



City of Glen Eira Open Space Strategy Refresh 2020

Prepared by:



in association with



Adopted by Council 9 June 2020

Acknowledgements

Acknowledgement of country

Glen Eira City Council acknowledges the Boon Wurrung people of the Kulin Nation as the Traditional Owners of the area now known as Glen Eira.

We respect and recognise Aboriginal and Torres Strait Islander people's history and heritage and their continuing spiritual connection to the land and seas. We value their living culture and practices and their right to self-determination

This Strategy has been prepared for Glen Eira City Council by Thompson Berrill Landscape Design Pty Ltd, in association with Environment & Land Management Pty Ltd and with guidance from the Council Project Working Group led by the Recreation and Open space Team.

Table of Contents

	Page #
Glossary	
Executive summary	
1 INTRODUCTION	1
1.1 The importance of open space in the City of Glen Eira	1
1.2 Strategy scope and purpose	3
1.3 Definition of open space	4
1.3.1 Introduction and background	
1.3.2 Definition of open space for this Strategy	
1.3.3 Ancillary open space	
1.3.4 Publicly accessible private open space	
1.4 Strategy vision, principles and aims	6
1.4.1 Council and Community Plan Vision	
1.4.2 Strategy principles and aims	
2. EXISTING SITUATION ANALYSIS	7
2.1 Strategic context	7
2.1.1 Relationship of the Strategy to Victorian and local government policies and strategies	
2.1.2 Relevant Victorian government policies and strategies	
2.1.3 Glen Eira Planning Scheme	
2.1.4 Relevant council policies and strategies	
2.2 Existing open space network	17
2.2.1 Overview	
2.2.2 Topography and natural values	
2.3 Health and wellbeing	21
2.3.1 Overview	
2.3.2 Structured sport and recreation	
2.3.3 Unstructured recreation	
2.3.4 Informal use	
2.4 Community values of the open space network	23
2.5 Cultural heritage values	25
2.5.1 Overview	
2.5.2 Existing heritage planning controls	

	Page #
3. OPEN SPACE FRAMEWORK	29
3.1 Standards for the provision of open space	29
3.1.1 Overview	
3.1.2 Plan Melbourne 2017-2050	
3.1.3 Glen Eira Planning Scheme	
3.1.4 International examples of open space frameworks	
3.1.5 Conclusions	
3.2 Open space use hierarchy for Glen Eira	33
3.2.1 Overview	
3.2.2 Analysis of the use hierarchy	
3.3 Character classification of open space	39
4. KEY INFLUENCES ON OPEN SPACE PLANNING IN THE FUTURE	43
4.1 Quantity of open space	43
4.1.1 Quantity of open space within the municipality	
4.1.2 Quantity of open space compared with other municipalities	
4.2 Distribution of open space	51
4.2.1 Overview	
4.2.2 Gap analysis	
4.2.3 Municipal open space distribution	
4.2.4 Neighbourhood open space distribution	
4.2.5 Local and Small Local open space distribution	
4.3 Quality of open space	58
4.3.1 Health and wellbeing	
4.3.2 Natural values and features	
4.3.3 Sustainability	
4.3.4 Cultural heritage values	
4.4 Future growth planning for Glen Eira	66
4.4.1 Summary of forecast population change	
4.4.2 Strategic framework guiding future change	
4.4.3 Future Strategic Sites	
4.4.4 Student population	
4.4.5 Minimal change areas	
4.5 Open space contributions	78
4.5.1 Contributions received	
4.5.2 Review of open space contributions program	

	Page #
5. MUNICIPAL-WIDE RECOMMENDATIONS	81
5.1 The role and purpose of the different types of open space	81
5.1.1 Facilities and features for different types of open space	
5.1.2 Provision of additional types of open space	
5.2 Quality of existing and new open space	85
5.2.1 Overview	
5.2.2 Health and wellbeing	
5.2.3 Climate change	
5.2.4 Natural biodiversity values	
5.2.5 Cultural heritage	
5.2.6 Community involvement in open space	
5.2.7 Other agency works in open space	
5.3 Provision of additional open space	92
5.3.1 Assessment criteria for suitability of land as public open space	
5.3.2 Sub-precinct analysis for additional open space	
5.3.3 Methods to acquire/secure additional open space	
5.4 Changes to forecast population and development over the strategy timeframe	97
5.4.1 Changes to forecast growth	
5.4.2 Potential disposal of open space	
5.5 Guidelines for development interface with open space	99
5.5.1 Guidelines for development adjoining or nearby public open space	
5.6 Revised open space contribution rate	102
6. PRECINCT ANALYSIS AND RECOMMENDATIONS	105
6.1 Overview	105
6.2 Bentleigh	107
6.2.1 Existing conditions	
6.2.2 Community characteristics for Bentleigh	
6.2.3 Future change in Bentleigh	
6.2.4 Open space needs assessment for Bentleigh	
6.2.5 Recommendations for Bentleigh	
6.3 Bentleigh East	125
6.3.1 Existing conditions	
6.3.2 Community characteristics for Bentleigh East	
6.3.3 Future change in Bentleigh East	
6.3.4 Open space needs assessment for Bentleigh East	
6.3.5 Recommendations for Bentleigh East	

	Page #
6.4 Carnegie	145
6.4.1 Existing conditions	
6.4.2 Community characteristics for Carnegie	
6.4.3 Future change in Carnegie	
6.4.4 Open space needs assessment for Carnegie	
6.4.5 Recommendations for Carnegie	
6.5 Caulfield	163
6.5.1 Existing conditions	
6.5.2 Community characteristics for Caulfield	
6.5.3 Future change in Caulfield	
6.5.4 Open space needs assessment for Caulfield	
6.5.5 Recommendations for Caulfield	
6.6 Caulfield East	175
6.6.1 Existing conditions	
6.6.2 Community characteristics for Caulfield East	
6.6.3 Future change in Caulfield East	
6.6.4 Open space needs assessment for Caulfield East	
6.6.5 Recommendations for Caulfield East	
6.7 Caulfield North	191
6.7.1 Existing conditions	
6.7.2 Community characteristics for Caulfield North	
6.7.3 Future change in Caulfield North	
6.7.4 Gaps in open space distribution in Caulfield North	
6.7.5 Recommendations for Caulfield North	
6.8 Caulfield South	205
6.8.1 Existing conditions	
6.8.2 Community characteristics for Caulfield South	
6.8.3 Future change in Caulfield South	
6.8.4 Open space needs assessment for Caulfield South	
6.8.5 Recommendations for Caulfield South	
6.9 Elsternwick and Gardenvale	219
6.9.1 Existing conditions	
6.9.2 Community characteristics for Elsternwick and Gardenvale	
6.9.3 Future change in Elsternwick and Gardenvale	
6.9.4 Open space needs assessment for Elsternwick and Gardenvale	
6.9.5 Recommendations for Elsternwick and Gardenvale	
6.10 Glen Huntly	239
6.10.1 Existing conditions	
6.10.2 Community characteristics for Glen Huntly	
6.10.3 Future change in Glen Huntly	
6.10.4 Open space needs assessment for Glen Huntly	
6.10.5 Recommendations for Glen Huntly	

	Page #
6.11 McKinnon	253
6.11.1 Existing conditions	
6.11.2 Community characteristics for McKinnon	
6.11.3 Future change in McKinnon	
6.11.4 Open space needs assessment for McKinnon	
6.11.5 Recommendations for McKinnon	
6.12 Murrumbeena	267
6.12.1 Existing conditions	
6.12.2 Community characteristics for Murrumbeena	
6.12.3 Future change in Murrumbeena	
6.12.4 Open space needs assessment for Murrumbeena	
6.12.5 Recommendations for Murrumbeena	
6.13 Ormond	283
6.13.1 Existing conditions	
6.13.2 Community characteristics for Ormond	
6.13.3 Future change in Ormond	
6.13.4 Open space needs assessment for Ormond	
6.13.5 Recommendations for Ormond	
6.14 St Kilda East	297
6.14.1 Existing conditions	
6.14.2 Community characteristics for St Kilda East	
6.14.3 Future change in St Kilda East	
6.14.4 Open space needs assessment for St Kilda East	
6.14.5 Recommendations for St Kilda East	
7. OPEN SPACE DESIGN AND MANAGEMENT GUIDELINES	307
7.1 Environmentally sustainable design	307
7.1.1 Sustainable water use in open space	
7.1.2 Vegetation selection	
7.1.3 Infrastructure material use and design	
7.1.4 Reduce reliance on vehicle use to access open space	
7.2 Natural values and features	311
7.2.1 Large trees in open space	
7.2.2 New indigenous planting to enhance biodiversity values	
7.2.3 Open space in and around higher density precincts	
7.3 Accessibility	314
7.3.1 All-ability/universal access	
7.3.2 Diversity, type and condition of facilities	
7.3.3 Personal safety	
7.4 Unstructured recreational infrastructure in open space	316
7.4.1 Shared trails in open space	
7.4.2 Paths in open space	

7.4.3	End of trip bicycle parking	
7.4.4	Car parking	
7.4.5	Seats	
7.4.6	Picnic shelters and barbecue facilities	
7.4.7	Playgrounds	
7.4.8	Multi-purpose courts and other minor recreational infrastructure	
7.4.9	Lighting in open space	
7.4.10	Rubbish bins	
7.4.11	Minor park infrastructure	
7.4.12	Interpretive and information signage about open space	
7.4.13	Management of dogs in open space	
7.5	Structured Community sport and recreational use of open space	327
7.5.1	Upgrade and replacement of existing structured sporting facilities	
7.5.2	New structured sporting facilities	
7.5.3	Non-open space dependent recreation and leisure facilities already located in open space	
7.5.4	Integration of informal recreational facilities into sporting reserves	
7.5.5	Sports fields and synthetic turf	
7.5.6	Advertising signage and permanent scoreboards in open space	
7.6	Buildings in open space	332
7.6.1	New non-open space dependent buildings	
7.6.2	Public toilets	
7.7	Cultural heritage values, public art and memorials	335
7.7.1	Cultural heritage values	
7.7.2	Public art	
7.7.3	Memorials and monuments in open space	
7.8	Family gatherings and functions in open space	337
7.8.1	Community festivals and family gatherings in open space	
7.8.2	Commercial or private events and functions in open space	
7.8.3	Commercial or private use of facilities in open space	
7.9	Design and management plans for open space	340
7.9.1	Overview of different plans to guide future works	
7.9.2	Masterplans	
7.9.3	Landscape design plans	
7.9.4	Conservation management plans	
7.10	Community involvement in open space	344
7.10.1	Community gardens	
7.11	Open space maintenance	346
7.11.1	Vegetation maintenance and management	
7.11.2	Public toilets	
7.11.3	Litter	
7.11.4	Open grassed areas	
7.11.5	Paths	

	Page #
8. IMPLEMENTATION	349
8.1 Responsibilities and actions	349
8.2 Funding	352
8.2.1 Capital works	
8.2.2 Land acquisition	
8.3 Open space contributions to implement the Strategy	353
8.3.1 Value of contributions	
8.3.2 Expenditure of contributions	
8.4 Priorities	354
8.5 Monitoring	355
REFERENCES	357
EXISTING OPEN SPACE IN GLEN EIRA Alphabetical listing	359
GLEN EIRA OPEN SPACE STRATEGY DRAWINGS:	363
The following drawings form part of the Strategy and are referred to throughout the document. They are as follows:	
GEOSS-01 Existing open space in Glen Eira	
GEOSS-02 Open Space Hierarchy	
GEOSS-03 Gap Analysis	
GEOSS-04 Future change	
APPENDICES	
A	Community Consultation Report for the City of Glen Eira Open Space Strategy May 2013

Glossary

The abbreviations and terms are listed in alphabetical order

Abbreviation/Term	Definition in this Strategy
AAV	Aboriginal Affairs Victoria
ABS	Australian Bureau of Statistics
Activity Centre	A physical urban location that provides a mix of land use activities including goods, services and facilities within walkable distances of local communities and accessible public transport modes.
Ancillary open space	Public land that contributes to open space, is often perceived as open space, but is not primarily reserved for recreation and/or nature conservation purposes and is therefore not included in the definition of public open space used in this Strategy. Refer to Section 1.3 for a further description of this term.
Biodiversity	Biodiversity (biological diversity) is the variability among living organisms from all sources (including terrestrial, aquatic, marine and other ecosystems and the ecological complexes of which they are part), at all levels of organisation, including genetic diversity, species diversity and ecosystem diversity.
CPTED	Crime Prevention Through Environmental Design (CPTED) is a crime prevention strategy that focuses on reducing the incidence and fear of crime in planning and design of cities and neighbourhoods.
Cultural heritage	Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups. <i>Source: Definition from The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 1999 edition</i>
Encumbered open space	Land that can be used as open space, but this use is restricted by other values or purposes such as presence of underground services water bodies, flood management etc.
ESD	Ecologically Sustainable Development
Indigenous vegetation	For the purpose of this Strategy, “Indigenous plants” means plants that are of species that occurred in the Sandbelt Region of South-eastern Melbourne*. It does not include hybrids. * The Sandbelt Region extends from the Yarra River to Frankston between Port Phillip Bay and the Princes Highway (which becomes South Gippsland Highway).
Informal use	This refers to the casual use of open space including sitting in the open space, picnicking, meeting people, reading a book, enjoying the ambience, relaxing etc.
MAC	Major Activity Centre

Abbreviation/Term	Definition in this Strategy
MSS	Municipal Strategic Statement, which is part of the Planning Scheme's Local Planning Policy Framework, contains strategic planning, land-use and development objectives, strategies and actions for the relevant planning authority.
MW	Melbourne Water
NC	Neighbourhood Centre
Public realm	Public realm is a term referring to all public open space, along with other publicly owned land between buildings including streets. Refer to Section 1.3 for a further description of this term.
Structured sport and recreation	The activity is organised by a club, association, school or community group and participation is by becoming a member of the club or on a fee-paying basis.
Universal Design	Universal Design is defined as the designing of environments for people of all ages and abilities.
Unstructured recreation	The activity is not organised by a club or other group, where participation is initiated by individuals.
Urban heat island effect (UHI)	Is the cumulative effect of modifying the natural environment through urbanisation including the covering of the soil surface, causing a rise in temperature of any urban area. This results in a defined, distinct "warm island" among the "cool sea" of lower temperatures of the surrounding nearby natural landscape. The urban surfaces are prone to store and release large quantities of heat.
VEAC	Victorian Environmental Assessment Council
VPA	Victorian Planning Authority
WHO	World Health Organization
WSUD	Water sensitive urban design



Executive Summary

Strategy scope and purpose

The Open Space Strategy guides the future planning, provision, design and management of public open space in Glen Eira for the next 15 years. This includes understanding and addressing the open space needs of the existing community and planning ahead to anticipate and meet the open space needs of the forecast population within the municipality.

Part of the scope for the Strategy is to provide an integrated framework that supports the justification for a fair and equitable open space contribution program. This is so that Council can incorporate the program, with appropriate policy directions, into the Glen Eira Planning Scheme. The Strategy includes specific actions with broad opinions of costs allocated to them in order to justify the underlying contribution rate. This also provides direction for Council and the community on the range of open space projects to be undertaken in the municipality during the 15 year open space program.

Definition of public open space

Open space for the purposes of this Strategy is the publicly owned land that is currently set aside, or has the potential in the future to be set aside primarily for recreation, nature conservation and passive outdoor enjoyment. This includes parks, reserves, gardens, larger urban and civic spaces and forecourts.

Key facts and values of open space in Glen Eira

Key facts include:

- 72 open space reserves with the most popular open space being Caulfield Park, followed by Princes Park and Packer Park.
- 170.89 hectares of open space of which more than 80 per cent forms the major Municipal open spaces.
- 4.4 per cent of the total municipal area is open space (excluding Caulfield Racecourse Reserve)
- Walking is the most popular reason to visit open space and other reasons include dog walking, exercising, playgrounds and play, relax and meeting people and friends.

Key values include:

- Trees are the most highly valued feature of open space as identified by the community in the open space survey.
- The quality of the existing Municipal open spaces, including their high standard of sport and recreation facilities, particularly given the high levels of use and demand for these facilities in Glen Eira.
- Visiting open space to relax and unwind is highly valued along with its contribution to community health and wellbeing.
- The choice and variety of open space, however the community identify they would like to see open space added to the network, particularly as urban densities increase.
- The excellent maintenance levels in open space.
- The high level of satisfaction with the play facilities in open space.

Key issues associated with open space in Glen Eira

The key issues include:

- The lack of open space, particularly the gaps in provision of open space, meaning some people are not within reasonable walking distance of any open space.
- The impact of the forecast increase in urban densities and population growth on liveability and access to open space.
- The need to ensure an equitable balance between sporting, unstructured recreation and informal use and values of open space.
- The need to care for, protect and carefully manage trees, particularly mature trees in open space.
- The lack of diversity of open space character and facilities and the need to adapt to changing needs.
- The need to improve sustainable design and management practices in open space, including sustainable water use.
- Improving accessibility for all to open space, including different cultural groups, diverse age ranges and people with all levels of ability.

Key principles, aims and recommendations

Principle	Aim	Recommendation
Equitable	Located within easy walking distance of the Glen Eira community.	<ul style="list-style-type: none"> • Provide additional Local and Small Local open space in locations where open space is not within reasonable walking distance. These areas have been identified through a gap analysis process included in this Strategy. Refer to Section 6 for locations where additional spaces are recommended. • The Strategy includes the analysis and planning for the open space needs of the forecast population as well as the existing population. An open space contribution rate of 8.3 per cent is included so that the forecast population will contribute fairly to the open space program.

Principle	Aim	Recommendation
Accessible	Designed to be accessible for people of all ages, abilities, health, gender and cultural background	<ul style="list-style-type: none"> • Incorporate all-ability access as part of the new open space design and upgrades to existing open space where feasible. Refer to the Design and Management Guidelines in Section 7.3. • Increase the diversity of facilities and character where appropriate in selected open spaces that are currently not well used to broaden their appeal and use. Refer to Section 6 and Section 7.4 for design guidelines. • Achieve a balance between facility provision and programming for structured sport and the unstructured recreational and informal use of the open space for the whole community.
Adaptable	Able to be added to and change over time to adapt to changing recreational, social and environmental conditions.	<ul style="list-style-type: none"> • Update Masterplans that are more than 10 years old to reflect contemporary uses and values. Refer to Section 6 for specific recommendations • The design and management guidelines in Section 7 encourage incorporating adaptability principles in new facilities and upgrades of existing sport and recreation facilities, refer to Sections 7.5 and 7.6.
Networked	A system of spaces that in combination meet the recreational, environmental and social needs of Glen Eira.	<ul style="list-style-type: none"> • The Strategy recommends adding open space to the network to address the gap areas in open space provision. The new open spaces will be designed to complement the other open space in the precinct so that choice and variety is offered in the network. Refer to Section 6 for precinct recommendations, and Section 7.4 and 7.9 regarding future design of open space. • Supports the continued implementation of the <i>Integrated Transport Strategy 2018-2031</i>. • Identifies improvements to links between open spaces.
Diverse	Providing a diversity of character and sizes of open space to maximise accessibility to the community and contribute to sustainability.	<ul style="list-style-type: none"> • Increase the diversity of facilities and character types of open space. • Incorporate green infrastructure including large canopy shade trees, garden beds and grassed areas into future open space designs for higher density precincts including the Major Activity Centres, including the Urban Renewal Areas, and the Neighbourhood Activity Centres. This is to assist with passive cooling and improve community health and wellbeing. • Continue to provide facilities that encourage social connectedness in open space, including picnic and barbecue facilities, seating and designs that encourage people to spend time in space. • Improve biodiversity values to strengthen existing remnant indigenous vegetation and values. • Investigate and identify suitable locations for community gardens.

Principle	Aim	Recommendation
Sustainable	Maximise opportunities to mitigate climate change, implement sustainable design and management practices and, where feasible, achieve improved ecological outcomes.	<ul style="list-style-type: none"> • Increase the provision of well-distributed, green open spaces, particularly where higher density living is proposed in the Major Activity Centres, including the Urban Renewal Areas, and the Neighbourhood Activity Centres. • Prepare a tree management strategy to develop a sustainable management program for the protection and care of trees, particularly mature trees in open space. • Encourage sustainable use of materials, sustainable water use and natural features in new open spaces and in future upgrades to existing open space.

Key priority projects

- Introduce the updated open space contribution rate into the Glen Eira Planning Scheme. Refer to Section 5.6 of the Strategy for more information.
- Undertake the sub-precinct open space assessments to identify opportunity sites for the new Local and Small Local open spaces in the three Major Activity Centres being Carnegie, Bentleigh and Elsternwick. Refer to the Section 6 of the Strategy for more information.
- Advocate for the proposed new open space identified in this Strategy to be included in the Caulfield Station Structure Plan, currently being prepared by the Victorian Planning Authority.
- Undertake the sub-precinct open space assessments to identify locations for new Local and Small Local open spaces in the other High priority locations. Refer to Section 6 of the Strategy for more information.
- Liaise with the Melbourne Racing Club (MRC) and the Victorian government to investigate the feasibility to include structured sporting use into the areas already set aside for public access in the centre of Caulfield Racecourse. Refer to Sections 5.1.2a and 6.6.3 of the Strategy for more information.
- Prepare a Tree Management Strategy to address short and long term management of tree canopy cover in Glen Eira. Refer to Section 5.2.2d of the Strategy for more information.



1. Introduction

1.1 The importance of open space in the City of Glen Eira

Public open space contributes to the liveability and character of Glen Eira. The community identified the key values of open space to be the trees, a place to relax and unwind and for its contribution to community health and wellbeing. Other key values include as a place for children to play and as an escape from the built environment. The quality of the facilities and the high level of maintenance of open space is appreciated by the community, as reflected in the open space survey results undertaken for this Strategy.

In our established urban setting, the large open spaces were set aside when Glen Eira originally developed and form the backbone of the highly valued open space network. The large open spaces facilitate participation in a range of outdoor sport and recreation activities. The sports fields are popular for both organised sport and informal use when they are not being used for training or match play. The sports fields are complemented by a range of other features including large mature broad spreading canopy trees, play areas, exercise and fitness facilities, picnic and seating areas. The multiple range of uses and the benefit derived from being in a large open space contributes to our mental and physical health and wellbeing. This system of large open spaces is complemented by a network of smaller open spaces that offer a diversity of informal recreation and social facilities that are close to where people live and work and contribute to the green and treed character of Glen Eira.

Melbourne's population is increasing and Glen Eira along with all metropolitan Councils are planning ahead to accommodate this larger population. Over the past 10 years urban densities have increased in and around the major commercial and retail centres and train stations in Glen Eira. With higher density living, people have less private open space/gardens and rely on public open space to meet a greater range of their open space needs beyond sport and exercise. This includes relaxing outdoors in the fresh air and sunlight, socialising with family and friends and playing with children. The combination of more people living and working in the city along with higher density living means the open space system will need to expand.

Given there are limited opportunities to create more large open spaces in Glen Eira, we can instead add new smaller open spaces to the network. By providing more and upgrading the existing smaller open spaces they will play a more valuable role in the network in future and provide an alternative to reduce the pressure on the large open spaces as our population grows. Providing more of these smaller open spaces so that the majority of the community can easily walk to and enjoy the benefits of open space is one of the key challenges this Strategy addresses. Quality open space that is easily accessible encourages people to go outdoors to visit it. Recent research has identified measurable links between lower levels of stress and incidents of chronic disease in communities who live nearby green open space and visit it regularly. Research has found that children are also more likely to visit open space independently if it is within 300 metres of their homes, and this strengthens their social, cognitive and physical development and health.

We are also facing the significant challenge of climate change which is forecast to lead to more extreme weather events including periods of extended heat, drought and severe storms. Open space can play a positive role in mitigating some of the negative effects of climate change, particularly urban heat island effect. This can be achieved with a well distributed system of green open spaces that are designed to assist with evapotranspiration¹ and urban cooling in higher density precincts. Given Glen Eira is in the process of planning for accommodating increased densities in the activity centres, now is the time to plan for a distributed system of green open spaces that will contribute to sustainability and liveability of our higher density and urban renewal precincts in the future.

Open space is already an important part of the character and identity of Glen Eira. With careful planning to expand and improve the quality of our open space network we will continue to strengthen the leafy green character of the city as it changes over the next 15 years.

A healthy, green and accessible open space network will support the goals in Glen Eira City Council's Community Plan including the social and ecological health of the city to improve its sustainability and liveability in the future.

¹ Evapotranspiration – the process by which water is transferred from the land to the atmosphere by evaporation from the soil and other surfaces and by transpiration from plants.

1.2 Strategy scope and purpose

The purpose of this Open Space Strategy Refresh is to provide a strategic direction for the future planning, provision, design and management of open space in Glen Eira over the next 15 year planning period based on the 2016 to 2031 forecasts. The Strategy Refresh is based on the *Glen Eira Open Space Strategy, Adopted by Council 8 April 2014*, and updates to it take account of the substantial changes that have occurred over the past five years since its adoption. These substantial changes include:

- Level Crossing Removal Project along the Frankston and the Pakenham/Cranbourne Railway Lines. This has impacted on the provision and accessibility to open space.
- Higher rates of population growth than those forecast at the time the 2014 Strategy was prepared.
- Change in Council's strategic growth framework.
- Preparation of Structure Plans for the three Major Activity Centres of Carnegie, Bentleigh and Elsternwick.

The Strategy Refresh relies on the 2012 open space surveys undertaken for the 2014 Strategy combined with site assessments as the basis for understanding and addressing existing community open space needs. Where significant change has already occurred in selected precincts, the needs of the existing population are based mainly on the site assessments with reference to the earlier community survey results. The Strategy Refresh plans ahead to anticipate and meet the open space needs of the forecast population within the municipality. The Strategy Refresh is consistent with the broader policy context set out in the Metropolitan Planning Strategy *Plan Melbourne 2017-2050*.

The Strategy Refresh addresses the open space needs of the existing and forecast population within an integrated framework that supports the justification for a fair and equitable open space contribution program that Council can then incorporate, with appropriate policy directions, into the Glen Eira Planning Scheme.

In order to achieve this, the Strategy Refresh provides a series of actions with broad opinions of cost allocated to the actions in order to justify the underlying contribution rate. The Strategy Refresh will commit Council to a 15 year framework of actions for the established areas that will be funded from a variety of sources including rates, grants and open space contributions.

This Open Space Strategy Refresh is referred to as this or the 'Strategy' throughout to differentiate it from other government strategies referred to in the text of this report.

1.3 Definition of open space

1.3.1 Introduction and background

This Strategy will address public open space, rather than private open space, and deals with parks, gardens, reserves and urban and civic squares or spaces that function as public meeting spaces as defined below (refer to Section 1.3.2).

A broader definition of public open space that is commonly referred to as public realm includes other public land such as streets, car parks, spaces and educational institutions. These areas of public realm are primarily set aside and reserved for other purposes than recreation, resort and parkland. There are other strategies, programs and sources of funding in place to support improvements to these other components of the public realm. While they are not the focus of this Strategy, they are considered and referred to in the context of their complementary use and connections to public open space.

The project brief called for the inclusion of an Open Space Contribution Program as part of this Strategy. The Open Space Contribution Program will set out the quantum of contributions that Council should collect from developers over the life of the Strategy. These open space contributions will be collected under the *Subdivision Act 1988*. Public open space is defined in this Act as:

'land set aside in a plan or land in a plan zoned or reserved under the planning scheme -
(a) for public recreation or public resort; or
(b) as parklands; or
(c) for a similar purpose'

The Strategy focuses on open space projects for which a contribution from developers can legitimately be required to assist Council with the costs of implementing the Strategy.

1.3.2 Definition of open space for this Strategy

1.3.2a Public open space

Open space for the purposes of this Strategy is the publicly owned land that is currently set aside, or has the potential in the future to be set aside primarily for recreation, nature conservation and passive outdoor enjoyment. This includes parks, reserves, gardens, larger urban and civic spaces and forecourts.

There is a range of categories of public open space land including:

- Public land owned and managed by Council.
- Public land owned by other government agencies and managed by Council.
- Public land that is managed for restricted recreation use on a fee paying or membership basis including public bowls greens, tennis courts and community gardens.

1.3.2b Encumbered open space

This is open space that is publicly owned, and can be used by the public for recreational purposes, but the other use takes precedence over recreational uses, and therefore encumbers recreational activities. There are a limited number of locations where encumbered open space exists in the municipality, mainly in service easements.

1.3.3 Ancillary open space

The term ancillary open space differentiates parts of the public realm that are not included as public open space in this Strategy. These other areas of public realm generally include streetscapes and urban spaces between buildings. This Strategy recognises that a range of other plans and strategies guide the other components of the public realm including Urban Design Frameworks, Streetscape Design Plans and Street Tree Strategies.

The Open Space Strategy will also recognise the contribution school grounds make as ancillary open space, especially where schools can partner with Council. However school land is not reserved for open space and can be sold for other purposes or converted to other uses through building construction.

Railway corridors and associated land can also be considered as ancillary open space. As with schools, the railway land is reserved for other purposes, but may also have an open space function including use as open space, paths etc. Where railway land is zoned PPRZ (as per Elsternwick Plaza), this is included as part of the open space system. While they can contribute to the open space values and connectedness, they are retained for railway use and there is potential that they could be upgraded to accommodate additional infrastructure, and change the environmental and recreational values.

Streets are used by people to socialise and exercise including walking and cycling, and while these are common to activities that are also undertaken in open space, the streets are primarily set aside for transport. However streets do contribute to the use and value of the open space network by providing links between them, therefore streets will be recognised as providing this complementary role in the Strategy.

It is important that the Strategy focuses on ensuring there is adequate provision of open space and facilities that will be retained for future generations, without the ability for that land to be sold or converted to another use, unless there is clear demonstration that it is no longer required by the community as open space.

1.3.4 Publicly accessible private open space

Publicly accessible private open space is defined as open areas of land that remain in private ownership, but can be used by the public. This can include church grounds, large forecourts to buildings including retail spaces and outdoor spaces around apartment buildings that are not fenced from public access. These spaces will be referred to as publicly accessible private open space, and are not included in the definition of public open space. These spaces cannot be relied on as a replacement for public open space.

given that Council does not have direct control over these areas and the land owner can change their purpose and use over time. In many cases publicly accessible private open space complements the public open space system.

The privately owned golf course is only available to members on a fee-paying basis. While the natural and unbuilt quality of the landscape and perimeter trees has some benefits in mitigation of the urban heat island effect associated with climate change, and contributes to the environmental values and landscape character of an area, it cannot be relied on as being available to the public as open space in the long term.

1.4 Strategy vision, principles and aims

1.4.1 Council and Community Plan Vision

We will strive for a city that is:

- *Liveable and well designed*
- *Accessible and well connected*
- *Safe, healthy and inclusive*
- *Clean and sustainable*
- *Informed and engaged.*

1.4.2 Strategy principles and aims

Equitable

Located within easy walking distance of the Glen Eira community.

Accessible

Designed to be accessible for people of all ages, abilities, health, gender and cultural background.

Adaptable

Able to be added to and change over time to adapt to changing recreational, social and environmental conditions.

Networked

A system of spaces that in combination meet the recreational, environmental and social needs of Glen Eira.

Diverse

Providing a diversity of character and sizes of open space to maximise accessibility to the community and contribute to sustainability.

Sustainable

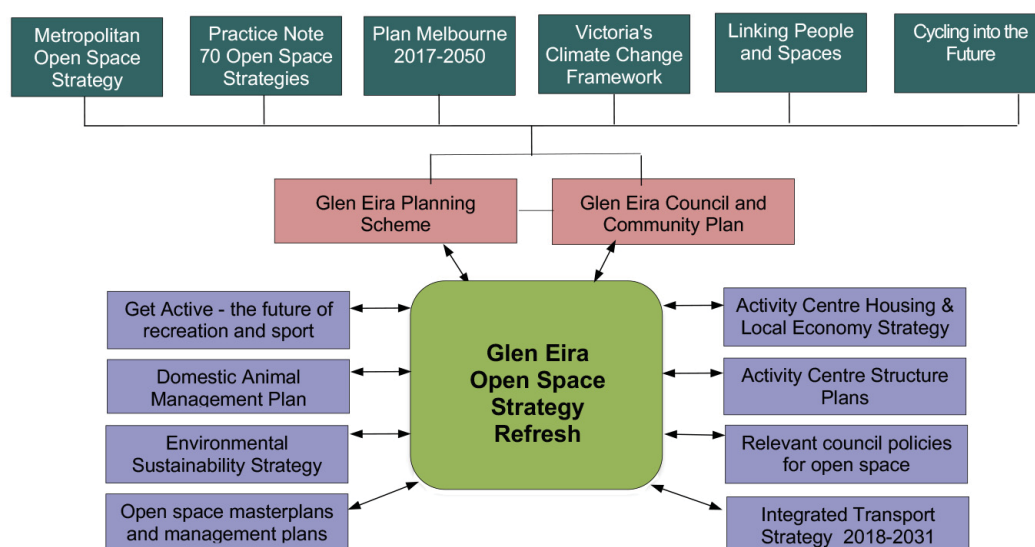
Maximise opportunities to mitigate climate change, sustainable design and management practices and, where feasible meet improved ecological outcomes



2. Existing situation analysis

2.1 Strategic context

2.1.1 Relationship of the Strategy to Victorian and local government policies and strategies



2.1.2 Relevant Victorian government policies and strategies

2.1.2a Plan Melbourne 2017 - 2050

The Victorian government's current plan for metropolitan Melbourne includes nine principles to guide policies and actions, seven outcomes to strive for in creating a competitive, liveable and sustainable city, 32 directions outlining how these outcomes will be achieved, and 90 policies detailing how these directions will be turned into action. There is also a separate five-year implementation plan.

Plan Melbourne's key principles influence how Glen Eira develops and its role in the wider Melbourne context. They include:

- Principle 1. A distinctive Melbourne
- Principle 2. A globally connected and competitive city
- Principle 3. A city of centres linked to regional Victoria
- Principle 4. Environmental resilience and sustainability
- Principle 5. Living locally – 20 minute neighbourhoods
- Principle 6. Social and economic participation
- Principle 7. Strong and healthy communities
- Principle 8. Infrastructure investment that supports balanced city growth
- Principle 9. Leadership and partnership

Council and its open space network will contribute to the achievement of many of these principles and the plan's directions and policies, for example:

- *Direction 1.3. Create development opportunities at urban renewal precincts across Melbourne.* New open space is part of urban renewal planning and implementation.
- *Direction 2.1. Manage the supply of new housing in the right locations to meet population growth* and create a sustainable city. There are opportunities to use development to fund the provision and improvements to open space.
- *Direction 4.1. Create more great public places across Melbourne.* Place-making approaches can enhance the standard of urban design and include open space.
- *Direction 5.1. Create a city of 20-minute neighbourhoods.* Open space is an essential part of the mix in creating neighbourhoods which offer services, employment and transport. Structure plans for activity centres can identify local solutions.
- *Direction 5.3. Deliver social infrastructure to support strong communities.* Open space provides a place for people to gather. In addition, sufficient land is needed for sporting facilities, etc.
- *Direction 5.4. Deliver local parks and green neighbourhoods in collaboration with communities.* Open space provides the opportunity to provide places where people can meet, exercise and relax. In addition, use redevelopment projects to provide new local open space.
- *Direction 6.4. Make Melbourne cooler and greener.* Use green spaces to provide a cooler, more liveable city and mitigate urban heat. The aim is a metropolitan network of open space.

The five-year implementation plan highlights the inclusion of open space in plans at different spatial scales. The key action for open space is to *“Prepare a metropolitan open space strategy that enhances recreation, amenity, health and wellbeing, species diversity, sustainable water management and urban cooling across Melbourne.”*

2.1.2b Planning Practice Note | 70 Open Space Strategies (2015)

This practice note provides guidance to councils on preparing an open space strategy. It covers the reasons for preparing a strategy and the possible inputs and outputs of the process. An open space strategy is a strategic approach for planning the current and future uses of open space within a municipality. The Glen Eira Open Space Strategy Refresh meets the guidance provided in this practice note.

2.1.2c Victoria's Climate Change Framework (2016)

Climate change poses one of the biggest threats to our future. The science is clear that we must take action to reduce emissions and the Victorian government plans to do this using the Framework as a guide. The Framework is a long term vision to 2050 and makes connections between climate change, the health of the economy and wellbeing. It also plans for the already unavoidable impacts of climate change.

The Framework sets the following targets:

- Transition to clean energy with an emissions reduction target of net zero by 2050
- Set renewable energy targets of 25 per cent by 2020 and 40 per cent by 2025.

The four pillars of emissions reduction are:

- *Increase our energy efficiency and productivity*
Decrease the amount of energy required to run our homes and fuel our economy and produce more using less energy.
- *Move to a clean electricity supply*
Increase electricity generation from zero emission sources and eliminate dependence on fossil fuels.
- *Electrify our economy and switch to clean fuels*
Shift from fossil fuel energy for activities such as transport and heating to the use of electricity and switch from gas, petrol, diesel and other fossil fuels to clean energy.
- *Reduce non-energy emissions and increase carbon storage*
Change industrial processes and increase carbon storage in our natural environment.

2.1.2d Victoria's Climate Change Adaptation Plan (2016) and Climate Change Act (2017)

The Victorian government is committed to keep global warming below 2 degrees above pre-industrial levels. The Adaptation Plan provides a framework to manage some of the unavoidable impacts that are already occurring and plan for the longer-term risks of climate change. The *Climate Change Act 2017* provides Victoria with a clear policy framework and legislative pathway to 2050 that is consistent with the Paris Agreement to keep global temperature rise well below 2 degrees Celsius above pre-industrial levels.

Of relevance to this Strategy is the threat to human health from urban heat. The plan recognises that cities and towns are hotter than non-urban areas because of urban heat island effect. This is caused by heat absorbing materials such as dark coloured pavements and roads, concrete, urban canyons trapping hot air and a lack of shade and green space in dense urban environments. Urban heat island effect can be reduced by increasing urban greening in our cities. The Victorian government supports the uptake of urban greening and integrated water management projects to assist to mitigate the impacts of urban heat island effect.

2.1.2e Living Melbourne: Our Metropolitan Urban Forest Strategy (2019)

Resilient Melbourne in conjunction with The Nature Conservancy developed this Strategy to support a greener, more liveable Melbourne. Council endorsed this Strategy on 30 April 2019. It specifically recommends that Council develop a Glen Eira Urban Forest Strategy that is based on the framework and values of the Living Melbourne Strategy and targets the needs, outcomes and goals of the Glen Eira community.

2.1.2f Participation in Exercise, Recreation and Sport, Australian Sports Commission Annual Report 2010

The Exercise, Recreation and Sport Survey (ERASS) collects information on the frequency, duration, nature and type of physical activities participated in for exercise, recreation or sport by persons aged 15 years and over. The data has been collected since 2001. For reference, organised activity is defined as activity that is organised in full or part by a recreation/leisure centre, sports club, workplace or school, and non-organised activity is an activity that is not part of any association or club. Some of the key relevant findings for national participation in physical activity in both the organised and non-organised activities are:

- 82% of the population participates at least once annually in physical activity.
- 69% of the population participates at least once a week in physical activity.
- 48% of the population participates regularly (at least 3 times per week) in physical activity.
- 28% of the population participates frequently in physical activity (at least 5 times per week).

