High Streets will also be encouraged.

Amendments - Precinct M

AM11 - Extend the Commercial 1 Zone to provide sufficient land for retail and commercial land uses to be consistent with the Marong Township Retail Land Needs Assessment.

AM12 - Rezone the remainder of the Township Zone to Neighbourhood Residential Zone.

AM13 - Apply the Heritage Overlay to places of heritage significance as shown on Plan 7 (see page 27).

AM14 - Apply the Design and Development Overlay to the blocks either side of High Street to guide specific design outcomes.

AM15 - Remove the Development Plan Overlay as there is no opportunity for larger scale developments that should require a Development Plan prepared.

AM16 - Apply the Land Subject to Inundation Overlay to affected areas on Plan 6 (see page 24).

Precinct LD (future low density residential area)

Preferred character/land use outcome

Precinct LD currently comprises of two primarily undeveloped parcels of land in the Farming Zone.

Given the proximity to an existing low density residential neighbourhood, an opportunity has presented itself to extend the precinct to the east to mirror the style of existing development.

New development must satisfy the requirement for low density residential developments (R22 in the Marong TSP).

New buildings on Fletchers Creek Road should be setback at similar distances to the opposite development.

The creation of new access points from Allies Road will be discouraged.

The planting of native trees will be encouraged as this precinct develops.

Amendments - Precinct LD

AM17 - Apply the Low Density Residential Zone to replace the Farming Zone.

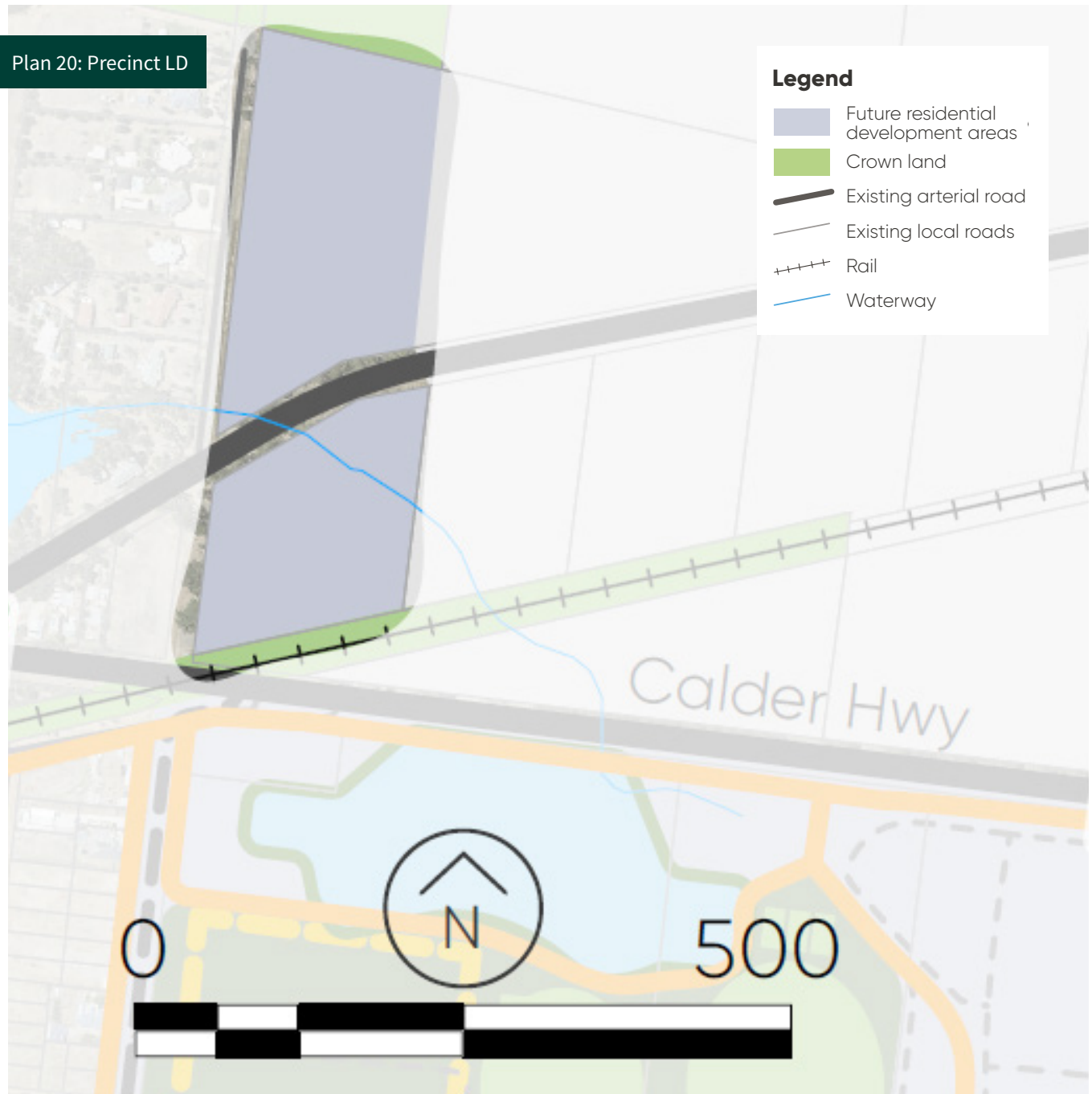
AM18 - Apply the Vegetation Protection Overlay as shown on Plan 8 (see page 29) to roadside vegetation areas.

AM19 - Apply a Design and Development Overlay to the precinct.

Guidelines - Development, Precinct LD

G47 - Dwellings fronting Fletchers Creek Road should be setback between 20-25 metres from the road reserve.

Plan 20: Precinct LD



ELD Precincts (existing low density residential neighbourhoods)

Preferred character/land use outcome

ELD Precincts currently comprise of existing low density residential neighbourhoods, which are currently zoned Township Zone.