In relation to non-organised physical activity:

- 71% of the population participates in non-organised physical activity at least once a year.
- 39% of the population participates regularly (at least 3 times per week).
- The participation rate has increased 11% between 2001 and 2010.
- Regular participation in non-organised physical activity gradually increased with age peaking in the 55 to 64 age group, and is higher in people with a university education.

Organised physical activity:

- 40% of the population participates in organised physical activity at least once a year.
- 26% of the population participates in club-based physical activity at least once a year
- 12% of the population participates regularly in organised physical activity

- 6% of the population participate regularly in club-based physical activity.
- Male participation rate exceeded female participation rate, which is in contrast to the higher female participation rates in non-organised activity.

National trends in participation in organised (including club-based) physical activity increased slightly between 2001 and 2010 by 3% for both males and females. Participation in non-organised physical activity increased 11% over the same period.

Regular participation in club-based physical activity was most common between those aged 15 to 24 years, and there is a higher proportion of males. Note that these surveys include people 15 years and older.

The top 5 non-organised physical activities in 2010 were walking, aerobic/fitness, swimming, cycling and bushwalking. The top 5 club-based physical activities in 2010 were golf, soccer, tennis, Australian rules football and outdoor cricket

The sport and recreation participation trends for people aged 15 years and over at a national and state level indicate that there are higher participation levels in non-organised activities and the rate of growth of participation in these is growing at a faster rate (11%) than for structured sporting activities (3%). The trends also indicate that the older age group is increasing their participation in non-organised activity, which is relevant to Glen Eira given that demographic forecasts indicate a rise in the older population in the future.

2.1.2g Victoria Cycling Strategy 2018-28

The Strategy aims to increase the number, frequency and diversity of Victorians cycling for transport in addition to those cycling for recreation. This includes investing in a safer, lower-stress, better-connected network prioritising strategic cycling corridors and making cycling a more inclusive experience. More people cycling will reduce congestion on public transport and reduce the number of vehicles on the road. Cycling for transport is defined as being commuter trips such as from home to a place of work or education, with trips commonly being up to 45 minutes in length, along with local trips to the station, shops and schools to meet the everyday needs. The key safety issues are to be addressed by taking the approach of separating cyclists, pedestrians and vehicles where feasible to reduce the need for cyclists to mix with other road users.

2.1.2h Linking People and Spaces (2002)

Parks Victoria prepared *Linking People and Spaces*, a strategy and vision for the continued growth and improvement of our open space network across Melbourne. *Linking People and Spaces* provides a strategic context for long-term planning and management of open space within the metropolitan region. Although *Linking People and Spaces* is strongly focused on meeting the recreational needs of Melbournians, it also considers the environmental priorities identified in Victoria's Biodiversity Strategy and the *Port Phillip and Westernport Native Vegetation Plan*. *Linking People and Spaces* will be replaced by the future forthcoming Metropolitan Open Space Strategy that the Victorian government is preparing.

2.1.3 Glen Eira Planning Scheme

The Glen Eira Planning Scheme encourages strategic planning for open space in existing urban areas and developing suburbs. Local open space planning provisions were introduced into the Glen Eira Planning Scheme by Amendment C120 in 2015 following the adoption of the 2014 Strategy. These are included in Clause 21.13 Open Space, Clause 22.12 Public Open Space Contribution Policy and the schedule to Clause 53.01 Schedule to Public Open Space Contribution and Subdivisions.

2.1.3a Victorian open space provisions

The statewide open space provisions in the Glen Eira Planning Scheme encourage strategic planning for open space in existing urban areas. The scheme content and format were significantly altered with Amendment VC148 (July 2018), however this has not changed the policy with respect to the planning and provision of open space. The planning scheme contains the overall policy direction that:

“Planning is to facilitate sustainable development that takes full advantage of existing settlement patterns and investment in transport, utility, social, community and commercial infrastructure and services.” (Clause 11 – Settlement)

The other statewide provisions relevant to open space planning in the municipality include:

- *Clause 19.02-6S Open space planning*
This is a Victorian clause that includes the objective: *“To establish, manage and improve a diverse and integrated network of public open space that meets the needs of the community.”* through providing a linked open space network for both recreation and conservation of natural and cultural environments. New open space should be added in areas that have an undersupply of parkland. Open space should be designed to accommodate people of all abilities, ages and cultures.
- *19.02-6R Open space - Metropolitan Melbourne*
This is a Metropolitan Melbourne clause inserted by the Victorian government: *“To strengthen the integrated metropolitan open space network,”* It includes the strategy to *“Develop a network of local open spaces that are accessible and of high-quality and include opportunities for new local open spaces through planning for urban redevelopment projects.”*
- *Clause 53.01 (formerly 52.01) Public open space contribution and subdivision*
This Victorian clause establishes the ability of Council to specify a public contribution rate in the Glen Eira Planning Scheme that is levied at the time of subdivision. The rate is expressed as a percentage of land area and/or equivalent cash value.
- *Clause 56 – Residential subdivision*
This clause includes a set of statewide objectives for public open space provision that aim to: provide a quality, well-distributed and diverse open space network, catering for a broad range of users, link different open spaces with linear parks and trails, encourage healthy and active communities, and manage public open space in an environmentally sustainable way.

2.1.3b Local open space provisions

- *Clause 21.13 Open Space*
This local clause in the Municipal Strategic Statement refers to the City of Glen Eira Open Space Strategy adopted on 8 April 2014 (the current strategy) and includes the objective “*To improve the amount, distribution and quality of open space that meets the needs of Glen Eira’s existing and future populations.*” The clause commits Council to implementing the Open Space Strategy, using the planning scheme to zone and acquire land for public open space, and levying a contribution for open space when subdivision occurs.
- *Clause 22.12. Public open space contribution policy*
This local policy sets out whether a cash or land contribution will be requested when Glen Eira levies an open space contribution under the *Subdivision Act 1988* and Clause 53.01. The assessment is to be consistent with the projects included in the 2014 Strategy.
- *Schedule to Clause 53.01 Public open space contribution and subdivision*
The schedule sets a mandatory rate of 5.7 per cent of land or equivalent land value for subdivision with the exception of the Caulfield Village as delineated in the Caulfield Mixed Use Area Incorporated Plan February 2014. The Caulfield Village rate is 5 per cent for the Mixed Use and Smith Street Precincts and 4 per cent for the Residential Precinct.

2.1.3c Urban planning framework

The Glen Eira Planning Scheme contains a framework for land use and development with a strong emphasis on directing more intensive development to preferred locations. These locations include:

- the Phoenix Precinct centred on the Caulfield Racecourse Reserve and Monash University
- Bentleigh, Carnegie and Elsternwick Urban Villages
- Neighbourhood and local activity centres
- Tram routes and selected main roads.

The remaining residential areas support minimal change, where the existing low intensity, low-rise character should be protected and enhanced. Refer to Section 4.4 of the Strategy for detailed information.

This urban planning framework was reinforced in August 2013 with the introduction of new residential zones. This zoning pattern remains in place while Council updates its strategic growth planning. Since the 2014 Strategy was adopted, Council’s strategic planning work has been responding to significant increases in population growth, new private investment in the larger activity centres and changes shaped by the Victorian government’s transport projects including the Level Crossing Removals and associated station rebuilds. Council is currently in the process of updating its planning framework with a focus on implementing the Bentleigh, Carnegie and Elsternwick Structure Plans with expanded development opportunities. More recently Council is working with the VPA on structure planning for the Caulfield Station area. Planning for the East Village project has also progressed since the 2014 Strategy, however this site will have its own public open space arrangements and contribution rates. Glen Huntly has been

designated in Plan Melbourne as a Major Activity Centre, which reflects a change in the status and structure planning is underway.

Further information is included in Section 4.4 of this report.

2.1.4 Relevant council policies and strategies

2.1.4a Glen Eira Council and Community Plan 2017-2021

The *Council and Community Plan* is the strategic framework for all Council plans and activities. The Strategic Resource Plan, which forms part of this Plan, is a rolling 10 year plan that outlines the financial and non-financial resources that Council requires to achieve the strategic objectives described in the Council and Community Plan.

The community plan strives for a city that is:

- *Liveable and well designed*
- *Informed and engaged*
- *Accessible and well connected*
- *Safe, healthy and inclusive*
- *Clean and sustainable.*

2.1.4b Activity Centre, Housing and Local Economy Strategy (2017)

Glen Eira is forecast to grow by 22,000 people, 9,000 dwellings and 9,500 jobs over the next 10 years. This Strategy sets a new 15 year vision for Glen Eira and is intended to:

- *Provide the strategic context to update Council's Municipal Strategic Statement.*
- *Provide a planning policy link between Council's new Glen Eira Council and Community Plan and the State's Plan Melbourne objectives.*
- *Guide the strategic context for structure plans.*
- *Provide clear policy directions for all centres currently without an adopted structure plan.*
- *Provide a community-owned plan in achieving future State Government housing and job targets.*
- *Provide high level, place based direction for strategies, including:*
 - *an Integrated Transport Strategy*
 - *a Revised Open Space Strategy*
 - *the Municipal Public Health and Wellbeing Plan.*

2.1.4c Environmental Sustainability Strategy 2016-2021

The strategy outlines how Council plans to achieve the following vision:

For a healthy environment that supports our community to live healthy, happy lives into the future and protects the diversity of plants and animals.

The *Environmental Sustainability Strategy* identifies the following focus for the next five years:

- Accelerating efforts to reduce greenhouse gas emissions.
- Improve sustainability of infrastructure over time.
- Advocate on behalf of the community.
- Support and mobilise the community.

2.1.4d Integrated Transport Strategy 2018-2031

The *Integrated Transport Strategy 2018-2031* sets priorities for transport that are aligned with the 15 year vision for future transport in the City of Glen Eira.

The strategy recognises that for many people driving is the only option and aims to make alternative transport modes more attractive for those who can travel in other ways. This includes:

- Increase walking, cycling and public transport trips
- Increase efficiency on key driving routes.

Council owns and maintains all non-arterial roads and this provides an opportunity for Council to prioritise and plan for the most appropriate and desired road user outcomes.

There are four transport corridors proposed including:

- Efficient driving routes
- Express public transport routes
- Safe cycling streets
- Great walking and shopping streets.

2.1.4e Get Active - The Future of Recreation and Sport 2019

The *GET ACTIVE – The Future of Recreation and Sport 2019* document provides a framework for the planning, management and investment of sport and active recreation facilities throughout the City of Glen Eira. *GET ACTIVE* replaces the *Glen Eira Recreation Needs Study 2006* and assesses all changes that have occurred since 2006. Additionally consideration is given to unstructured, informal and active open space uses outside of organised sport.

The Study consolidates key local, state and national policy and planning recommendations relating to sport, recreation and leisure into a single document. It presents a snapshot of current participation and considers local demand for a range of sports and active recreation pursuits, now and into the future.

GET ACTIVE outlines a set of guiding principles, which reflect best practice in the provision of open space, sports facilities and active recreation facilities. They provide guidance to future decision making and investment in sport and recreation, with an integrated and flexible approach.

2.1.4f Glen Eira Bicycle Strategy 2010

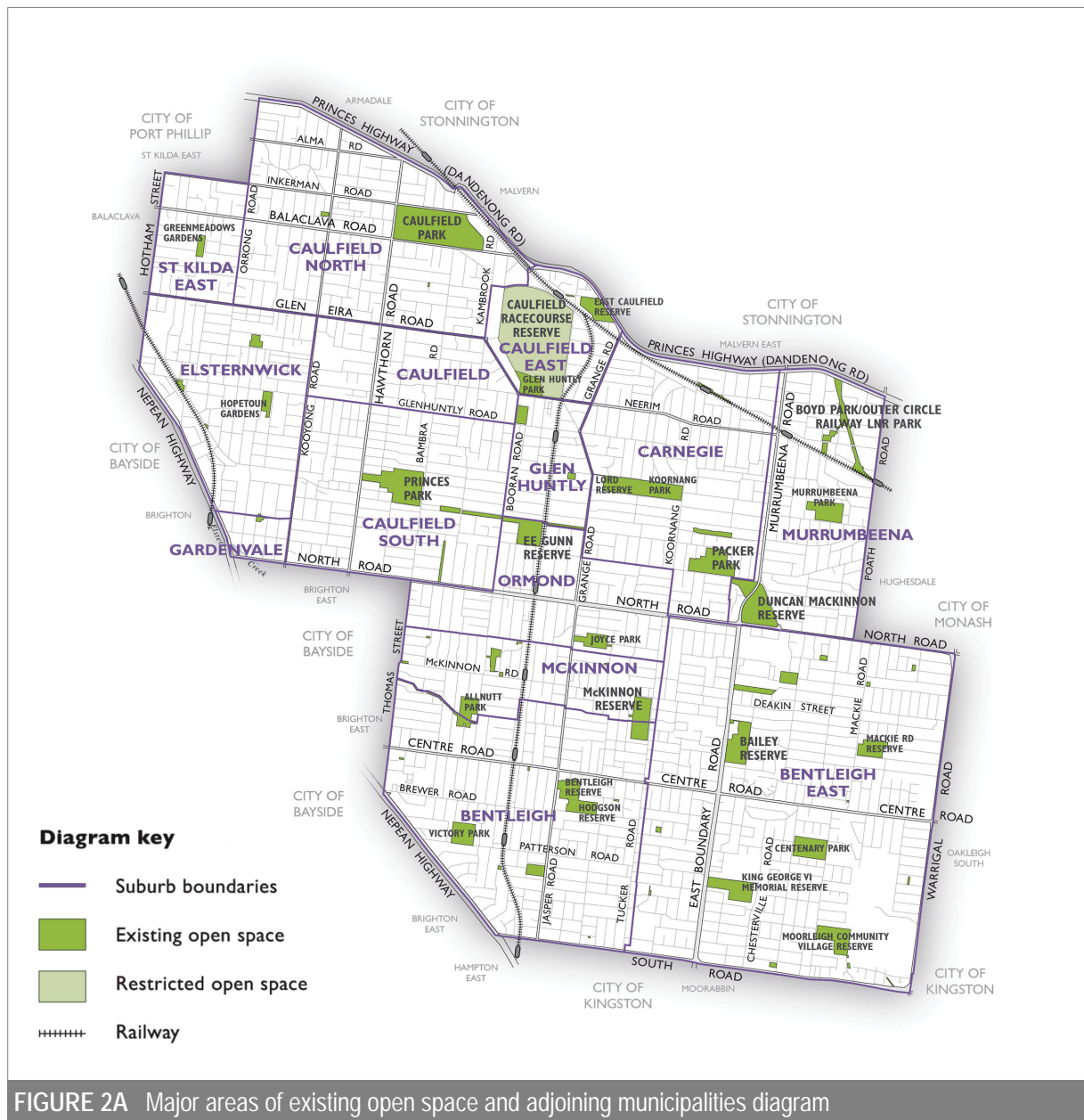
Recreational and commuter cycling is increasing in popularity and all levels of government recognise the positive benefits of cycling. This includes physical health, reduced carbon footprint and decreasing traffic congestion. The Bicycle Strategy provides Council with a framework to promote and encourage cycling and includes an action plan

to deliver a safe and extensive bicycle network in Glen Eira. The intention is to further develop the bicycle network links to major urban centres, transport and open space. For open space, improving the cycle network will reduce noise and air pollution, improve off-road paths and increase accessibility. The Frankston Railway Line path provides good north-south connectivity, however in some sections cyclists are required to ride on-road, cross busy east-west streets and navigate local streets. The east-west connections are all via on-road cycle path links.

This Open Space Strategy reinforces the importance of cycling and incorporates specific actions into the precinct recommendations where applicable for increasing appropriate cycling opportunities in open space.

2.2 Existing open space network

2.2.1 Overview



Glen Eira covers a total land area of 38.7 square kilometres, located in the inner south-east region of metropolitan Melbourne approximately ten kilometres south east of the Melbourne Central Business District. It includes the suburbs of Bentleigh, Bentleigh East, Carnegie, Caulfield, Caulfield East, Caulfield North, Caulfield South, Elsternwick, Gardenvale, Glen Huntly, McKinnon, Murrumbeena, Ormond and part of St Kilda East. Adjoining municipalities include the Cities of Port Phillip, Bayside, Stonnington, Kingston and Monash. Glen Eira has approximately 72 existing open space reserves (excluding private golf courses and restricted open space) covering 170.89 hectares of land area, which equates to 4.4 per cent of the municipality. The diversity of open space in Glen Eira ranges from large sporting reserves to historical gardens and some smaller spaces with informal and urban characters.

Glen Eira is predominantly residential land use with some smaller industrial land use areas mainly in Bentleigh East. The consultation for the Community Plan confirms that the community values the established parks, gardens and streetscapes and treed character of the City. Most neighbourhoods have at least one larger open space including Caulfield Park in Caulfield North, Princes Park in Caulfield South, Packer Park in Carnegie, McKinnon Reserve, Bentleigh Reserve, King George IV Memorial Reserve in Bentleigh East and Murrumbeena Park. Caulfield Park is the most popular open space in the City followed by Packer Park and Princes Park. These are three of the larger open spaces within the municipality and the main reason for visiting demonstrates people appreciate diversity. Packer Park is most popular for its playground, Caulfield Park for walking and Princes Park for dog walking.

Key values of open space include the trees and a place to relax and unwind, followed by health and wellbeing, a place for children to play and to escape the built environment. The quality of the facilities and level of maintenance of open space is appreciated by the community, which is reflected in the open space survey results undertaken for this Strategy and the survey undertaken as part of the Integrated Open Space Services (IOSS) Surveys. The relatively flat topography in the municipality assists accessibility to open space, and where there is some change in topography, such as the north end of Duncan McKinnon Reserve and Bentleigh Reserve, this diversity contributes to the change in character of the spaces across the municipality and offers expansive views over the open space.

Since the 2014 Strategy was adopted Council has focused on increasing the diversity of facilities provided in open space, particularly the inclusion of unstructured recreation and informal facilities along with upgrades to the structured sporting facilities in the Municipal reserves.

Glen Eira has a large proportion of sporting reserves with a diversity of organised sport facilities and clubs including football, cricket, soccer and tennis, encouraging participation in outdoor activities for all ages including young people who value the support associated with the sporting clubs. The sports fields are also used for a variety of informal and unstructured recreational activities by the community including dog walking, jogging/running, walking, fitness and relaxation. The linear open space links in Glen Eira are established along existing and former rail corridors, road reserves and some smaller waterway tributaries that have been converted to underground pipes, with the overland flow drainage reserves providing linear links and connections. Some of these links connect to larger systems and open space in adjoining municipalities including the Outer Circle Railway Park connecting from Boyd Park in Murrumbeena north into the City of Stonnington and beyond and the Elster Creek linear open space connecting Allnutt Park to open spaces in the City of Bayside. Additionally, as part of the Level Crossing Removal Project on the Cranbourne-Pakenham Line, a new shared trail is located along the railway corridor from East Caulfield Reserve east to Hughesdale and Oakleigh.

A network of highly valued smaller areas of open space complement the large sporting reserves. The results of the open space survey identified that the smaller areas of open space are used as frequently as the larger sporting reserves, reinforcing their valuable role in contributing to community health and wellbeing. While they are distributed throughout the municipality, gaps in their distribution occur in a number of locations meaning the community need to travel further than a safe and accessible walking distance to reach open space.

2.2.2 Topography and natural values



FIGURE 2B Topography diagram

2.2.2a Topography

The City of Glen Eira is relatively flat leading to excellent accessibility to open space. The relatively flat topography makes cycling easy and this Strategy will refer to the recommendation in the Bicycle Strategy to encourage cycle and walking access to open space with the aim to reduce car trips.

The topography reflects its original swampy character referred to in the historical descriptions of the municipality (refer to Section 2.5), and has resulted in some drainage issues at a local level, illustrated by the Special Building Overlays, shown on the Future Change Plan, Drawing GEOSS-04. Some existing open space is included in the Special Building Overlays, potentially limiting the future use of some areas of open space. As noted in the 2.2.2b, there are no open waterways flowing through Glen Eira.

2.2.2b Natural biodiversity values

The City of Glen Eira has been extensively modified from the 1830s onwards and as noted in the *City of Glen Eira Heritage Management Plan* (1996), *'it retains substantial evidence of growth from all of Melbourne's major development phases'* however it retains very little evidence of its original natural and biodiversity values. The pastoral settlement patterns of the 1830s defined the road grid that form the boundaries of key areas of open space in Glen Eira today. Caulfield's importance in this early settlement period was centered around it being a strategic point between Port Phillip's eastern pastoral run and the Melbourne markets. Both Dandenong Road and Brighton Road were major highways out to the east defining the north and south boundaries of Glen Eira. Caulfield and its wetlands had become a good spot for drovers to layover before embarking on the last leg of the journey to the stock markets.

The original survey plans showed the south-east area of the municipality as reedy swamp which influenced the alignment of Dandenong Road, skirting around the swampy land. The *Heritage Management Plan* (1996) notes that Joseph Hunt, one of the early pastoralists described the district was *'pretty well timbered, with a good deal of red gum, not large, but thick peppermint and whitegum'* (p.19) during the early 1850s, and this is reflected in an 1857 plan.

There is one remnant plant community remaining in the municipality, which is protected with an existing Vegetation Protection Overlay. This plant community is located on public land at the southern end of Boyd Park in Murrumbeena. The Schedule to the overlay notes that it is the only remaining significant remnant indigenous plant community making a positive contribution to the locality's former ecology and landscape. There are mature River Red Gums combined with a total of 29 indigenous plants remnant of the River Red Gum Woodland Community that once would have covered a large part of Glen Eira.

Additionally, there are some other individual remnant Red Gums in the open space system including a significant specimen in Woora Street Reserve, Carnegie. Some other areas of open space within the existing open space system have been replanted with indigenous species to reflect the original character including:

- Mallanbool Reserve - including wetlands and surrounding Red Gum woodland planting character.
- Packer Park - the Red Gum Woodland character in parts of the reserve in close proximity to Mallanbool Reserve.

The community value the remnant indigenous vegetation values in the municipality which is demonstrated by 44 per cent of the survey respondents valuing open space as a place for native plants and animals. Participants in Council's annual community environment forum have consistently suggested increasing the use of local indigenous trees and plants in public open space.

Indigenous planting has been reintroduced into other open space reserves across the municipality and the parks maintenance team estimate that indigenous species comprise approximately 5 per cent of all planting in open space.

The Environmental Sustainability Strategy encourages the use of native, indigenous and drought tolerant plants in parks and gardens to continue to promote and support strategies to increase environmental biodiversity and sustainability.

2.3 Health and wellbeing

2.3.1 Overview

The community values and uses open space for a range of tangible and intangible reasons, all contributing to their physical and mental health and wellbeing. Open space is highly valued for its trees, as a place to relax and unwind, for health and wellbeing, a place for children to play, an escape from the built environment, fitness, accessibility, spaciousness and being outside. The activities participated in include walking, exercising, dog walking, visiting playgrounds, jogging and playing sport.

2.3.2 Structured sport and recreation

Glen Eira provides a variety of facilities for structured sport and recreation use throughout the major reserves in the city, predominantly located in the east and south-east areas of the municipality. All the traditional outdoor sports are provided for along with others as identified in the *GET ACTIVE - The Future of Recreation & Sport (2019)* and include:

- Cricket ovals
- Australian rules football ovals
- Soccer fields
- Tennis courts
- Outdoor netball courts
- Bowling greens
- Lacrosse fields
- Softball diamonds
- Cycling velodrome
- Baseball fields
- Synthetic athletics track
- Other sports including bocce and croquet.

Glen Eira provides a wide variety of indoor and outdoor recreation and leisure facilities, some council owned and others are privately run within the municipality. These include a major indoor aquatic and recreation facility that was recommended to be developed in the *Glen Eira Recreation Needs Study (2006)*. Some of these facilities are located in the existing open space and include:

- Glen Eira Sports and Aquatic Centre (GESAC), located in Bailey Reserve, Bentleigh East.
- Duncan Mackinnon Reserve Athletics Track
- Carnegie Swim Centre located in Koornang Park, Carnegie.
- Moorleigh Community Village located in the Moorleigh Community Village Reserve, Bentleigh East.

In summary *GET ACTIVE* confirmed that sportsgrounds are at practical capacity, meaning that additional use would likely mean a reduction in quality and potentially reduced capacity.

GET ACTIVE presents a range of actions to assist in meeting the demand for organised sport and active recreation opportunities in Glen Eira. These include higher capacity surfaces, use of educational facilities, sports lighting to extend play, multi-purpose and

flexible space and sporting facilities within Caulfield Racecourse. Meeting this need will be a collaborative approach between Council, sporting bodies and state agencies.

2.3.3 Unstructured recreation

The existing open space network is used for a variety of unstructured recreation activities, of which some utilise facilities specifically provided in open space and others utilise facilities provided for structured sporting use. This includes:

- Walking - which is the most popular activity in open space, and people use designated walking paths and shared trails. Nearly 70 per cent of open space survey respondents used the street network to link between open space and for exercise.
- Dog walking - also very popular with many people including the dog off leash areas in parks. The surveys also noted a number of concerns that the off-leash areas require enforcement.
- Exercising including jogging and running - people utilise the paths and also the sports fields when they are not being used by sports clubs.
- Playgrounds - these are well used and a high level of satisfaction with their provision and maintenance.
- Cycling - including along the linear corridors formed by the railways, through the larger reserves and along the former Rosstown railway reserve.
- Other outdoor recreation facilities - including half courts, tennis hit up walls, fitness equipment and skate facilities receive lower levels of use overall in the survey, however there are requests for more of them due to there being only one in the municipality.

2.3.4 Informal use

People value and enjoy using open space for other reasons including social interaction and as a place to unwind. The survey recorded high use levels of seats, picnic tables, shelters and barbecues and open grassed areas for relaxing, sitting and picnics. The survey also recorded high response rates for informal use and values of open space with people noting it is important as a place to relax and unwind, escape the built environment, being outside, spacious and being in contact with natural features and character.

2.4 Community values of the open space network

The main method of identifying community use and values of open space was via an open space survey distributed in the monthly Glen Eira News to all households. 1,078 completed surveys were received, summarised and analysed.

In general, residents valued the wide variety and proximity of open space available within their municipality. The existing open space is an asset to the community, and respondents enjoy living in Glen Eira because of it. Open space contributes to the community's quality of life as it provides opportunities for exercise, recreation and relaxation away from busy roads and traffic. Examples of activities enjoyed by respondents in open space included walking, dog walking, taking children or grandchildren to the playground, meeting friends and family, exercising, cycling, playing sport, watching activity and generally enjoying the natural environment and ambience. There were suggestions to actively promote the open space, as many residents were eager to know more about the types of open space available in Glen Eira.

The most popular open spaces in priority order are (top 4 only):

- Caulfield Park
- Packer Park
- Princes Park
- Allnutt Park

What open space is most valued for in priority order (top 5 only):

- Trees
- Relax and unwind
- Health and wellbeing
- Place for children to play
- Escape from the built environment

Most frequently used types of open space in priority order are:

- 82% Large parks and gardens (non sporting)
- 81% Local streets for exercise
- 68% Small local parks
- 68% Sporting reserves
- 56% Medium sized parks

Most frequently used facilities:

- 51% Walking paths
- 50% Seats
- 48% Open grassed areas
- 41% Drinking fountains
- 41% Public toilets
- 32% Playgrounds

Facilities not adequately provided for:

Overall the majority of facilities are well provided, with some deficiencies noted in the following facilities by 19 per cent or more respondents:

- 27% Drinking fountains
- 25% Seats
- 24% Public toilets
- 22% Cycle paths
- 19% Walking paths
- 19% Picnic tables

Facilities not adequately maintained:

There is generally a good level of satisfaction with maintenance levels with only two facilities with responses over 10 per cent including:

- 18% Public toilets
- 12% Drinking fountains

Reasons for not visiting open space:

Summarised below are the key reasons and the number of responses rather than percentage.

- 109 Too far to travel
- 98 Other, which includes inability to access Caulfield Racecourse, difficulty travelling to reach open space due to major roads/traffic/lack of public transport and inappropriate design and management.
- 69 Lack of time.

General comments:

Summarised below are the key categories, and the number of responses rather than percentage:

- 94 Additional open space is required
- 43 Diversity of open space and facilities is appreciated
- 36 Well maintained
- 36 Retain existing open space / don't lose any to future development
- 32 Dog off-lead areas require enforcement
- 20 Contributes to character of Glen Eira and sense of community.

2.5 Cultural heritage values

2.5.1 Overview

Members of the Kulin Nation were the first inhabitants of the area that now makes up the southern and south-eastern suburbs of Melbourne, which includes the City of Glen Eira. The low lying nature of the topography with extensive swamps and wetlands led to major modification to the natural landscape character in order to drain the swamps and allow for urban development. This highly modified nature of the landscape means there are no known sites of Indigenous cultural heritage remaining in the municipality.

The *City of Glen Eira Heritage Management Plan 1996* includes a background history of Glen Eira commencing at the Pastoral era from 1830 onwards. The pastoral history shaped the major road alignments in the municipality and influenced the open space layout. The land was described as being swampy and this was a reason that Caulfield was a popular layover stop for drovers from the east heading into the Melbourne saleyards.

The 1850s gold rush triggered the survey of land in Caulfield and purchase of it as freehold land by some of the key pastoralists who had been relying on this area as a layover and watering point for stock on their way to markets in Melbourne. The district's first self contained settlement was at Camden Town in 1857, and this was later subsumed into what is now the Caulfield South Neighbourhood Activity Centre on Glenhuntly Road. Land use was largely a combination of pastoral activities and market gardens in the east, and urban development commenced in the western extent of the City with the construction and opening of three railway lines in the city. The Elsternwick line opened in 1857, followed by the line to Caulfield in the 1870s.

Caulfield Park (originally known as Paddy's swamp) was set aside as a public park in 1866, and the reserve for the future Caulfield Racecourse site was originally set aside as the town commons for a future township reserve at a similar time. Caulfield Railway Station opened in 1876 and this gave rise to a spate of land subdivisions within the immediate vicinity of the racecourse, and while the planned township did not occur, the land for the town common was retained as the racecourse with the first Caulfield Cup run in 1879.

While some of the larger estates including Sir Frederick Sargood's Rippon Lea, commenced in 1868 and completed in 1887, and Labassa built in 1890 for the pastoralist William Alexander Robertson no longer have the extensive grounds associated with them, they contribute to the heritage character of Glen Eira. The gardens associated with Rippon Lea also contribute to the ancillary open space character of Elsternwick.

The Frankston railway line opened up the central part of the municipality including Ormond, McKinnon and Bentleigh, and this area continued to develop from the late 1880s through to the 1940s. East Bentleigh and parts of Murrumbeena were mostly developed post WWII and largely completed by the 1960s.

Some open space reserves were purchased by Council such as Hopetoun Gardens in the early 1900s, while others were set aside as part of the subdivisions, such as Greenmeadows Gardens which form part of the subdivision of Lempriere Avenue. The

subdivision pattern varied as development moved south-east through the municipality generally with a more diverse range of open space reserves being set aside in McKinnon, Bentleigh and Bentleigh East than the earlier urban development in the north-west areas of the municipality.

2.5.2 Existing heritage planning controls

Some existing open space reserves have heritage overlays over all or part of them as noted in the following table.

Precinct	Open space	HO No.	Description
Bentleigh	Burgess Street Reserve	HO69	Bentleigh Environs, standard heritage controls apply
Carnegie	Woorayl Street Reserve	HO123	Tree controls apply
Caulfield East	Caulfield Plantation Reserve	HO85	Tree controls apply (Note, this is VicTrack owned land)
Caulfield North	Caulfield Park	HO4	Area west of pathway located west of the Caulfield Cricket Ground Pavilion. Tree controls apply only to <i>Prunus ilicifolia</i> (Holly-leaved Cherry Tree), <i>Cussonia spicata</i> (Cabbage Tree), <i>Coriaria leptopetala</i> (Brown Myrtle or Ironwood Box), <i>Cryptocarya triplinervis</i> (Brown Laurel Tree) and <i>Syncarpia glomulifera</i> (Turpentine Tree)
Elsternwick	Elsternwick Plaza	HO72	Elsternwick Estate and environs (Note, this is VicTrack owned land).
McKinnon	Glen Orme Avenue Reserve	HO75	Ormond Precinct environs
St Kilda East	Greenmeadows Gardens	HO74	Lempriere Avenue, Greenmeadows Gardens and environs.

Other relevant planning controls recognising heritage landscape character include:

Precinct	Open space	Overlay	Description
Murrumbeena	Boyd Park Outer Circle Railway Linear Park, Springthorpe Gardens and Riley Reserve.	NCO6	The Neighbourhood Character Overlay extends over these open spaces recognising the adjoining residential neighbourhood derives its distinctive character from its setting around these public open space reserves.
	Springthorpe Gardens	SLO1	This overlay applies to the private property adjoining the eastern boundary of Springthorpe Gardens. The private property has well established trees of more than 30 metres height that form an important backdrop and overhead canopy to Springthorpe Gardens. The Gardens are noted as having retained their original picturesque style and character in keeping with the Interwar housing development of the surrounding neighbourhood.
	Boyd Park in the Outer Circle Railway Linear Park	VPO1	This Vegetation Protection Overlay recognises the remaining significant remnant indigenous plant community which makes a positive contribution towards the locality's former ecology and landscape. 44 mature River Red Gums and 29 indigenous plants are present in the reserve.

Specific conservation management plans are prepared for:

- a) Greenmeadows Gardens, prepared 1995

Masterplans and Management Plans that include documentation and conservation heritage values have been prepared for the following reserves:

- b) Caulfield Park
- c) Boyd Park/Outer Circle Railway Linear Park and Springthorpe Gardens



3. Open space framework

3.1 Standards for the provision of open space

3.1.1 Overview

Since the 2014 Strategy, some of the planning framework directions and trends have changed including:

- Increased population growth.
- *Plan Melbourne 2017-2050* that forecasts higher levels of population growth compared to the previous *Melbourne 2030* with the focus of future change in Activity Centres.
- The inclusion of higher density precincts including Urban Renewal areas in Carnegie and Elsternwick.
- Changing patterns of open space use including higher value placed on all types of open space including small areas of open space.
- *Planning Practice Note | 70 Open Space Strategy, June 2015* has been released to provide direction on the method of preparing an open space strategy.

Historically, as the City of Glen Eira developed, open space was set aside primarily for recreation purposes. These function as Municipal open spaces, providing the structured sporting and informal recreational needs of the community. In other adjoining municipalities the majority of the large Municipal and Regional open spaces are located along the waterway corridors. Given that Glen Eira does not have any major waterways flowing through it, the larger areas of open space are mostly accessed via the local street network. The largest Regional open space is the Caulfield Racecourse Reserve, being Crown Land and zoned for Public Park and Recreation purposes. While this appears as a large area of open space in the north of the municipality, it is not easily accessible to everyone at all times, and has been referred to in the Strategy as restricted open space.

There are some key issues associated with the current provision of open space:

- The uneven distribution of open space across the municipality, which affects the distance people need to travel.
- The lack of a well linked and connected open space system due to the lack of natural topographic features such as waterways. The existing system of open space is a

series of larger and smaller reserves connected by the street network and a minimal number of linear open spaces.

- The ability of the existing open space to provide for climate change mitigation, recreational and environmental needs of each neighbourhood.
- The capacity of the existing open space system to accommodate the existing and forecast population and urban densities.

3.1.2 Plan Melbourne 2017-2050

Council and its open space network will contribute to the achievement of a number of Plan Melbourne principles and directions, including:

- Direction 1.3. Create development opportunities at urban renewal precincts across Melbourne.
- Direction 2.1. Manage the supply of new housing in the right locations to meet population growth and create a sustainable city.
- Direction 4.1. Create more great public places across Melbourne.
- Direction 5.1. Create a city of 20-minute neighbourhoods.
- Direction 5.3. Deliver social infrastructure to support strong communities.
- Direction 5.4. Deliver local parks and green neighbourhoods in collaboration with communities.
- Direction 6.4. Make Melbourne cooler and greener.

3.1.3 Glen Eira Planning Scheme

The Glen Eira Planning Scheme includes directions for open space provision which are relevant to the municipality, including its high growth areas.

The objectives of Clause 56.05 encourage development of a network of quality, well-distributed, multi-functional and cost-effective public open space that includes local parks, active open space, and linear links to open space. Open space is to cater for a broad range of uses, encourage healthy and active communities, integrate with encumbered open space, and contribute to environmental sustainability and sustainable neighbourhoods.

Specific size and locational standards for open space are included in Clause 56.05.

Table 3-1 Public open space standards (Clause 56.05 of planning schemes)

Open space type	Size	Locational distribution
Active open space	Minimum 8 hectares	Within 1 kilometre of 95 per cent of dwellings
Local parks and open spaces	1 hectare plus included active open space	Within 400 metres safe walking distance of 95 per cent of dwellings
Small parks and public squares	Not specified	Activity centres and higher density precincts
Linear parks and trails	Not specified	Within 1 kilometre of 95 per cent of dwellings

3.1.4 International examples of open space frameworks

3.1.4a London's open space planning guidelines

The previous Clause 56 standards are generally consistent with the guidelines recently developed in London for provision of open space. These are shown in the following Table 3-2:

Table 3-2 London's public open space hierarchy

Open space categorisation	Size guidelines	Distance from home
Regional parks	400 hectares	3.2 to 8 kilometres
Metropolitan parks	60 hectares	3.2 kilometres
District Parks	20 hectares	1.2 kilometres
Local parks and open spaces	2 hectares	400 metres
Small open spaces	Under 2 hectares	Less than 400 metres
Pocket parks	Under 0.4 hectares	Less than 400 metres
Linear open space	Variable	Wherever feasible

3.1.4b Urban green spaces and health – A review of evidence

World Health Organization Europe, 2016

The World Health Organization (WHO) reviewed the evidence behind the importance of green space in supporting healthy living in urban areas. The report concludes the evidence suggests that open space is effective for having positive effects on mental relaxation if it is at least 0.5 hectares in size and people live within 300 metres of it. For open space to have a positive effect on our physical health and wellbeing it is preferred to be a minimum of 1.0 hectare. There is also available evidence to support that there is a need for small, local green spaces very close to where people live and spend their day, as well as large green spaces with sports fields and opportunities to experience contact with nature and relative solitude.

Table 3-3 *World Health Organization aims for the provision of urban green space*

Open space type	Size	Distance from home/work
For physical activity	1.0 hectare minimum	300 metres
For mental relaxation	0.5 hectare minimum	300 metres
Additional small local green open spaces	Not specified	Very close to home (no distance specified, but less than 300 metres)

3.1.5 Conclusions

Future planning for the provision of open space in Glen Eira considers the principles set out in *Plan Melbourne 2017-2050*, Clause 56.05 of the Glen Eira Planning Scheme, the World Health Organization standards and those applicable to existing urban areas from the United Kingdom. These provision standards relate to the use hierarchy and accessibility/walkability standards applied in this Strategy and to Glen Eira's open space network.

3.2 Open space use hierarchy for Glen Eira

3.2.1 Overview

The hierarchy for Glen Eira is described in Table 3-4 below and is based on the policies and directions guiding the future provision of open space included in the Open Space Framework Section of this Strategy. The hierarchy is based on both the intended catchment of users and the relative size of the open space to adequately cater to its intended use. It is a guide for analysing the spatial distribution of open space, and is a management tool to direct appropriate facility development funding sources and maintenance levels in different types of open space reserves. This is discussed in more detail in Section 4.2 Distribution of Open Space.

Table 3-4 Open space hierarchy, size and walking distances for Glen Eira

Open Space	Size	Travel/walking distance	Purpose of open space
Regional	Unlimited	No specific travel distance is included as it is provided for the Melbourne-wide population. A 500 metre walking distance has been applied where appropriate to recognise its use by the nearby community.	Primarily caters to a broader regional population, including residents of Glen Eira, and/or protection and enhancement of environmental values in a regional context. There is only one example of this type of open space in Glen Eira and it is Caulfield Racecourse Reserve.
Municipal	Generally a minimum of 3 hectares*	<p>Located within 1 kilometre of all dwellings (travel distance includes cycling/public transport and vehicle).</p> <p>A 500 metre safe walking catchment is applied to Municipal open space with the ability to provide for neighbourhood open space needs as well as municipal needs.</p>	<p>Primarily caters to residents of Glen Eira and will also provide facilities that are used by residents from other municipalities. Generally these areas of open space provide facilities that appeal to people from across the municipality - for example, they may include sporting facilities, historical gardens or major recreational facilities such as playgrounds or skate facilities that people will travel up to 1 kilometre to reach. Examples include Princes Park, Caulfield Park, Bailey Reserve and King George VI Memorial Reserve.</p> <p>* There is some Municipal open space that is smaller than the min 3 hectares where the reserve contains a specialised facility on a smaller area of land, and fulfills a Municipal function - eg. public tennis courts and public bowling clubs</p>

Open Space	Size	Travel/walking distance	Purpose of open space
Neighbourhood	min 1 hectare	Located within 500 metres safe and easy walking catchment from all dwellings.	Provides for Neighbourhood use within walking distance of home with a range of facilities on the larger area of land. Examples include Hopetoun Gardens, Rosanna Street Reserve, and Halley Park.
Local	Less than 1 hectare to 0.26 hectares	Located within 300 metres safe and easy walking catchment from all dwellings.	Located within easy walking distance of home and large enough to provide for two activities in the one open space reserve - for example, a playground and open grassed area with seats. Examples include Gardenvale Park, Memorial Park Caulfield North and Springthorpe Gardens Murrumbena.
Small Local	From 0.25 hectares to 0.05 hectares, generally a minimum width of 20 metres	Located within 200 metres safe and easy walking catchment from all dwellings	Located within easy safe walking distance of home and generally able to accommodate a single use, for example seats in a small park or garden or a small play area. These spaces also have a potential role in urban heat mitigation where they are capable of supporting shade trees, with natural green features interspersed in higher density neighbourhoods. Examples include Colin Street Park Bentleigh East and Clee Street Park McKinnon.
Small Local Link	Minimum width of 5 metres	Not applicable, located on an as needs basis.	These areas of open space provide improved connectivity between streets and open space reserves. They are usually less than 0.05 hectares in size and only provide for the single use of a path connection between streets or open space reserves.

3.2.2 Analysis of the use hierarchy

The use hierarchy has been applied to open space across Glen Eira and is summarised in Table 3-5 below. This summary highlights the largest proportion of open space is Municipal in terms of both land area and quantity. This indicates that the majority of open space reserves in Glen Eira include at least some structured sport and recreation facilities or other significant values that are relevant to the whole municipality.

Table 3-5 Summary of quantity of open space use hierarchy types in Glen Eira

Please note that the quantities shown in this table exclude the Caulfield Racecourse Reserve as this is classified as restricted open space, meaning that it is not easily accessible, visible and available for use by the general public at all times.

Open space type	No. of open spaces	Area sqm	Area Ha	Proportion of total amount of open space
Regional	1	17,278	1.73	1%
Municipal	24	1,452,778	145.28	85%
Neighbourhood	9	150,690	15.07	9%
Local	12	65,302	6.53	4%
Small Local	24	22,293	2.23	1%
Small Local Link	2	528	0.05	0%
Total open space	72	1,708,869	170.89	100%

Municipal open space comprises the greatest land area with nearly 85% of the total open space area. The Municipal open space is generally well distributed across the City with the exception of the area generally west of Kooyong Road and north of North Road, where Neighbourhood open space provides the largest type of open space.

For reference, when the Caulfield Racecourse Reserve (the entire reserve that includes the race track, grand stands, training facilities etc) is added into the total amount of open space, there would be a total of 224.3 hectares of open space which comprises 5.8 per cent of the Municipality.

If the total area of the centre of the racecourse only, (approximately seven hectares in size), is added to the total amount of open space then open space would comprise 4.6 per cent of the Municipality.



FIGURE 3A Open space hierarchy in the City of Glen Eira

3.3 Character classification of open space

There are different character types of open space influenced by the inherent natural and physical character of the open space, the facilities in them, the urban context in which it is located, the design and the layout of the open space. Open space character in Glen Eira ranges from structured sporting reserves to formal gardens and informal spaces. These different characters appeal to different parts of the community including young and old and different cultural backgrounds. Diversity in character generally assists in meeting diverse needs, maximising accessibility of open space to the community.

Character classification of open space assists with identifying the overall management direction and intent for each open space. For example, if the open space has 'Formal' as its primary classification, future decisions regarding the planting style will be guided by whether that is consistent with this style. The application of this and assessment of the distribution of these character types at a precinct level, forms the basis of recommending any changes to the open space design to increase diversity from the existing situation. Refer to the precinct recommendations in Section 6 of this Strategy for the listing of the character classifications for each open space.

Each open space is assigned a primary classification and then any additional secondary classifications as appropriate.

The following character classification has been used to assess the provision and distribution of different types of reserves within the municipality. These are listed in alphabetical order.

Table 3-6 Character classification for open space in Glen Eira

Character classification	Description
Botanical	Where there is a significant botanical collection or where there are significant trees with botanical interest. This applies to both indigenous and non-indigenous vegetation.
Civic forecourt	Open space at the entrance to civic buildings (eg. Town Hall, Neighbourhood Centre) that is of a size that allows for passive outdoor use such as seating, resting, gathering and viewing.
Community garden (refer to Restricted recreation)	Where members of the community are assigned 'garden' plots in public open space to grow their own plants. These areas are fenced and open only to those who have been assigned garden plots, and therefore are a restricted open space use.
Formal	Where the facilities and overall open space layout are set out in a formal style.

Character classification	Description
Heritage	Where the Indigenous or non-Indigenous history of the site makes a significant contribution to the open space character and use. This classification includes open space that has been identified as having heritage values in existing studies, but is not limited to reserves that have or in the future will have formal heritage status.
Informal	Where the facilities and overall open space layout is not highly structured or formal.
Linear	Linked or continuous reserves that are used primarily for travelling through or along and typically include a path, seating or resting points and vegetation. These reserves are generally located along waterways, drainage lines, railways, major roads with shared use spaces and service infrastructure (eg. water supply).
Linking space	Where open space provides a local link or connection between streets or individual open space reserves and is not part of a linear network.
Nature conservation	Where the intent (or partial intent) of the open space is protecting and/or improving the biodiversity and habitat values. This may include reserves with existing value or those identified to have potential to provide for this in the future in existing strategies and plans.
Play	Where the character of the open space is dominated by a play facility and its primary purpose is for this.
Public garden	A planned open space set aside for the display, cultivation and enjoyment of plants and used for recreation.
Public square	The surrounding urban setting significantly influences the character and function of the space. These spaces are primarily located in commercial or business precincts, and are publicly owned and are free and accessible for the public to use at any time. These public squares are of a size that can provide for recreational use including social gatherings and are freely available for the public to use. A range of other urban design strategies and planning frameworks can also influence these spaces.
Railway easement/siding	Open space (other than linear) where the railway use significantly influences the open space's future use and design.
Restricted sporting/recreation	Available on a club membership or fee-paying basis only and not available for general public use at any time. This includes tennis courts, bowling clubs and community garden (refer Community Garden classification).
Seating/Viewing	Where the character and major use of the open space is for seating and viewing.

Character classification	Description
Service easement	Open space where the level of use, design and management is influenced by the presence of services in the reserve.
Significant road reservation	Road reserves of a significant size or width to contribute to the open space network for nature conservation, visual landscape or recreational use. This classification is for land either reserved as open space or with the potential for this, whilst recognising vehicle transport has a major influence on the open space.
Sporting	Primarily provides for organised club based sporting use and the outdoor grounds and facilities are available for general public use when no organised sporting events are in progress.
Undeveloped	Open space which has not been developed and may appear as 'left over space' without facilities.
Water feature/wetland	The presence of a water feature, WSUD feature or waterbody makes a contribution to the character and use of the reserve. This can include wetlands, water sensitive urban design features such as rain gardens, lakes and/or fountains and interactive water play features, and these contribute to the design and variety of recreational and habitat opportunities offered in these open spaces.

Refer to the Precinct recommendations in Section 6 for the listing and application of the character classification.



4. Key influences on open space planning in the future

4.1 Quantity of open space

4.1.1 Quantity of open space within the municipality

An assessment and analysis of existing open space has been undertaken for this Strategy, using the Council supplied data base as a starting point, and modifying this as required based on the mapping and site assessment work where it meets the definition of public open space for this Strategy. These areas of open space are shown on Drawing GEOSR-01, Figure 4A on the following page.

Based on the latest assessment which incorporates the changes since the 2014 Strategy there is a total of 72 open space reserves, with a total area of 170.89 hectares of open space, equating to 4.4 per cent of the total land area of the municipality. This excludes the restricted open space. If restricted open space is added in, there is a total of 224.3 hectares of open space which comprises 5.8 per cent of the Municipality. As noted previously, the only restricted open space is Caulfield Racecourse, which includes the training facilities, racetrack, grandstands etc.

Provision of open space quantity has been assessed in the following ways:

- Quantity of open space area as a proportion of the total land area of the municipality at both a municipality-wide level and a suburb level.
- Quantity of open space area per person, both at the municipality-wide level and the suburb level.

The rationale for assessing the quantity in these two ways is to measure how changes in population density can impact on the quantity of people using the open space. In addition to considering the quantity of open space, the design and distribution of open space are also assessed to determine whether there is an adequate provision of open space.



FIGURE 4A Existing open space in the City of Glen Eira

It is important to note that while this section of the Strategy focuses on the quantity of open space, this is not the only measure of value and contribution that open space makes to the community. The diversity of types, sizes and design of open space have different roles in the network, with the small areas of open space often forming valuable spaces within an easy walk of people living and working in the municipality. Refer to the discussion regarding the distribution of open space and the quality and design in the following sections.

Table 4-1 highlights the variation in quantity of open space across the different suburbs, and Table 4-2 includes quantity of open space per person.

Table 4-1 Quantity of open space in Glen Eira

PRECINCT NAME	No. of open spaces	Total open space Ha	Proportion of o/space of total precinct area
Bentleigh	10	13.40	2.8%
Bentleigh East	17	32.98	3.6%
Carnegie	6	21.07	5.7%
Caulfield	1	0.05	0.03%
Caulfield East	4	8.81	7.0%
Caulfield North	3	26.33	6.3%
Caulfield South	5	15.39	4.7%
Elsternwick	4	3.55	1.4%
Gardenvale	1	0.45	1.7%
Glen Huntly	3	2.73	3.1%
McKinnon	9	14.18	9.0%
Murrumbeena	6	21.20	8.1%
Ormond	2	9.39	4.5%
St Kilda East	1	1.35	1.4%
TOTALS	72	170.89	4.4%

There is significant variation in provision of open space across different precincts in the City. Caulfield has only 0.03 per cent as open space, and Elsternwick, St Kilda East and Gardenvale all have less than 2 per cent of open space as a proportion of the total precinct area.

McKinnon has 9 per cent open space relative to the precinct area, which is the highest amount and Murrumbeena is second highest at 8 per cent. Accessibility to open space is also a key influence on its use and benefit to the community that surround it, so the assessment of its distribution is also considered, and described in Section 4.2, along with the quality of the space as described in Section 4.3

The following tables highlight the provision of open space relative to population density. Table 4-2 is based on the forecast population in 2016 and Table 4-3 is based on the forecast population in 2031.

Please note that population figures included in these tables are those derived from the .id Consulting data. Refer to Section 4.4 for an explanation of future growth.

Table 4-2 Quantity of open space relative to 2016 estimated population

PRECINCT NAME	Total open space Ha	Proportion of o/space of total precinct area	Total population 2016	Sqm of open space per person 2016
Bentleigh	13.40	2.8%	17,828	8
Bentleigh East	32.98	3.6%	28,813	11
Carnegie	21.07	5.7%	18,228	12
Caulfield	0.05	0.03%	5,920	0.08
Caulfield East	8.81	7.0%	Incl. in Caul. Nth	20
Caulfield North	26.33	6.3%	17,849	20
Caulfield South	15.39	4.7%	12,536	12
Elsternwick	3.55	1.4%	12,061	3
Gardenvale	0.45	1.7%	Incl in Elsternwick	3
Glen Huntly	2.73	3.1%	5,318	5
McKinnon	14.18	9.0%	6,605	21
Murrumbeena	21.20	8.1%	10,647	20
Ormond	9.39	4.5%	8,850	11
St Kilda East	1.35	1.4%	4,358	3
TOTALS	170.89	4.4%	149,013	11

Note: the total estimated population figures included in the Table 4-2 are taken from the .id Forecast website and represent the residential population. Refer to the .id Consulting website for information on the assumptions in these estimates.

Caulfield has the lowest proportion of open space per person at 0.08 sqm followed by Elsternwick, Gardenvale and St Kilda East at 3 sqm. Taking the overall average open space provision being somewhere between 20 sqm and 25 sqm per person McKinnon, Murrumbeena, Caulfield East and Caulfield North achieve this.

This table shows the difference that urban density can make to overall provision of open space. Bentleigh has less open space relative to the overall suburb area (2.8 per cent) but a higher proportion of open space relative to population density (8 sqm) than Glenhuntly, which has 3.1 per cent of the suburb as open space and 5 sqm per person. It is important to also consider whether the open space is accessible and the design contributes to the quality of the open space system as a whole.

The following Table 4-3 illustrates the potential change in availability of open space relative to population density as forecast growth occurs in the municipality by 2031.

Table 4-3 Quantity of open space relative to 2031 forecast population Glen Eira

Please note that the estimated future population figures below are shown in the yellow column to differentiate them from the 2016 estimated population.

PRECINCT NAME	Total open space Ha	Total population 2016	Sqm of open space per person 2016	Forecast population 2031	Sqm of open space per person 2031
Bentleigh	13.40	17,828	8	20,160	7
Bentleigh East	32.98	28,813	11	32,591	10
Carnegie	21.07	18,228	12	22,279	9
Caulfield	0.05	5,920	0.08	6,594	0.07
Caulfield East	8.81	Incl. in Caul. Nth	20	Incl. in Caul. Nth	14
Caulfield North	26.33	17,849	20	25,730	14
Caulfield South	15.39	12,536	12	13,479	11
Elsternwick	3.55	12,061	3	14,007	3
Gardenvale	0.45	Incl in Elsternwick	3	Incl in Elsternwick	3
Glen Huntly	2.73	5,318	5	6,193	4
McKinnon	14.18	6,605	21	7,376	19
Murrumbeena	21.20	10,647	20	11,621	18
Ormond	9.39	8,850	11	9,392	10
St Kilda East	1.35	4,358	3	4,400	3
TOTALS	170.89	149,013	11	173,822	10

Forecast population change varies across the municipality with lower levels of change forecast to occur in Caulfield South, Murrumbeena, Ormond and St Kilda East. The greatest population change is forecast to occur in Caulfield North/East (combined), which is associated with the Phoenix Precinct followed by Carnegie, Elsternwick, Bentleigh and Bentleigh East.

It is important to acknowledge that this type of assessment does not take into account the location, distribution and type of open space and therefore how easy it is for the community in different parts of the municipality to visit open space.

4.1.2 Quantity of open space compared with other municipalities

Table 4-4 is a comparative overview of the provision of open space in Glen Eira relative to its population density with adjoining municipalities. The data has been sourced from the VEAC Metropolitan Melbourne Investigation, and the forecast population figures on the .id forecasts websites. There are variations between the total quantities nominated in the VEAC Investigation report and figures published in the open space planning documents for each municipality, so the figures should be taken as approximate only. The figures for Kingston City Council have the largest differential, with Council's Open Space Strategy nominating 559 hectares of open space, while the VEAC report nominates more than double this amount with 1,240.6 hectares.

Table 4-4 Comparison of Glen Eira open space quantity with adjoining municipalities

Municipality	Total open space sqm	Total municipal land area sqm	Total Population estimated population 2013	Open Space sqm per person	% of open space as a proportion of total land area
Glen Eira	1,729,324	38,700,000	140,320	12	4.5%
Bayside	4,413,000	37,000,000	97,400	45	11.9%
Kingston	12,406,000	91,000,000	149,772	83	13.6%
Monash	7,770,000	82,000,000	177,999	44	9.5%
Port Phillip	3,881,000	20,620,000	96,922	40	18.8%
Stonnington	1,726,000	25,600,000	89,883	19	6.7%
Notes: The total quantity of open and municipal land area for municipalities other than Glen Eira have been sourced from the VEAC Metropolitan Melbourne Investigation Final Report. The population estimates are all sourced from the relevant links to .id forecasting from Council websites. The total sqm areas nominated in the table are approximate only.					

Table 4-4 illustrates the following:

- City of Glen Eira has the lowest amount of open space as a proportion of land area available and per person, due to the high density of development and lack of large Regional open space within the municipality.
- City of Stonnington has a similar quantity of open space to Glen Eira, but is a smaller municipality so has a slightly higher proportion of open space to the total municipal area. They also have a smaller population than Glen Eira, resulting in more open space per person when measured relative to population density. Like Glen Eira, Stonnington has a limited amount of Regional open space.
- The other three municipalities have significantly more open space, and this is due to the presence of the regional open space including:
 - The foreshore reserves in Port Philip, Bayside and Kingston.
 - The foreshore and other major regional open space reserves including Braeside Park and Edithvale Seaford Wetlands in Kingston.
 - The foreshore and Albert Park in Port Phillip.
 - The Dandenong Valley Parklands along Dandenong Creek in Monash.

As noted above, these figures are a snapshot and do not assess the design and function of open space. It is also unclear as to what open space is included in these lump sum figures, for example some may include restricted open space such as golf courses whilst others may not. Most municipalities have their own policy or strategy to direct the future provision, management and design of open space, and it is anticipated that there will be variations in the totals listed above over the coming years.

This snapshot view should be taken as an overview and not analysed in too much detail, with the main conclusion being that Glen Eira has a relatively low amount of open space, in part due to lack of larger Regional open spaces that cater to the broader metropolitan Melbourne population, and a lack of open space provision at the time the older parts of the municipality were originally established.

4.2 Distribution of open space

4.2.1 Overview

Open space planning principles in Australia and overseas identify that all residents should be able to easily walk to some public open space without the need to cross busy roads or drive to them. This distance is generally agreed to be approximately 400 to 500 metres to a larger open space and 150 to 300 metres to a smaller open space. Victorian government planning policy including the current *Plan Melbourne 2017-2050* supports the principles of walkable neighbourhoods contributing to people's fitness, social connectedness and sustainability by reducing the reliance on cars. Walkability is affected by other factors such as major roads, at grade railway lines, poor walking links/connectivity and topography which can form physical barriers to easily walking from home to the open space. For larger areas of open space where people typically spend a longer time in the open space it is considered reasonable that people with limited mobility will cross major roads to reach them. However, the role of Local and Small Local open space is usually for frequent shorter visits where it is easy for everyone to reach a nearby open space. For the Local and Small Local open space it is therefore considered unreasonable that everyone, including people with limited mobility, will cross busy roads and railway lines to reach them.

4.2.2 Gap analysis

The gap analysis is an assessment of the distribution of existing open space across the municipality to identify if there are any locations where open space is not within reasonable reach of the community. This analysis identifies localised sub-precincts without open space within safe and easy walking distance. A travel catchment analysis has been undertaken for Municipal open space within both a one kilometre and two kilometre radius of all dwellings. The travel catchment does not take into account major barriers to access such as main roads as travel includes vehicle, public transport, cycling and walking, which meets the accepted standards for travel catchments to Municipal open space. This is illustrated separately on Figure 4C in Section 4.2.3.

A 500 metre radius walking catchment has been applied to all Municipal and Neighbourhood open space, which represents an approximate 10 to 15 minute walk for most to reach open space, whereas for the elderly or young children this is likely to be a 20 minute walk. Local and Small Local open space have a smaller radius applied to them, to reflect the different expectations in terms of length of stay at the different types of open space.

Open space has been provided in Glen Eira during different historical periods of urban development. Generally the Municipal open space is well provided for and distributed across the municipality. The lack of waterway corridors means that linear open space links are principally along existing and former railway corridors. The recently completed Elevated rail project for the Cranbourne Railway Line through Carnegie, Murrumbeena and Hughesdale a new linear shared trail has been constructed along the railway corridor. The project has also improved north south pedestrian connectivity with people

able to walk to open space they potentially had to walk much longer distance to reach. Consequently, the gap analysis plan has been updated to reflect this change.

The level crossing removal project construction for the Frankston Line through Ormond, McKinnon and Bentleigh, has relocated the former off-road linear path into the road reserves.

Generally in the older parts of the municipality, open space is less well provided for than new areas towards the south-east. For Municipal open space, some minor gaps in its distribution occur in the west of the municipality as described in section 4.2.3.

The gap analysis assessment is one tool when considering suitability of the provision of open space. The character, quality, design and accessibility of the open space is also important to ensure that it is meeting the social, recreation, environmental and sustainability needs. The Open Space Gap analysis shows all open spaces, with a coloured hatch illustrating the walking distance applicable to each hierarchy of open space. The areas without any colour hatch shown are locations in the municipality where the community need to travel further than the easy walking catchments to reach open space described in Table. The walking catchments take into account major barriers to access including major roads and railways. This is shown in Drawing GEOSR-02b in Figure 4B.

For the Strategy Refresh, intersections with pedestrian signals and signalised pedestrian crossings adjacent to Regional, Municipal, Neighbourhood and Local open space have been shown on the gap analysis plan to acknowledge that they improve accessibility to open space. These have been calibrated to the road hierarchy described in Table 3-4 in the Strategy. The gap analysis has been updated to illustrate this as shown in Figure 4B.

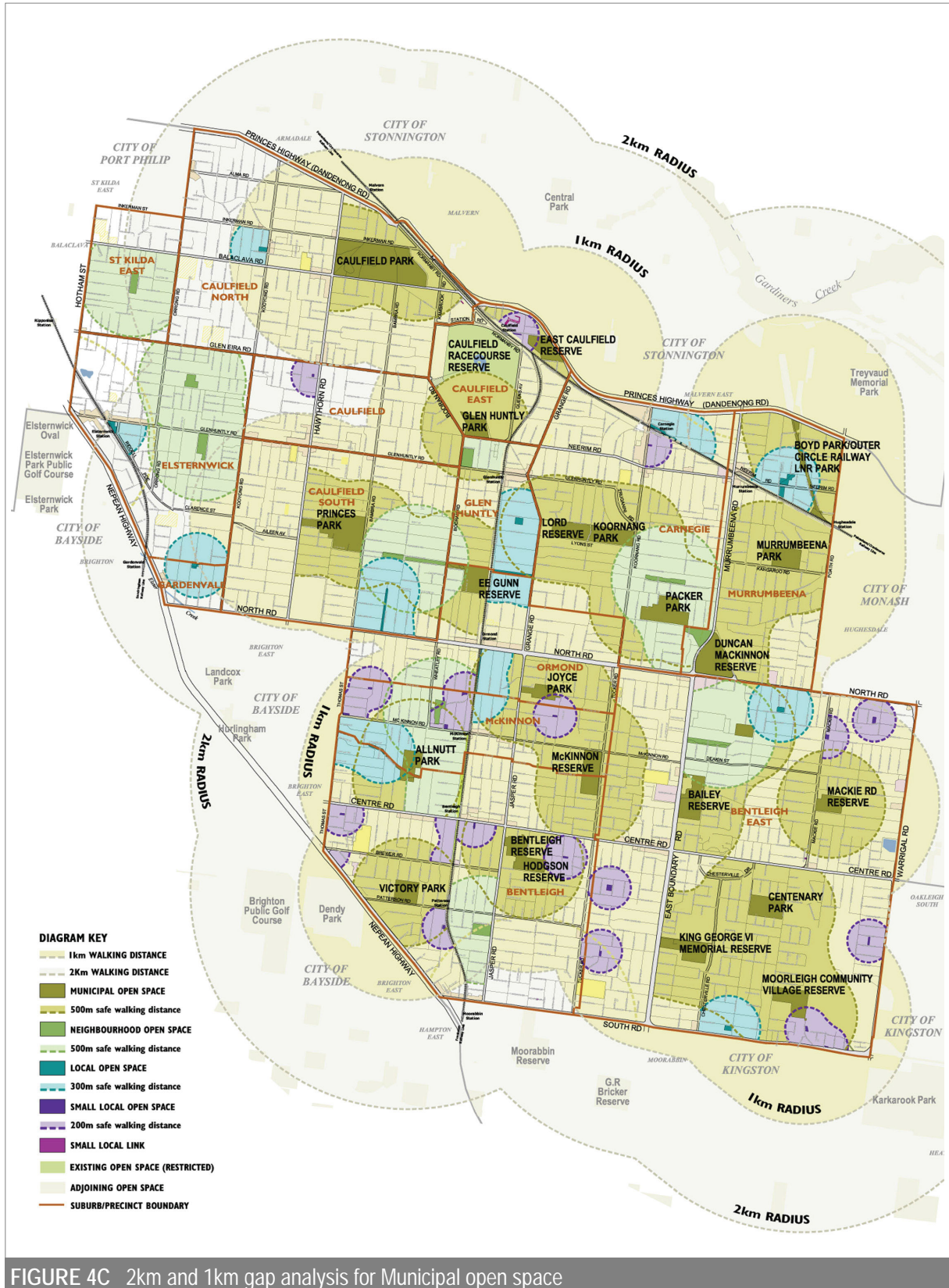
Recommendations to address gaps in the open space network are included in the Precinct recommendations in Section 6 of the Strategy.



FIGURE 4B Open space gap analysis in the City of Glen Eira

4.2.3 Municipal open space distribution

Figure 4C below is based on the Gap Analysis shown in Figure 4B, with the added layer of the one and two kilometre travel radius to assess the provision of Municipal open space only.



Municipal open space is predominantly located within a two kilometre radius of the majority of residents with the exception of residents in St Kilda East and Elsternwick. Applying a one kilometre travel radius to Municipal open space identifies there is a gap in the north-west of the municipality and also the southern extent. This includes St Kilda East, the western parts of Caulfield North, the north-western area of Caulfield, and the south-central area of Bentleigh.

Elsternwick Park, a Municipal open space in the City of Bayside, is located within a one kilometre radius of the western parts of Elsternwick and southern area of St Kilda East. For the community living in the western parts of Caulfield and Caulfield North there is no Municipal open space in the adjoining municipalities of Stonnington and the City of Port Phillip which is accessible within a 1 kilometre radius. Moorabbin Reserve is located in the City of Kingston and is within the 2 kilometre radius of the gap area in the southern part of Bentleigh. Refer to the diagram in Figure 4C.

It is unlikely, due to the density of existing urban development, that there will be an opportunity to provide additional Municipal open space in the areas noted above. Instead, this increases the priority to maximise effective use of existing Municipal open space and the potential provision of other types of open space, along with improved links between existing open spaces to better meet the open space needs of residents in this area. Important to this is the potential opportunity to improve the use of the centre of Caulfield Racecourse for structured sporting use, as this currently represents a large area of open space in Glen Eira that is not well utilised by the public for recreational purposes other than horse training and racing. Further analysis of this issue is included in Section 6.6.

4.2.4 Neighbourhood open space distribution

In Elsternwick and St Kilda East, Neighbourhood open space plays an important role given the lack of any Municipal open space within the Municipality. There are gaps in the provision of Neighbourhood open space in a number of other precincts, however Municipal open space has the potential to provide neighbourhood level facilities instead. An example is Caulfield Park, which has a diversity of facilities that would typically be provided in a Neighbourhood open space in addition to the structured sporting facilities.

The only gaps without Municipal or Neighbourhood open space within a 500 metre safe walking catchment is the western part of Caulfield North and the central part of Caulfield North.

There are some areas where residents do not have easy walking access to either Municipal or Neighbourhood open space, meaning they only have access to smaller areas of Local and Small Local open space. These include:

- Bentleigh, east of Jasper Road
- Bentleigh East, west of East Boundary Road
- Carnegie - north of Neerim Road
- Caulfield North, west of Hawthorn Road
- Caulfield
- Caulfield South, west of Hawthorn Road
- Gardenvale

- Glen Huntly - south of Glenhuntly Road, west of the railway
- Ormond, north of North Road

In these locations without access to larger open space, there is potential for the smaller Local and Small Local open spaces to become over-used, as was demonstrated in Gardenvale. Since the preparation of the 2014 Strategy, Gardenvale Park has been expanded in size to better cater to the existing levels of use.

4.2.5 Local and Small Local open space distribution

Some areas of Glen Eira have gaps in all types of existing open space including the Local and Small Local open space. In these locations the community do not have easy and safe walking access to any type of open space. This Strategy identifies specific actions to address these gaps and they have been prioritised over others as Very High/Urgent in Section 6, Precinct analysis and recommendations.

Table 4-5 High priority gap areas for Local and Small Local open space

Precinct	Location	Gap area
Bentleigh East	East of Jasper Road and south of Patterson Road	B1
Caulfield North	Between Hotham Street and Kooyong Road, north of Alma Road	CN1
Caulfield North	Between Hotham Street and Kooyong Road, south of Balaclava Road	CN2
Elsternwick	Between the railway and Nepean Highway, north of Glenhuntly Road	E1
Elsternwick	Between the railway and Nepean Highway, south of Glenhuntly Road	E3

The gap areas are described further in Section 6.

4.3 Quality of open space

4.3.1 Health and wellbeing

4.3.1a Overview

Open space significantly influences the health and wellbeing of the community. The existing population via the strategy household surveys has identified the need for additional open space in the municipality. Additionally, the forecast increase in population will create additional demand for open space. In some locations the forecast growth coincides with precincts where there is an identified lack of open space for the existing population, and growth will impact directly on the structured, unstructured and informal recreation needs of the community.

4.3.1b Key issues

Increased population densities in urban areas

As described in Section 4.4 of this Strategy, the Glen Eira City Council has prepared three Structure Plans to guide future development in the three Major Activity Centres: Bentleigh, Carnegie and Elsternwick. The Activity Centre, Housing and Local Economy Strategy 2017 provides further definition around the forecast change in the neighbourhood centres and in selected strategic sites. The extent of the key areas of forecast change and increased urban densities are shown on the updated Future Change Plan, Figure 4E.

In the Carnegie and Elsternwick Activity Centres high density development is proposed in the Urban Renewal Precincts. Given these precincts currently are predominantly non-residential land use there is little or no existing open space. Therefore, there will be a need to provide new open space in these urban renewal areas in the future. Some of the existing activity centres and neighbourhood centres have no or little existing open space. Increasing urban densities and concentrations of additional resident and worker populations in them means there is a need for new open space. This is described in more detail in the precinct analysis in Section 6 of this Strategy.

Increase in medium to high density living

Within activity centres, the types of dwellings being forecast include townhouses and apartments. These dwelling types typically have limited areas of private open space compared with detached and semi-detached dwellings. Limited private open space is likely to increase the need for reliance on public open spaces to meet the majority of residents outdoor recreation needs including access to sunlight, particularly during winter, fresh air, exercise, social events with family and friends and rest and relaxation.

With increased building heights there is also the increased impact of overshadowing on existing and proposed open space. This is exacerbated during winter when the sun is lower in the sky and buildings cast longer shadows. This also directly conflicts with the

time of the year when we need direct sunlight access on our skin to produce adequate levels of Vitamin D. People living in single detached dwellings have access to natural sunlight in their private open space, whereas those living in medium and high density housing have little or no private open space, and rely on being outdoors in public open space to receive adequate levels of sunlight during winter. This increases the importance of having adequate levels of sunlight access to open space during the winter in medium and high density precincts.

In relation to children living in higher density dwellings, a recent study *Vertical Living Kids* (2009), undertaken by the University of Melbourne for the Victorian Health Promotion Foundation, found that children living in high-rise housing within a 300 metre radius of local green space were more likely to access those spaces independently than children who had to travel further. While this research is available on children's use and access to open space, it is likely that vertical living for adults results in at least the same and potentially a greater reliance on public open space.

Urban heat island effect

In the higher density locations such as the activity centres, the future population will be living in taller buildings. The combination of increased building height and density of built form in the activity centres has the potential to create a warmer microclimate that can affect human health. This is due to the presence of heat absorbent surfaces that radiate heat back out and create a warm microclimate. During extended periods of heat in the summer, this can cause heat exhaustion and a serious threat to the vulnerable in the community including the frail and the elderly.

Regularly distributed green open spaces across built up areas that are designed with appropriate green infrastructure can be effective in off-setting some of the impacts of increased urban heat as well as promote community health and wellbeing. The appropriate green infrastructure includes a combination of large canopy shade trees, garden beds and natural grass which will allow effective evapotranspiration to cool the local microclimate. The green open space will provide some radiant passive cooling at night, be a cooler and attractive space to use during the day and provide a visual and physical break in the built form.

Other green infrastructure and features can also contribute to passive cooling in open space including water features and green walls, however the ongoing maintenance and costs associated with these types of features, along with the technology and energy required to maintain them needs to be considered carefully prior to including these.

Refer to discussion in the Climate Change Section 4.3.3a.

Structured community sport and recreation facilities

The *GET ACTIVE (2019)* noted that sporting facilities in the municipality are at capacity and there is already some undersupply of sporting fields to meet existing demands, particularly soccer. In addition to the demand for use of sports fields by sports clubs for training purposes and competitions, they are also well used for unstructured sport and recreation use. Glen Eira has put in place measures to address the current undersupply by limiting the number of new teams, and increasing durability of the turf surfaces with warm and cool season grasses and appropriate irrigation to improve capacity.

By 2026 the additional population is forecast to be in the order of 13,000 and there is potentially a need to increase the durability and use of the outdoor sports fields by investigating providing additional structured sports training fields in the centre of Caulfield Racecourse.

Sports club pavilions

Glen Eira has an ongoing upgrade program in place for sports pavilions in open space. This Strategy will promote multiple-use of pavilions in recognition that there are constraints on the amount of open parkland area available within the municipality. This approach will need to be strengthened within the context of forecast population growth.

Indoor multi-purpose facilities

The construction of GESAC has catered to the demand for these facilities identified in the Recreation Needs Study. If additional facilities are required, provision of additional multi-purpose indoor facilities should be investigated for sites additional to the existing open space network to avoid losing outdoor open space to built facilities.

Caulfield Racecourse

At this stage, Caulfield Racecourse is referred to as restricted open space and only the area that is accessible to public at restricted times is included as restricted open space (7 hectares). The Racecourse Reserve is Crown Land under the control of Trustees appointed by the Governor in Council on the recommendation of the Minister for Crown Lands. This restricted open space is not included in the total amount of open space, and is referred to separately. The Racecourse is primarily used and managed as a horse racing facility. This is not consistent with the definition of public open space in this Strategy.

Council released the *Crown Land - Caulfield Racecourse Reserve Position of the Glen Eira City Council*. The report was attached to the Ordinary Council Meeting Minutes of 19 March 2013. The report states that *'The Crown Land is reserved by law for three purposes: a racecourse, public recreation ground and public park'*. The paper then puts the position that the land should be managed for all three purposes, however only the first purpose of a racecourse is well provided for. Council's position includes:

- *The Crown Land should provide sporting facilities for both horse racing and community recreation. The area allocated for the sports grounds should be no less than the area allocated for race tracks.* Examples of tracks that provide sporting ground in the centre of them are attached to the report.
- *Specific areas of Crown Land should be designated for each of the uses of a racecourse, public recreation ground and public park and established by specific leases or licenses.*
- *Removal of horse training.*
- *Removal of car parking.....an arrangement should be entered into with Monash University for use of its multi-storey car parks for race days and other events.*
- *Removal of visual barriers*
- *Revenues for public purposes.*
- *Provision of public access.*

Access to Caulfield Racecourse for informal recreational use by the community is limited. 21 respondents to the household survey identified this as a specific issue, stating they are unsure if they are able to access the facilities in the centre of the racecourse. Future management arrangements and responsibilities of the Melbourne Racing Club in relation

to local community access to and use of the Racecourse Reserve is discussed further in precinct analysis recommendations, refer to Section 6.6.

Unstructured recreation facilities and infrastructure design

Cycling and walking

The strategy household survey outcomes have identified the need for more cycling paths in open space, and some requests for additional walking paths. The site assessments have identified there is potential to increase the provision of walking paths in some areas of open space particularly around existing sports fields and to provide connections to existing path networks. In relation to bicycle paths, the *Glen Eira Bicycle Strategy 2010* has undertaken a thorough assessment of all existing and potential links in the municipality. Council's *Integrated Transport Strategy 2018-2031* will direct future actions for improved opportunities for cycling.

Other unstructured recreational use of open space

There are a variety of unstructured recreational activities that the community participate in including walking, dog walking, running, jogging, cycling, exercise, using the fitness equipment, informal ball games such as kick to kick and futsal, playgrounds, skate boarding, tennis hit up walls and informal half court basketball. These unstructured activities are undertaken individually and in informal groups, without any structure associated with them such as a club or organisation, and not on a fee-paying basis.

Encouraging people to participate in physical activities to keep fit is important, and many of these activities require medium and large sized spaces to undertake them effectively. The Strategy supports providing facilities in open space to encourage this unstructured use along with the structured or organised sporting activities. Facilities include level open grassed areas, hard court areas that are open and accessible, mix of path surfaces, tennis hit up walls, fitness equipment and skate facilities, etc.

The open space survey outcomes identified that overall people are satisfied with the provision of dog off lead areas, however there are a range of comments relating to the adequate adherence to and enforcement of these controls in open space. Dogs off-lead is identified as a reason some people are not visiting open space.

Informal use and enjoyment of open space

Design and provision of open space that is accessible and enjoyable to use will encourage people outside to relax and unwind. This is important for people's mental health and wellbeing. The design and location of these spaces influences the ability of people to be able to relax and unwind. Facilities and designs that encourage this includes seating in a variety of locations and styles suitable for the levels of use anticipated in the different spaces, picnic and barbecue facilities, strolling paths, trees, shade, drinking fountains, playgrounds, and open grassed areas with a variety of settings including areas in the sun and shade.