There are limited development opportunities in these precincts as much of the land is highly fragmented and in the Bullock Creek floodplain.

The TSP encourages the retention of the existing character of these precincts, including the retention of the large river red gums and focus on the Bullock Creek and Fletchers Creek corridors.

New development must satisfy the requirement for low density residential developments (R22 in the Marong TSP).

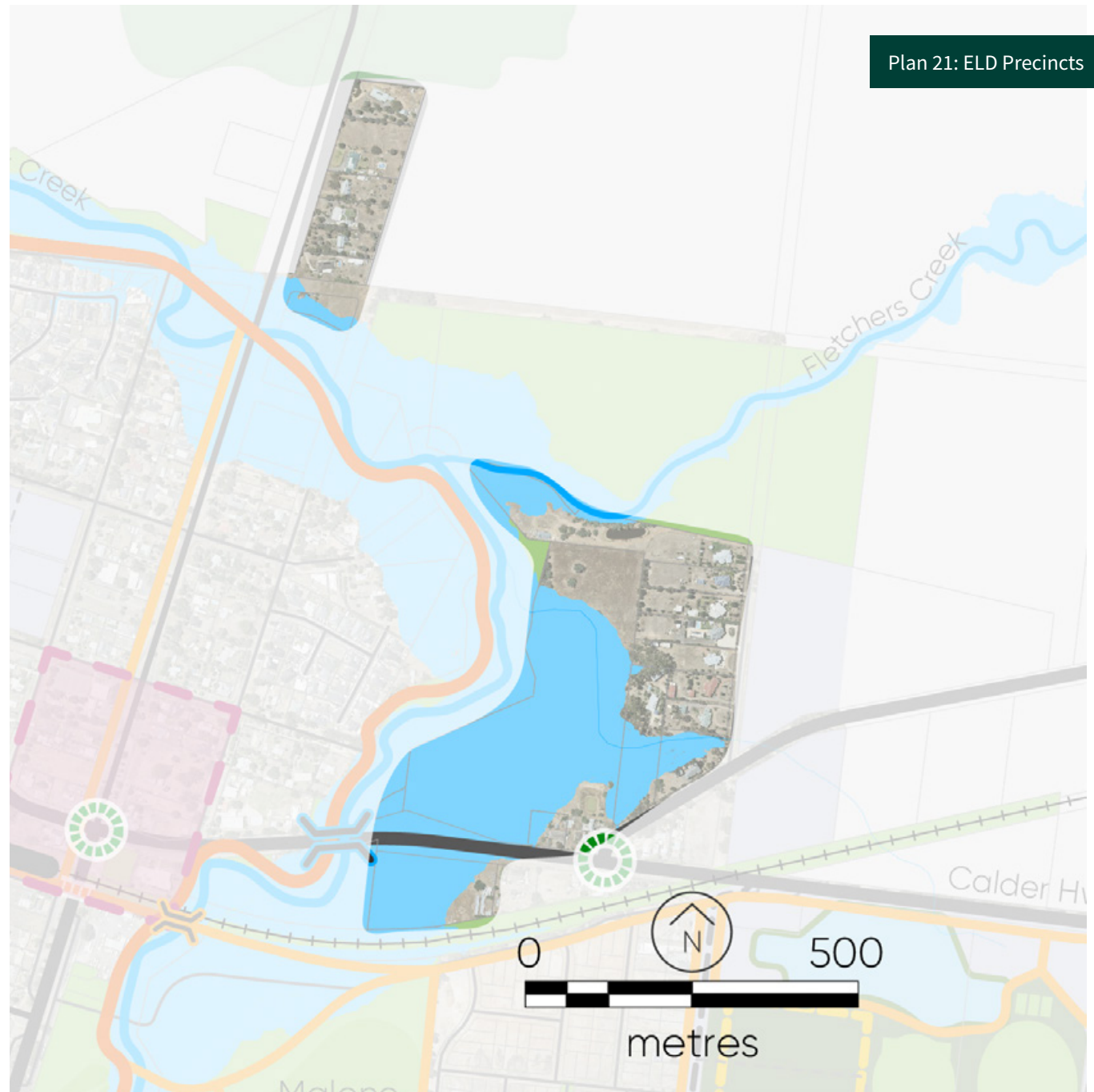
Amendments - ELD Precincts

AM20 - Apply the Low Density Residential Zone, replacing the Township Zone.

AM21 - Apply the Land Subject to Inundation Overlay to affected areas on Plan 6 (see page 24).

Legend

-  1% AEP (1 in 100 year flood event)
-  Crown land
-  Intersection upgrade
-  Existing arterial road
-  Existing local roads
-  Proposed underpass
-  Rail
-  Creeks



Precinct G (township gateway)

Preferred character/land use outcome

Precinct G is a small area comprising of six parcels of land straddling the Calder Highway on the eastern approach of Marong. Parcels north of the highway are currently in the Township Zone, and parcels to the south are in the Rural Living Zone.

The precinct features several existing dwellings and associated buildings, some of which are of local heritage significance. These typically have minimal setbacks to the road reserve.






The TSP encourages the retention of the existing character of this precinct, which includes the large eucalypts that flank the Calder Highway.

The precinct is at risk by being dominated from highway traffic and freight movements using the intersection to access Allies Road. Any future development in this precinct will need to consider a design response to this issue.