Conflicts arise between different people in open space if their activities are incompatible. There is a need to ensure that compatible uses are considered in the design of future open space, while ensuring there is a diversity of activities and designs that encourage people out into the space. Results from the open space survey indicate requests for additional seats in a variety of different open spaces. Other facilities that assist informal use and enjoyment of open space that were requested included drinking fountains, picnic

tables, open grassed areas and shelters. Overall the conflicts between different uses are mainly in relation to adequate adherence to the dog off-lead and on-lead controls, and balance of sporting needs and uses and non-sport related uses.

Community gardens

Community gardens in Glen Eira are located on Council land, ancillary open space and private land. This includes some in school grounds, the Murrumbeena Community Garden in the grounds of the Koornang Uniting Church and the Caulfield Community Health Services community garden.

A recently established community garden is located at Moorleigh Community Village Reserve. Community gardens have many positive social, health and wellbeing benefits encouraging people outdoors to grow their own food in a social setting. Community gardens are a restricted use in open space, with the garden plots being available only to selected groups or individuals to use. Community gardens can be effectively established on ancillary open space or publicly accessible open space that is not reserved as public open space, as demonstrated by the Murrumbeena Community Garden. There may be opportunities to establish community gardens in association with existing community houses and learning centres, schools and other church grounds in the city. Community gardens are often best co-located with other built facilities to utilise these for associated facilities that community gardens need such as storage sheds and water supply (preferably sustainable re-use).

This Strategy includes guidelines for council and the community to use in assessing and determining appropriate locations for community gardens in the future. Section 5 of this Strategy recommends that council be proactive regarding community gardens and undertake a thorough assessment of possible sites in the municipality that are appropriate for community gardens in the future in accordance with the guidelines included in Section 7 of this Strategy.

4.3.1c Conclusions

As noted in Section 4.2.3 it is highly unlikely that opportunities will arise to feasibly add large new open spaces to the network in Glen Eira given the established urban nature of the municipality. Opportunities to provide additional structured sports training facilities in the Caulfield Racecourse site is recommended to be advocated for by this Strategy in Section 5 and Section 6.6. The purpose of doing this is to increase the availability of the outdoor sports fields for unstructured recreational uses by moving some of the sports training use out of the most popular parks.

The analysis completed for this Strategy confirms there are gaps in the Municipal, Neighbourhood, Local and Small Local open space system. Additional areas of well designed and located Local and Small Local open space are recommended to be added to the network so a higher proportion of the existing and forecast community are within easy walking distance of open space. They will be designed to complement the existing open spaces in the precinct and meet the physical and mental health and wellbeing needs of the community. These additional open spaces will also assist to mitigate urban heat build-up and provide some natural spaces within the higher density areas.

The analysis has also identified opportunities for improvement to the quality and character of some open spaces to better address gaps in the open space network. Refer to Section 5 and 6 for the recommendations and actions.

4.3.2 Natural values and features

Some of the key issues identified from the site assessments, council officer workshops and the household survey outcomes are outlined below.

4.3.2a Overview

Glen Eira has very little remnant vegetation remaining in the municipality, with Boyd Park containing some remnants of the original River Red Gum Woodland that would have once been more extensive in the municipality. The other major vegetation community originally present was the wetland and swamp areas, which were drained to allow for development.

With the relatively flat topography and swampy nature of the city and the lack of significant natural waterway corridors, has meant that only limited areas of either remnant or reinstated vegetation communities are present. There are some single remnant or older established indigenous trees in some of the individual open spaces and these will be noted in the precinct analysis stage.

4.3.2b Key Issues

- While there are few examples of remnant vegetation in the municipality, the presence of the individual remnant trees do provide environmental features in the open space. There is potential in some areas to consider introduction of additional woodland and wetland character to open space to provide some character diversity and contact with nature for the community. Any future provision of additional natural areas would primarily be for character and educational purposes. These would most appropriately be located to expand on the smaller existing remnants and where remnant trees are present.
- There is potential to increase biodiversity values with the establishment of water quality treatment features in open space, to assist with sustainable water use in open space and urban heat mitigation. These will have broader health and wellbeing benefits as well as environmental sustainability. Refer to the discussion regarding sustainability 4.3.3.
- The potential to strengthen the natural character of open space with additional trees, water/wetland, garden beds and grassed surfaces is identified in the household survey outcomes. Trees are the most highly valued feature of open space, and many open space improvement recommendations are for additional vegetation, trees and shade in open space. These are consistent with the sustainability principles of increased biodiversity values and mitigating urban heat island effect.

4.3.3 Sustainability

Some of the key issues identified from the site assessments, council officer workshops and the household survey outcomes are outlined below.

4.3.3a Key Issues

Climate change

Climate change mitigation and adaptation is an issue that open space can contribute to, including urban heat mitigation by providing cool spaces for people to retreat to in hot weather, and provide a cooling effect with natural spaces that absorb moisture in the urban landscape. Higher densities increase the need for these cooler spaces to be located nearby. Currently increased urban densities occur in and around the activity centres, where in many locations the existing open spaces are predominantly urban spaces that do not passively cool the immediate areas. This Strategy advocates for new open spaces in urban centres to incorporate passive cooling principles and for these principles to guide future upgrades to open space.

Sustainable energy use in open space including sports pavilion design, lighting infrastructure and maintenance practices.

Reduce carbon emissions by improving the walking and cycling facilities in open space and surrounding street network. Currently some open spaces are developed primarily for vehicle access, circulation and carparking. Improving prioritisation of pedestrian and cycle movement and circulation within the open spaces will be incorporated in future upgrades to existing open spaces and in the design of new open space. Encourage the community to walk and cycle to open space rather than drive.

Carbon sequestration values of open space including mature trees, natural surfaces and the potential to increase these values with additional tree planting where appropriate. Trees are highly valued by the community and the existing open space network contains many stands of mature trees. Within our major open spaces, there is pressure to expand sporting uses or adhere to higher risk management standards resulting in the need to install additional infrastructure like fencing. There is a need to establish a balance that quantifies the environmental and qualitative value of the trees against a recreational risk profile. This Strategy recommends preparation of a Tree Management Strategy for trees on public land including open space, to assist with this future decision making process - refer to recommendations 5.2K.

Sustainable Water Use

Improve rainwater harvesting and reuse in open space including capture of roof runoff from pavilions and redirect this, where feasible, into the open space via irrigation of garden beds, trees and sports turf where appropriate. Sustainable water re-use within open space assists with urban heat mitigation as noted above.

Infrastructure Design and Material Use

Where infrastructure upgrade is required, consider sustainability of material use, and investigate opportunities to prioritise use of green infrastructure over built infrastructure (e.g. trees in place of structures for shade).

4.3.4 Cultural heritage values

4.3.4a Overview

The cultural heritage values of open space in Glen Eira require on-going protection and interpretation.

4.3.4b Key Issues

Refer to precincts for descriptions of key issues pertaining to Cultural Heritage values.

4.4 Future growth planning for Glen Eira

4.4.1 Summary of forecast population change

Population, housing and employment projections and trends are all important factors in understanding future open space needs. Glen Eira is anticipating population increases and demographic change as well as residential redevelopment in response to the population pressures being experienced across Melbourne. There are also significant commercial redevelopment opportunities in the municipality. Educational institutions such as Monash University continue to grow. To respond to these changes, the analysis for this Strategy has included a clear understanding of where new residential populations are forecast to be, along with an indication of other non-residential population numbers including workers and students. A range of information has been gathered for the 15 year period covered by the Strategy to assist with this.

This information has been used in analysing local requirements for open space. The Strategy reviews the anticipated population changes in respect of the current open space provision not only in terms of quantity, but also quality and accessibility. It is important that the quantity of open space is not considered in isolation from the quality and accessibility. The Strategy identifies what overall changes to the open space network are required to meet the anticipated population increase in the areas that experience growth and change.

Redevelopment opportunities in Glen Eira are directed towards the Activity Centres, Neighbourhood Centres and Local Centres along with the Major Roads and Tram Routes. A combination of commercial and residential development is anticipated in these areas subject to zoning provisions. Therefore the areas that will require most attention in terms of future change include the largest activity centres and strategic sites where there will be a concentrated population increase, especially where good access to open space may already be limited in the local area or too small to cater for a large increase in use.

In response to future change in Glen Eira, the Strategy proposes open space upgrades to accommodate the additional population and additional land for open space or open space links, and determines that some of the existing open space would make a more valuable contribution to the network if its function and design were changed to take account of population change. Local analysis with detailed assessments of open space has been undertaken at a precinct level with recommendations for open space improvements. It is expected that opportunities for future open space provision and/or upgrade will be coordinated with plans for activity centres and/or strategic redevelopment sites.

Recommended improvements have strategic estimates of cost allocated to them as the basis for preparing a revised open space contribution rate to implement the Strategy.

4.4.1a Residential population

The Council has published residential population and dwelling forecasts by year and geographic location/suburb. The forecasts shown in Table 4-6 and Table 4-7 were compiled for Council by .id Consulting and are based on 2016 ABS Census data. They are the forecasts used in this Strategy. The forecast figures in the tables do not include

the new population for the East Village development in Bentleigh East. This redevelopment site is planned through a different process, anticipates a future population of 6,000 people (mainly in the latter half of this Strategy) and has its own open space requirements.

Table 4-6 Forecast residential population change 2016 - 2031
(.id Consulting forecasts, November 2018)

Precinct	2016 persons	% all persons in the city	2031 persons	% all persons in the city	Change 2016-2031
Bentleigh	17,828	12%	20,160	12%	2,332
Bentleigh East	28,813	19%	32,591	19%	3,778
Carnegie	18,228	12%	22,279	13%	4,051
Caulfield	5,920	4%	6,594	4%	674
Caulfield North - Caulfield East	17,849	12%	25,730	15%	7,881
Caulfield South	12,536	8%	13,479	8%	943
Elsternwick - Gardenvale	12,061	8%	14,007	8%	1,946
Glen Huntly	5,318	4%	6,193	4%	875
McKinnon	6,605	4%	7,376	4%	771
Murrumbeena	10,647	7%	11,621	7%	974
Ormond	8,850	6%	9,392	5%	542
St Kilda East	4,358	3%	4,400	3%	42
City of Glen Eira	149,013	100%	173,822	100%	24,809

Table 4-7 Forecast private dwelling change 2016 - 2031
(.id consulting forecasts, November 2018)

Precinct	2016 dwellings	% all dwellings in the city	2031 dwellings	% all dwellings in the city	Change 2016-2031
Bentleigh	7,081	12%	8,433	12%	1,352
Bentleigh East	10,993	18%	12,680	17%	1,687
Carnegie	7,985	13%	10,191	14%	2,206
Caulfield	2,340	4%	2,628	4%	288
Caulfield North - Caulfield East	7,419	12%	10,800	15%	3,381
Caulfield South	5,030	8%	5,600	8%	570
Elsternwick - Gardenvale	5,210	9%	6,261	9%	1,051
Glen Huntly	2,443	4%	2,836	4%	393
McKinnon	2,298	4%	2,747	4%	449
Murrumbeena	4,533	7%	5,112	7%	579
Ormond	3,575	6%	4,028	6%	453
St Kilda East	1,557	3%	1,682	2%	125
City of Glen Eira	60,464	100%	72,998	100%	12,534

Each suburb is expected to attract new residents during the 15 year forecast period. In order of the greatest number of new residents to the least:

- Caulfield North - Caulfield East which includes the Phoenix Precinct: 7,881 additional people, or 44 per cent growth.
- Carnegie: 4,051 additional people, or 22 per cent growth.
- Bentleigh East: 3,778 additional people, or 13 per cent growth (not including East Village).
- Bentleigh: 2,332 additional people, or 13 per cent growth.
- Elsternwick - Gardenvale: 1,946 additional people, or 16 per cent growth.
- Murrumbeena: 974 additional people, or 9 per cent growth.
- Glen Huntly: 875 additional people, or 16 per cent growth.
- McKinnon: 771 additional people, or 12 per cent growth.
- Caulfield: 674 additional people, or 11 per cent growth.
- Ormond: 542 additional people or 6 per cent growth.
- St Kilda East: 42 additional people or 1 per cent growth.

Comparison to the 2014 Open Space Strategy

The 2014 Open Space Strategy uses the forecast period of 2013-2026. At that time, it was estimated that an additional 13,180 residents would live in Glen Eira by 2026, taking the total population from 140,320 to 153,500. This is an average increase of about 1,013 residents per year. Three years later, in 2016 (a Census year), the population was already at 149,013, an increase of 8,693 people, or about 65 per cent of the 2013-2026 forecast and representing the equivalent of approximately 8.5 years of growth. The level of change varied across the individual suburbs as shown in Table 4-8.

Table 4-8 Comparison of the forecast population change between 2013 and 2016 and actual change

	Glen Eira Open Space Strategy 2014				Between 2013 and 2016 (23% of the time period)				
	2013	2026	No. increase 2013 to 2026	% increase	2013	2016	No. increase 2013 to 2016	% increase	% of total 2026 forecast population
Small area/Precincts									
Bentleigh	16,501	17,251	750	5%	16,501	17,828	1,327	8%	177%
Bentleigh East	26,922	28,978	2,056	8%	26,922	28,813	1,891	7%	92%
Carnegie	17,084	18,722	1,638	10%	17,084	18,228	1,144	7%	70%
Caulfield	5,514	5,861	347	6%	5,514	5,920	406	7%	117%
Caulfield North - Caulfield East	17,319	21,994	4,675	27%	17,319	17,849	530	3%	11%
Caulfield South	12,078	12,625	547	5%	12,078	12,536	458	4%	84%
Elsternwick - Gardenvale	11,358	13,148	1,790	16%	11,358	12,061	703	6%	39%
Glen Huntly	5,062	5,284	222	4%	5,062	5,318	256	5%	115%
McKinnon	5,981	5,954	-27	0%	5,981	6,605	624	10%	62400%
Murrumbeena	9,891	10,539	648	7%	9,891	10,647	756	8%	117%
Ormond	8,386	8,599	213	3%	8,386	8,850	464	6%	218%
St Kilda East	4,224	4,545	321	8%	4,224	4,358	134	3%	42%
City of Glen Eira Total	140,320	153,500	13,180	9%	140,320	149,013	8,693	6%	66%

The new residential forecast period is 2016-2031. The forecast used in this Strategy is for a Glen Eira population of 173,822 people in 2031, an increase of 24,809 people from 2016 and 33,502 from 2013. These are shown in Table 4-9 on the next page.

Table 4-9 Comparison of the forecast population change between the 2014 Strategy and this Strategy Refresh

	Glen Eira Open Space Strategy 2014				GEOSS Refresh forecasts			
Small area/Precincts	2013	2026	No. increase 2013 to 2026	% increase	2016	2031	No. increase 2016 to 2031	% increase
Bentleigh	16,501	17,251	750	5%	17,828	20,160	2,332	13%
Bentleigh East	26,922	28,978	2,056	8%	28,813	32,591	3,778	13%
Carnegie	17,084	18,722	1,638	10%	18,228	22,279	4,051	22%
Caulfield	5,514	5,861	347	6%	5,920	6,594	674	11%
Caulfield North - Caulfield East	17,319	21,994	4,675	27%	17,849	25,730	7,881	44%
Caulfield South	12,078	12,625	547	5%	12,536	13,479	943	8%
Elsternwick - Gardenvale	11,358	13,148	1,790	16%	12,061	14,007	1,946	16%
Glen Huntly	5,062	5,284	222	4%	5,318	6,193	875	16%
McKinnon	5,981	5,954	-27	0%	6,605	7,376	771	12%
Murrumbeena	9,891	10,539	648	7%	10,647	11,621	974	9%
Ormond	8,386	8,599	213	3%	8,850	9,392	542	6%
St Kilda East	4,224	4,545	321	8%	4,358	4,400	42	1%
City of Glen Eira Total	140,320	153,500	13,180	9%	149,013	173,822	24,809	17%

Dwelling numbers have also increased significantly for the new forecast period. There were 57,977 dwellings in 2013 with forecast growth of 6,861 additional dwellings by 2026, an average increase of 527 dwellings per year. In 2016 there were 60,464 dwellings, an increase of 2,487, or about 35 per cent of the 2013-2026 forecast and equivalent to 4.7 years of expected growth.

For the new residential forecast period of 2016-2031, the forecast is for 72,998 dwellings, an increase of 12,534 dwellings from 2016 and 15,021 from 2013.

Interestingly, the proportion of all dwellings located in each suburb has not changed over time. What may change is that development within a suburb will intensify around main activity centres and urban renewal areas in future.

In summary, this Strategy Refresh is planning for an increase of 24,809 people compared to 13,180 in the 2014 Strategy and 12,534 dwellings compared to 6,881 in the 2014 Strategy.

4.4.1b Demographic change

The .id Consulting forecasts indicate that the most populous age group in Glen Eira is the 35 to 49 year olds, representing 21 per cent of the total population. This group is forecast to remain the most numerous and increase slightly in proportion to represent 22 per cent of the population in 2031. Overall trends indicate that people aged between 60 and 84 represent the largest proportional increase, changing from comprising approximately 19 per cent of the population in 2016 up to 22 per cent by 2031. Children aged between 0 and 11 years are forecast to decline slightly from comprising approximately 15 per cent of the population in 2016 to 14 per cent in 2031. In summary, Glen Eira will continue to support a diversity of age groups with a trend towards an increase in the older population.

4.4.1c Employment population

The ABS 2016 Census includes the Working Population Profile Based on Place of Work to provide information on where employed people over 15 years of age worked in the week prior to the night that the Census is taken (Census Night). For the Glen Eira LGA there were 37,172 employees counted in 2016, and this is a 4,500 or 13.8 per cent increase from the 2011 figure of 32,672. The same data in the 2011 Census showed an increase of 12.6 per cent in the number of employees during the 2006-2011 period.

.id Consulting publishes a National Economic Indicators series on its web pages that reports data by municipality. According to these figures Glen Eira had 15,674 businesses and 46,339 local jobs in 2017/18, which is a higher employment figure than for the other available data sources.

The SGS report, *Glen Eira Housing and Local Economy Growth Assessment, December 2018*, provides a breakdown of employment by suburb for the years 2016 and 2031 as shown in Table 4-10. It is noted that this report provides a different number of employees for 2016 compared to the above two data sources, which highlights the difficulty in tracking employment data. The SGS work has been helpful in allocating municipal data to the suburb level, as these are the precincts addressed individually in Section 6 of this report.

Table 4-10 Forecast employment population change 2016 - 2031
(SGS, December 2018)

Precinct	2016 employees	2031 employees	Change 2016-2031
Bentleigh	5,650	7,605	1,955
Bentleigh East	8,423	12,372	3,949
Carnegie	3,820	5,181	1,361
Caulfield	4,290	5,999	1,709
Caulfield North - Caulfield East	6,816	9,482	2,666
Caulfield South	2,547	3,648	1,101
Elsternwick - Gardenvale	5,690	7,600	1,910
Glen Huntly	894	1,200	306
McKinnon	1,194	1,666	472
Murrumbeena	1,388	1,848	460
Ormond	1,928	2,623	695
St Kilda East	2,520	3,920	1,400
City of Glen Eira	44,053	61,238	17,185

Areas of future employment are likely to focus on health, education, retail and hospitality. Innovation will also shape the types and locations of businesses locating in Glen Eira.

Increases in worker populations are anticipated to concentrate in employment nodes such as the Phoenix Precinct, other large activity centres, strategic commercial redevelopment sites, and health and education facilities.

4.4.2 Strategic framework guiding future change

Glen Eira continues to rely on the strategic framework in the Glen Eira Planning Scheme. Parts of the framework are in transition as the Council responds to strong population growth and increasing investment in the Major Activity Centres identified in *Plan Melbourne 2017-2050*: Bentleigh, Carnegie, Caulfield, Elsternwick and Glen Huntly. There are also additional commercial and industrial sites transitioning to housing and mixed use developments. Therefore this section of the report is updated from the 2014 Strategy.

4.4.2a Glen Eira activity centre and residential planning framework

Council has adopted the *Activity Centre, Housing and Local Economy Strategy, July 2017*, (ACHLES) to inform a revised planning framework. The following provides an overview of the Council's current policy direction.

Refer to Drawing GEOSSR-03 for the locations of the Major and Neighbourhood Activity Centres and housing diversity locations. Activity centres and housing as they relate to open space are discussed further in Section 6 of this report.

Activity centres

The Activity Centre hierarchy is shown in Table 4-11. There are new locations and changes in the roles of centres compared to the 2014 Strategy.

Table 4-11 Activity centre hierarchy (Source: ACHLES, July 2017)

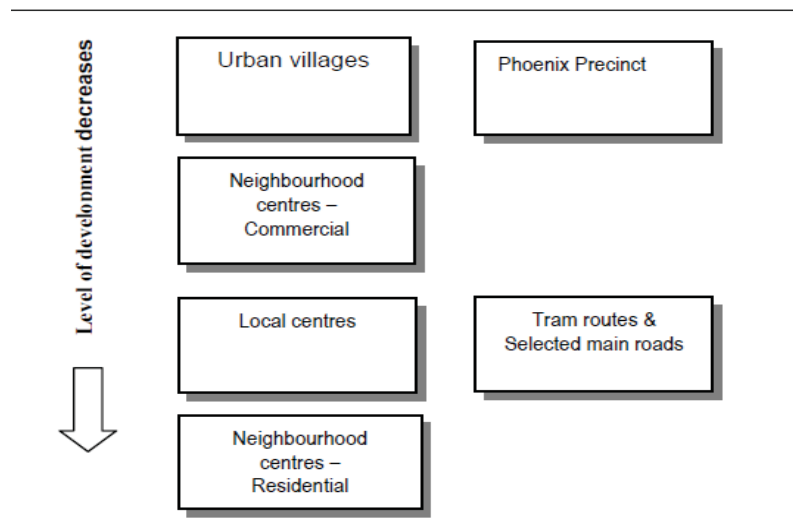
Precinct	Function
Caulfield Station Precinct	Health, education and innovation precinct with urban renewal
East Village	Emerging health, education and innovation precinct
Carnegie	Major activity centre with urban renewal
Elsternwick	Major activity centre with urban renewal
Moorabbin Junction	Emerging major activity centre with urban renewal
Bentleigh	Major activity centre
Glen Huntly	Emerging major activity centre
Bentleigh East	Large neighbourhood centre
Caulfield South	Large neighbourhood centre
Caulfield Park	Neighbourhood centre
Alma Village	Neighbourhood centre
Hughesdale	Neighbourhood centre
McKinnon	Neighbourhood centre
Murrumbeena	Neighbourhood centre
Ormond	Neighbourhood centre
Patterson	Neighbourhood centre
Ripponlea	Neighbourhood centre
Gardenvale	Neighbourhood centre
Oakleigh South	Emerging neighbourhood centre

The above hierarchy does not name local activity centres, however Clause 22.07 of the Glen Eira Planning Scheme indicates the location of local centres on plan.

Housing

The ACHLES provides direction on preferred locations for growth and housing types in Glen Eira. Clause 21.04 Housing and Residential Development of the Glen Eira Planning Scheme is still the relevant policy, whilst noting that it reflects the Housing and Residential Development Strategy from June 2002. The priority locations for housing are shown in Clause 22.07 Housing Diversity Area Policy. With the preparation of Structure Plans, the Urban Villages are now absorbed into the Structure Plan areas and new urban renewal sites have emerged, however the planning scheme residential hierarchy is still valid.

Clause 21.04 Housing and Residential Development, Hierarchy of housing diversity areas



4.4.2b Precinct plans

Phoenix Precinct

The Phoenix Precinct includes the Caulfield Racecourse, the Monash University Caulfield Campus and the surrounding area. There are six areas identified within this precinct (Clause 22.06 Phoenix Precinct Policy):

- Area 1 Mixed Use Precinct
- Area 2A Residential Precinct
- Area 2B Residential Precinct
- Area 3 Smith Street Precinct
- Area 4 Caulfield Racecourse
- Area 5 Derby Road and Caulfield Plaza
- Area 6 Monash University

This precinct was created by Glen Eira Planning Scheme Amendment C14. Amendment C60 established the open space requirements for the Caulfield Village area only. Refer to the precinct analysis in Section 6.6 for further information.

Caulfield Station

The Victorian Planning Authority is working with the Council on structure planning for this area near the Caulfield railway station which is part of the Phoenix Precinct.

Refer to the precinct analysis in Section 6.6 for further information.

Bentleigh Structure Plan 2018-2031

Adopted by Council in 2018, the 2031 vision for Bentleigh is:

Bentleigh will be an accessible, local shopping destination with a vibrant cafe and restaurant culture.

It will maintain its community feel with open space, places for people to meet and gather and a broad range of local businesses, all of which will meet the needs of a diverse community,

The Structure Plan addresses issues of land use, buildings, public spaces, and parking and movement within the local area. Opportunities will focus on food and wellbeing and improved amenity around the Bentleigh railway station, employment and retailing/services, increased housing near the station and along Centre Road, and a community precinct with new and expanded community facilities. Open space is to be consistent with the recommendations of the Open Space Strategy.

Refer to the precinct analysis in Section 6.2 for a plan and further information.

Carnegie Structure Plan 2018 - 2031

Adopted by Council in 2018, the 2031 vision for Carnegie is:

Carnegie will be a safe, connected and welcoming centre that embraces its authentic urban character and cultural identity.

The centre will be a destination for entertainment, shopping and employment, supporting a range of businesses and interconnected community spaces that meet the needs of the local community,

The Structure Plan addresses issues of land use, buildings, public spaces, and parking and movement within the local area. Opportunities will focus on the Carnegie station, an entertainment precinct south of the station, retailing along Koornang Road, increased housing in several locations and a community precinct centred around existing community facilities. The Structure Plan also identifies an area of urban renewal north of the Carnegie railway station and train line, extending to Dandenong Road. This is an area that will experience significant and more intensive redevelopment whilst retaining and protecting valued adjoining heritage and character areas and existing open space. Open space is to be consistent with the recommendations of the Open Space Strategy.

Refer to the precinct analysis in Section 6.4 for a plan and further information.

Elsternwick Structure Plan 2018 - 2031

Adopted by Council in 2018, the 2031 vision for Elsternwick is:

Elsternwick will be a safe, accessible and liveable centre that embraces its historic character and strong cultural and village feel.

The centre will be a destination for its long standing cultural and entertainment offerings, business and employment opportunities, and a range of quality local retail outlets and community spaces.

The Structure Plan addresses issues of land use, buildings, public spaces, and parking and movement within the local area. Opportunities will focus on the amenity around the Elsternwick Station, the entertainment and cultural precinct north of Glenhuntly Road and retailing along Glenhuntly Road. The Structure Plan also identifies an area of urban renewal south-west of the Elsternwick railway station and train line, extending to the Nepean Highway. This is a newly emerging area for redevelopment and transition to higher density housing and non-residential uses and including the provision of new open space. Open space is to be consistent with the recommendations of the Open Space Strategy.

Refer to the precinct analysis in Section 6.9 for a plan and further information.

East Village (Virginia Park)

Council rezoned part of the long-established industrial precinct in East Boundary Road, Bentleigh East, from Business 3 Zone and Industrial 1 Zone to Commercial 1 and 2 zones. According to the Panel report (2010), at the time of rezoning there were approximately 1,500 employees on site. The rezoning was termed a “*strategic repositioning opportunity*” to “*develop the site into a more commercially oriented business centre to sustain the location as an important employment node within the municipality*”.

The Victorian Planning Authority has more recently worked with Council on a comprehensive development plan for the site. Glen Eira Planning Scheme Amendment C155 proposes a Comprehensive Development Zone with mandatory open space contribution rates of 11.4 per cent and 5.7 per cent. (This is in addition to a proposed Development Contributions Plan.) Future land uses will include private residential, mixed use and commercial developments, community facilities and public spaces.

Refer to the precinct analysis in Section 6.3 for further information.

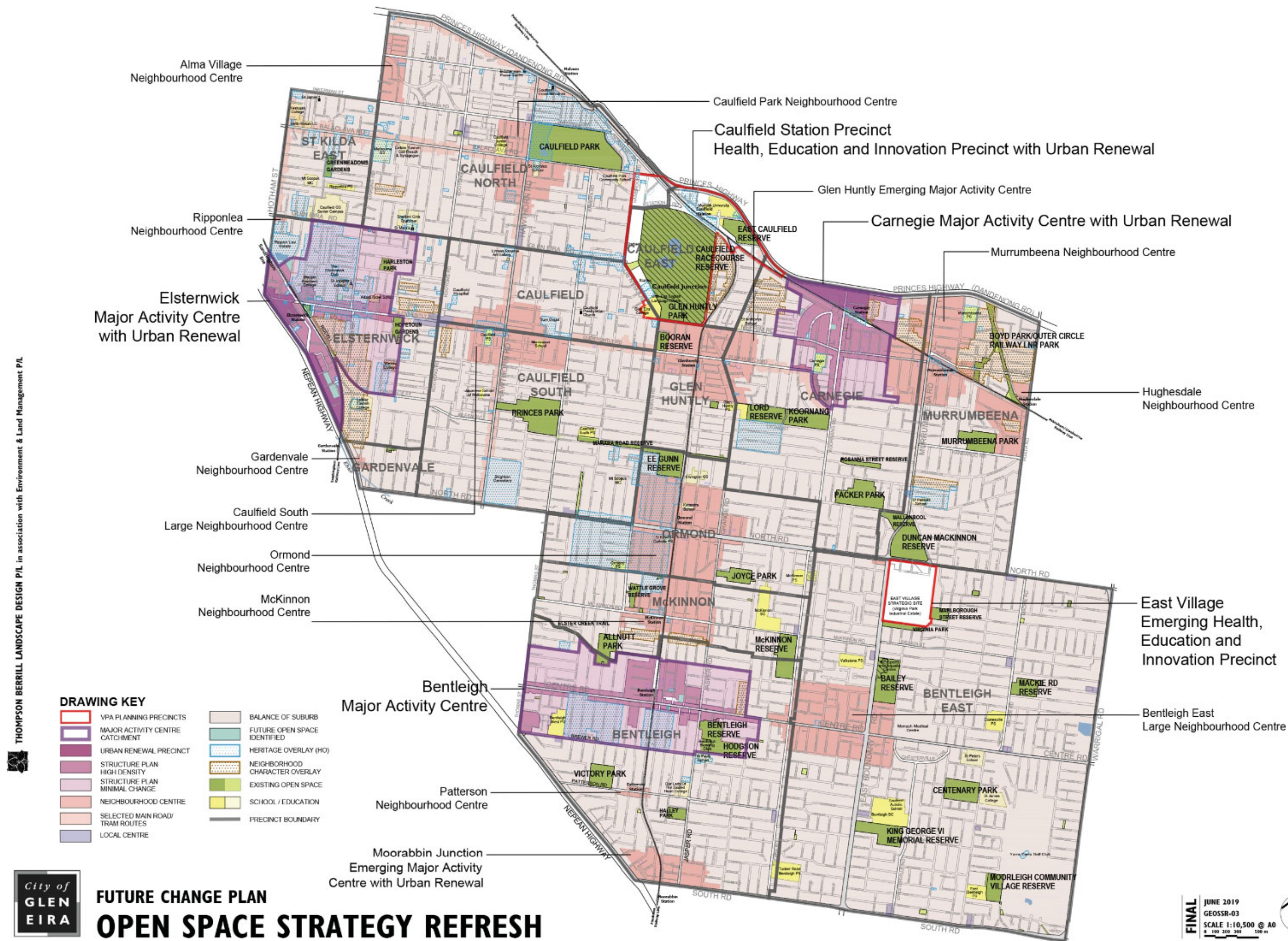


FIGURE 4D Future change plan for the Open Space Strategy Refresh Project

4.4.3 Future Strategic Sites

There will be a number of strategic sites identified during the course of implementing the Strategy, some of which may emerge in later years. Strategic sites are identified when there is one or more of the following:

- A proposal for redevelopment of a site providing at least 10 dwellings.
- A rezoning initiated either by Council or a land owner.
- Ownership, market or policy changes that affect the viability of a site and its redevelopment potential.

Strategic sites are commonly larger sites that can take advantage of these changing circumstances. They usually will support significant new construction, greater intensification of built form compared to the existing or historic use, and potentially a diversity of land uses.

4.4.4 Student population

4.4.4a Student Population

Monash University (Caulfield campus) and Holmesglen Institute of TAFE (Moorabbin campus) will continue to attract students to the municipality along with those employed at these institutions. Students travel to these locations for study or else live in university provided accommodation or private accommodation nearby. Planning for student and worker open space needs will influence in particular the recommendations associated with the Phoenix Precinct. Refer to Section 6.6 for further analysis of this influence on open space.

4.4.4b Student Housing

Council policy is to direct student housing into Housing Diversity areas (Clause 22.07) and specifically into the following locations (Clause 22.09 Student Housing Policy):

- Policy Zone 1
 - within the Phoenix Precinct.
- Policy Zone 2
 - within Housing Diversity Areas with direct public transport access to Monash University, Caulfield campus, and
 - Moorabbin Neighbourhood Centre in close proximity to Holmesglen Institute of TAFE on South Road.

4.4.5 Minimal change areas

Council policy is to protect remaining residential neighbourhoods from significant infill development. (Clause 22.08 Minimal Change Area Policy)

4.5 Open space contributions

Financial contributions from development for open space provision and capital improvements are required by the *Subdivision Act 1988* with the contribution established in the schedule to Clause 53.01 (Public open space contribution and subdivision) of the Glen Eira Planning Scheme.

The Council collects open space contributions from all development at the time of subdivision. Two lot subdivisions are generally exempt from making a contribution.

The contribution is based on a percentage of land area or equivalent value in cash. The current schedule contains a municipal rate of 5.7 per cent.

4.5.1 Contributions received

Glen Eira City Council has received the following cash contributions for each of the past six financial years:

Table 4-12 Cash contributions received annually
(City of Glen Eira annual reports)

Financial year	Cash contributions received by Council
2013-2014 FY	\$ 2,581,000
2014-2015 FY	\$ 3,667,000
2015-2016 FY	\$ 5,865,000
2016-2017 FY	\$ 7,811,000
2017-2018 FY	\$ 10,348,000
2018-2019 FY	\$ 7,851,000

The level of cash contributions received in a financial year is a factor of the value of the contributions that have been assessed and the timing of when these contributions are subsequently paid. It is noted that the Open Space Strategy was adopted in April 2014 at the end of the 2014 financial year and the 5.7 per cent contribution rate was included in the Glen Eira Planning Scheme in March 2015.

4.5.2 Review of the open space contributions program

The public open space contributions program has been reviewed as part of this Strategy Refresh. Key issues addressed in the review include the case for changing the contribution rate in response to significant population growth since the 2014 Strategy was prepared and whether Council should move from a municipal rate to multiple rates in the schedule to Clause 53.01 of the Glen Eira Planning Scheme.

A strategically based rate provides open space for the incoming population on whose behalf the rate is collected. The rate should allow Council to forecast the value of contributions it expects to receive over the Strategy planning period so that it can be confident it can deliver the projects included in the Open Space Strategy Refresh.

The current rate in the Glen Eira Planning Scheme is 5.7 per cent. This is applied to every subdivision eligible under the *Subdivision Act 1988* and Clause 53.01 of the planning scheme. The current rate reflects the open space for the new population that was anticipated in April 2014. The population increase in Glen Eira during the past five years is significantly greater than was forecast at that time.

This Strategy is now planning for approximately 24,800 new residents and 12,500 new dwellings, and 17,200 additional employees. In accordance with Council's planning framework, new open space projects will significantly benefit the Bentleigh/Bentleigh East, Carnegie and Elsternwick suburbs. A rate schedule that reflects this has been calculated as shown in Table 4-13.

Table 4-13 Proposed change to public open space contribution rate

Type or location of subdivision	Amount of contribution for public open space (proposed)
All subdivision with the exception of the area known as the Caulfield Village as delineated in the Caulfield Mixed Use Area Incorporated Plan February 2014.	8.3%

Note: the above wording reflects the current schedule in the Glen Eira Planning Scheme. The schedule will also include the open space contribution rate/s for subdivision in the East Village redevelopment site once these rates are approved.



5. Municipal-wide recommendations

5.1 The role and purpose of different types of open space

5.1.1 Facilities and features for different types of open space

The Strategy identifies where and what type of new open space is required in Glen Eira, as described in the precinct recommendations in Section 6. The following table provides a guide for the typical facilities and features that are appropriate for the different hierarchy of open space. This is to guide future upgrades and designs for existing open space, and the design of new open space.

This is not a prescriptive list but suggests the types of facilities to be considered for each. The role and function of these spaces is to be consistent with the hierarchy described in Section 3 of the Strategy.

Table 5-1 *Guide for appropriate facility and feature provision of existing and new open space by use hierarchy*

The facilities and features are listed in alphabetical order. This is a guide only for what is appropriate for different hierarchy of open space, however not all open spaces will have all the features and facilities listed here within them.

The actual facilities and features provided in existing and new open space will vary depending on its location, design, character, recreation needs, community input and environmental values.

Facilities and features	Municipal	Neighbour-Hood	Local	Small Local
Barbecues	✓	✓	✓	
Car parking	✓	✓		
Dog off-lead areas	✓	✓		
Drinking taps	✓	✓	✓	
Festivals/events - major	✓			
Festivals/Events - minor	✓	✓		
Garden beds - feature	✓	✓	✓	✓
Garden beds - to mitigate urban heat	✓	✓	✓	✓
Lighting	✓	✓		
Open grassed areas for informal use	✓	✓	✓	
Paths - pedestrians/informal	✓	✓	✓	✓
Paths - shared	✓	✓	✓	✓
Playground - large	✓			
Playground - medium	✓	✓	✓	
Playground - minor		✓	✓	✓
Rubbish bins	✓	✓	✓	✓
Seating	✓	✓	✓	✓
Shelters	✓	✓	✓	
Skate/BMX facilities	✓	✓		
Structured sport and recreation facilities	✓			
Toilets	✓	✓		
Trees - large canopy shade	✓	✓	✓	✓*
Unstructured recreation facilities eg. tennis wall, multipurpose courts etc.	✓	✓	✓	
Water features/wetlands	✓	✓		
WSUD infrastructure and sustainable water supply	✓	✓	✓	✓

* Note: While it may be difficult to achieve this in the smaller spaces, the area allocated for Small Local open spaces range in size from 300 sqm up to 2,499 sqm and the larger sized spaces can accommodate large canopy trees.

5.1.2 Provision of additional types of open space

5.1.2a Additional Municipal open space

GET ACTIVE (2019) has identified there is inadequate space to cater for the outdoor field sporting needs. This is both for the existing and future population, with many clubs already being at capacity. The only feasible additional land area that could potentially be suitable for this purpose, pending further detailed consultation and investigation with the Caulfield Racecourse Reserve Trust (CRRT), is the area in the centre of Caulfield Racecourse. This includes the area already set aside for access and use by the general public between the hours of 9.30am and sunset. Refer to Precinct Recommendations in Section 6 for further explanation of the rationale and background for this recommendation.

While the preferred minimum size for Municipal open space is 3 hectares, there is potential to utilise smaller areas for this purpose if required.