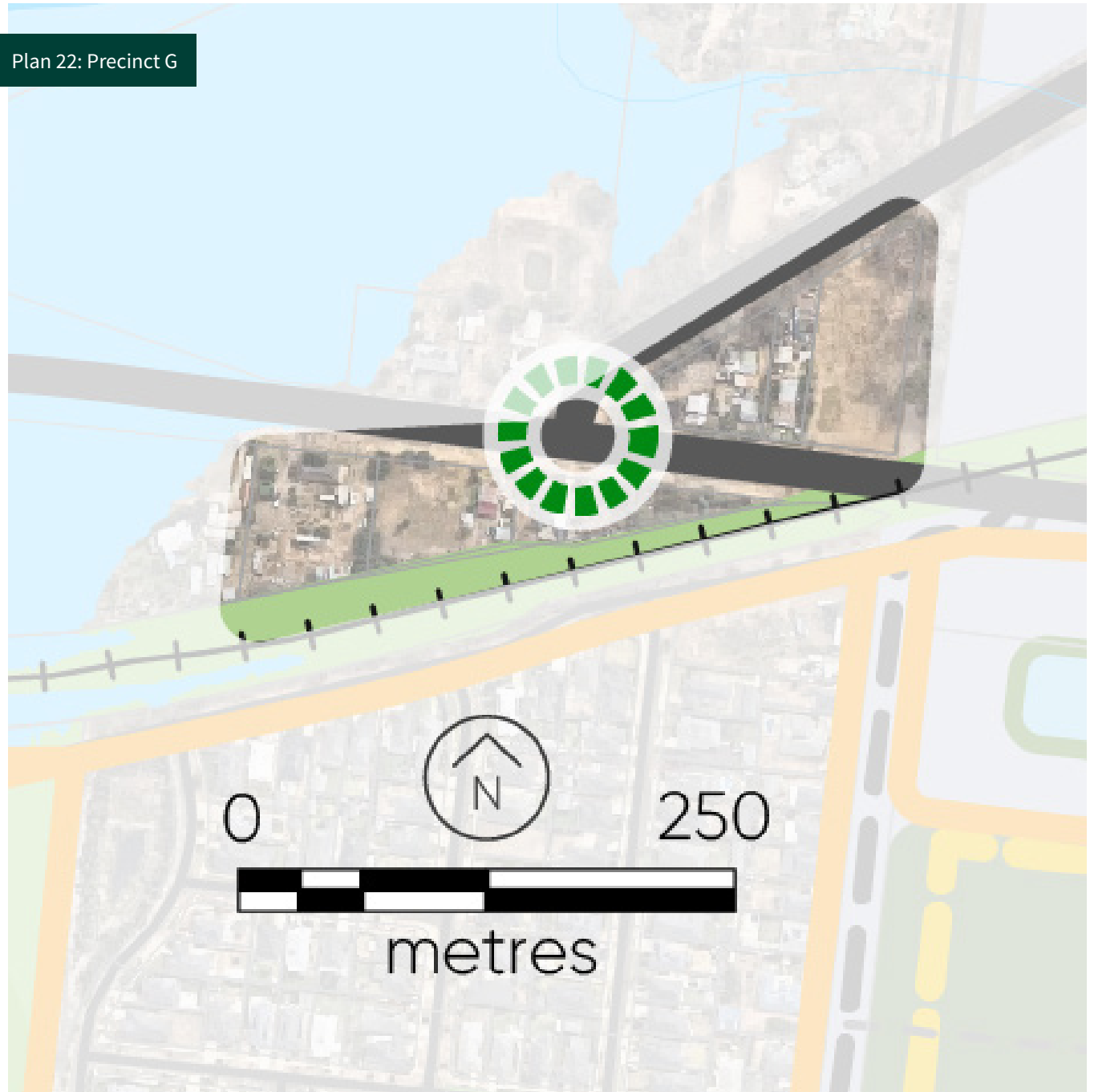
Amendments - Precinct G

AM22 - Apply the Neighbourhood Residential Zone to replace the Township Zone and Rural Living Zone.

Legend

-  1% AEP (1 in 100 year flood event)
-  Crown land
-  Intersection upgrade
-  Existing arterial road
-  Rail

Plan 22: Precinct G



RS Precincts (recently subdivided residential land)

Preferred character/land use outcome

RS Precincts currently comprise of existing and developing conventional density residential neighbourhoods, which are currently zoned Township Zone.

The TSP encourages the retention of the existing character and land uses in these precincts.