No.	Recommendation	Responsibility	Priority
5.1A	Undertake research into the structured and unstructured sport and recreation needs for the forecast population, to ascertain the likely outdoor sporting needs for the forecast population and whether this can be accommodated in the existing open space. Completed.	GE	Completed
5.1B	Liaise with the Caulfield Racecourse Reserve Trust (CRRT) and the Victorian government as required to investigate the feasibility to include structured sporting use into the areas already set aside for public access in the centre of Caulfield Racecourse. This is to cater to the demand for outdoor sports field space, particularly soccer.	GE (CRRT) (Vic Govt)	Very High

5.1.2b Additional Local and Small Local open space

New Local and Small Local open space will be required in a range of locations throughout the municipality as identified in Section 6 of this Strategy. Refer to Section 3 for further information about the role and size of Local and Small Local open space. In order to identify future opportunity sites for the additional Local and Small Local open space, the Glen Eira City Council is to undertake assessments of the sub-precincts identified to require additional Local and Small Local open spaces as included in this Strategy. These may require a combination of public and private land early in the process to inform developers as to whether the council will be requesting a land or cash open space contribution. The assessments will be prioritised according to both the priorities in the Strategy and the level of development activity occurring.

No.	Recommendation	Responsibility	Priority
5.1C	For the high priority precincts of Elsternwick/Gardenvale, Caulfield, Caulfield North and Caulfield East, undertake a detailed open space sub-precinct analysis for optional locations of new Local and Small Local open space as described in Section 6 of the Strategy. There may be a combination of different methods required to achieve a reasonable land area for these open spaces. Refer to Table 5-2 regarding assessment criteria for suitability of land as public open space and 5.3.3 for optional methods to achieve the land area required.	GE	Very High
5.1D	Undertake a detailed Sub-precinct analysis for options for the planned location of new Local and Small Local Open Space in the lower priority precincts identified in Section 6 of this Strategy. There may be a combination of different methods required to achieve a reasonable land area for these open spaces. Refer to Table 5-2 regarding assessment criteria for suitability of land as public open space and 5.3.3 for optional methods to achieve the land area required.	GE	High

5.1.2c Links between existing and new open space

Connectivity between open space is an important criteria to consider in the location of future open space. Many of the improved connections will be via the street network. In the future open space sub-precinct analysis, include an assessment of existing and potential open space links as part of this analysis.

No.	Recommendation	Responsibility	Priority
5.1E	As part of the open space sub-precinct analysis described in 5.1.2a and 5.1.2b, identify the potential links between the existing and future open spaces as one of the criteria to be considered in location of future open space.	GE	Very High

5.2 Quality of existing and new open space

5.2.1 Overview

The quality of the existing and new open spaces is integral to their value to the community and environment as part of the open space network. This Strategy has identified the need for improvements to some existing open spaces either in response to the site assessments and community feedback via the strategy open space survey or for the forecast population.

5.2.2 Health and wellbeing

5.2.2a Structured sport and recreation

No.	Recommendation	Respons- ibility	Priority
5.2A	Prior to each upgrade and replacement of facilities, assess the use levels and need for the facility relative to other competing uses. If it is assessed as still being required, then ensure the upgrade meets best practice design principles, and integrates multiple-use objectives for structured and unstructured recreational use where feasible.	GE	Ongoing
5.2B	Prior to the construction of any new structured sporting new facilities, the proposal will need to demonstrate the need for the facility and how it will be integrated with and meet multiple-use objectives of the open space, current trends in sport and recreation participation and will contribute to the use and value of open space.	GE	Ongoing
5.2C	Proposals for the upgrade of existing or new non-open space dependent recreation and facilities in open space need to be reviewed to confirm options for their location outside of open space prior to any future expansion of or introduction of new built facilities in open space. Larger open spaces and parkland values in the municipality will increasingly be in greater demand as urban densities increase. Minimising any further loss of these larger spaces is an important determiner in future decisions regarding additional built facilities and use in the larger reserves.	GE	Ongoing
5.2D	Any future proposals for new non-open space dependent buildings in open space are to be discouraged, and any proposal is to clearly demonstrate the net positive benefits it will provide to the open space if it is determined to be required.	GE	Ongoing

5.2.2b Unstructured recreation

No.	Recommendation	Responsibility	Priority
5.2E	Maximise accessibility in future open space upgrades and new open space design. This includes all-ability access, and diversity of facilities that encourage a range of activities which appeal to different age groups, gender, cultures and physical abilities in the proposed catchment of the open space. When designs for individual open spaces are in preparation, prepare a regional context description/diagram to describe the context of this space within the relevant catchment of other open spaces.	GE (Dev)	Ongoing
5.2F	Future unstructured recreation facility design in open space is to meet current best management practice in relation to sustainability, accessibility and recreational use that it is appropriate in the community and urban context of the open space.	GE (Dev)	Ongoing
5.2G	Prepare an open space infrastructure style guide based on the guidelines included in Section 7 of this Strategy to supersede the existing guidelines. The style guide needs to address and clearly promote the importance of diversity in open space character and design including historical values and natural character. The Municipal and Neighbourhood open spaces may have some custom designed infrastructure to respond to the individual character and use of each major reserve.	GE	High

5.2.2c Informal use

No.	Recommendation	Responsibility	Priority
5.2H	Informal use of open space is to be integrated in the design of new open space and in upgrades to existing spaces. This includes achieving a balance between facilities that encourage physical activity and those that allow for social interaction, contemplation and relaxation in open space.	GE (Dev)	Ongoing
5.2I	Information about open space facilities Develop an information awareness plan that effectively communicates to the community different open space facilities and features throughout the municipality. This is to be developed in conjunction with the communications team at Glen Eira.	GE	High
5.2J	Enforcement of dog off-lead areas Improve enforcement of dog off-lead controls in open space assessment with the Glen Eira Domestic Animal Management Plan and Section 7 of this Strategy.	GE	High

5.2.2d Natural features in open space

As urban densities continue to increase in the Urban Villages and Neighbourhood Centres, open space will increasingly be valued for the break this provides to built form. The feedback in the open space survey identified that trees are the most highly valued feature of open space, and along with other values, escape from the urban environment was ranked as fifth most important value. Other values for natural areas of open space include the natural character and sense of space, being outside and contact with nature. Large canopy shade trees, open grassed areas and planting in open space provide a point of contact with nature in the municipality for the community.

No.	Recommendation	Respons- ibility	Priority
5.2K	Trees Given the importance the community place on trees in open space, Council to prepare a Strategy to address short and long term management of trees and canopy cover in Glen Eira. This is to include trees on all public land including open space and streets as a minimum.	GE	Very High
5.2L	In future masterplans and design plans for open space, incorporate natural features into the open space where feasible, particularly for open space in and around the catchment of the activity centres and near to higher density precincts. This is to provide spaces with natural features so people can easily be outside and access natural areas. Included in this is the presence of large canopy shade trees to assist with urban heat mitigation and as a respite for people to escape to in hot weather.	GE	Ongoing

5.2.2e Community gardens

As described in Section 7, community gardens have many positive features including encouraging people to grow their own food, socialise and be outdoors. They also create a single use of open space as they are often fenced and dedicated to this specific use. Given the limited open space in Glen Eira, sites for community gardens are to be actively investigated on ancillary open space and publicly accessible private open space as a preference to public open space. Alternatively community garden plantings in open space could be considered in appropriate locations where they do not restrict broader access or functionality.

No.	Recommendation	Responsibility	Priority
5.2M	Undertake an assessment of potential sites for community gardens on public land and publicly accessible private open space where appropriate. This includes open space, ancillary open space such as neighbourhood houses, community facilities, railway land, road reserves, schools and church land consistent with guidelines included in Section 7 of this Strategy. This is to proactively identify suitable locations for community gardens in the future for when groups request establishment of a garden.	GE	High

5.2.2f Community festivals and celebrations

Community festivals and celebrations in open space are popular and contribute a sense of belonging to the community and expression of cultural values. Open space hosts a limited range of these to ensure open space is accessible for regular community structured and unstructured sport and ensure recreational activities and informal use can continue. Larger festivals and events are referred to the Caulfield Racecourse.

No.	Recommendation	Responsibility	Priority
5.2N	Continue to hold key council run community festivals and the small community celebrations in open space where it is compatible with other sport and recreation uses. Refer to Section 7 for further guidelines.	GE	Ongoing

5.2.3 Climate change

5.2.3a Urban heat mitigation

Open space has an important role to play in mitigating urban heat, contributing to the ongoing health and wellbeing of the community. The principles associated with urban heat island mitigation are described in Section 5, with guidelines in Section 7 as well.

No.	Recommendation	Responsibility	Priority
5.2O	All future open space designs are to incorporate the principles of passive cooling into them where feasible. This includes increasing the amount of porous surfaces, planting long-lived broad spreading canopy trees, garden bed planting, sustainable use of turf where feasible (instead of paved surfaces, excluding paths), stormwater harvesting and WSUD features.	GE (Dev)	Ongoing

5.2.3b Sustainable water use

The 1997-2009 and the 2014 droughts in Victoria heightened the awareness and understanding of how valuable our water resource is. This same drought period also raised awareness of the significant impact the urban heat island effect can have on the frail and vulnerable in our society, with increased mortality rates experienced during the extended heat wave conditions in early 2009. Therefore we need to plan for our open spaces to achieve passive cooling function where feasible without reliance on unsustainable levels of potable water.

No.	Recommendation	Respons- ibility	Priority
5.2P	All new open space designs to investigate and where feasible integrate water sensitive measures including opportunities for urban water cycling, harvesting and re-use of rainwater and stormwater. The multiple objectives to be achieved from this are to maximise the passive cooling effect of open space and maintain the natural turfed and grassed areas including planting and trees in open space with a sustainable source of water.	GE	Ongoing

5.2.3c Carbon sequestration

No.	Recommendation	Respons- ibility	Priority
5.2Q	All future open space design is to maximise the use of long-lived trees for long-term shade and carbon capture. Where new open space can incorporate existing long-lived trees, the open space is to be designed to retain the trees. Existing mature trees in open space are to be protected and retained where feasible. Refer also to recommendation 5.2K regarding preparation of a future Tree Strategy.	GE	Ongoing

5.2.4 Natural biodiversity values

5.2.4a Remnant indigenous vegetation

No.	Recommendation	Respons- ibility	Priority
5.2R	In future open space design and upgrades allow for protection and retention of all remnant indigenous trees including where feasible, dead and dying trees. Allow for some indigenous regeneration of remnant trees in these reserves where appropriate, as is currently the case in Boyd Park. Request that for any future development sites with mature remnant indigenous trees, that trees are	GE	Ongoing

No.	Recommendation	Responsibility	Priority
	retained and where feasible incorporated into a future open space reserve.		
5.2S	Planting of indigenous species is to be undertaken in open spaces with some remnant indigenous vegetation present. This is to provide some representative examples of the former original landscape character of Glen Eira prior to urban development. Refer to Section 7 for guidelines to address in future revegetation works in existing and new open space.	GE	Ongoing

5.2.4b Water quality treatment wetlands

Glen Eira's original landscape was dominated by wetlands/swamps and Red Gum Woodland. This landscape type has largely been removed, with some individual remnant Red Gums remaining in selected areas of open space. There is potential for Glen Eira to consider some reinstatement of the original landscape character type in selected sites demonstration areas or preferably where remnant Red Gums remain, with construction of water quality treatment wetlands, thereby increasing biodiversity values in open space. Examples may include Boyd Park and Packer Park.

No.	Recommendation	Responsibility	Priority
5.2T	Habitat diversity and sustainable water reuse In future open space design when assessing the most appropriate sustainable water reuse methods and infrastructure for open space, consider the benefits to habitat values and reinstatement of original landscape character type that water quality treatment wetlands can provide.	GE Dev	Ongoing

5.2.5 Cultural heritage

5.2.5a Indigenous cultural heritage values

No.	Recommendation	Responsibility	Priority
5.2U	Indigenous cultural heritage values Aboriginal Affairs Australia advised Glen Eira that there are no known remaining Indigenous cultural heritage sites in Glen Eira due to the extensive disturbance with urbanisation. Therefore Cultural Heritage Management Plans are not required for any works in open space.	GE (Dev)	Ongoing

5.2.5b Non-Indigenous historical values

No.	Recommendation	Respons- ibility	Priority
5.2V	Investigate the need for conservation management plans for all reserves identified to have heritage values. Where these reserves also require masterplans, ensure the conservation management plan is prepared prior to the masterplan to appropriately guide future works.	GE	High
5.2W	Review the need to add Heritage Overlays and/or other appropriate statutory controls to open spaces with identified heritage values to ensure that future works are consistent with these values.	GE	High

5.2.6 Community involvement in open space

The wider community is consulted when developing new or upgrading existing open space via processes appropriate to the scale of the open space. This is described in Section 7.9 of this Strategy.

5.2.6a Implementation of the Strategy

No.	Recommendation	Respons- ibility	Priority
5.2X	Council will regularly update the community on implementation of this Strategy via articles in the regular Council newsletter <i>Glen Eira News</i> or any similar council publication, and via appropriate information on the website.	GE	Ongoing

5.2.7 Other agency works in open space

Utility companies use open space for the provision of services (gas, water, electricity) in some circumstances. This can limit the existing and potential upgrades for the open space for recreational uses.

No.	Recommendation	Respons- ibility	Priority
5.2Y	Any future works proposed by utility companies or other agencies in open space will need to demonstrate they cannot be provided elsewhere. If they are required, then they are to demonstrate they will not limit the potential to upgrade the open space for the purposes for which it is reserved. Any works will need to be consistent with the design and management guidelines in Section 7 of this Strategy.	GE	Ongoing

5.3 Provision of additional open space

5.3.1 Assessment criteria for suitability of land as public open space

All land area proposed for new open space will first be assessed against the list of criteria in Table 5-2 to confirm if it is suitable for that purpose. This will ensure that the future land areas of new open space meet best practice. It will be at the responsible authority's discretion as to whether an area of land offered by a developer as open space is accepted and adequately meets the criteria included in this Strategy. Glen Eira City Council will apply these criteria to any future land that they convert or acquire for open space.

The assessment criteria in this table is to be used to determine the suitability of any future land proposed as new open space and can also be used to assess existing open spaces where review of their status and condition is required.

Table 5-2 Assessment criteria for suitability of land area for public open space

Criteria	Description
Accessibility	Physical access into the site including the inherent topography, location on natural ground (not an elevated part of a building) and ability to make the site safe and accessible to people with limited mobility or with a disability (Note - refer also to Transport, Visibility, Condition and Location in this list of Criteria for other access related issues).
Adjoining land use	The influence of adjoining land use on the recreational, ecological, social and cultural value of the open space. This includes consideration of existing and future planned land use and associated urban densities, built form and height.
Amenity	Visual and passive amenity values relates to the influence open space has on the liveability of neighbourhoods, providing visual relief from built form, the break open space provides from noise levels associated with traffic and other urban land use activities and adequate levels of sunlight. Refer to Sunlight in this table.

Criteria	Description
Climate change mitigation	<ul style="list-style-type: none"> • Ability for the site to have long-lived broad spreading canopy trees planted and space to become fully established without encroachment into their canopy. • Ability for the site to incorporate sustainable water supply and reuse and maximise moisture retention to allow passive cooling of the local microclimate including areas for long-wave radiant cooling at night. • Ability for the site to remain as useable and functional open space in the context of sea level rise and larger storm events which are likely to increase in the future.
Condition	The existing physical condition of the land is to be suitable for use as public open space including that there are no inherent issues such as contamination and significant financial or safety implications for the Glen Eira City Council if the land becomes public open space.
Ecological	Includes the site's existing biodiversity values and the potential to contribute to the protection and enhancement of these values along with a site's contribution to existing or future ecological diversity.
Equity	The Glen Eira City Council community including residents and workers should have reasonable access to public open space.
Financial	The costs to the Glen Eira City Council in obtaining and improving the land as open space, along with the costs associated with the ongoing maintenance and management of it.
Glen Eira City Council policies	The land is subject to other planning processes and policies that may be consistent or inconsistent with all or part of the site becoming public open space.
Heritage character	Indigenous and non-Indigenous cultural heritage and historical values that could be enhanced and protected in the open space. These values will influence the future use and design and management of the open space.
Landscape character	Its contribution to the character and attractiveness of the neighbourhood.
Location/linkages	The site's contribution to the wider open space network including forming open space corridor links. This includes consideration of the other strategic planning projects in the municipality including linear open space corridors, and links and connections to improve accessibility into existing or proposed future open space.

Criteria	Description
Ongoing maintenance and management	The ability for the Glen Eira City Council to re-zone the land for open space purposes, and to effectively maintain and manage the land as open space.
Ownership	<p>Where the land is already in public ownership, potential for conversion to open space should be considered, where it can successfully be rezoned for this purpose. This may include Glen Eira City Council assets or land owned by other authorities. Conversion of public land is preferred where it eliminates the need to purchase land for public open space and this method will likely be used in a range of areas across the municipality as redevelopment progresses.</p> <p>Where land is privately owned, land can be acquired through open space contributions, generally at the time a site is redeveloped. Private land acquisition may be needed in some locations to create a functional open space of the size and configuration required for its intended role.</p>
Recreation	The potential for the site to accommodate a range of structured sport, unstructured recreation and informal uses. These can include field sports, play, walking, jogging, cycling, exercising, informal ball games, socialising, picnicking, sitting and dog walking.
Services/easements	Extent of other services and easements that would affect the development and use of the land as open space including roadways, overhead structures, water supply, power supply, flood mitigation and drainage.
Size	<p>The minimum size for the site to meet its intended purpose, on its own or in combination with adjoining land. Refer to minimum size parcels for each type of open space as follows:</p> <ul style="list-style-type: none"> • Municipal open space, generally a minimum of 3 ha, subject to the proposed municipal recreation facility located in it. • Neighbourhood open space, minimum of 1 ha. • Local open space, minimum 0.26 ha (up to 0.99 ha). • Small Local open space, minimum 0.05 ha (up to 0.25 ha), with a minimum width of 20 m in at least one direction. • Small Local Link, with a minimum width of 5 m.

Criteria	Description
Sunlight	<p>Adequate levels of sunlight access to the open space to ensure it is attractive and comfortable to use and supports community health and wellbeing, particularly vitamin D and exposure to bright natural light during winter. Additionally, adequate sunlight is required to support healthy vegetation including trees, garden beds and grass. As a minimum, the following sunlight access requirements are to be met:</p> <ul style="list-style-type: none"> • In higher density areas, such as the commercial zones of the Bentleigh, Carnegie and Elsternwick Structure Plan areas, the designated urban renewal areas and large redevelopment sites, development should not increase overshadowing of any existing or proposed public open space from 11am to 2pm on 21 June (winter solstice) beyond the shadow cast by a 9 metre high built form on an adjoining property. • In all other areas, development should not increase overshadowing of any existing or proposed public open space from 10am to 3pm on 21 June (winter solstice) beyond the shadow cast by a 9 metre high built form on an adjoining property.
Transport	<p>The range of transport options for residents to easily access the site including proximity to public transport, linear shared trails, major roads and the street network, relevant to the size and anticipated catchment for the proposed open space.</p>
Visibility	<p>The site's visual prominence to maximise its use and contribution to the broader community. Generally, land is preferred which has at least two access points and local roads to at least two sides and is provided on natural ground.</p>

5.3.2 Sub-precinct analysis for additional open space

This Strategy has identified in each precinct where additional open space is required over the 15 year lifespan of the Strategy. Some of the additional open space is to be provided primarily for the existing population, and others are proposed to meet both the needs of the existing and forecast population. The method to secure additional land area as open space can be a combination of different mechanisms including contribution of land area by larger redevelopment sites coupled with purchase of undeveloped land and conversion of public land to open space. This is explained further in Section 5.3.3.

This Strategy recommends undertaking sub-precinct open space analysis in the locations where additional open space is planned as identified in this Strategy, to identify potential

opportunities to secure additional land that meets the criteria outlined in Table 5-2. Refer to the recommendations noted in Section 5.3.1.

5.3.3 Methods to acquire/secure additional open space

It is anticipated that the Glen Eira City Council will acquire additional open space via a range of methods including:

- As a land contribution as part of future subdivision of land for development in the city.
- Conversion of land owned by Glen Eira from its existing use to open space (eg. a road)
- Conversion of land owned by another government agency to open space.
- Purchase of undeveloped land, particularly where this may be negotiated with a land developer to add to an area of land being contributed on the same development site, or on an adjoining site so that a contiguous open space is created.

There are likely to be situations where an additional open space may require a combination of the above methods to achieve a suitable land area for use as open space – refer to Table 5-2.

5.4 Changes to forecast population and development over the strategy timeframe

5.4.1 Changes to forecast growth

The Strategy recommends projects to improve existing open space and add to the open space network. These are linked to the residential population forecasts and the development projections prepared by .id Consulting. If there is a substantive change in the location or intensity of new development, then project priorities in proximity to those locations can be upgraded and implementation of these projects can be accelerated, taking into account the timing of the open space contributions that are collected. Alternatively, if change occurs at a slower pace or at a lower intensity than anticipated, then project priorities and implementation timetables may need to be revised.

If there is a substantial change to the population forecasts and location of where additional growth is proposed in the precincts that have not been forecast to receive substantial growth, then additional open space may be required beyond that outlined and included in the Strategy. If this occurs, an analysis of the forecast population change, the demographics and the existing open space will be required to assess if any new open space is required and the type of additional open space.

5.4.2 Potential disposal of open space

5.4.2a New open space replacing the need for some areas of existing open space

Although not identified as being required in any locations in the municipality, if Glen Eira identifies any existing open space for potential disposal, the following process would be followed as a minimum:

- a) Assess the subject open space within a neighbourhood context. This analysis will need to assess all other existing and proposed open space within the walking catchment of the subject site to clearly understand each open space size and level of existing and potential use (which may include an environmental role as well as community use) to determine the subject site's existing or future role in the local open space network.
- b) Assess the site in relation to the Criteria listed in Table 5-2
- c) Consult with the community who would potentially be affected by any disposal of the subject open space in accordance with the distances nominated in Table 3-2.
- d) If after steps (a), (b) and (c) the open space is still considered excess to requirements and the Glen Eira City Council intends to proceed with disposal of open space, ensure the funds from the disposal of open space is spent on open space projects only, as required by the *Subdivision Act 1988*. Refer to Section 20 of the Act for limitations.

5.4.2b Potential overlap in the provision of open space

The consultation and site assessment work completed for the project has identified that the Glen Eira community highly value their open space. The strategy survey outcomes included a large number of comments that no further loss of open space should occur to development and that there is a need to provide additional open space.

Opportunities may arise during the course of the Strategy implementation to acquire/secure a new piece of land that is highly suitable for open space and may potentially make a less accessible piece of open space nearby surplus to requirements. If this was to arise in the future, each case would need to be assessed at a detailed level, utilising the assessment criteria in Table 5-2, and all other relevant considerations outlined in *Section 5.1*. All cases would involve consultation with the local community.

5.5 Guidelines for development interface with open space

The amenity and function of open space is influenced by the land use, design, layout, built form and landscaping treatments on adjoining sites. Section 5.3 discusses the criteria for siting new open space. These criteria have been adapted to address development proposals on adjoining sites and they should also be applied as relevant to any site that has potential to influence the function of the open space.

Development adjoining and nearby open space should positively contribute to open space by providing a degree of passive surveillance without interfering with the enjoyment, function and use of the open space. Development should not create adverse conditions in open space such as undue shadowing, increased wind effects, intrusion of unwanted light and noise, use of car parking or traffic access for private uses, interference with vegetation and dispersal of weeds, and loss of visibility.

No.	Recommendation	Respons- ibility	Priority
5.5A	Adjoining development and development that may influence nearby open space Require relevant applicants for development to demonstrate compliance with the Guidelines for development adjoining or nearby open public space.	Council	High & Ongoing

5.5.1 Guidelines for development adjoining or nearby public open space

(a) Accessibility to open space

- Design and layout of the site development should foster good public access to open space. Barriers to access should be avoided.
- Access directly into open space from adjoining private land and not via a public road or laneway should be avoided unless it meets the requirements of the dot point above in (a).

(b) Amenity and function of the open space

- Design and layout of the site is to provide passive surveillance of open space. Buildings are to face open space and avoid blank walls (especially on lower floors) and high fences at the interface with open space. Passive surveillance should be effective but not intrusive for park users or occupants of adjoining buildings.
- Design of the built form and site use should maintain and improve the amenity, function and use of the open space. Factors that could degrade open space amenity, function and use include excessive built form, creating a sense of enclosure, noise, light spill, traffic movements, car parking demand, wind effects or shadowing. In addition, the proximity of built form and building design should not allow undue transfer of noise from the open space into the development, thereby limiting the recreational function and uses that can reasonably occur in open space. Applicants will be required to supply studies demonstrating whether there will be positive or adverse effects on open space. Refer also to (c) Sunlight access to open space.

(c) Sunlight access to open space

- Sunlight access to public open space in the winter is important for community health and wellbeing. It is also a factor in the health and longevity of soft landscape works including trees, grass and garden beds.
- Additionally, natural sunlight in public open space contributes to the attractiveness of open space. It creates a warmer microclimate in the winter encouraging people to stay longer in open space. It also creates visual interest with sunlight creating more vivid colours, dappled shade and highlights features in open space.
- Over the past 10 years more research has emerged linking the importance of public open space to community health and wellbeing. This includes the health benefits of maintaining adequate levels of Vitamin D. Studies have found that Vitamin D deficiency causes health issues in relation to bone health and growth/fragility, particularly in the young and elderly. Maintaining adequate levels of Vitamin D and being outdoors in the bright light during winter reduces the incidents of depression and interrupted sleep patterns. Public open space is free and accessible to everyone and therefore makes it an equitable space in which to guarantee acceptable levels of winter sunlight access, particularly in higher density urban environments.
- Based on the benefits of sunlight access to open space during the winter, the following guidelines for sunlight access in winter are:
 - In higher density areas, such as the commercial zones of the Bentleigh, Carnegie and Elsternwick Structure Plan areas, the designated urban renewal areas and large redevelopment sites, development should not increase overshadowing of any existing or proposed public open space from **11am to 2pm** on 21 June (winter solstice) beyond the shadow cast by a 9 metre high built form on an adjoining property.
 - In all other areas, development should not increase overshadowing of any existing or proposed public open space from **10am to 3pm** on 21 June (winter solstice) beyond the shadow cast by a 9 metre high built form on an adjoining property.

(d) Characteristics and values of open space

- Design is to be compatible with and enhance where possible the recreational, ecological, social and cultural values of the open space.
- Built form and landscape treatments should maintain the ecological processes and biodiversity values of the open space and allow for opportunities to enhance these values.
- Design of built form and landscape treatments should be compatible with heritage values of the open space.
- Landscape treatments should be compatible with the landscape character of the open space and its contribution to the character and attractiveness of the neighbourhood.

(e) Climate change mitigation in open space

- Built form and landscape treatments should be planned to allow for the growth and maturity of vegetation in open space, especially long-lived broad spreading canopy trees.
- Where feasible, proximity of built form to the open space to encourage sufficient long-wave radiant cooling to occur from the open space overnight.

- The development should allow for the use of sustainable water supply and reuse in the open space.
- (f) Glen Eira City Council policies about open space**
- The development meets any planning policies pertaining to amenity and open space.
- (g) Delineation of open space and private land**
- Design and layout of adjoining sites, including location of buildings, structures and furniture, are to provide clear physical and visual separation between public open space and private land to avoid appropriation of and encroachment on public space.
- (h) Ongoing maintenance and management of open space**
- Development will not increase the ongoing cost and responsibility for the Glen Eira City Council to maintain and manage the open space.
- (i) Open space contribution from development**
- Development site adjoining existing or proposed open space is to be assessed for its suitability for an open space land contribution to create or add to the area of open space, or to create formal public linkages.
- (j) Services/easements to be provided to an adjoining site**
- Access and easements for water and power supply, other utilities and drainage should be provided on the development site so that they do not interfere with use or management of the open space.
- (k) Setback from site boundary**
- Larger sites should allow for a setback from the boundary, relative to the height of the built form, where height will adversely affect the amenity, function and use of the open space.
- (l) Transport and car parking arrangements for the development**
- Traffic access, traffic patterns and car parking demand should not decrease the accessibility, use and amenity of the open space.
- (m) Visibility of open space**
- Public view lines are to be maintained and enhanced to and from the open space.

No.	Recommendation	Respons- ibility	Priority
5.5A	Guidelines for development adjoining and nearby public open space in the Glen Eira Planning Scheme Introduce guidelines to manage the impacts on public open space where development is planned and approved. Use the text in (a) – (m) in the above table to introduce the guidelines.	Council	Very High

5.6 Revised open space contributions rate

A new open space contribution rate schedule is proposed for Clause 53.01 of the Glen Eira Planning Scheme. Based on the projects included in this Strategy Refresh, the recommended open space contribution rate is 8.3 per cent (refer Table 4-13). This rate will apply to all land in the municipality other than the land zoned Schedule 2 to the Priority Development Zone (PDZ2) - Caulfield Mixed Use Area and the land included in the East Village project. The schedule includes separate open space contribution rates for these developments.

Land contributions will be required by some subdivisions to achieve the additional open space identified as being required by this Strategy Refresh. The basis for a land contribution is specified in the local planning policy indicating the precincts where a land contribution may be requested and the criteria these contributions should meet. The criteria for land contributions are included in Table 5-2 of this Strategy Refresh.

No.	Recommendation	Respons- ibility	Priority
5.6A	<p>Open space contribution rate in the Glen Eira Planning Scheme</p> <p>Introduce a revised open space contribution rate in the schedule to Clause 53.01 of the Glen Eira Planning Scheme: The new municipal rate is 8.3 per cent to apply across the municipality except where a different rate has been agreed. Future negotiations for a separate rate should not fall below the municipal rate.</p> <p>The local policy should indicate in what circumstances a land contribution will be requested and the criteria for these Land contributions should be required when the land is able to contribute to the municipal open space network as recommended in this Strategy Refresh and the land generally meets the criteria in Table 5-2.</p> <p>The 2014 Strategy and Strategy Refresh should be cited as reference documents.</p>	Council	Very High
5.6B	<p>Locations for land contributions</p> <p>Request an open space land contribution (at Council's discretion) in all precincts where a land contribution would be consistent with the recommendations for new open space and open space links contained in this Strategy.</p> <p>Request a cash contribution for all other subdivisions in these precincts.</p>	Council	Ongoing

No.	Recommendation	Respons- ibility	Priority
5.6C	<p>Criteria for land contributions</p> <p>Require open space land contributions to meet the criteria contained in Table 5-2. Where the size criteria cannot be initially met, Council to supplement a land area shortfall (for land otherwise meeting the criteria) through request, negotiation or purchase, or conversion of additional adjoining public land.</p> <p>Refuse land offers for open space contributions that do not support implementation of this Strategy and request a cash contribution instead.</p>	Council	Ongoing
5.6D	<p>Cash contributions</p> <p>Request a cash contribution across the municipality when a land contribution is not required, or in combination with land to the value of the contribution rate.</p>	Council	Ongoing



6. Precinct analysis and recommendations

6.1 Overview

Glen Eira is made up of 14 different suburbs and the analysis and planning for open space has been undertaken at the suburb level. This has allowed the analysis and recommendations to reflect the changes in the provision of open space and access to it across the different suburbs. For the purposes of the Strategy, the suburbs are referred to as precincts.

The characteristics and future change proposed in each precinct varies significantly. The change referred to in this Strategy is consistent with Council's direction as outlined in the *Glen Eira Activity Centre, Housing and Local Economy Strategy 2017*. The forecasts are based on those provided by .id Consulting.

This Strategy has assessed the forecast open space needs for this population increase and made recommendations to address these needs if the forecast growth occurs.

The precincts are listed in alphabetical order, and Elsternwick and Gardenvale have been combined in one chapter given the smaller physical size of Gardenvale. This means there are 13 precinct chapters.

6.2 Bentleigh

6.2.1 Existing conditions



FIGURE 6.2A Existing open space in Bentleigh

6.2.1a Overall precinct description

Public open space

Bentleigh Reserve, Hodgson Reserve, Victory Park and Halley Park are the major areas of open space in Bentleigh. The southern end of McKinnon Reserve and Allnutt Park are also located in Bentleigh, and Elster Creek Trail is on the boundary with McKinnon so is also easily accessible from Bentleigh.

Of these, the most frequently visited open space is Allnutt Park, mainly for walking, dog walking, trees and socialising. The Park has a range of unstructured recreational facilities with a public parkland character of scattered overstorey shade trees and paths that meander through the park for strolling. The second most popular reserve in the household survey outcomes is Hodgson Reserve, which has a combination of structured sporting facilities including the bowling greens and sports field, and other informal facilities including playgrounds, paths, fitness stations and picnic facilities. The main reasons household survey respondents nominate visiting this reserve are for dog walking, being close to home, walking and play. Directly adjoining Hodgson Reserve is Bentleigh Reserve, which receives lower levels of use in the survey, but this may be due to the facilities primarily being for structured sporting use at the reserve, and the demographic profile of people that utilise the sporting facilities is not well represented in the household survey.

Halley Park also has an open parkland character with unstructured recreation facilities including a large playground. The household survey respondents visit this primarily for the playground and dog walking. Victory Park is the other major open space in Bentleigh, primarily for sporting facilities with two sports fields and tennis courts.

The recent grade separation works to the Frankston Railway Line has meant that the two linear open spaces that were located adjacent to it previously have now been removed. Council are investigating the provision of line marking on Nicholson and Burgess Streets as an alternative for cycle access. Elster Creek Trail extends from Allnutt Park west to Brighton East providing off-road pedestrian and cycle linear connectivity.

Other small open spaces located through Bentleigh vary in character from the Daly Street Mall which has a built, urban character, through to Leckie Street Reserve with a more informal character.

Ancillary open space

Bentleigh West Primary School does have a sports field that is accessible for informal use out of school hours.

Land use and character

Bentleigh is a residential suburb mainly developed around the inter-war period. The Bentleigh Major Activity Centre on Centre Road has a distinctly low scale suburban character. The station redevelopment has created a more intimate and cohesive character to Centre Road. There is a diverse range of services provided along Centre Road including cafes, local shops and the Bentleigh Library towards the eastern end. Bentleigh Station is located on the north side of Centre Road and the recent grade

separation project has significantly improved east-west access along Centre Road with the removal of the at grade level crossing. Since the 2014 Strategy was prepared there has been substantial change in the area surrounding the core of centre with progressive change from single storey dwellings to apartments, increasing the urban densities.

The dominant architectural form in the Balance of suburb is single storey detached dwellings ranging from the timber California Bungalows through to the clinker brick style homes of the 1940s and later. Other land use includes education with only one public school.

Recognised heritage and neighbourhood character precincts in Bentleigh include:

- Bentleigh Heritage Area - two significant areas are located between Brewer and Centre Roads, mainly brick and timber California bungalows interspersed with Spanish Mission, Old English and others. The area is a good example of inter-war housing and the garden suburb character.
- The Highway - an intact street of clinker brick homes with uniform setbacks, low front fences and vegetated gardens.

6.2.1b Quantity of open space in Bentleigh

Following is a brief summary of the key statistics for quantity of open space in Bentleigh. For reference the total quantity of open space in Bentleigh has decreased since the 2014 Strategy as a result of the Level Crossing Removal Project. This includes the loss of the linear open space along Johnston and Burgess Streets adjacent to the railway.

Summary

- 13.40 hectares of open space (down from 15.15 hectares in 2014)
- 2.8 per cent of the total suburb area is open space (down from 3.2 per cent in 2014)
- 7.8 per cent of the total open space in the City of Glen Eira
- 8 sqm of open space per person, based on the estimated population for 2016
- Within 400 metres of the precinct, other major areas of open space include McKinnon Reserve and Allnutt Park. The precinct boundary is midway through these two reserves, so approximately one quarter of Allnutt Park is actually located in Bentleigh and approximately one third of McKinnon Reserve is also located in Bentleigh.

6.2.1c Open space hierarchy and character in Bentleigh

Table 6.2-1 List of existing open space type and character classification in Bentleigh

Open space	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Bentleigh Reserve	3.56	Municipal	Sporting	Restricted sporting/recreation, Formal
Brentwood Street Reserve	0.03	Small Local Link	Linking space	
Clapperton Street Reserve	0.07	Small Local	Play	Informal
Daly Street Mall	0.09	Small Local	Public square	Linking space
Glen Rigney Memorial Reserve	0.06	Small Local	Significant Road Reservation	
Halley Park	1.73	Neighbourhood	Informal	
Hodgson Reserve	3.34	Municipal	Sporting	Restricted sporting/recreation, Informal
Leckie Street Reserve	0.07	Small Local	Play	Informal
North Avenue Park	0.09	Small Local	Play	Informal
Victory Park	4.37	Municipal	Sporting	Restricted sporting/recreation
Total area	13.40			

Heritage values of open space

Railway easement adjacent to Burgess Street

This is included in the Heritage Overlay 69 as part of the Bentleigh Heritage Area. While not mentioned specifically in the heritage studies, there is an established planting of Canary Island Date Palms along the railway easement that contributes to the cultural landscape of the area.

6.2.1d Distribution of open space in Bentleigh

The Municipal open space is well provided for with Victory Park west of the railway, Bentleigh and Hodgson Reserves to the east and both Allnutt Park and McKinnon Reserve easily accessible in the north. West of the railway there is a gap area between Centre and Brewer Roads and also a second gap area in the south-west corner of the precinct. East of the railway and relatively central in the precinct there is a gap area north of Centre Road in the vicinity of Jasper Road and within the catchment of Bentleigh Major Activity Centre. A fourth gap area is also present south of Patterson and east of Jasper Roads, without any ancillary open space.



FIGURE 6.2B Open space distribution analysis for Bentleigh

6.2.2 Community characteristics for Bentleigh

6.2.2a Demographic summary of existing population and forecast trends

Source: ABS Census data, 2016 (.id Consulting 2018)

Age structure:

The most populous age group is 35 to 49 years, followed by 50 to 59 years and the 25 to 34 years. Compared with the municipal-wide average, there is the same proportion of children in the 0 to 11 age group and a lower proportion of the 18 to 34 year olds, with a slightly increased proportion of people aged 35 to 49 and 70 to 84.

Forecast trends through to 2031 include:

- A more pronounced increase in the 60+ age range.
- A decrease in age groups less than 17 years of age.

Household type:

Approximately 37 per cent of the households are couples with children, 25 per cent are lone person households, followed by 21 per cent couples without children households. Compared with the Municipal-wide average, there is a higher proportion of couple families with dependents and one parent families, and a slightly lower proportion of couple families without dependents and lone person households.

Forecast trends through to 2031 include:

- Couple families with dependents will decrease slightly.
- Couple families without dependents and lone person households to increase slightly.

Dwelling type:

Compared with the Municipal-wide average, there are more separate houses, less medium density housing, and slightly more high density housing in Bentleigh.

Approximately 61 per cent of the population live in separate houses, 31 per cent in medium density and 7 per cent in high density dwellings. Between 2011 and 2016, there was a 7 per cent decrease in separate houses and an increase in medium and high density dwellings.