Amendments - RS Precincts

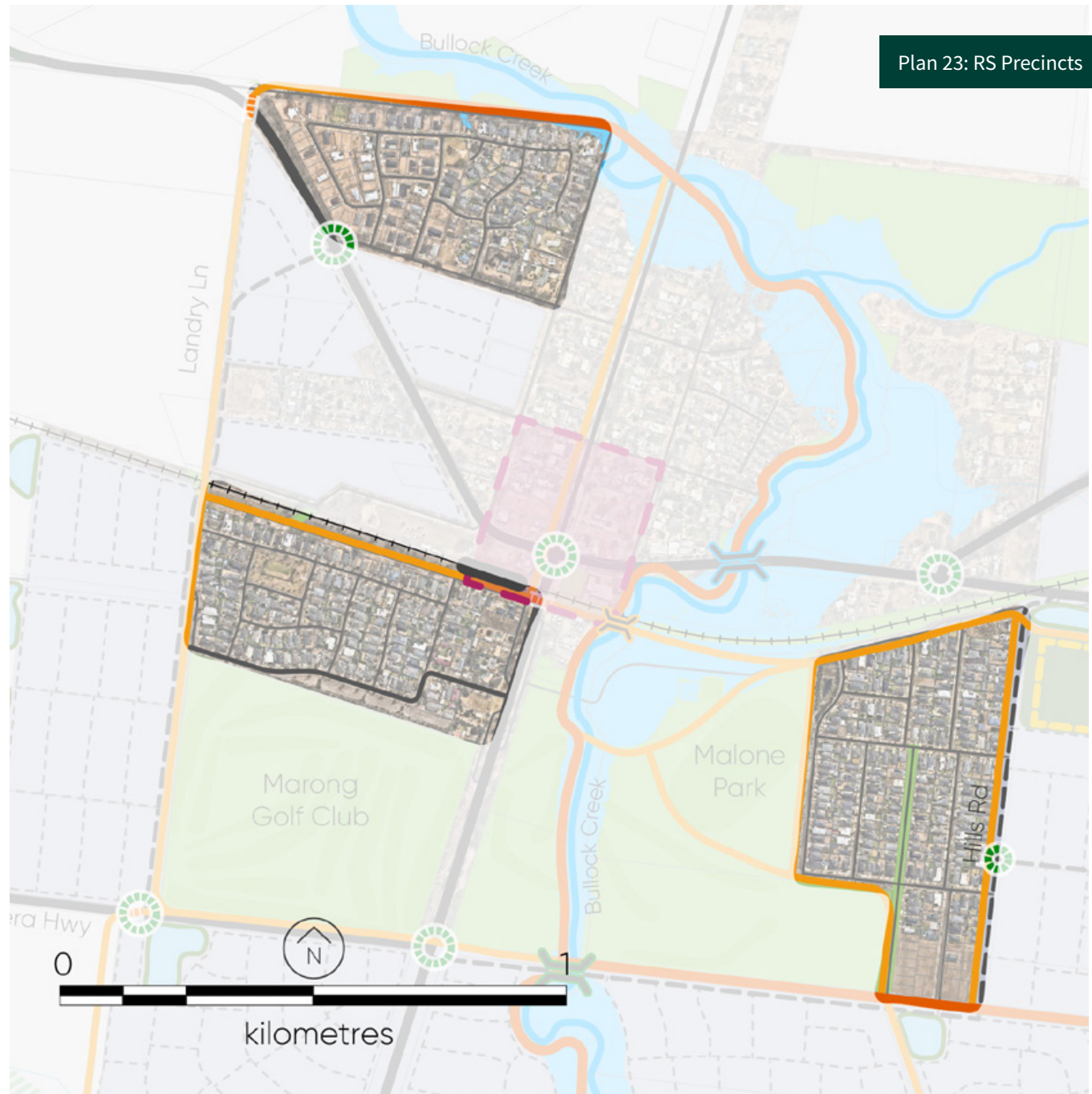
AM23 - Apply the Neighbourhood Residential Zone, replacing the Township Zone.

AM24 - Remove the Development Plan Overlay as relevant Development Plans have been recently approved.

AM25 - Apply the Vegetation Protection Overlay as shown on Plan 8 (see page 29) to vegetation areas.

Legend

- 1% AEP (1 in 100 year flood event)
- Crown land
- Intersection upgrade
- Existing arterial road
- Proposed collector road
- Existing collector road
- Existing local roads
- Rail
- Proposed railway station
- Primary public space network (district)
- Secondary public space network (local)



Bendigo Regional Employment Precinct

Preferred character/land use outcome

Bendigo Regional Employment Precinct is a large area south of Marong situated between the Wimmera and Calder Alternative Highways and adjacent to the proposed Western Bypass Investigation Corridor. The precinct is currently in the Farming Zone.

The precinct features a small number of existing dwellings and associated buildings, and the site of a water tank business in the north-west corner of the precinct.

The precinct has a rural character, comprised of mostly cleared land used for livestock grazing, with three clusters of native vegetation and a north-south spine of remnant roadside vegetation along O'Sullivan's Road.

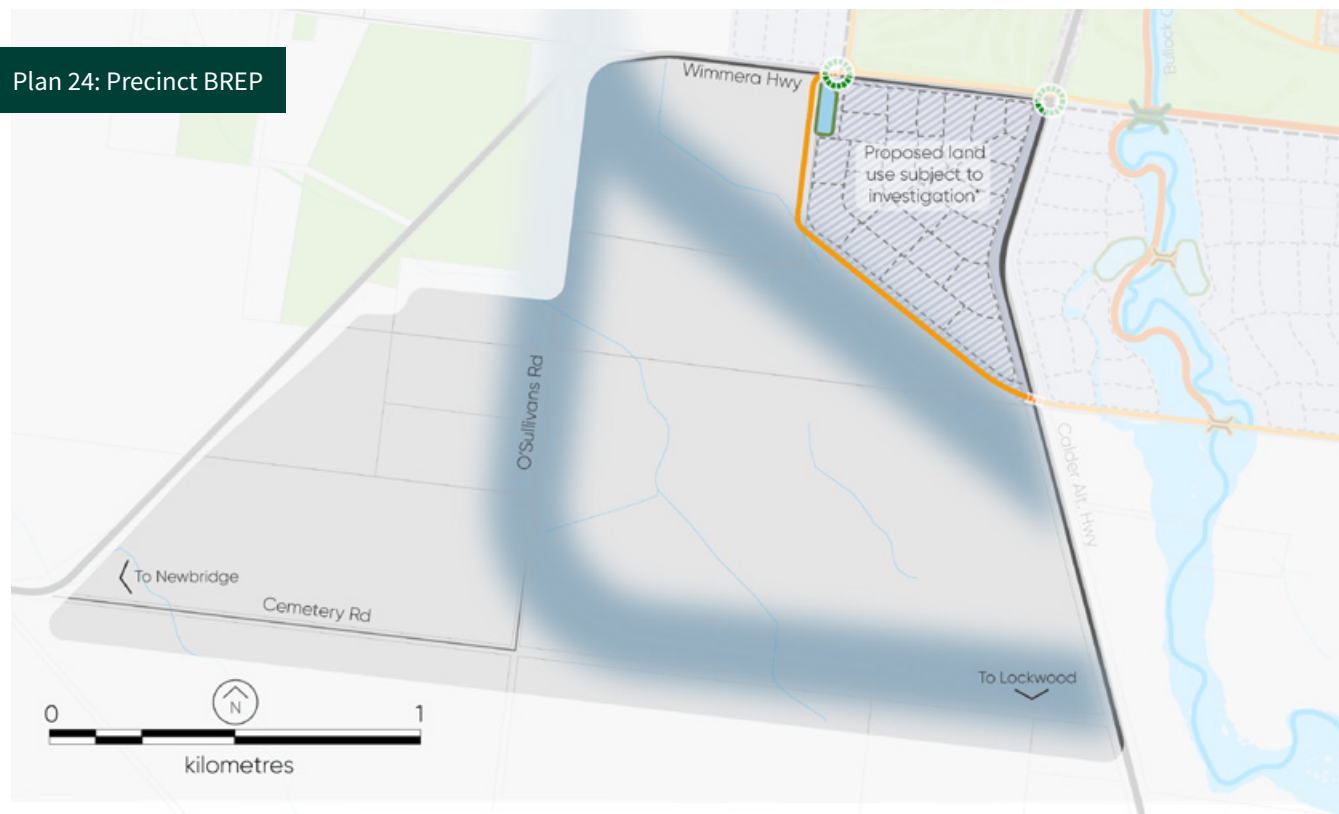
Given its proximity to the Marong township, access to two state highways, limited constraints and land ownership pattern, this precinct should be subject to a detailed investigation regarding its future use as an industrial employment area.