Total population (2016): 17,828

Forecast population in 2031: 20,160* (increase of 2,332)

*Source: .id Consulting forecasts for Glen Eira suburbs, November 2018

6.2.2b Summary of household survey outcomes for Bentleigh

A total of 136 household surveys were received from residents of Bentleigh, in 2012, which represents 12.6 per cent of the total number of surveys received. This is slightly more than the proportion of Bentleigh residents in the Glen Eira population, which is 11.9 per cent.

Most frequently visited open space reserves

Use	Open space	Reason to visit	Suggested improvements
Open space within walking distance			
45%	Allnutt Park	walking (13%) dog walking (11%) close to home (9%) play safe for children (7%)	Improve maintenance, particularly to toilets, enforcement of dog off lead areas and garden beds. Additional infrastructure including lighting, rubbish bins, seats and signs. Consider indigenous heritage values and provide shade to playground.
31%	Hodgson Reserve	dog walking (10%) close to home (7%) walking (5%) play safe for children (4%) playground (4%)	Provide basketball ring/half court, additional dog drinking facilities, provide playground fencing, and improve maintenance to toilets and additional trees.
29%	Halley Park	playground (9%) dog walking (8%) close to home (6%) play safe for children (6%)	Additional dog waste bags/bins and dog drinking facilities, provide shade to playground and improve maintenance to toilets.
22%	Victory Park	close to home (6%) dog walking (5%) playground (4%) walking (3%)	Provide more paths and dog waste bags/bins. Upgrade existing sporting facilities and playground with more diverse and challenging equipment.
8%	Elster Creek Trail	walking (3%) close to home (2%) relaxing (2%) trees (2%)	Provide more native/indigenous planting.
Open space beyond walking distance			
12%	Caulfield Park	ambience/beauty (2%) shade (2%) trees (2%)	Provide additional park infrastructure including BBQs, dog drinking facilities, toilets, seating and shelters.
7%	Allnutt Park	walking (3%) BBQ's (2%) meeting people/friends (2%) playground and equipment (2%)	Potentially provide more events, provide shade to playground and provide more toilets.
7%	Packer Park	playground and equipment (4%) shared paths (2%) variety of play spaces (2%)	Not completed
5%	Princes Park	ambience and beauty (2%)	Additional dog waste bags/bins, remove graffiti, improve pest control and plant more indigenous trees.
5%	Other Open Space	picnics (2%) relaxation (2%) sport spectator (2%) convenience (2%)	Provide more shaded seating areas, upgrade and maintain sporting facilities and additional trees.

Types of open space used (top four):

85% Large parks and gardens (non sporting)
 82% Sporting reserves
 78% Local streets for exercise
 62% Medium sized parks

Values (top four):

64% trees
 57% place for kids to play
 57% place to relax and unwind
 52% health and wellbeing

Activities and facilities in open space (top four):

82% seats
 81% walking paths
 76% open grassed areas
 68% public toilets

Facility provision and maintenance:

The highest levels of satisfaction with provision of facilities include for playgrounds, open grassed areas and walking paths. The need for additional seats and drinking fountains was identified by more than 40 per cent of respondents. Generally, facilities are well maintained with the exception of public toilets.

General comments:

- Additional open space is required, particularly as urban density increases.
- Appreciate previous improvements and maintenance.
- Value the choice and variety of open space in Glen Eira.
- Value the natural character of open space, including comments that trees should not be removed, and if removal is needed, then they should be replaced.
- Provide additional dog off-lead areas and improved enforcement of them.
- Requests for fencing of playgrounds for safety

For further details on household survey outcomes, refer to Appendix A of the Strategy.

6.2.2c Implications of community characteristics on future open space planning in Bentleigh

The household survey results reinforce that residents are using a variety of the existing major reserves located within Bentleigh and that they value the natural character, particularly trees in open space. Compared with some of the other precincts in Glen Eira, playgrounds are highly valued due to the predominance of families in this precinct.

In Bentleigh the population is forecast to change with a decrease in younger children and people under the age of 17 and a pronounced increase in the 60+ age range. While it will continue to be important to provide facilities for all age groups, there will need to be a greater emphasis on facilities that cater to people in the older age range to encourage their use of open space and encourage physical and mental health and wellbeing.

6.2.3 Future change in Bentleigh



FIGURE 6.2C Future change in Bentleigh

The *Bentleigh Structure Plan 2018-2031* (Glen Eira City Council, 2018), *Glen Eira Housing and Local Economy Growth Assessment Report* (SGS, Dec 2018) and *22.07 Housing Diversity Area Policy*, Glen Eira Planning Scheme (29/03/19 Version) provides direction on future growth in Bentleigh. The spatial location of the different areas of growth referred to in the report is summarised in Figure 6.2C.

Between 2016 and 2031 the resident population is forecast to increase by 13 per cent, with 2,332 additional residents forecast to be living in Bentleigh. Of these, 1,376 additional residents are forecast to live in the high density areas as shown in Figure 6.2C which represents a 70 per cent increase. An additional 233 residents are forecast to live in the minimal change areas in the Bentleigh Structure Plan, representing a 5 per cent change. In the Moorabbin Junction Emerging Major Activity Centre with Urban Renewal 233 additional residents are forecast to be living there by 2031 representing a 20 per cent increase, while there is only a minimal change in the Bentleigh East Neighbourhood Centre with an additional 23 people forecast to be living there by 2031. An additional 467 people will be living in the balance of the suburb, representing a 5 per cent change.

Bentleigh Major Activity Centre

The Bentleigh Structure Plan concentrates forecast growth and change in Bentleigh along Centre Road with the core of the change being focussed around Bentleigh Station. The Vision statement in the Structure Plan is as follows:

Bentleigh will be an accessible, local shopping destination with a vibrant cafe and restaurant culture. It will maintain its community feel with open space, places for people to meet and gather and a broad range of local businesses, all of which will meet the needs of a diverse community.

In relation to open space, the Structure Plan supports the provision of additional public open space in the centre along with other improvements to the public realm including increasing pedestrian priority in some of the key streets and laneways to activate the businesses and encourage outdoor tables and a cafe/restaurant culture in the centre.

At the time the 2014 Strategy was prepared, the residential population was forecast to increase by 750 through to 2026 representing a 5 per cent increase. Between 2013 and 2016 just over 1,300 additional residents moved into Bentleigh which is a 177 per cent increase over what was forecast through to 2026 at the time the 2014 Strategy was prepared. Correspondingly over the same time period, there has been a decrease in the quantity of open space in Bentleigh. Based on the analysis of the dwelling data between 2013 and 2016 there has been a faster rate of growth in the Bentleigh Activity Centre and a slightly slower rate of growth than forecast in the Balance of suburb.

Moorabbin Junction Emerging Major Activity Centre with Urban Renewal

Moorabbin Junction Emerging Major Activity Centre with Urban Renewal is located on South Road and extends into the adjoining municipalities of Kingston to the south and Bayside to the west. The Activity Centre, Housing and Local Economy Strategy (ACHLES) describes Moorabbin Junction as

A vibrant, accessible and safe centre with a strong focus on arts, nightlife and community connections. As an emerging growth hub, the centre will support a diverse

range of housing and commercial activity with dining and entertainment options available during the day and into the night.

The Housing Diversity Area Policy 22.07 in the Glen Eira Planning Scheme encourages residential use in the commercial centre with shop top housing and apartment style developments, transitioning to the predominantly single storey detached dwellings in the area adjoining the centre. Multi-unit developments are noted as being potentially appropriate in the adjoining area and it is noted that developments can build up to three stories in height.

Patterson Neighbourhood Centre

The Patterson Neighbourhood Centre on Patterson Road has been upgraded from a Local Centre to a Neighbourhood Centre in the recent ACHLES and has been experiencing some change to its catchment over the past five years. The vision for the centre set out in the ACHLES is:

Patterson will be a connected and vibrant creative hub embracing local art and music. The centre will be enhanced by a leafy green streetscape and lively cafes and restaurants which strengthen the close-knit village atmosphere.

Currently, the Housing Diversity Area Policy 22.07 in the Glen Eira Planning Scheme for Local Centres applies.

Employment population change

The forecast employment population change is an additional 1,955 workers over the 2016-2031 period, representing a 35 per cent increase (SGS, 2018).

6.2.4 Open space needs assessment for Bentleigh

Refer to the Future Change Diagram, Figure 6.2C for the sub-precincts described in Table 6.2-2. Approximately 60 per cent forecast change in the resident population is located in the high density precincts within the Bentleigh Major Activity Centre and will generate the need for additional public open space north of Centre Road and within a safe and easy walk of the population. The forecast 20 per cent change in the resident population in the Moorabbin Junction Emerging Major Activity Centre with Urban Renewal will further highlight the lack of any open space within a safe and easy walk of this centre. The forecast 5 per cent increase in residents across the Balance of suburb and in the minimal change areas within the Bentleigh Major Activity Centre area will place additional demand on the existing facilities in open space.

Table 6.2-2 Open space needs assessment for Bentleigh

Description	Assessment
Bentleigh Major Activity Centre north of Centre Road	
<ul style="list-style-type: none"> The extent is defined in the <i>Bentleigh Structure Plan 2018-2031</i> from Thomas Street in the west to Balmoral Avenue in the east. Refer to Figure 6.2C. The southern extent of Allnutt Park is located in this precinct and is a popular Municipal park with an established character that provides for unstructured recreation and social/informal open space needs. The community who live and work in the centre west of the railway have safe and easy walking access to Allnutt Park. Elster Creek Trail (part) adjoins the southern extent of Allnutt Park and provides a linear walking path link to the west of the park along the linear reserve. The majority of the higher density precincts within the Bentleigh Major Activity Centre (MAC) are located north of the railway and will accommodate a higher proportion of the forecast future 1,376 residents. This includes proposed height controls of 5 storeys close to Centre Road, scaling down to 4 storeys and 3 storeys to the perimeter of the high density precincts shown on Figure 6.2C. A new Small Local open space is proposed on part of an existing Council owned car park in the Structure Plan. Additionally the Structure Plan identifies a range of shared pedestrian and vehicle spaces, commercial spaces via eat street and new plaza spaces. 	<ul style="list-style-type: none"> Undertake a major upgrade to Allnutt Park to better cater to the forecast additional population that will be living and working the Bentleigh MAC in the future. This includes addressing a diversity of needs including in the context of the forecast increase in the 60+ age range. Refer to Recommendation 6.11B-1 in McKinnon for Allnutt Park. East of the railway there is a need for a new Local open space. This includes achieving adequate sunlight access to the open space which may require a different configuration and expansion to the open space currently illustrated in the Structure Plan. It is noted that the 2014 Strategy identified the need for a new Local open space in the centre to address the forecast needs and Gap Area B2. This is due to the need to provide a diversity of facilities and this can only be achieved in an open space that is larger than a Small Local open space. After review of the revised figures for the forecast change, a new Local open space is still required.

Description	Assessment
Bentleigh Major Activity Centre south of the Centre Road	
<ul style="list-style-type: none"> The extent is defined in the <i>Bentleigh Structure Plan 2018-2031</i> from Thomas Street in the west to Leckie/Wood Streets in the east. Refer to Figure 6.2C. Bentleigh Reserve is a sporting reserve that caters primarily to structured sporting needs of the broader community of Glen Eira. Hodgson Reserve provides both unstructured recreation and sporting facilities in Glen Eira. Daly Street Mall is an existing Small Local open space adjoining Centre Road and is in the process of being redesigned as part of the 'Eat Street' project. Clapperton Street Reserve is a Small Local open space currently located in a standard suburban street and provides a small playground, grass and trees. The Bentleigh Structure Plan proposes increased urban densities along Centre Road including buildings up to 5 storeys high. During the redevelopment process, there is an opportunity to activate and improve the interface to open space. This is particularly relevant to any redevelopment adjoining the northern boundary of Bentleigh Reserve and proposed new open spaces. 	<ul style="list-style-type: none"> Given the forecast growth in Bentleigh, undertake a major upgrade to Bentleigh Reserve and Hodgson Reserve to maximise the opportunities for unstructured recreational use. Review the extent and location of the restricted sporting use in the reserve including the tennis and bowling facilities to confirm if these are the most appropriate uses to retain in the reserve in the longer term. Given the loss of the former linear open space along the railway corridor and the proposal to increase urban densities in the centre west of the railway, provide a new Small Local open space in an accessible and visible location west of the railway, in Gap Area B4. In the longer term, investigate opportunities to either improve accessibility to it through providing an access to the park from Hardy Court or establish a new alternative open space with improved accessibility, particularly from the higher density area associated with Centre Road to the north.
Moorabbin Junction Emerging Major Activity Centre with Urban Renewal	
<ul style="list-style-type: none"> The Moorabbin Junction is identified as an emerging Major Activity Centre within urban renewal and extends south into the City of Kingston. Refer to Figure 6.2C. There is no open space within the centre. While there is forecast to be an additional 233 people living in the centre by 2031, there is also potential this may increase beyond that in the future, particularly when the Centre is upgraded to form part of the emerging MAC and Urban Renewal. 35 per cent of the dwellings have been built since the 2014 Strategy which is similar to the rate of change that was forecast to occur in the Strategy. 	<ul style="list-style-type: none"> Provide a new Small Local open space west of the railway to cater to the existing and forecast use included in this Strategy. The future open space is to be located within the local street network and not adjoining the major roads, will require good sunlight and large enough to provide a diversity of facilities to address the existing Gap Area B3. If the forecast population increases beyond that noted in the Strategy, additional open space may be required in the future to cater to an increased level of use. Upgrade Halley Park as required to cater to the forecast additional residents in the Centre as described in the Patterson Neighbourhood Centre.

Description	Assessment
Patterson Neighbourhood Centre	
<ul style="list-style-type: none"> The Patterson Neighbourhood Centre is concentrated around Patterson Station on Patterson Road and is within 400 metres of the Bentleigh MAC to the north and the Moorabbin Junction Emerging MAC in the south. Refer to Figure 6.2C. Halley Park is located in the catchment to the east of the railway on Jasper Road. Halley Park is an informal open space with a playground and an informal open grassed area as key features. Victory Park is just south of the centre on Patterson Road, west of the railway. It primarily provides structured sporting facilities with mature trees and paths and is popular for walking dogs, walking and play. North Avenue Park is a Small Local open space just south of the centre. This has a medium sized playground, a seating shelter and a couple of trees. This Centre has been upgraded from a Local Centre to a Neighbourhood Centre which indicates that more growth is planned for the Centre likely due to its proximity to the station. 	<ul style="list-style-type: none"> Major upgrade to Victory Park to improve the unstructured recreation and informal uses of the reserve. This includes improving views into the open space from Patterson Road and the adjoining residential streets and identifying options to improve its character. Upgrade Halley Park to increase the diversity of unstructured recreation facilities in the open space to meet the open space needs of the existing and forecast population. These changes are also to address the forecast population needs in the Moorabbin Junction Emerging Major Activity Centre with Urban Renewal as well and will focus on a diversity of facilities given the increase in apartments and medium density housing in both activity centres.
Bentleigh East Large Neighbourhood Centre	
<ul style="list-style-type: none"> The Bentleigh East Large Neighbourhood Centre (NC) is mainly located in Bentleigh East as shown on Figure 6.4C. The southern extent of McKinnon Reserve is located north of Centre Road. The reserve is predominantly a sporting reserve with an oval in the north and a sporting field that is used for Soccer and cricket in the south. The Bentleigh East Large NC is focused on Centre Road and Tucker Road and is situated in Bentleigh East. Leckie Street Reserve is a Small Local open space with trees and playground. 70 per cent of the dwellings forecast for the Bentleigh East NC in the 2014 Strategy had been built by 2016. Council is planning for approximately 10 per cent of the forecast new residents to be living in the Centre by 2031, and a forecast dwelling growth rate of 46 per cent. 	<ul style="list-style-type: none"> The existing and forecast population in this precinct will benefit from the proposed upgrades to Bentleigh and Hodgson Reserve. In the medium term, upgrade Leckie Street Reserve including review of the appropriate facilities for this open space in the context of the proposed upgrades to Bentleigh and Hodgson Reserves nearby. Refer to McKinnon for the recommendations regarding open space.

Description	Assessment
Balance of suburb	
<ul style="list-style-type: none"> • This includes the remainder of Bentleigh between Jasper and Tucker Roads and south of Lawson Street, refer to Figure 6.2C. There is also a small area in the north west of the suburb near Thomas Street. • Part of the Elster Creek Trail links from Allnutt Park west to Thomas Street providing an off-road linear path link. • There is no open space in the south east Balance of suburb area and this is Gap Area B1 as shown in Figure 6.2B. • 466 additional residents are forecast to live in the Balance of suburb by 2031, representing a 5 per cent increase from the existing population. • The land use is predominantly residential with a combination of detached dwellings and a large number of unit developments. 	<ul style="list-style-type: none"> • Provide an additional Small Local open space in Gap Area B1 to address the lack of any public open space within safe and easy walking distance of existing and forecast community in this location.

6.2.5 Recommendations for Bentleigh

6.2.5a Summary of overall intent

Provision and distribution

There is potential to improve the function and role of the local open space network in Bentleigh through provision of additional Local and Small Local open space in and near the Bentleigh Major Activity Centre, Moorabbin Junction Neighbourhood Centre and the Balance of suburb gap area to the south east. Provision of a new Local open space in the Bentleigh Major Activity Centre will also address the gap area in McKinnon.

Quality and design

The design of some of the existing open spaces will be upgraded to incorporate a greater diversity of facilities for unstructured recreational use, and social spaces to appeal to the changing demographics. This includes the forecast decrease in children and increase in the people in the 60 plus age range.

6.2.5b Precinct recommendations for Bentleigh

The priorities shown in the Recommendation tables are indicative only. The priorities provide guidance on the expected sequence and timeframes for the commencement of actions and may change pending the allocation of suitable funding and resources, along with the actual rate and location of forecast future growth and development.

A Additional open space

No.	Recommendation	Responsibility	Priority
6.2A-1	Provide a new Small Local open space in gap area B1 to meet the needs of the existing and forecast population. It needs to be located relatively central within the gap area which is defined by Patterson Road to the north and between Jasper and Tucker Roads. The open space needs to be easily accessible, preferably with local access streets to at least two sides.	GE Developer	Very High/ Urgent
6.2A-2	Expand the area of Brentwood Street Reserve to create a useable Small Local open space to primarily meet the needs of the existing population and also the forecast population in the nearby Moorabbin Neighbourhood Centre. Upgrade completed Dec 2014.	GE Developer	Complete
6.2A-3	Provide a new Local open space in gap area B2 to meet the needs of the existing and forecast population from this gap area and also from McKinnon to the north. This recommendation is still required and is primarily to cater to the forecast population in the Bentleigh Major Activity Centre and needs to meet the criteria for new open space included in the Strategy including sunlight access.	GE Developer	Very High

No.	Recommendation	Responsibility	Priority
6.2A-4	Provide a new Small Local open space in gap area B3 to meet the needs of the existing and forecast population in this gap area, particularly in the Moorabbin Neighbourhood Centre. This new Small Local open space is to provide different facilities to those already provided in North Avenue Park. The preferred location for the future open space is central to the gap area, west of the railway and preferably not adjoining it and in a configuration that improves east-west connectivity within the precinct.	GE Developer	Very High
6.2A-5	Provide a new Small Local open space in gap area B4 to meet the needs of the existing and forecast population in this gap area including the Bentleigh Major Activity Centre. The removal of the former linear open space along the railway as a result of the Level Crossing Removal Project has increased the priority for this new open space. Given the predominant north south local street network it is preferable that the new open space establishes east-west connectivity.	GE Developer	Very High

B Open space links

No.	Recommendation	Responsibility	Priority
6.2B-1	Improve the accessibility and amenity of the streetscapes in gap area B4 to establish an improved on-street link between Allnutt Park in the north and Victory Park to the south of this gap area. Investigate the potential to create a circuit walk with signage and facilities in the two destination reserves.	GE	Medium

6.2.5c Individual open space recommendations for Bentleigh

C Municipal open space

No.	Recommendation	Responsibility	Priority
6.2C-1	Bentleigh Reserve Undertake a major review of the Landscape Masterplan for Bentleigh and Hodgson Reserves to update the overall direction. This is to provide guidance to ongoing management and future design upgrades to address the changing demographics in the local catchment of the reserve. This includes investigating opportunities to review the extent and size of the existing restricted open space uses and rationalise the other non-open space dependent facilities in the reserve.	GE	Very High
6.2C-2	Hodgson Reserve Included above in 6.2C-1.	GE	Refer 6.2C-1
6.2C-3	Victory Park Prepare a Landscape Masterplan to guide appropriate future upgrades to this park. This is to include integration of recreation and social facilities in open space to improve its use and accessibility by all. The sports pavilion is to be upgraded in 2019/20 with Victorian Government funding.	GE	High

D Neighbourhood open space

No.	Recommendation	Responsibility	Priority
6.2D-1	Halley Park Prepare a Landscape Concept Plan to guide future upgrades to this open space to increase the diversity of facilities in this reserve in the context of forecast change and the removal of the Scout Hall.	GE	Medium

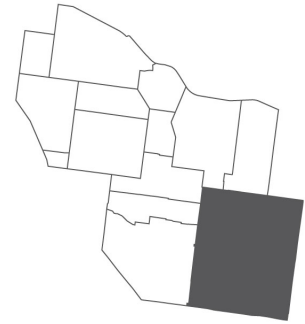
E Small Local open space

No.	Recommendation	Responsibility	Priority
6.2E-1	Burgess Street Reserve This is no longer listed as public open space as the railway easement has changed as part of the Level Crossing Removal Project, meaning it is no longer feasible to install a shared trail or other recreational facilities in the easement.	N/A	N/A
6.2E-2	Clapperton Street Reserve Minor upgrade completed in 2016. Investigate opportunities to improve access to this reserve from Hardy Court and increase recreational opportunities by enlarging the reserve or establish an alternative open space that is more accessible to the existing and new population, particularly from the higher density housing along Centre Road to the north.	GE	Medium
6.2E-3	Daly Street Mall Undertake a major review of the design of this space with a Landscape Concept Plan to improve its function and use, its contribution to the landscape character, introduce natural features and a reduction in built form to assist in mitigating urban heat island effect in the centre and provide a green respite space for residents and workers.	GE	Very High
6.2E-4	Glen Rigney Memorial Reserve Continue to maintain.	GE	Ongoing
6.2E-5	Leckie Street Reserve Upgrade completed, continue to maintain.	GE	Ongoing
6.2E-6	North Avenue Park Continue to maintain this open space as a local play area. Investigate some improvements including additional screen planting to perimeter fencing.	GE	Medium

F Small Local Link

No.	Recommendation	Responsibility	Priority
6.2F-1	Brentwood Street Reserve Upgrade completed, continue to maintain.	GE	Ongoing

6.3 Bentleigh East



6.3.1 Existing conditions



FIGURE 6.3A Existing open space in Bentleigh East

6.3.1a Overall Precinct description

Public open space

The five large Municipal open spaces in Bentleigh East provide a diversity of structured sporting facilities including the major Glen Eira Sports and Aquatic Centre adjoining Bailey Reserve, sports fields for cricket, AFL and soccer, tennis and bowling facilities. In addition to the structured sporting facilities, the Municipal open spaces provide a range of unstructured recreation facilities including playgrounds and a skate park. Different from the older parts of the municipality, the open spaces have a predominantly native and informal character as a contrast to the more exotic and public garden character in the older parts of Glen Eira.

Centenary Park is identified in the household survey as the most popular open space within walking distance for its variety of uses including walking, play, dog walking and exercising. A new sports pavilion was built in the park in 2015. The second most popular is King George VI Memorial Reserve, primarily for walking and seating along with play and cycling and a new hit up wall, basketball and netball rings were installed in 2016 to increase the diversity of facilities. Bailey Reserve is nominated as the third most popular for dog walking and walking along with other values. People travel outside the precinct to visit Duncan Mackinnon reserve primarily for walking, fitness, exercise, jogging and running. Mackie Road Reserve, like Bailey Reserve, is mainly visited for dog walking, followed by a range of other uses. Marlborough Street Reserve provides structured sporting and local community use and is located adjoining the Virginia Park Industrial area. Virginia Park is the only Neighbourhood open space in Bentleigh East and visited primarily for relaxing and walking. This park has a more formal exotic character providing a contrast to the character of the other major reserves. Of note, the Moorleigh Community Village Reserve is not identified as being well used in the survey undertaken for the 2014 Strategy. Since the 2014 Strategy, a new community garden has been established and the process of implementing a Community Shed is underway. Recently, a new fenced cricket net/multipurpose facility was installed at the reserve.

Annie and Arthur Abrahams Reserve is a Local open space in the north and includes picnic and barbecue facilities. Wingate/Brady Roads Park is the other Local open space in Bentleigh East and includes a play and picnic area along with some seating and open grassed areas. Additional to these two Local open spaces is a series of seven Small Local open spaces that provide a diverse range of facilities and character across the precinct.

Ancillary open space

Yarra Yarra Golf Club occupies a large physical area in Bentleigh East and is fenced from public access, mainly with solid fencing at the residential interface. While not public open space, this ancillary open space contributes to the neighbourhood character with the presence of overstorey canopy trees which are visible above the fence line. Being a large area with turf and planting, it also contributes to mitigating urban heat island effect.

A number of public schools contribute to the open space character, including East Bentleigh Primary School, Bentleigh Secondary College, Tucker Road Bentleigh Primary School, Coatesville Primary School and Valkstone Primary School. All these schools have outdoor sports field areas, however only two of the five are currently accessible to

informal access after-hours including Tucker Road Bentleigh Primary School and East Bentleigh Primary School.

Land use and character

Bentleigh East is a residential suburb developed mainly in the 1950s, with a number of public and private schools, and the major areas of open space within Glen Eira.

Bentleigh East Neighbourhood Centre is located on Centre Road and provides mainly convenience retail and cafe facilities, along with a number of other smaller convenience retail centres located through the suburb.

The Virginia Park industrial precinct located on East Boundary Road, just south of North Road, has recently been the subject of a Structure Planning Process by the Victorian Planning Authority referred to as East Village. The Monash Medical Centre on Centre Road and the Yarra Yarra Golf Club are other non-residential land uses within the precinct. *Plan Melbourne 2017-2050* refers to the consolidation of Monash Medical Centre in Clayton, however clarification is required on whether the Monash Medical Centre will continue to be located in Bentleigh East as well.

The dominant architectural form is single storey detached dwellings of the post war era with cream brick dwellings and well established gardens with low and medium scale planting and front fences. There is also a presence of some contemporary dwellings throughout the precinct.

There are no recognised heritage precincts in Bentleigh East.

6.3.1b Quantity of open space in Bentleigh East

Following is a brief summary of the key statistics for quantity of open space in Bentleigh East:

- 32.98 hectares of open space (down from 33.93 hectares in 2014, due to the incorrect inclusion of the buildings as part of Moorleigh Community Village Reserve).
- 3.6 per cent of the total suburb area is open space (down from 3.8 per cent in 2014).
- 19 per cent of the total open space in the City of Glen Eira
- 11 sqm of open space per person, based on the estimated population for 2016 (down from 13 sqm in 2014 which is a combination of the reduced area and the increased population).
- Within 400 metres of the precinct, other major areas of open space include Hodgson Reserve, McKinnon Reserve, Duncan Mackinnon Reserve and Mallanbool Reserve.

6.3.1c Open space hierarchy and character in Bentleigh East

Table 6.3-1 List of existing open space type and character classification

Open space	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Annie and Arthur Abrahams Reserve	0.31	Local	Informal	
Bailey Reserve	8.28	Municipal	Sporting	Restricted sporting, Informal
Centenary Park	5.92	Municipal	Sporting	Informal
Colin Street Park	0.24	Small Local	Informal	
Cormick Street Reserve	0.03	Small Local Link	Linking space	
Dega Avenue Park	0.10	Small Local	Play	Informal
Haigh / Kershaw Street Park	0.12	Small Local	Informal	Linking space
King George VI Memorial Reserve	6.12	Municipal	Sporting	Restricted sporting, Informal
Mackie Road Reserve	3.70	Municipal	Sporting	Restricted sporting, Informal
Marlborough Street Reserve	1.78	Municipal	Sporting	Restricted sporting, Informal
Moorleigh Community Village Reserve	3.79	Municipal	Sporting	Restricted sport and recreation
Nina Court Reserve	0.04	Small Local	Service easement	Linking space
Pell Street Reserve	0.17	Small Local	Informal	
Virginia Park	1.88	Neighbourhood	Public garden	Linking space
Waratah Road Reserve	0.14	Small Local	Informal	
Wingate & Brady Roads Park	0.28	Local	Informal	
Yarra Yarra Links Estate Reserve	0.10	Small Local	Informal	
Total area	32.98			

Heritage values of open space

No heritage values identified to date.

6.3.1d Distribution of open space in Bentleigh East

As illustrated in Figure 6.3B, there are five main gap areas in the distribution of local open space in Bentleigh East, along with other smaller gap areas. These are between Tucker and Warrigal Roads. Municipal open space is well distributed, however there is a lack of Neighbourhood open space. Additional Neighbourhood open space is difficult to achieve in established urban areas and instead, the neighbourhood role and facilities are to be provided in the Municipal open space. The Strategy recommendations will focus on the

6.3.2 Community characteristics for Bentleigh East

6.3.2a Demographic summary of existing population and forecast trends

Source: ABS Census data, 2016 (.id Consulting 2018)

Age structure:

The most populous age group is 35 to 49 years, followed by 50 to 59 years and the 25 to 34 years. Compared with the municipal-wide average, there is a slightly higher proportion of people in the 35 to 49 year age group and in the 70 to 84 year age range, and a lower proportion of those aged 18 to 34 years of age.

Forecast trends through to 2031 include:

- a minor decrease in the 35 to 49 age range
- an increase in the 50 to 84 age range.

Household type:

Approximately 40 per cent of the households are couples with dependents, followed by 22 per cent couples without dependents and 20 per cent are lone person households. Compared with the Municipal-wide average, there is a higher proportion of couple families with dependents and one parent families, and a lower proportion of lone person households.

Forecast trends through to 2031 include:

- Couple families with dependents will decrease slightly
- Couple families without dependents will increase slightly
- Lone person households to increase slightly
- One parent families to decrease slightly.

Dwelling type:

Compared with the Municipal-wide average, there are significantly more separate houses and less medium and high density housing in Bentleigh East. Approximately 72 per cent of the population live in separate houses, 27 per cent in medium density and less than 1 per cent in high density dwellings. Between 2011 and 2016, there was a 10 per cent growth in medium density housing with a corresponding decline in separate houses.

Total population (2016): 28,813

Forecast population in 2031: 32,591* (increase of 3,778)

**Source: .id Consulting forecasts for Glen Eira suburbs, November 2018*

6.3.2b Summary of household survey outcomes for Bentleigh East

A total of 189 household surveys were received from residents of Bentleigh East, in 2012, which represents 17.5 per cent of the total number of surveys received. This is slightly less than the proportion of Bentleigh East residents in the Glen Eira population, which is 19.3 per cent.

Most frequently visited open space reserves:

Use	Open space	Reason to visit	Suggested improvements
Open space within walking distance			
25%	Centenary Park	walking (10%) close to home (5%) playground (5%) jogging/running (3%)	Additional trees, upgrade of existing playground and improvements to clubrooms and buildings.
18%	King George IV Memorial Reserve	walking (5%) close to home (4%) play safe for children (3%) playground (3%)	Upgrade existing playground including diversity of equipment for a range of ages and provide more seating.
18%	Bailey Reserve	dog walking (6%) walking (6%) exercising (2%) peaceful open space (2%) play safe for children (2%) relaxing (2%)	Additional dog off-lead areas, additional trees, reduce car park and locate toilets near playground.
17%	Duncan Mackinnon Reserve	walking (6%) fitness (5%) exercising (3%) jogging/running (3%) paths (3%)	Improvements to path surfaces and path maintenance and additional trees.
13%	Mackie Road Reserve	dog walking (5%) walking (3%) close to home (2%) relaxing (2%)	Provide additional dog off-lead areas and dog waste bags/bins. Suggestion to provide dog off-lead hours.
Open space beyond walking distance			
15%	Packer Park	playground and equipment (8%) dog walking (2%) exercising (2%)	Additional BBQ's, dog drinking facilities, dog off-lead areas and trees. Improvements to fencing and water pond to be regularly cleaned.
10%	Caulfield Park	meeting people/friends (2%) playground and equipment (2%)	Reduce car park, provide connecting paths and improvements to path surfaces.
7%	Allnutt Park	ambience and beauty (2%) meeting people/friends (2%)	Additional car park
5%	Duncan Mackinnon Reserve	walking (3%) jogging/running (2%) exercising (1%)	Additional car parking, seating and trees.
5%	Karkarook Park	walking (2%) ambience and beauty (2%) dog walking (1%) exercising (1%)	Provide more café/kiosk facilities and regular maintenance and cleaning. Additional paths, seating and trees, particularly shade trees and seating in shade. Provide more security.

Types of open space used (top four):

87% sporting reserves
 81% local streets for exercise
 74% Small local parks
 71% Large parks and gardens

Values (top four):

72% place to relax and unwind
 64% trees
 58% health and wellbeing
 54% place for kids to play

Activities and facilities in open space (top four):

81% walking paths
 79% seats
 71% open grassed areas
 65% public toilets

Facility provision and maintenance:

The survey outcomes identify that generally people are satisfied with the provision of playgrounds, open grassed areas and walking paths. They consider that public toilets, cycling paths and drinking fountains need to be better provided for. Generally facilities are well maintained with the exception of public toilets.

General comments:

- Value the choice and variety of open space in Glen Eira.
- Open space is well maintained and should be retained/kept where it is.
- Additional open space is required, particularly as density increases and private gardens become smaller.
- Enjoy using local open space.

For further details on household survey outcomes, refer to Appendix A of the Strategy.

6.3.2c Implications of community characteristics on future open space planning in Bentleigh East

In Bentleigh East the population is forecast to age slightly, however there will continue to be a dominance of family households with dependents in the precinct. The major change is the forecast increase in the population across the suburb and in the Bentleigh East Large Neighbourhood Centre by 2031. This will place increasing pressure on the existing open space network. In the future, opportunities to increase the diversity of open space character and facilities to encourage physical and mental health and wellbeing of all ages including children, parents and older adults will be provided.

The other implication is the substantial growth forecast at the proposed East Village Emerging Health, Education and Innovation Precinct of 5,400. However, at this stage, this forecast change will occur post 2031 and is outside of the population forecasts included in this Strategy.

6.3.3 Future change in Bentleigh East



FIGURE 6.3C Future change in Bentleigh East

The *Glen Eira Housing and Local Economy Growth Assessment Report* (SGS, 2018), the *Activity Centre, Housing and Local Economy Strategy 2017* (ACHLES) and the *22.07 Housing Diversity Area Policy* in the Glen Eira Planning Scheme provides direction on future growth in Bentleigh East.

Between 2016 and 2031 the residential population is forecast to increase by 13 per cent, with 3,778 additional residents forecast to be living in Bentleigh East. Of these, approximately 32 per cent or 1,225 are forecast to live in the Bentleigh East Large Neighbourhood Centre. An additional 667 are forecast at the end of the planning period in 2031 to live in the East Village Emerging MAC with Urban Renewal and the remaining 50 per cent or 1,886 are forecast to live in the Balance of suburb.

By comparison, in the 2014 Strategy, a total population increase of 2,056 people was forecast between 2013 and 2026. By 2016, 1,891 of the 2,056 were already living in Bentleigh East, meaning that the growth occurred at a faster rate than was forecast.

Bentleigh East Large Neighbourhood Centre

The Bentleigh East Large Neighbourhood Centre is identified in the ACHLES and the overall direction for it is described as:

Bentleigh East will be a welcoming and connected centre that caters for all. The centre will be enhanced by a range of retail and dining options to meet the everyday needs of its local community.

Located on Centre Road between Tucker and East Boundary Roads, the Monash Medical Centre abuts the eastern extent. The *Housing Diversity Area Policy 22.07* in the Glen Eira Planning Scheme encourages residential use in the commercial centre with shop top housing and apartment developments transitioning to predominantly single storey detached dwellings in the adjoining areas.

East Village Emerging Health, Education and Innovation Precinct

East Village Strategic Site is referred to as an 'Emerging Health, Education and Innovation Precinct' in the ACHLES. Located near the corner of North Road and East Boundary Road, the Victorian Planning Authority is working in partnership with the City of Glen Eira to develop a plan that will facilitate the redevelopment of East Village for mixed-use development over the long term. This includes increasing the number and types of jobs, providing a diversity of housing, commercial uses and providing 10 per cent of the land area of the Strategic Site as public open space.

Local Centres

There are a number of small local centres across the suburb as illustrated in Figure 6.3C.

Balance of suburb

In these areas protection of the existing neighbourhood character will support extensions to existing dwellings, new single dwellings and dual occupancies.

Employment population

The forecast employment population change is an additional 3,949 workers over the 2016-2031 period representing a 47 per cent increase (SGS, 2018).

6.3.4 Open space needs assessment for Bentleigh East

Refer to the Future Change Diagram, Figure 6.3C for the sub-precincts described in Table 6.3-2. The 13 per cent forecast change in the resident population in Bentleigh East, particularly with 1,225 additional residents living in the Bentleigh East Large Neighbourhood Centre will create the need for additional open space. It is anticipated that a significant amount of the forecast additional employment population will be working in the core of the activity centre. Additional Local and Small Local open space will be required in the gap areas in outside of the activity centres to improve accessibility to open space for both the existing and forecast population.

Table 6.3-2 Open space needs assessment for Bentleigh East

Description	Assessment
Bentleigh East Large Neighbourhood Centre (North of Centre Road)	
<ul style="list-style-type: none"> The extent of the Bentleigh East Neighbourhood Centre (NC) north of Centre Road is shown on Figure 6.3C. This includes the area east and west of East Boundary Road. Bailey Reserve is a sporting reserve which includes the Glen Eira Sports and Aquatic Centre and associated car parking. While not located in this suburb, McKinnon Reserve in Bentleigh, west of Tucker Road is accessible from this part of the centre and addresses the gap in the Municipal open space provision in this part of Bentleigh East. The retail strip and commercial centre addresses Centre Road with some car parking to the north and changing to residential. Densities have increased in the centre over the past 10 years. 35 per cent of the dwellings that were forecast in 2014 for the Bentleigh East NC have been constructed. Council is planning for the rate of dwelling growth to continue at a similar pace, with an additional 544 dwellings or 1,225 people forecast to be living in the Bentleigh East NC by 2031. These figures apply to the whole centre both north and south of Centre Road. 	<ul style="list-style-type: none"> East Boundary Road is a major arterial that forms a barrier to safe and easy access to Bailey Reserve. It is recognised that there are traffic signals on this road to improve east west access, however younger children and older people with less mobility will not find this easy and safe to cross on their own. Tucker Road to the west is a major road and carries less traffic than East Boundary Road and is therefore safer to cross and visit McKinnon Reserve. There is forecast to be a progressive increase in urban densities with additional dwellings in the NC through to 2031. This means that people will have less private open space and will rely more on public open space. Provide a new Local open space close to, but not facing Centre Road. This will provide an open space as a social space for the community and provide some greening to assist to mitigate urban heat. It will also provide a place to relax and unwind for the community living and working in the Centre. This space will preferably be north facing and complement the structured sporting uses provided in the nearby Municipal open spaces. Investigate the opportunity to establish this on the existing car park near the corner of Centre Road and East Boundary Road. This is consistent with the recommendations in the 2014 Strategy. Support the upgrade of the unstructured and informal recreation facilities in McKinnon Reserve to better cater to the open space needs of the forecast population and the existing population in the centre, north of Centre Road.