The Precinct could be expected of accommodate between 2,000 – 3,000 new jobs for the Greater Bendigo area and provide local employment opportunities the growing Marong township.

A mix of industrial land uses should be accommodated in this precinct, with a particular opportunity for land uses that require larger parcels of land that cannot be situated elsewhere in the City.

In areas that interface with highways and the Potential Marong Western Freight Corridor, a sensitive design response is needed. The design response should focus on achieving a smooth transition of rural to urban character into the Marong township. Larger setbacks, service roads or internal perimeter roads, and land uses that compliment highway and township activity can assist in achieving this.

Plan 24: Precinct BREP



Amendments - Precinct BREP

AM26 - Any future planning scheme amendments for BREP will be subject to a separate planning process upon further investigation.

AM27 - Apply an appropriate planning overlay to protect existing significant vegetation.

AM28 - Apply the Development Contributions Overlay to facilitate critical infrastructure funding (if applicable).

Legend

- Future development areas
- Land use subject to further investigation of the Bendigo Regional Employment Precinct and the Marong western freight corridor
- Potential Marong western freight corridor
- Crown land
- Intersection upgrade
- Existing arterial road
- Existing local roads
- Waterways
- Proposed retarding basin

Planning zones and overlays

Plans 25-28 (see pages 72-75) outline both the current and proposed planning zones and overlays.

The proposed planning zones and overlays in this section reflect the changes that will be made as part of the first stage of the planning scheme amendment. Further rezoning and the application of overlays will be included in future proponent-led planning scheme amendments.

The following planning zones and overlays are used/proposed in Marong:

Planning zones

C1Z - Commercial 1 Zone

C2Z - Commercial 2 Zone

CDZ - Comprehensive Development Zone

FZ - Farming Zone

IN3Z - Industrial 3 Zone

LDRZ - Low Density Residential Zone

MUZ - Mixed Use Zone

NRZ - Neighbourhood Residential Zone

PCRZ - Public Conservation and Resource Zone

PUZ - Public Use Zone

PPRZ - Public Park and Recreation Zone

RDZ1 - Road Zone 1

RDZ2 - Road Zone 2

RLZ - Rural Living Zone

SUZ - Special Use Zone

TZ - Township Zone

Planning overlays

BMO - Bushfire Management Overlay

DCPO - Development Contributions Plan Overlay

DDO - Design and Development Overlay

DPO - Development Plan Overlay

ESO - Environmental Significance Overlay

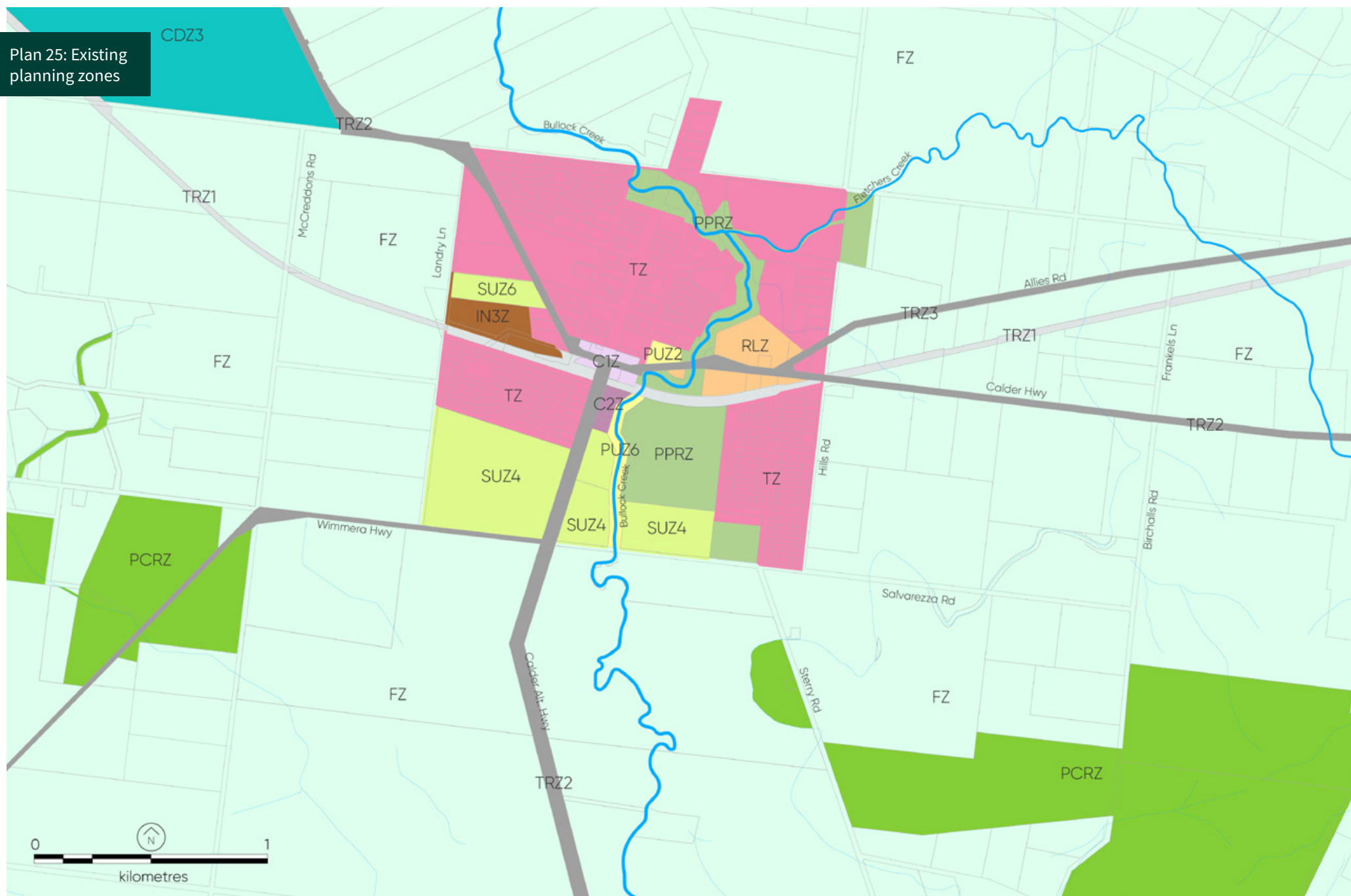
HO - Heritage Overlay

LSIO - Land Subject to Inundation Overlay

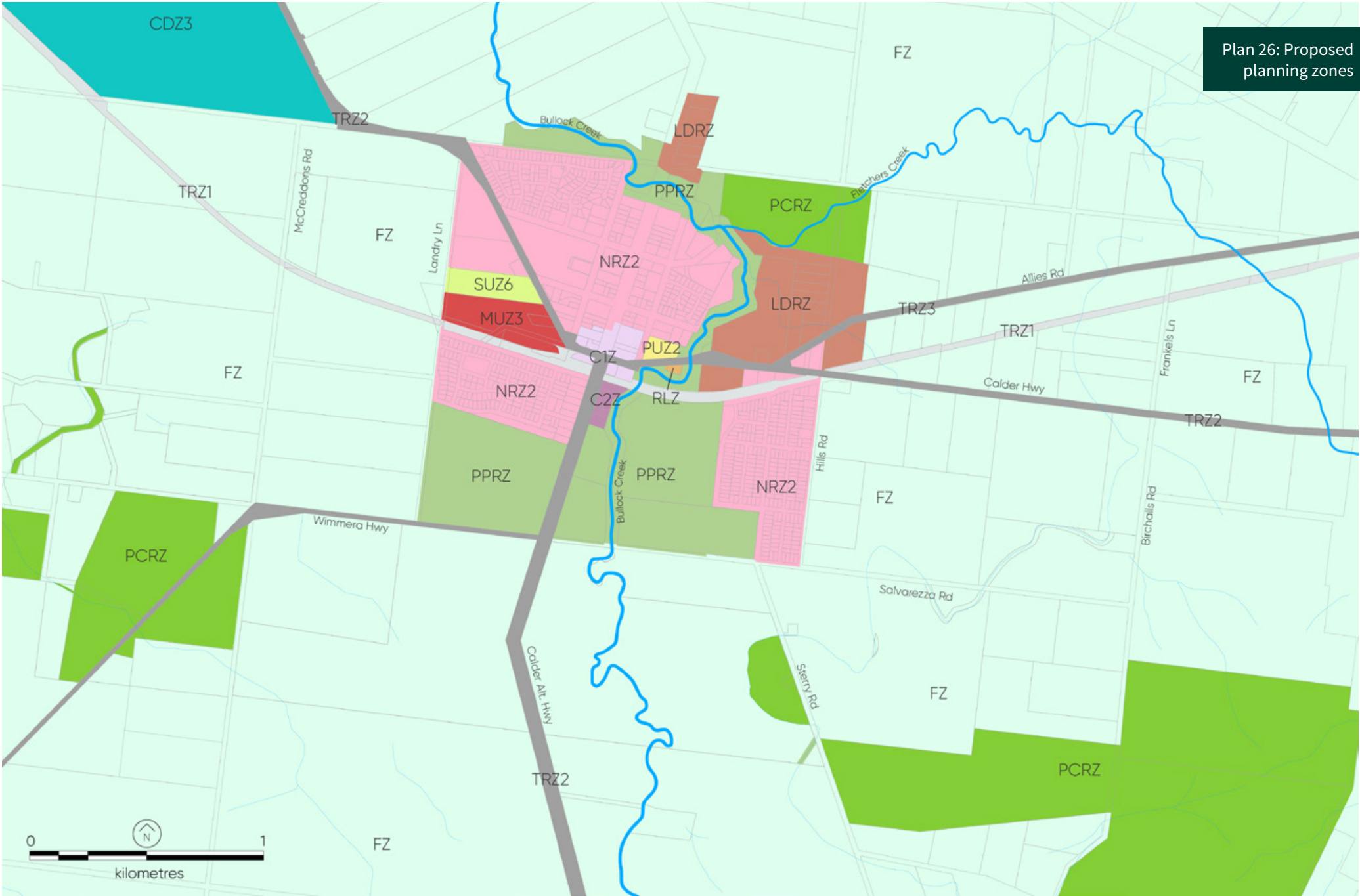
VPO - Vegetation Protection Overlay



Plan 25: Existing
planning zones



Plan 26: Proposed
planning zones



Plan 27: Existing
planning overlays



Plan 28: Proposed
planning overlays



Action Implementation Plan

The following table sets out the Action Implementation Plan for the actions identified in the Township Structure Plan. Each action is categorised by:

- The type of action (in terms of the City of Greater Bendigo's role in facilitating the action)
- The resources required to undertake the action
- The timeframe in which the action should be implemented

A general indication of costs is provided to assist in the allocation of funds.

Type of action	
Council collaboration	Actions where the City works with other stakeholders, such as landholders, proponents and Government agencies
Council advocacy	Actions where the City influences others to act
Resources	
OT	Officer time. The City has existing resources to complete the action within the identified timeframe
\$	Limited. The City can readily fund the action within the identified timeframe
\$\$	Moderate. The City will require and plan for additional funds to complete the action within the identified timeframes
\$\$\$	Significant. Council will require substantial planning to complete actions and likely require other funding sources
Timeframe	
Immediate	Within the next year, most likely as part of implementation of the Township Structure Plan
Short	Within the next 1-2 years
Medium	Within the next 2-5 years
Long	5+ years
Ongoing	Actions that will continue over time

	Action	Type of action	Lead responsibility	Internal partners	External partners	Timeframe	Resources
A1	<p>Prepare and implement an amendment to the Greater Bendigo Planning Scheme which:</p> <ul style="list-style-type: none"> References the Marong Township Structure Plan and outlines the requirements for rezoning and developing future growth areas Applies the Land Subject to Inundation Overlay in accordance with Plan 6 (see page 24) in the TSP and the Bullock Creek Flood Study 2018 Applies the Neighbourhood Residential Zone, replacing the Township Zone in accordance with Plans 17, 19, 22 and 23 (see pages 63, 65, 68 and 69) Applies the Mixed Use Zone, replacing the Township Zone and Industrial 3 Zone in accordance with Plan 18 (see page 64) Applies the Commercial 1 Zone, replacing the Township Zone in accordance with the Marong Township Retail Needs Assessment 2019 and Plan 19 (see page 65) Applies the Design and Development Overlay in accordance with Plans 17 and 19 (see pages 63 and 65) Applies the Heritage Overlay in accordance with Plan 7 (see page 27) to the following properties in Marong: <ul style="list-style-type: none"> 13 Cathcart Street 19 Cathcart Street 25 High Street Bills horse trough, Calder Highway in front of the Marong Family Hotel Adams Street palms, Calder Highway Marong railway trestle bridge, Eaglehawk to Inglewood railway Bullock Creek bridge 12 Leslie Street 82 Goldie Street 1329 Calder Highway 1320 Calder Highway 1318 Calder Highway Former Argyle Inn Stables, 1880 Calder Alternative Highway Marong Removes the Development Plan Overlay in accordance with Plans 19 and 23 (see pages 65 and 69) Applies the Low Density Residential Zone in accordance with Plans 20 and 21 (see pages 66 and 67) 	Council collaboration	Strategic Planning	<ul style="list-style-type: none"> Active and Healthy Lifestyles Community Partnerships Engineering Financial Strategy Parks and Open Spaces Property Services Statutory Planning 	<ul style="list-style-type: none"> Coliban Water Country Fire Authority Department of Education and Training Department of Energy, Environment and Climate Action Department of Transport and Planning Development and Planning Industry Forum Marong Community Action Group North Central Catchment Management Authority Parks Victoria Powercor 	Immediate	OT + \$

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	Action	Type of action	Lead responsibility	Internal partners	External partners	Timeframe	Resources
A2	Finalise Master Plan for Malone Park.	Council collaboration	Active and Healthy Lifestyles	<ul style="list-style-type: none"> Community Partnerships Engineering Parks and Open Spaces 	<ul style="list-style-type: none"> Malone Park User Groups Association Marong Community Action Group North Central Catchment Management Authority 	Short	OT + \$\$
A3	Continue to advocate for the provision of a new education facility in a suitable location.	Council advocacy	Strategic Planning	<ul style="list-style-type: none"> Active and Healthy Lifestyles Community Partnerships Statutory Planning 	<ul style="list-style-type: none"> Department of Education and Training Marong Community Action Group Marong Primary School 	Ongoing	OT
A4	Complete Investigation and planning for Proposed Bendigo Regional Employment Precinct, including: <ul style="list-style-type: none"> Prepare background studies for the Industrial Employment Precinct Investigation Area Continue working with the Department of Transport and Planning to confirm Marong Western Freight Corridor and specific design requirements Prepare a Framework Plan for the Precinct to confirm industrial development opportunities and address areas of potential land use conflict / transition Prepare an infrastructure funding framework, including a Development Contributions Plan (if required) Rezone land for industrial development Facilitate early stages of the Precinct's development via government and private sector partnership(s) 	Council collaboration	Victorian Planning Authority	<ul style="list-style-type: none"> Engineering Statutory Planning 	<ul style="list-style-type: none"> Coliban Water Department of Energy, Environment and Climate Action Department of Jobs, Precincts and Regions Department of Transport and Planning 	Short	OT + \$\$\$
A5	Continue to advocate for quality additional public transport services, including bus and rail.	Council advocacy	Strategic Planning		<ul style="list-style-type: none"> Department of Transport and Planning Marong Community Action Group V/Line VicTrack 	Ongoing	OT