Description	Assessment
Bentleigh East Large Neighbourhood Centre (south of Centre Road)	
<ul style="list-style-type: none"> The extent of the Bentleigh East Large NC south of Centre Road is shown on Figure 6.3C. This includes east and west of East Boundary Road. Colin Street Park is a Small Local open space providing a playground and picnic shelter along with an open grassed area within an easy walk of the Bentleigh East Large NC. The land use is predominantly residential with commercial use along the southern side of Centre Road with the active interface to Centre Road. Refer to the description of forecast growth in the Bentleigh East Large NC (north of Centre Road). 	<ul style="list-style-type: none"> People living and working in the northern and eastern part of the centre do not have any open space within an easy and safe walk. Colin Street Park provides for the local catchment to the south west. With the forecast increase in population living and working in the Bentleigh East Large NC, there is a need to provide a new Small Local open space to cater to both the forecast and existing residents and workers in this part of the centre. This will address Gap Area BE3 and is consistent with the recommendation in the 2014 Strategy. Upgrade Colin Street Park to include additional large overstorey shade trees and seating to improve the character.
East Village Emerging Health, Education and Innovation Precinct	
<ul style="list-style-type: none"> The East Village Emerging Health, Education and Innovation Precinct is shown on Figure 6.3C. East Village is also referred to as Virginia Park. The industrial precinct is forecast to change to a mixed-use precinct and the Victorian Planning Authority (VPA) is currently preparing a Structure Plan to guide its future redevelopment in consultation with Glen Eira City Council and key stakeholders. There is forecast to be a new resident population of 6,000 for the site along with a significant employment population as well. Virginia Park is a Neighbourhood open space adjoining the southern extent of East Village Precinct. The park is linear in form with established mature canopy shade trees that contribute significantly to its character along with a shared trail, playground, open grassed areas and seating. Marlborough Street Reserve is a Municipal sporting reserve that includes a soccer field with lighting, playground, dog off leash area and pavilion. Annie and Arthur Abrahams Reserve is a Local open space with play and picnic facilities and a multiuse ball court. No growth is assigned to this area until 2031, when an additional 667 people are forecast to live here. In the longer term, 	<ul style="list-style-type: none"> The East Village Structure Plan will provide direction for the site. The Structure Plan proposes to provide 10 per cent of the net developable area as open space. The following works are proposed: <ul style="list-style-type: none"> Expand the size of Marlborough Street Reserve which would make it directly accessible from the Structure Plan area and provide a full sized soccer field A new Neighbourhood open space in the Town Centre A new Town Square (Small Local open space)

Description	Assessment
substantial resident and worker population growth is forecast to occur in the precinct with the future resident population estimated at 6,000.	
Balance of suburb north of centre Road and west of East Boundary Street	
<ul style="list-style-type: none"> For the extent of the area, refer to Figure 6.3C. There is no existing open space within a safe walk without crossing major roads. This is referred to as Gap Area BE1. Predominantly residential use with a combination of single and double storey detached dwellings. There is also an industrial precinct on Ardena Court opposite Bailey Reserve. Valkstone Primary School and McKinnon Primary School are located in this area and provide ancillary open space with the school grounds being accessible out of school hours. The Balance of suburb forecasts an additional 842 dwellings or 1,886 people to be living in the precinct by 2031. This represents approximately 50 per cent of all the forecast growth in Bentleigh East, some of which is assumed to be located in this area. 	<ul style="list-style-type: none"> The predominantly residential area does not have any open space within a safe and easy walk. The Valkstone and McKinnon Primary Schools provide ancillary open space. While this is useful in the interim, in the medium to long term, a new Small Local open space is required for both the existing and forecast population.
Balance of suburb south of England Street and west of East Boundary Road	
<ul style="list-style-type: none"> For the extent of the area, refer to Figure 6.3C. Dega Avenue Park is a Small Local open space with a playground, small open grassed area and seat. Predominantly residential use with a combination of single and double storey detached dwellings. Tucker Road Bentleigh Primary School towards the southern end of the sub-precinct is an ancillary open space with the school grounds being available for after school use including the sportsground and the playground. The Balance of suburb forecasts an additional 842 dwellings or 1,886 people to be living in the precinct by 2031. This represents approximately 50 per cent of all the forecast growth in Bentleigh East. 	<ul style="list-style-type: none"> Given the small size of Dega Avenue Park, recommend increasing the size of this open space so that it can more comfortably accommodate two to three uses. Some of the open space needs will be addressed by the provision of a new Small Local open space further north within the Bentleigh East Neighbourhood Centre.

Description	Assessment
Balance of suburb south of Centre Road and east of East Boundary Street	
<ul style="list-style-type: none"> For the extent of the area, refer to Figure 6.3C This area has three Municipal open spaces and a few Local and Small Local open spaces. King George VI Memorial Reserve has two sportsgrounds, a tennis facility, pavilion, guide hall, playspace, unstructured recreation facilities and a traffic school. Centenary Park has sportsgrounds, playspace, a tennis facility, new pavilion and car park. Moorleigh Community Village Reserve includes a tennis facility, sportsground, pavilion, cricket nets/multipurpose facility and a community garden. Currently a Community Shed is being constructed within the village. Haigh/Kershaw Street Park is a Small Local open space with play facilities located east of the Yarra Yarra Golf Club. This is the only open space for residents living east of the golf club. Wingate and Brady Roads Park Local open space provides play, seating and an open grassed area Yarra Yarra Links Estate Reserve provides seating and Nina Court Reserve is a linking open space. A number of schools, including private and public, along with the Yarra Yarra Golf Club are also located in this precinct. The Balance of suburb forecasts an additional 842 dwellings or 1,886 people to be living in the precinct by 2031. This represents approximately 50 per cent of all the forecast growth in Bentleigh East. 	<ul style="list-style-type: none"> The majority of the Balance of suburb south of Centre Road is reasonably well provided for with open space and while there are gaps in the distribution, they are accessible via the local street network, rather than needing to cross major roads. The Yarra Yarra Golf Club separates this part of the suburb into two distinct precincts as it is not accessible to the public. Provide a new Small Local open space between McGuinness Road and Patricia Street to meet the open space needs of the existing and forecast community. Currently, the nearest open spaces are more than 800 metres walk due to urban layout. This will address gap area BE5. Secure an open space link between Moorleigh Community Village Reserve and Bignell Road. Currently, access is via a road link behind the buildings adjacent to the school. This will improve accessibility for all into the open space. Secure an open space link between Chesterville Road and King George VI Memorial Reserve. Currently the link is via the Bentleigh Secondary College grounds. This will secure public access into the eastern end of this reserve. Upgrade Centenary Park to improve the quality of the reserve and usability for walking, seating and social facilities.

Description	Assessment
Balance of suburb north of Centre Road, east of East Boundary Road	
<ul style="list-style-type: none"> For extent, refer to Figure 6.3B. Mackie Road Reserve is a Municipal open space with a sportsground, a tennis facility, bowling facility, playspace and a pavilion. Pell Street Reserve includes an open grassed area, playspace and seating in a Small Local open space towards North Road. Nearby is Waratah Road Reserve that has a path, seats and mature trees but is located on the busy Mackie Road. Mackie Road Reserve includes tennis, sportsground and the bowls club, along with a small play facility, circuit path and dog off lead area referred to as Orange Street Park. Monash Medical Centre directly adjoins the Balance of suburb area and has an employment population who we anticipate would also use the open space network. Coatesville Primary School has both a synthetic and natural turf outdoor sportsground along with a recently constructed indoor basketball stadium. The site is fenced and prevents after-hours access. The Balance of suburb forecasts an additional 842 dwellings or 1,886 people to be living in the precinct by 2031. This represents approximately 50 per cent of all the forecast growth in Bentleigh East. 	<ul style="list-style-type: none"> Central to the precinct there is a gap in the provision of open space referred to as BE4. Urban densities are forecast to increase in the nearby Bentleigh East Large Neighbourhood Centre and the future East Village Precinct, which means there will be increased levels of use of the existing open space. Mackie Road Reserve provides primarily structured sporting facilities and there is limited space to accommodate additional informal local scale facilities in the gap area BE4. Provide a new Small Local open space between Marlborough Street and Mackie Road so that the existing and forecast community have a local community space within safe and easy walking distance as the urban densities increase. Undertake a Masterplan for Mackie Road Reserve to investigate options to improve the function, integration and layout.

6.3.5 Recommendations for Bentleigh East

6.3.5a Summary of overall intent

Provision and distribution

Municipal open space is well provided for and distributed across Bentleigh East, however there are gaps in the Neighbourhood and Local open space system. To address this, additional Small Local and Local open space is recommended including in and nearby the Bentleigh East Large Neighbourhood Centre and the East Village Emerging Health, Education and Innovation Precinct. Other recommendations include improving access into selected Municipal open space reserves with additional open space links into them.

Quality and design

The design of the neighbourhood and local level facilities in Municipal open space will continue to be improved. There will be a focus on providing social facilities and improving the landscape character and quality of selected Local and Small Local open space with additional shade trees, seating and picnic facilities to provide social spaces.

6.3.5b Precinct recommendations for Bentleigh East

The priorities shown in the Recommendation tables are indicative only. The priorities provide guidance on the expected sequence and timeframes for the commencement of actions and may change pending the allocation of suitable funding and resources, along with the actual rate and location of forecast future growth and development.

A Additional open space

No.	Recommendation	Responsibility	Priority
6.3A-1	Provide a new Small Local open space west of East Boundary Road, between North and McKinnon Roads. This is for the existing and forecast population and addresses Gap Area BE1.	GE Developer	Low
6.3A-2	Provide a new Local open space in the Bentleigh East Large Neighbourhood Centre, north of Centre Road and west of East Boundary Road. This is to meet the needs of the forecast and existing population, particularly in the context of increased urban densities and less private open space and will address Gap Area BE2.	GE Developer	High
6.3A-3	Expand the area of Dega Avenue Park to create a more functional Small Local open space to meet the open space needs of primarily the existing population. Investigation into methods to expand this open space could include a partial road closure.	GE	Medium
6.3A-4	Provide a new Small Local open space in the Bentleigh East Large Neighbourhood Centre, south of Centre Road. This will address Gap Area BE3 to meet the needs of the existing and forecast population in this gap area, particularly in the context of increased urban densities. The design of this new Small Local open space is to complement the facilities provided in the Colin Street Park.	GE Developer	High

No.	Recommendation	Responsibility	Priority
6.3A-5	Provide a new Small Local open space in the Balance of suburb area north of Centre Road. This will address Gap Area BE4 and address the incremental increased urban densities, particularly within the Bentleigh East Large Neighbourhood Centre west of the Balance of suburb area. The open space design is to primarily cater to the informal and social use of open space given that structured sport and unstructured recreation are provided for at Bailey Reserve to the west of this area.	GE Developer	High
6.3A-6	Provide a new Small Local open space in the Balance of suburb, south of Centre Road and east of the Yarra Yarra Golf Club. This is to primarily address the open space needs of the existing population due to the lack of open space in Gap Area BE5.	GE	Low

B Open space links

No.	Recommendation	Responsibility	Priority
6.3B-1	Secure a public open space link into King George VI Memorial Reserve that is accessible and available for everyone to use including an adequate width to improve visual sightlines. To achieve this, liaise with Bentleigh Secondary College.	GE	High
6.3B-2	Establish a pedestrian and cycle entry into Moorleigh Community Village Reserve to make this more appealing and accessible for the community to use.	GE	High

6.3.5c Individual open space recommendations for Bentleigh East

C Municipal open space

No.	Recommendation	Responsibility	Priority
6.3C-1	Bailey Reserve Continue to maintain this open space including minor upgrades.	GE	Medium
6.3C-2	Centenary Park Prepare a Landscape Masterplan for this park to guide appropriate future upgrades to this park, within the context of this being the most popular open space in this suburb. This is to include integration of unstructured recreation and social facilities in open space to improve its use and accessibility by all. Note that a new pavilion was completed in 2015.	GE	High
6.3C-3	King George VI Memorial Reserve Continue to maintain the existing structured sport and unstructured recreation facilities. In the medium term, prepare a Landscape Masterplan for this Reserve, including review of the two restricted uses in the reserve including the Moorabbin Childrens Traffic School and the childcare facility and providing a secure and wider pedestrian access into the reserve from Chesterville Road	GE	Medium

No.	Recommendation	Responsibility	Priority
6.3C-4	Mackie Road Reserve Undertake a Masterplan to investigate opportunities to incorporate unstructured recreation and informal facilities into the reserve and improve the overall layout and design.	GE	Medium
6.3C-5	Marlborough Street Reserve Currently there are proposals to expand this reserve to provide a full-sized sportsground for the forecast 6,000 additional residents in the adjoining East Village Strategic Site. The Strategy supports retaining unstructured recreational use of the sportsground and therefore recommends it be retained as a natural turf sportsground and not a synthetic surface. Council to continue to advocate for a viable enlarged sportsground to be provided as part of the East Village Structure Plan prepared by the VPA.	GE	Very High
6.3C-6	Moorleigh Community Village Reserve Currently a Community Shed is being constructed. In the medium term it is recommended that Council review options to improve pedestrian/cycle access and circulation into and through the reserve including improving visual access from Bignell Road.	GE	Medium

D Neighbourhood open space

No.	Recommendation	Responsibility	Priority
6.3D-1	Virginia Park Continue to advocate for appropriate treatment and design of the new access points between Virginia Park and the East Village Strategic Site to the north. This includes a significant upgrade to the existing play and seating areas in the reserve, ensuring the protection of all the existing mature trees that significantly contribute to the character of this reserve. This is to cater to the additional residents and workers in the new East Village Strategic Site adjoining this reserve.	GE, VPA	Very High

E Local open space

No.	Recommendation	Responsibility	Priority
6.3E-1	Annie and Arthur Abrahams Reserve Continue to maintain this open space. In the medium term, consider upgrade of the reserve to improve facilities.	GE	Medium
6.3E-2	Wingate and Brady Roads Park Minor upgrade to plant additional shade trees and improve the landscape amenity of the open space and complement the recent minor playground upgrade works.	GE	Medium

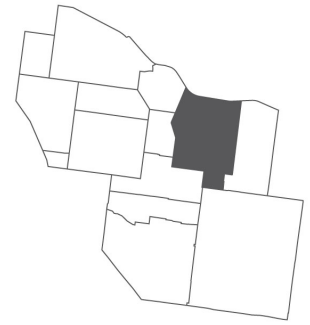
F Small Local open space

No.	Recommendation	Responsibility	Priority
6.3F-1	Colin Street Park Undertake a minor upgrade to this open space to improve the character and natural qualities with additional large canopy trees and seating.	GE	Medium
6.3F-2	Dega Avenue Park Undertake a major upgrade to this open space once expansion plans for this open space are confirmed. Refer to Recommendation 6.3A-3.	GE	Medium
6.3F-3	Haigh/Kershaw Street Park Continue to maintain this open space for informal recreation use, particularly in the context that this is the only open space to the east of the Yarra Yarra Golf Club within safe walking distance for the residential catchment.	GE	Ongoing
6.3F-4	Nina Court Reserve Continue to maintain. The reserve was upgraded in late 2015.	GE	Ongoing
6.3F-5	Pell Street Reserve Continue to maintain. The reserve was upgraded in 2017.	GE	Ongoing
6.3F-6	Waratah Road Reserve Continue to maintain this open space for unstructured recreation and informal use.	GE	Ongoing
6.3F-7	Yarra Yarra Links Estate Reserve Continue to maintain this open space.	GE	Ongoing

G Small Local Link

No.	Recommendation	Responsibility	Priority
6.3G-1	Cormick Street Park Continue to maintain as a Small Local Link to bus stop.	GE	Ongoing

6.4 Carnegie



6.4.1 Existing conditions

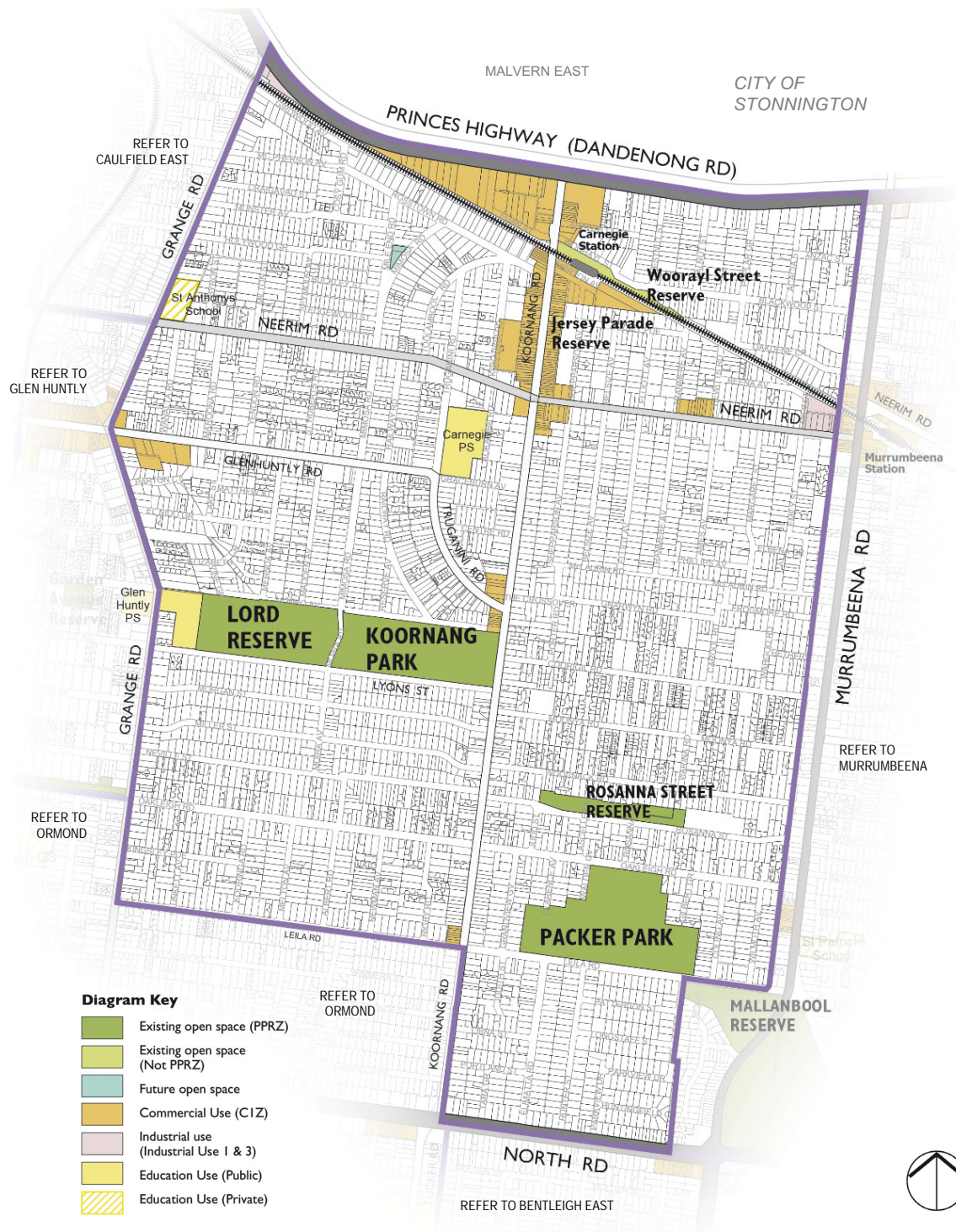


FIGURE 6.4A Existing open space in Carnegie

6.4.1a Overall Precinct description

Public open space

Lord Reserve, Koornang Park and Packer Park are the three major Municipal open space reserves in Carnegie. The household surveys identify Packer Park as the most popular followed by Koornang Park and Lord Reserve. All these reserves include a combination of sporting facilities and unstructured recreation and informal use with different characters.

Packer Park has an informal and native character and the sporting facilities including a sportsground, the velodrome, a diverse range of unstructured recreation facilities, the public bowling facility, bocce and petanque facilities on the site of the former Carnegie Bowling Club. The playspace and picnic facility is popular at this reserve with the natural character contributing to its appeal and sense of place.

Walking and exercise are key reasons the household survey respondents visit Koornang Park. Located adjacent to Lord Reserve, combined these two reserves offer a large system of open space that is popular for walking and dog walking, exercise and playing sport. These two major reserves have been recently upgraded to improve the circuit walking path and other facilities including the cricket nets and seating. The Lord Reserve/Koornang Park Masterplan outlines a range of additional improvements including the closure of Moira Avenue to combine the two spaces. The Carnegie Swim Centre is located in Koornang Park and an upgrade of this facility is in preparation. There is an opportunity to consider future improvements to Koornang Park as part of this upgrade, particularly in relation to the future design and use of the car park.

Rosanna Street Reserve includes a tennis facility at the western end and a playspace, open grassed areas and a seating area with a rotunda and sensory garden at the eastern end. The reserve forms part of the original Rosstown Railway alignment.

Part of Woorayl Street Reserve remains following the implementation of the Level Crossing Removal Project, however confirmation is required as to whether this reserve will be retained in the longer term given the proposals for redevelopment of the site by the Victorian Government. The remnant Red Gums are key natural features and the future design will protect and enhance these. This open space is directly adjacent to Carnegie Station and is connected to the Djerring Trail, the shared linear path along the railway corridor.

Jersey Parade Reserve is an urban plaza space located in the heart of the retail precinct of Koornang Road and includes the forecourt to Carnegie Library. There is potential for this space to provide a greater role in urban cooling and greening as the centre continues to develop and intensify in the future with the implementation of the Structure Plan. It was recently paved with synthetic grass whereas natural garden beds, large broad spreading canopy trees and natural turf is needed to contribute to urban cooling.

Ancillary open space

The Pakenham/Cranbourne Line railway runs east-west through Carnegie and with implementation of the Level Crossing Removal Project has created a linear corridor with

a linked shared path, the Djerring Trail, along it. The elevated rail viaduct has improved north south connectivity through Carnegie making it easier for people to access the centre and open space on foot and by bicycle.

Glen Huntly Primary School directly adjoins the west end of Lord Reserve and there is access to the school grounds from Grange Road out of school hours. Carnegie Primary School sportsgrounds and trees contribute to the natural and green character of the area however, the school grounds are not accessible out of school hours.

Land use and character

Carnegie is a residential area with a diverse mix of housing types and character. Centered around the railway station and Koornang Road is a mixed use precinct, including a vibrant retail hub, high density residential and commercial/business use. This includes a mix of retail, restaurants, banks and community facilities including the library south of the railway, and larger scale retail and business use between the railway and Dandenong Road.

Carnegie has undergone different phases of development with housing ranging from detached single and double storey older style period homes from the early 1900s; 1940s style clinker brick homes; villa unit developments; and 1950s style walk up flats. More recently, a range of contemporary apartment buildings of varying heights including up to 10 storeys and more have been constructed in the heart of the activity centre.

The recently completed Level Crossing Removal Project on the Cranbourne/Pakenham railway line has transformed the heart of Carnegie. This project has involved the complete reconstruction of the railway as two elevated rail viaducts opening up the railway easement at ground level to provide an off-road linear shared path, the Djerring Trail, car parking and other community uses. Other uses include multi-purpose spaces with features including ball courts, outdoor table tennis tables and fitness equipment along with substantial areas of commuter car parking and station entries.

Council has recently prepared the Carnegie Structure Plan to guide future growth and change in this major activity centre.

Heritage and neighbourhood character precincts include:

- Glen Huntly Park Estate Heritage Area - immediately south of Lord Reserve, this area demonstrates the principles of the inter-war garden suburb movement with low front fences, open gardens and wide nature strips.
- McPherson Avenue Neighbourhood Character Area - significant as a small subdivision containing a picturesque concentration of Edwardian and inter-war homes.
- Chestnut and Walnut Streets Neighbourhood Character Area - significant from the coherence and quality of streets and predominantly picturesque inter-war homes and gardens.

6.4.1b Quantity of open space in Carnegie

Following is a brief summary of the key statistics for quantity of open space in Carnegie:

- 21.07 hectares of open space
- 12.2 per cent of the total suburb area is open space
- 5.7 per cent of the total open space in the City of Glen Eira
- 12 sqm of open space per person, based on the estimated population at 2016
- Within 400 metres of the precinct, other major areas of open space include Mallanbool Reserve, Duncan Mackinnon Reserve, Murrumbeena Park and East Caulfield Reserve.

6.4.1c Open space hierarchy and character in Carnegie

Table 6.4-1 List of existing open space type and character classification

Open space	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Koornang Park	5.69	Municipal	Sporting	Restricted sporting/recreation, Formal, Informal
Jersey Parade Reserve	0.06	Small Local	Civic forecourt	
Lord Reserve	5.08	Municipal	Sporting	Informal
Packer Park	7.94	Municipal	Sporting	Informal
Rosanna Street Reserve	1.47	Neighbourhood	Informal	Restricted sporting/recreation, Heritage
Woorayl Street Reserve	0.83	Local	Botanical	Heritage, Nature conservation, Railway easement/siding
Total area	21.07			

Heritage values of open space

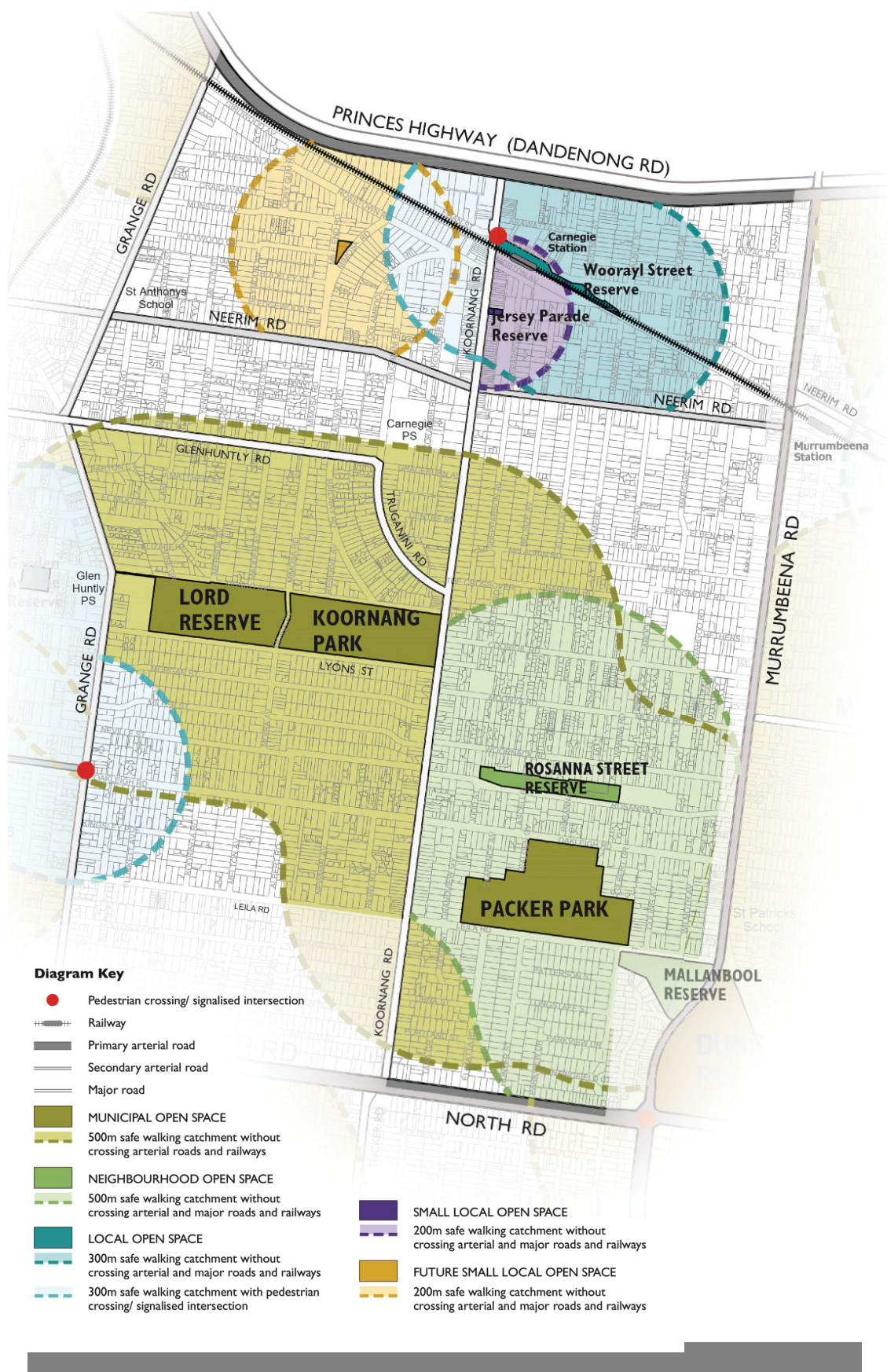
Woorayl Street Reserve was included in Heritage Overlay 123, in which tree controls applied, however the majority of these trees have been removed as part of the Level Crossing Removal Project at Carnegie Station.

6.4.1d Distribution of open space in Carnegie

As illustrated in Figure 6.4B, open space is reasonably well distributed in the central and south western areas of Carnegie, particularly combined with Mallanbool Reserve and Duncan Mackinnon Reserve to the south east in Murrumbeena. The main gap areas are in the north, both to the east and the west of Koornang Road. These are numbered and referred to as the Gap Areas C1 and C2.

As with some of the other precincts in Glen Eira, there is good provision of Municipal open space in Carnegie and a lack of the Neighbourhood and Local open space network in some areas. The Municipal open space supplements the provision of the Neighbourhood open space.

Refer to Figure 6.4B on the following page.



6.4.2 Community characteristics for Carnegie

6.4.2a Demographic summary of existing population and forecast trends

Source: ABS Census data, 2016 (.id Consulting 2018)

Age structure:

The most populous age group is 25 to 34 years, followed by 35 to 49 years and the 18 to 24 years. Compared with the municipal-wide average, there is a higher proportion of the young workforce (25 to 34 years) and a higher proportion of 18 to 24 year olds. Correspondingly there is a lower proportion of people in the 5 to 17 and the 50+ age range.

Forecast trends through to 2031 include:

- A minor decrease proportionally in the 25 to 34 age range.
- A minor increase proportionally in the 35 to 49 age range and the 70 to 84 age range.

Household type:

Approximately 29 per cent of the households are lone person households, followed by 26 per cent as couples with children and 24 per cent of couples without children. Compared with the Municipal-wide average, there is a higher proportion of lone person households and couples without children and a lower proportion of couples with children.

Forecast trends through to 2031 include:

- Proportionally, there will be a slight decline in couple families with dependents and slight increase in couple families without dependents and lone person households.

Dwelling type:

Compared with the Municipal-wide average, there are significantly more medium density dwellings in Carnegie. Approximately 57 per cent of the population live in medium density while 34 per cent live in separate houses (compared to 49 per cent as the municipal average). 9 per cent live in high density dwellings. Between 2011 and 2016, the greatest growth was in high density housing, with a corresponding decline in separate houses.

Total population (2016): 18,228*

Forecast population in 2031: 22,279* (increase of 4,051)

**Source: .id Consulting forecasts for Glen Eira suburbs, November 2018*

6.4.2b Summary of household survey outcomes for Carnegie

A total of 145 household surveys were received from residents of Carnegie in 2012, which represents 13.5 per cent of the total number of surveys received. This is slightly more than the proportion of Carnegie residents in the Glen Eira population, which is 12 per cent.

Most frequently visited open space reserves:

Use	Open space	Reason to visit	Suggested improvements
Open space within walking distance			
48%	Packer Park	walking (15%) play safe for children (10%) playground (10%) dog walking (7%) exercising (6%)	Greater enforcement of dog off-lead areas and provide more shade.
35%	Koomang Park	walking (12%) exercising (9%) close to home (6%) playground (5%)	Additional trees, paths and fencing and improve maintenance to toilets.
23%	Lord Reserve	walking (8%) dog walking (6%) exercising (4%)	Additional trees, dog waste bags/bins, paths and connecting paths required.
18%	Duncan Mackinnon Reserve	walking (7%) jogging/running (6%) exercising (4%) paths (2%)	Improvements to path surfaces.
10%	Other open space	walking (4%) playground (3%) exercising (1%) meeting people/friends (1%) trees (1%)	Upgrade playground and provide a diversity of equipment for a range of age groups and shade. Additional fencing, lighting, open space and picnic tables. Improve path surfaces and undertake regular maintenance and cleaning.
Open space beyond walking distance			
16%	Caulfield Park	playground (4%) walking (3%)	Improve and regularly clean the lake.
6%	Packer Park	playground (4%) BBQ's (1%) large open space (1%)	Additional paths, picnic tables and café/kiosk facilities. Increase diversity of playground equipment for a range of age groups and provide shade to playground.
6%	Princes Park	playground (1%) sport spectator (1%) walking (1%)	Additional picnic tables, seating and trees. Regular removal of rubbish.

Types of open space used (top four):

86% large parks and gardens (non sporting)

86% sporting reserves

81% local streets for exercise

72% small local parks

Values (top four):

63% trees

61% place to relax and unwind

56% escape built environment

53% health and wellbeing

Activities and facilities in open space (top four):

85% walking paths
 83% seats
 70% open grassed areas
 70% drinking fountains

Facility provision and maintenance:

The highest levels of satisfaction with provision of facilities includes seats, playgrounds and open grassed areas. Facilities that are not well provided for include drinking fountains, public toilets, cycling paths, shelters and picnic tables. Generally facilities are well maintained with the exception of public toilets.

General comments:

- Additional open space is required, particularly as density increases.
- Ensure no further loss of open space.
- Value the choice and variety of open space in Glen Eira.
- Open space is well maintained.
- Open space is a key feature of Glen Eira
- Dog off lead areas require enforcement.
- Information about the range of open space is required.

For further details on household survey outcomes, refer to Appendix A of the Strategy.

6.4.2c Implications of community characteristics on future open space planning in Carnegie

Packer Park is the most frequently visited open space in Carnegie, followed by Koornang Park and Lord Reserve. While these large spaces are popular, the community identify there is not enough open space within Carnegie. This is consistent with the physical assessment of the open space network, which has identified gaps in the distribution of open space. The gaps are where people do not have any public open space within an easy and safe walk of their home or workplace, as shown in Figure 6.5B.

In Carnegie there is forecast to be more people living in medium to high density housing which means they will have less access to private open space and increase their reliance on public open space. The age range will remain fairly consistent with the most populous age group being adults between 35 and 49 years of age. In terms of change there is forecast to be an increase in the 70 to 84 age range, however there will still be a good representation of all age groups in Carnegie. Open space will be designed to accommodate all age groups including consideration of people in the 70 plus age range given the proportional increase. Designs will need to ensure that playgrounds do not dominate the open space reserves and a balance of play coupled with other facilities and spaces that appeal to the dominant age group are provided for.

6.4.3 Future change in Carnegie

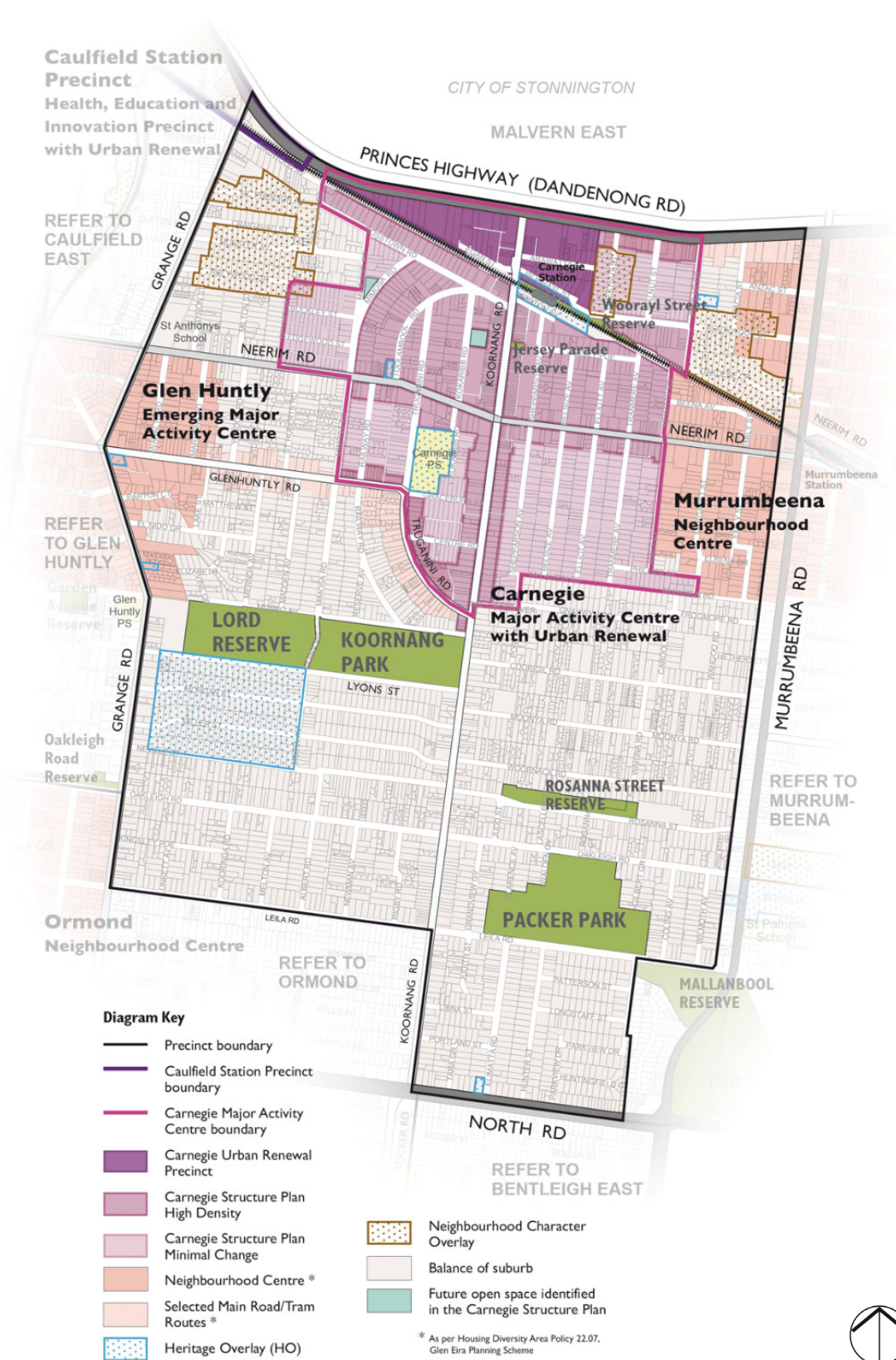


FIGURE 6.4C Future change in Carnegie

The *Carnegie Structure Plan 2018-2031* (Glen Eira City Council, 2018), *Glen Eira Housing and Local Economy Growth Assessment Report* (SGS, Dec 2018) and 22.07 *Housing Diversity Area Policy*, Glen Eira Planning Scheme (accessed 28 February 2019) provides direction on future growth in Carnegie. The spatial location of the different areas of growth referred to in the reports is summarised in Figure 6.4C.