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	Action	Type of action	Lead responsibility	Internal partners	External partners	Timeframe	Resources
A6	Undertake further investigations to apply relevant statutory controls to protect significant trees and landscapes along arterial roads, particularly around key township entrances.	Council collaboration	Parks and Open Spaces	<ul style="list-style-type: none"> Strategic Planning Statutory Planning 	<ul style="list-style-type: none"> Department of Energy, Environment and Climate Action Department of Transport and Planning 	Short	OT + \$
A7	Prepare and implement an Urban Design Framework for the Marong Town Centre including streetscape improvements in High and Adams Streets and a town centre drainage scheme.	Council collaboration	<ul style="list-style-type: none"> Engineering Parks and Open Spaces Strategic Planning 	<ul style="list-style-type: none"> Active and Healthy Lifestyles Strategic Planning Property Services 	<ul style="list-style-type: none"> Bike Bendigo Department of Transport and Planning Marong Community Action Group 	Short-Medium	OT + \$\$\$
A8	Plan and implement a Bullock Creek Improvement Project, which features actions that will: <ul style="list-style-type: none"> Undertake vegetation improvements on the southern section of Bullock Creek to improve water quality and streamside condition Identify and protect Aboriginal cultural sensitive places Provide opportunities to share Dja Dja Wurrung culture Investigate opportunities to remove or relocate Phoenix canariensis (palms) Deliver a Bullock Creek trail, including an underpass of the Calder Highway 	Council collaboration	Project team consisting of: <ul style="list-style-type: none"> Active and Healthy Lifestyles Engineering Parks and Open Spaces 	<ul style="list-style-type: none"> Strategic Planning 	<ul style="list-style-type: none"> Bike Bendigo Department of Energy, Environment and Climate Action Department of Transport and Planning Dja Dja Wurrung Clans Aboriginal Corporation Malone Park User Groups Association, including Marong Golf Club Marong Community Action Group North Central Catchment Management Authority Parks Victoria VicTrack 	Medium-Long	OT + \$\$\$
A9	Plan and construct a Marong to Bendigo (via Maiden Gully) shared path connection to be linked in with the wider regional network of paths.	Council collaboration	<ul style="list-style-type: none"> Active and Healthy Lifestyles (planning) Engineering (construction) 	<ul style="list-style-type: none"> Parks and Open Spaces Strategic Planning 	<ul style="list-style-type: none"> Bike Bendigo Department of Energy, Environment and Climate Action Department of Transport and Planning Dja Dja Wurrung Clans Aboriginal Corporation Marong Community Action Group North Central Catchment Management Authority 	Medium-Long	OT+\$\$\$

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	Action	Type of action	Lead responsibility	Internal partners	External partners	Timeframe	Resources
A10	Acquire 7 Adams Street and consolidate the land with the Bullock Creek Reserve.	Council collaboration	Property	<ul style="list-style-type: none"> • Active and Healthy Lifestyles • Parks and Open Spaces • Strategic Planning • Statutory Planning 	<ul style="list-style-type: none"> • Department of Energy, Environment and Climate Action • Dja Dja Wurrung Clans Aboriginal Corporation • Department of Transport and Planning • Marong Community Action Group • North Central Catchment Management Authority 	Long	OT + \$\$
A11	Apply the Vegetation Protection Overlay in accordance with Plan 8 (see page 29).	Council collaboration	Strategic Planning	Engineering	<ul style="list-style-type: none"> • DEECA • DTP 	Short	OT + \$
A12	<p>Continue to monitor and consider whether the boundaries of Precinct 1 can be extended to include the balance of parcels 1A, 1B, 1C, 1D (to McCreddons Road) having regard to resolution of:</p> <ul style="list-style-type: none"> • The alignment of the potential Marong Western Freight Investigation Corridor and interface with the Bendigo Regional Employment Precinct • The completion of an odour risk assessment to the satisfaction of Council and the EPA, which Assess the operations of the broiler farm at 74 Barnes Road, Marong and which demonstrates there is additional land suitable for residential development • Infrastructure and servicing constraints, bushfire management and drainage 	Council collaboration	Strategic Planning	Engineering	<ul style="list-style-type: none"> • Coliban Water • CFA • DEECA • DTP • NCCMA • Powercor 	Ongoing	OT + \$
A13	<p>Continue to monitor and consider whether the boundaries of Precinct 4 can be extended to include the balance of parcel 4I (to Salvarezza Road and Birchalls Road) and Precincts 4K and 4J (to Birchalls Road) having regard to resolution of:</p> <ul style="list-style-type: none"> • Biodiversity values within the property and abutting road reserves • Infrastructure and servicing constraints, bushfire management and drainage 	Council collaboration	Strategic Planning	Engineering	<ul style="list-style-type: none"> • Coliban Water • CFA • DEECA • DTP • NCCMA • Powercor 	Ongoing	OT + \$

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	Action	Type of action	Lead responsibility	Internal partners	External partners	Timeframe	Resources
A14	<p>Continue to monitor land supply and take up of residential land within Marong, including within Precinct 1-4 of the TSP. Any additional future residential development areas considered for growth beyond Precincts 1-4 will prioritise the land to the immediate west of the existing township, south of Calder Highway and east of McCreddons Road, and must demonstrate:</p> <ul style="list-style-type: none"> • Sufficient demand for additional residential development in Marong • The suitability of the land for development, including the resolution of infrastructure and servicing constraints, bushfire management and drainage • That the development of the land would not conflict with a potential Marong Western Freight Investigation Corridor, the operations of the broiler farm at 74 Barnes Road, Marong, the Marong Business Park, the Calder Highway and the Eaglehawk - Inglewood railway line 	Council collaboration	Strategic Planning	Engineering	<ul style="list-style-type: none"> • EPA • Coliban Water • CFA • DEECA • DTP • NCCMA • Powercor 	Long	OT + \$

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MARONG
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