A 22 per cent increase in the residential population is forecast for the suburb of Carnegie between 2016 and 2031. This equates to a forecast increase of 4,051 residents. For reference this is more than twice the size of the forecast resident population in the previous 2014 Strategy. At that time the forecast was for an additional 1,638 residents, representing a 12 per cent change.

Approximately 70 per cent of the forecast residents are planned to live in the high density precincts within the Carnegie Structure Plan area, with the remainder living in the Murrumbeena Neighbourhood Centre, Glen Huntly Emerging Major Activity Centre and in the Selected main roads/tram routes as shown in Figure 6.4C. Very little change is planned to occur in the balance of the suburb and minimal change areas through to 2031.

Carnegie Major Activity Centre

The Carnegie Structure Plan concentrates forecast change into a combination of the proposed Urban Renewal area between Dandenong Road and the railway and within the core of the centre along Koornang Road and the railway as summarised in Figure 6.4C. The Vision Statement in the Structure Plan is:

Carnegie will be a safe, connected and welcoming centre that embraces its authentic urban character and cultural identity. The centre will be a destination for entertainment, shopping and employment, supporting a range of businesses and interconnected community spaces that meet the needs of the local community.

In relation to open space the Carnegie Structure Plan supports the provision of additional open space in the Urban Renewal and higher density precincts, along with other improvements to the public realm.

Glen Huntly Emerging Major Activity Centre

Within Carnegie, the Glen Huntly Emerging Major Activity Centre is centred on Glenhuntly Road as the key spine, extending north to Neerim Road and south to Lord Reserve along Grange Road. The Activity Centre, Housing and Local Economy Strategy (ACHLES) describes Glen Huntly Emerging Major Activity Centre as

Glen Huntly will use Booran Reserve and the emerging cultural offerings to become a new, exciting destination that acts as a focal point for the local community with a diverse range of retail and hospitality experiences. The centre will be attractive, clean and safe, and support pedestrian and cycle access.

The Housing Diversity Area Policy 22.07 in the Glen Eira Planning Scheme encourages residential use in the commercial centre with shop top housing and apartment style developments, transitioning to the predominantly single storey detached dwellings in the catchment. In the catchment multi-unit developments could be appropriate. It is noted that developments can build up to three stories in height.

Murrumbeena Neighbourhood Centre

Within Carnegie, Murrumbeena Neighbourhood Centre is centred on the west side of Murrumbeena Road and extending both north and south of Neerim Road. The Activity Centre, Housing and Local Economy Strategy (ACHLES) describes Murrumbeena Neighbourhood Centre as

Murrumbeena will be a leafy and green local centre with a strong community and environment focus. With a mix of local businesses to meet residents' daily needs, the accessible, pedestrian-friendly centre will maintain a safe village feel and embrace its local history.

The Housing Diversity Area Policy 22.07 in the Glen Eira Planning Scheme encourages residential use in the commercial centre with shop top housing and apartment style developments, transitioning to the predominantly single storey detached dwellings in the catchment. In the catchment multi-unit developments could be appropriate. It is noted that developments can build up to three stories in height.

Figure 6.4C shows the extent of existing Heritage Overlay and Neighbourhood Character Overlay areas within Carnegie. While redevelopment may occur within these overlay areas, it is anticipated they will receive a lower intensity of redevelopment.

Employment population

The forecast employment population change in Carnegie is an additional 1,361 workers representing at 36 per cent increase.

6.4.4 Open space needs assessment for Carnegie

Refer to the Future Change Diagram, Figure 6.4C for the sub-precincts described in Table 6.4-2.

The gaps in the distribution of open space in Carnegie are shown in Figure 6.4B. While the gaps are a key factor to consider in relation to whether open space needs are adequately addressed, other key factors include the existing and proposed urban layout and densities and mitigating urban heat island effect. Within the Carnegie Major Activity Centre there is forecast to be an additional approximately 3,000 residents plus an employment population that is forecast to grow. Since the 2014 Strategy was prepared more than an additional 1,100 people have moved into Carnegie.

In the Carnegie Activity Centre the increase in urban densities is a major factor in the need for additional open space. People are living in dwellings with little or no private open space and therefore rely more on public open space. Additionally, there is a need to provide unencumbered public open space with a sense of naturalness including green open spaces that contribute to mitigating urban heat and provide natural green spaces in close proximity to residents and workers in the centre. This forms an important part of the future public realm in addition to laneways, streets and other ancillary public spaces that have and will be provided as part of the Carnegie Structure Plan.

Refer to Table 6.4-2 on the next page.

Table 6.4-2 Open space needs assessment for Carnegie

Description	Assessment
Urban Renewal Area	
<ul style="list-style-type: none"> The extent is defined in the Carnegie Structure Plan as the area between Dandenong Road and the rail corridor, extending east to Walnut Street. Woorayl Street Reserve, located on VicTrack land, is the only open space in the precinct. This open space is not owned by Council and there is potential that it may be repurposed for alternative uses. The Pakenham/Cranbourne railway reserve is a key ancillary open space. It provides excellent east-west pedestrian and cycle connectivity along Djerring Trail and some additional multi-purpose facilities that are accessible for use under the railway viaducts. The Structure Plan notes the Urban Renewal Precinct has underutilised land which can accommodate new and diverse housing and employment opportunities (p. 44 <i>Carnegie Structure Plan 2018-2031</i>). The Urban Renewal Precinct (Fig. 13 <i>Carnegie Structure Plan 2018-2031</i>) illustrates high density with built form of up to 12 storeys. 	<ul style="list-style-type: none"> Given the limited area of public open space and the substantial forecast change there is a need for new open space on the west side of Koornang Road. If Woorayl Street Reserve is not secured as public open space in the future there is also a need for new public open space east of Koornang Road as well. West of Koornang Road provide a new Local open space primarily for the forecast new residents and workers. Given the intensity of proposed development in this sub-precinct, it is recommended that the new Local open space is located in the vicinity of the Rosstown Hotel carpark. To achieve a minimum size of 2,500 sqm, additional land beyond the car park footprint will be required. The open space will need to receive winter sunlight access requirements and meet the other criteria for open space in this Strategy. A key point of difference for this location from Woorayl Street Reserve is that it does not directly adjoin either the railway or Dandenong Road and is therefore protected from noise and movement impacts by built form. This will be important for future residents and workers in this sub-precinct to have a space away from the transport infrastructure. East of Koornang Road, provide an additional Small Local open space if Woorayl Street Reserve is not secured as public open space.

Description	Assessment
Carnegie Major Activity Centre south of the railway	
<ul style="list-style-type: none"> • The extent of the Activity Centre is defined in the <i>Carnegie Structure Plan 2018-2031</i> and summarised in Figure 6.4C. • Jersey Parade Reserve is a Small Local open space, located between Carnegie Library and Koornang Road, just south of Carnegie Station. • Future Mimosa Road open space is proposed to address the gap area identified in the 2014 Strategy. The Mimosa Road open space is defined by the existing Public Acquisition Overlay that has been applied to the private land, however the final extent will include some of the adjoining road reserves to increase its size. • The Pakenham/Cranbourne railway reserve is a key ancillary open space. It provides excellent east-west pedestrian and cycle connectivity along the Djerring Trail and additional multi-purpose facilities that are accessible for use under the railway viaducts. • The <i>Carnegie Structure Plan 2018-2031</i> identifies there are a number of strategic sites (6 to 8 storeys), Garden apartments (4 storeys), Townhouse and apartment mix (3 storeys), Garden townhouse (3 storeys) and Minimal change areas within the catchment. The Structure Plan proposed a new public open space on the Council owned Kokaribb Street carpark to the west of Koornang Road and north of Neerim Road. This was identified by TBLD as part of the sub-precinct assessment following the 2014 Strategy. Part of the basis for selecting this site as future open space was the presence of an older style two storey dwelling to the north that would allow suitable sunlight access into the future open space. In the Structure Plan that site has been shown as a strategic site (6 to 8 storeys). • Council owned land on the east side of Koornang Road in Shepparson Avenue has been identified as a Strategic Site in the Structure Plan. This site is located in the heart of a medium to high density precinct and directly adjoins the Carnegie Library to the north. 	<ul style="list-style-type: none"> • Given there is only one existing public open space (Jersey Parade Reserve) in the centre, there is a need for new open space on both sides of Koornang Road. • Support the proposal for a new Small Local open space on Kokaribb Street carpark, ensuring that future built form controls protect winter sunlight access as described in this Strategy. • Provide a new Local open space on at least part of the Council owned Shepparson Avenue carpark. This will provide an important future green open space for people living and working the Activity Centre east of Koornang Road. If part of this site is redeveloped then the built form is to be on the southern section of the site so that sunlight access is retained to the public open space on the north, along with an active interface to the Carnegie Library building. • Provide a new Small Local open space south of Neerim Road and east of Koornang Road to address the existing gap in open space provision in this sub-precinct for both the existing and forecast population. With the difficulty of the predominance of north south oriented streets, the preference is for the new Small Local open space to be located adjoining the east-west laneway to improve accessibility.

Description	Assessment
Glen Huntly Neighbourhood Centre	
<ul style="list-style-type: none"> The Glen Huntly Neighbourhood Centre (NC) is shown on Figure 6.4C, and is west of Koornang Road. Lord Reserve is located in the southern end of the Glen Huntly NC. Almost half of the dwellings forecast for the centre through to 2026 in the 2014 Strategy have already been built. Council is planning for approximately 10 per cent of the forecast new residents to be living in the centre by 2031, and a forecast dwelling growth rate of 40 per cent. 	<ul style="list-style-type: none"> Given the forecast growth and lack of open space within the heart of the centre a new Small Local open space in the Glen Huntly NC, south of Neerim Road for the existing and forecast population is recommended.
Murrumbeena Neighbourhood Centre	
<ul style="list-style-type: none"> The Murrumbeena Neighbourhood Centre (NC) is shown on Figure 6.4C. There is no existing open space in the NC or within an easy and safe walk of it. The Pakenham/Cranbourne railway reserve is a key ancillary open space. It provides excellent east-west pedestrian and cycle connectivity along the Djerring Trail and additional multi-purpose facilities that are accessible for use under the railway viaducts. 70 per cent of the dwellings forecast for the centre in the 2014 Strategy had been built by 2016. Council is planning for 405 new residents to be living in the centre by 2031, which represents an approximate 40 per cent increase from the 2016 population. 	<ul style="list-style-type: none"> Provide a new Small Local open space in the Murrumbeena NC north of Neerim Road. This is for both the existing and forecast population.
Balance of suburb	
<ul style="list-style-type: none"> This is the remainder of Carnegie outside of Activity Centre and Neighbourhood Centres, essentially south of Truganini Road west of Koornang Road and Gnarwyn Road east of Koornang Road. Koornang Park, Rosanna Street Reserve and Packer Park are located in this area. Predominantly residential use with a combination of detached dwellings and a large number of unit developments. 	<ul style="list-style-type: none"> Investigate the potential to provide a new Small Local Link between Woonack Road and Rosanna Street Reserve and south to Packer Park to improve connectivity and access for the existing community living in the area between Koornang and Murrumbeena Roads. Continue to upgrade Rosanna Street Reserve and Koornang Park.

6.4.5 Recommendations for Carnegie

6.4.5a Summary of overall intent

Provision and distribution

Municipal open space is well provided for in Carnegie, however there are gaps in the provision and distribution of the Local and Small Local open space network, particularly in the Carnegie Major Activity Centre. With the Activity Centre forecast to have more than 3,000 additional residents and a growing worker population by 2031, there is a need to provide additional public open space to cater for the increased levels and intensity of use as well as addressing accessibility to open space. The Strategy has proposed additional Local and Small Local open spaces to be added to the network beyond those identified in the *Carnegie Structure Plan 2018-2031*.

Quality and design

Incorporate natural features and appropriate green infrastructure that promotes urban cooling in the proposed new Local and Small Local open spaces in the high density precincts. This includes large canopy trees, feature garden beds and turf that also contribute to the health and wellbeing of the population. The new spaces will have different characters and facilities so that together with the existing open spaces, the network caters to the diverse community needs. Continue to upgrade the Municipal and Neighbourhood open spaces in the precinct, focusing the design and facilities to those that require the larger land area, complementing the network of smaller areas of open space.

6.4.5b Precinct recommendations for Carnegie

The priorities shown in the Recommendation tables are indicative only. The priorities provide guidance on the expected sequence and timeframes for the commencement of actions and may change pending the allocation of suitable funding and resources, along with the actual rate and location of forecast future growth and development.

A Additional open space

No.	Recommendation	Respons- ibility	Priority
6.4A-1	Provide a new Small Local open space in Gap Area C1 towards Grange Road and north of Neerim Road for both the existing and forecast population. This recommendation is partially complete, with the identification of a suitable site for the new open space and application of the Public Acquisition Overlay on the site at 93 Mimosa Road and 11 Mile End Road, Carnegie.	GE Developer	Very High
6.4A-2	Provide a new Small Local open space in the Carnegie Major Activity Centre on the west side of Koornang Road, north of Neerim Road for both the existing and forecast population. This Recommendation is partially complete by identifying the future Small Local open space on the Council owned car park on Kokaribb Road, Carnegie.	GE Developer	Very High

No.	Recommendation	Respons- ibility	Priority
6.4A-3	Provide a new Small Local open space in the Glen Huntly Neighbourhood Centre, south of Neerim Road for the existing and forecast population.	GE Developer	Very High
6.4A-4	Provide a new Local open space south of Neerim Road that is accessible to people living and working in the Carnegie Major Activity Centre and Murrumbeena Neighbourhood Centre for the existing and forecast population. This will address Gap Area C2.	GE Developer	Very High
6.4A-5	Provide a new Local open space for the forecast new population west of Koornang Road in the Urban Renewal Precinct north of the railway. The preferred location for the new Local open space is in the general location of the Rosstown Hotel Carpark, preferably a minimum size of 2,500 sqm for the forecast population.	GE Developer	Very High
6.4A-6	Provide a new Small Local open space in the Urban Renewal Area east of Koornang Road, north of the railway primarily for the forecast population. This action is only required if Woorayal Street Reserve is not able to be secured in Council ownership – refer to Recommendation 6.4E-1.	GE Developer	Very High
6.4A-7	Provide a new Local open space on at least the northern part of the Council owned Shepparson Avenue car park or similar location, primarily for the forecast population living and working in in the Carnegie Major Activity Centre east of Koornang Road.	GE Developer	Very High
6.4A-8	Provide a new Small Local open space in the Murrumbeena Neighbourhood Centre north of Neerim Road. This is for both the existing and forecast population.	GE Developer	High

B Open space links

No.	Recommendation	Respons- ibility	Priority
6.4B-1	Investigate the potential to provide a new Small Local Link between Woornack Road and Rosanna Street Reserve. This will improve access to open space for the existing community living in the area between Koornang and Murrumbeena Roads.	GE (Developer)	Very High

6.4.5c Individual open space recommendations for Carnegie

C Municipal open space

No.	Recommendation	Respons- ibility	Priority
6.4C-1	Koornang Park Implement the recently adopted Koornang Park and Lord Reserve Masterplan. This includes investigating options to better utilise the space currently set aside for car parking at the western end of Koornang Park as part of the proposed Carnegie Swim Centre Upgrade.	GE	Very High
6.4C-2	Lord Reserve Implement the recently adopted Koornang Park and Lord Reserve Masterplan.	GE	Ongoing

No.	Recommendation	Responsibility	Priority
6.4C-3	Packer Park Continue to maintain this popular open space, and strengthen the Indigenous landscape character in the south eastern area of the park to connect to Mallanbool Reserve, ensuring that clear sightlines and space for play and picnic area is retained.	GE	Ongoing

D Neighbourhood open space

No.	Recommendation	Responsibility	Priority
6.4D-1	Rosanna Street Reserve Recommendation from the 2014 Strategy partially completed. Continue to implement the Landscape Concept Plan for the reserve, consistent with the original recommendation in the 2014 Strategy to improve the connectivity, diversity of spaces and facilities particularly for a range of ages and overall improvement to the landscape character with broad spreading shade trees to provide natural character and shade to the dense precinct of unit development adjoining the northern boundary.	GE	Ongoing

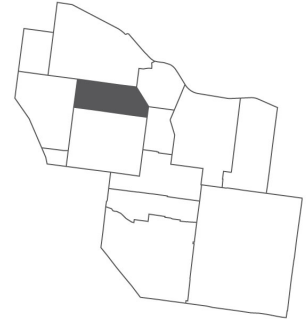
E Local open space

No.	Recommendation	Responsibility	Priority
6.4E-1	Woorayl Street Reserve GE to continue to advocate to the Department of Transport (DOT) and/or VicTrack regarding the need to protect this area of open space and not develop the site for commercial or residential use. If this reserve is not retained, then refer to implementation of Recommendation No. 6.4A-6.	GE VicTrack	Very High

F Small Local open space

No.	Recommendation	Responsibility	Priority
6.4F-1	Jersey Parade Reserve The recent upgrade to Jersey Parade Reserve includes extensive areas of impermeable surfaces. Given the high density precinct in which this is located, undertake a review of the design to integrate urban greening and cooling in this open space with moisture absorbing surfaces and natural features.	GE	Very High

6.5 Caulfield



6.5.1 Existing conditions

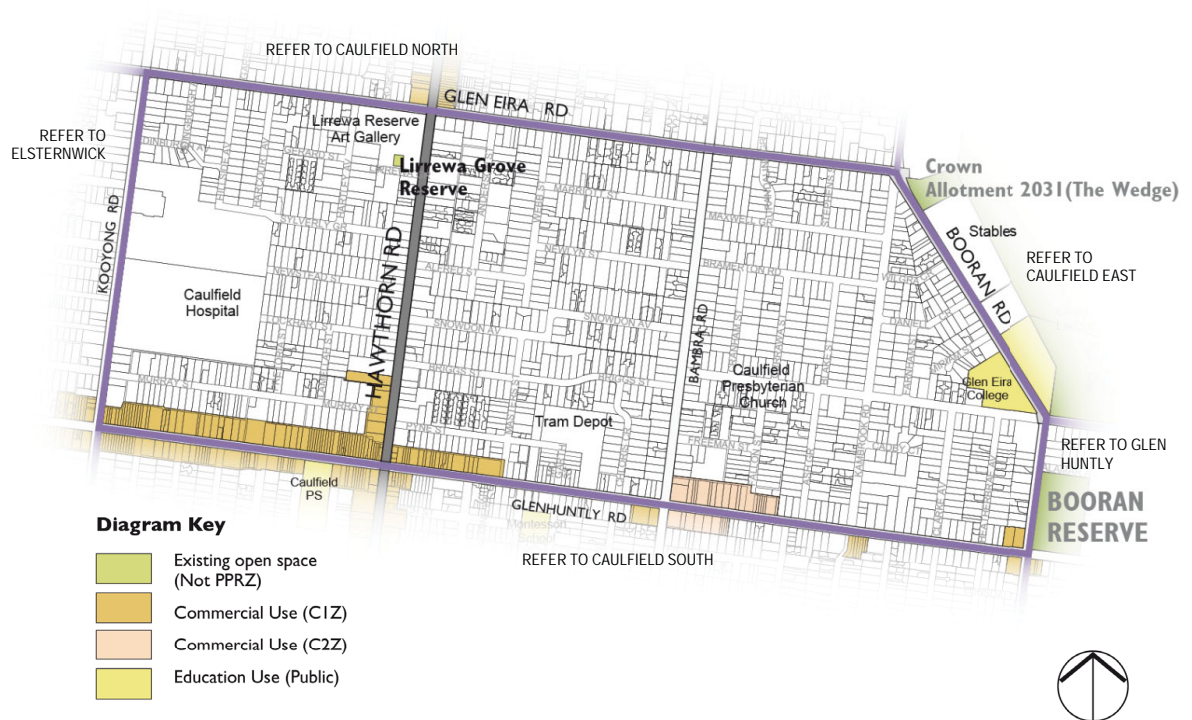


FIGURE 6.5A Existing open space in Caulfield

6.5.1a Overall Precinct description

Public open space

Lirrewa Grove Reserve is the only open space in Caulfield. Located immediately south of the Town Hall car park, the reserve includes some mature trees, picnic tables and barbecue which appears mainly be used by workers during a break from work. This precinct has the least amount of open space in the municipality with the majority of the population not having access to open space within easy safe walking distance of their homes/workplace.

Ancillary open space

The Caulfield Presbyterian Church provides some minor ancillary open space.

Land use and character

Caulfield is predominantly residential land use and developed from the mid 1850s onwards. Other key land uses includes the Caulfield Hospital, a number of nursing homes and hostel care. The Glen Eira City Council offices, library and art gallery are located in the precinct, along with retail, business and commercial use in the main strip shopping precinct.

Caulfield is predominantly a combination of single and double storey detached dwellings on larger lots. Some sub-precinct areas are recognised for their historic architectural character including:

- Glen Eira Road and Environs Heritage Area - Located between Linithglow Avenue and Kambrook Road it is distinguished by the variety of inter-war houses of high architectural quality.
- Glenhuntly Tramways Depot and Glenhuntly Road Heritage Area - a group of inter-war period middle class villas constructed in the 1920s and includes the Tramways Depot constructed in 1924.
- Caulfield South Shopping Heritage Area - partly located in the Caulfield South Neighbourhood Activity Centre, recognised to be of architectural importance as an inter-war shopping centre with some prominent buildings.

6.5.1b Quantity of open space in Caulfield

Following is a brief summary of the key statistics for quantity of open space in Caulfield:

- 0.048 hectares of open space
- 0.03 per cent of the total suburb area is open space
- 0.01 per cent of the total open space in the City of Glen Eira
- 0.08 sqm of open space per person, based on the estimated population for 2016
- Other major areas of open space within 400 metres walking distance of Caulfield North. Glen Huntly Park and Caulfield Racecourse (restricted areas in the centre of the racecourse).

6.5.1c Open space hierarchy and character in Caulfield

Table 6.5-1 List of existing open space type and character classification

Open space	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Lirrewa Grove Reserve	0.048	Small Local	Civic forecourt	Linking space, Informal
Total area	0.048			

6.5.1d Distribution of open space in Caulfield

Lirrewa Grove Reserve is located adjacent to Glen Eira Town Hall precinct and forms a linking space from Lirrewa Grove to Caulfield Library. The location of the open space is in a no through road and has poor connectivity to the surrounding neighbourhood.

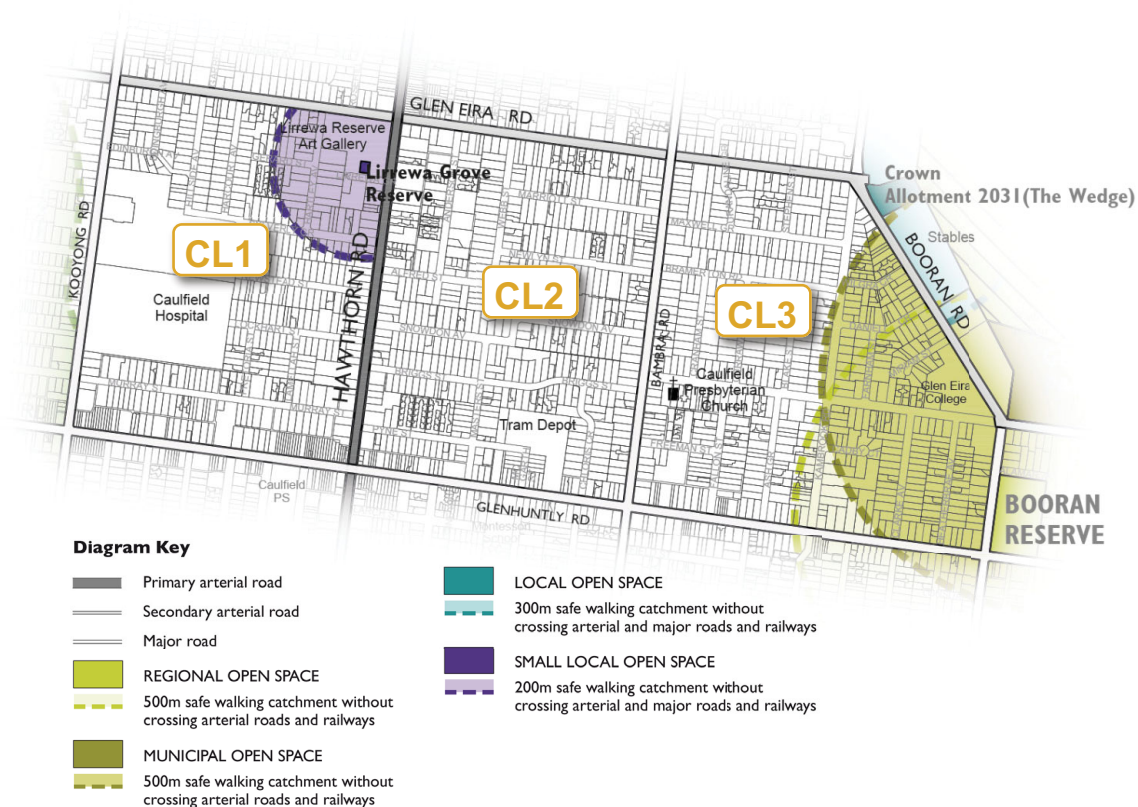


FIGURE 6.5B Open space distribution analysis for Caulfield

6.5.2 Community characteristics for Caulfield

6.5.2a Demographic summary of existing population and forecast trends

Source: ABS Census data, 2016 (.id Consulting 2018)

Age structure:

The most populous age group is 35 to 49 years and this is forecast to continue. The age group with the largest proportion increase (2011 to 2016) is people aged over 70 to 84 years. Compared with the municipal-wide average, there is a lower proportion of people in the younger age groups (0 to 17 years) and a higher proportion of people in the older age groups (60+ years).

Forecast trends through to 2031 include:

- An overall increase in the 25 to 49 age group
- The greatest proportional increase is people in the 35 to 49 age group
- Decline in people aged 18 to 24 years of age.

Household type:

Compared with the Municipal-wide average, there is a slightly lower proportion of couple families with dependents, and lone person households are the same as Municipal-wide average and couples without dependents are higher.

Forecast trends through to 2031 include:

- Couple families with dependents is forecast to increase.
- Lone person households to increase, along with group households.

Dwelling type:

Compared with the Municipal-wide average, there are fewer separate houses and more medium density housing in Caulfield. Between 2011 and 2016, the greatest growth was in high density housing.

Total population (2016): 5,920*

Forecast population in 2031: 6,594* (increase of 674)

*Source: .id Consulting forecasts for Glen Eira suburbs, November 2018

6.5.2b Summary of household survey outcomes for Caulfield

A total of 26 household surveys were received from residents of Caulfield, in 2012, which represents 2.4 per cent of the total number of surveys received. This is slightly less than the proportion of Caulfield residents in the Glen Eira population, which is 3.9 per cent.

Most frequently visited open space reserves:

No.	Open space	Reason to visit	Suggested improvements
Open space within walking distance			
69%	Caulfield Park	walking (27%) dog walking (15%) large open space (12%) play safe for children (12%) relaxing (12%)	Improve path surfaces, enforce dog off-lead areas and provide fencing to playground for safety.

No.	Open space	Reason to visit	Suggested improvements
		trees (12%)	
38%	Princes Park	dog walking (12%) cycling (8%) meeting people/friends (8%) play safe for children (8%) walking (8%)	Enforce dog off lead areas, provide fencing to playground for safety and extend open space.
12%	Glen Huntly Park	walking (8%) close to home (4%) play safe for children (4%)	Enforce or prohibit dog off-lead areas and increase diversity of playground equipment for a range of age groups.
12%	Caulfield Racecourse	Not completed	Improve access to open space.
8%	Packer Park	dog walking (12%) play safe for children (4%)	Not completed
Open space beyond walking distance			
12%	Allnutt Park	cycling (8%) dog off-lead areas (4%) natural bushland (4%) open space (4%) playground and equipment (4%) trees (4%)	Not completed
4%	Caulfield Park	Birdlife watching (4%)	Not completed
4%	Harleston Park	ambience and beauty (4%) meeting people and friends (4%)	Not completed
4%	Packer Park	variety of play spaces (4%)	Not completed

Types of open space used (top four):

77% large parks and gardens (non sporting)

73% sporting reserves

69% local streets for exercise

42% small local parks

Values (top four):

62% health and wellbeing, place to relax and unwind, spacious and trees

58% fitness

50% accessible and place for kids to play

46% natural character and habitat for native plants and animals

Activities and facilities in open space (top four):

77% walking paths

73% open grassed areas

65% seats

50% public toilets

Facility provision and maintenance:

The most popular facilities used include walking paths, open grassed areas and seats. Facilities to be better provided for include seats, drinking fountains, open grassed areas and cycle paths. Generally, facilities are well maintained with the exception of drinking fountains.

General comments:

- Additional open space is required, particularly as density increases.
- Enjoy living in and value the choice and variety of open space in Glen Eira.
- Increase the diversity of vegetation.
- Provide more playgrounds.

For further details on household survey outcomes, refer to Appendix A of the Strategy.

6.5.2c Implications of community characteristics on future open space planning in Caulfield

The main change in the forecast population is a slight decrease in people aged 11 years and less, the 25 to 34 year age group and the 50 to 69 year age group. The main increase is in the 70 to 84 year age group, along with the 12 to 17 year age group and 35 to 49 year age range.

Therefore, the future open space planning is intended to increase the diversity of facilities for older adults, including those that encourage them out into open space to maintain physical and social health and wellbeing. It will be important to maintain a diversity of facilities to meet the needs of all age groups, recognising the most populous age group will remain the 35 to 49 age range.

6.5.3 Future change in Caulfield

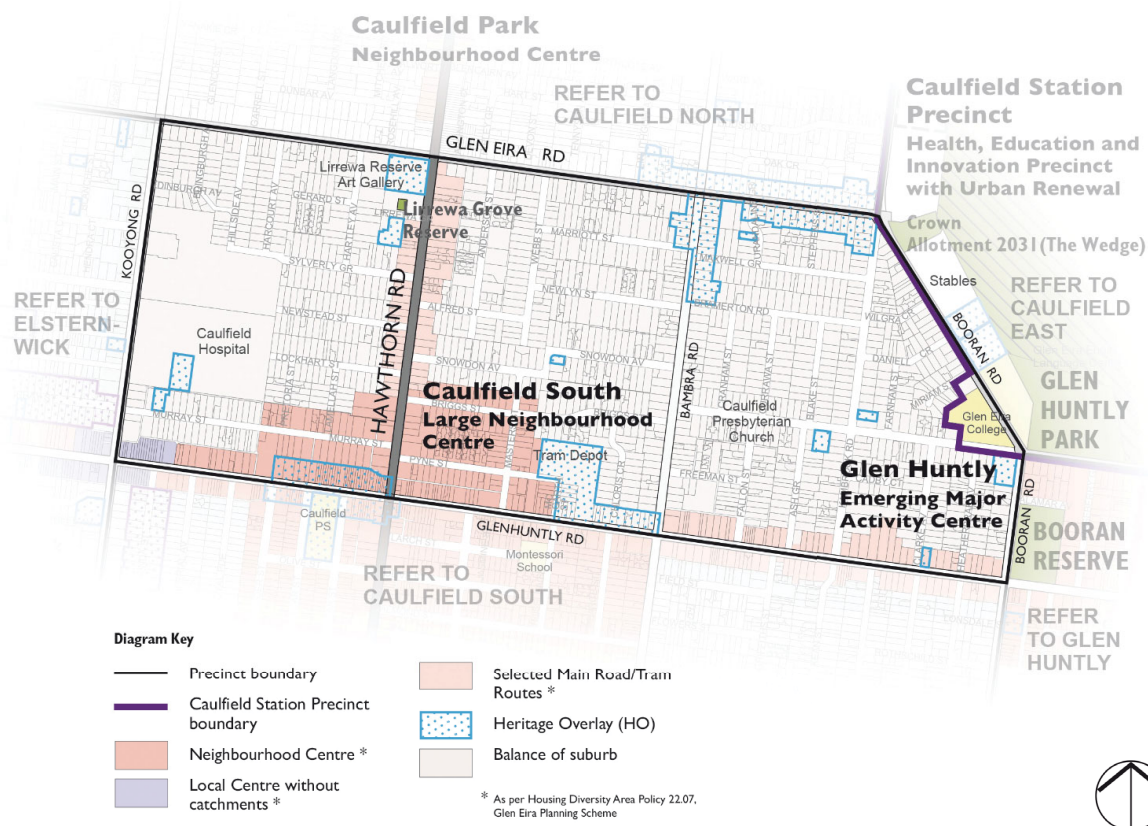


FIGURE 6.5C Future change in Caulfield

The *Glen Eira Housing and Local Economy Growth Assessment Report* (SGS, Dec 2018) and *22.07 Housing Diversity Area Policy* in the Glen Eira Planning Scheme (accessed 28 February 2019) provides direction on future growth in Caulfield. The spatial location of the different areas of growth referred to in the reports and policies are reflected in Figure 6.5C.

An 11 per cent increase in the residential population is forecast for the suburb of Caulfield between 2016 and 2031. This equates to a forecast increase of 674 residents. For reference this is different from the resident population forecasts in the 2014 Strategy. At that time the forecast was for a 6 per cent increase with an additional 347 residents by 2026. Between 2013 and 2016 an additional 406 residents were living in Caulfield.

Approximately 35 per cent of the forecast residents are planned to live in the Caulfield South Neighbourhood Centre, 35 per cent in the Glen Huntly Emerging Major Activity Centre and the remaining 30 per cent in the Balance of suburb. Refer to Figure 6.5C for the spatial extent of the different Centres and Balance of suburb.

Caulfield South Large Neighbourhood Centre

This Centre is predominantly retail with a mix of mainly food and other convenience retailing, commercial offices and other services. The ACHLES includes the following vision statement for the Centre:

Caulfield South will be a convenient, diverse and attractive shopping strip that is vibrant both during the day and at night. Enhanced pedestrian and cycling amenity and greenery will foster an active, safe and friendly environment.

Parts of this Centre are in heritage overlay areas which are recognised for their inter-war architecture as it was largely developed by 1924.

Balance of suburb

Across the remaining areas of Caulfield the forecast population increase is relatively low, and these minimal change areas are intended to retain the existing neighbourhood character with extensions to existing dwellings, single new dwellings and dual occupancies identified as being feasible.

Employment population change

The forecast employment population change is an additional 1,709 workers over the 2016-2031 period, representing a 40 per cent increase (SGS, 2018).

Figure 6.5C also shows the extent of existing Heritage Overlay and Neighbourhood Character Overlay areas within Caulfield. While redevelopment may occur within these areas, it is anticipated they will receive a lower intensity of redevelopment.

6.5.4 Open space needs assessment for Caulfield

Refer to the Future Change Diagram, Figure 6.5C for the sub-precincts.

Caulfield has the least amount of existing open space in the Municipality with less than 1 square metre per person based on the existing population. As noted earlier, there has been more change than was anticipated when the 2014 Strategy was prepared. The gaps in the provision of open space are a key reason for the proposed new open space, combined with the forecast population change.

Table 6.5-2 Open space needs assessment for Caulfield

Description	Assessment
Caulfield South Neighbourhood Centre, north of Glen Huntly Road	
<ul style="list-style-type: none"> The extent of the Caulfield South Large Neighbourhood Centre in Caulfield is shown on Figure 6.5C. West of Hawthorn Road Lirrewa Grove Reserve is a Small Local open space located adjacent to the Caulfield Library and Glen Eira Town Hall. Due to the local street network layout, access to this open space is difficult being located in a small court. To the east of Hawthorn Road there is no existing open space in gap area CL2 as shown in Figure 6.5B. The precinct is a combination of predominantly residential and health care with Caulfield Hospital located on Kooyong Road. The hospital has expanded their built facilities since the 2014 Strategy. The Caulfield South Local Neighbourhood Centre is a retail strip and commercial centre along Glenhuntly Road. There is potential for increased urban densities including shop top housing and small apartment style housing. The resident population is forecast to increase by 674 in the Centre by 2031 along with a more than 60 per cent increase in the commercial and retail floor area by 2036. 	<ul style="list-style-type: none"> Provide a new Small Local open space close to Glenhuntly Road in the heart of the Neighbourhood Centre where the forecast medium and high density growth will occur. The new Small Local open space will cater to the existing and forecast worker and resident community. The future open space will improve accessibility from the local street network and have at least two street frontages, with at least one being a local access street and address Gap Area CL1. Identify opportunities to provide a new Local open space in the north of the precinct utilising part of the Caulfield Hospital site. The location will preferably be to the north east and accessible to the community via the local street network and will also provide for the open space needs of the employment community at Caulfield Hospital. Provide a new Small open space between Hawthorn and Bambra Roads to address Gap Area CL2. It will need to be easily accessible from or in the core of the higher density areas of the Caulfield South Neighbourhood Centre close to Glenhuntly Road.

Description	Assessment
Glen Huntly Emerging Major Activity Centre and Balance of Suburb	
<ul style="list-style-type: none"> • The extent of the Glen Huntly Emerging Major Activity Centre in Caulfield is shown on Figure 6.5C. • Located between Kambrook Road and Booran Road, there is no existing open space in this catchment. Booran Reserve is located across Booran Road and Glen Huntly Park is also within a 400 metre catchment of the Centre. • The precinct is a combination of predominantly residential use with Glen Eira College located on Booran Road and retail and commercial use adjoining Glenhuntly Road. • The resident population is forecast to increase by 235 in the Glen Huntly Emerging Major Activity Centre by 2031. • The resident population in the Balance of suburb is forecast to increase by 202 by 2031. 	<ul style="list-style-type: none"> • Provide a new Small Local open space between Bambra Road and Kambrook Roads to provide some local open space that is within safe and easy walking distance of the existing and forecast community in the Glen Huntly Emerging Major Activity Centre and the Balance of Suburb.

6.5.5 Recommendations for Caulfield

6.5.5a Summary of overall intent

Provision and distribution

The lack of open space in Caulfield is to be addressed with recommendations for additional Local and Small Local open spaces in the precinct.

Quality and design

The objectives are to provide a diversity of facilities in the new Local and Small Local open spaces to be established in the precinct. This will appeal to different age groups, particularly the older age group with a diversity of facilities and landscape character to meet existing and forecast population needs.

6.5.5b Precinct recommendations for Caulfield

The priorities shown in the Recommendation tables are indicative only. The priorities provide guidance on the expected sequence and timeframes for the commencement of actions and may change pending the allocation of suitable funding and resources, along with the actual rate and location of forecast future growth and development.

A Additional open space

No.	Recommendation	Responsibility	Priority
6.5A-1	Provide a new Small Local open space close to Glenhuntly Road in the heart of the Neighbourhood Centre where the forecast growth will occur. The new Small Local open space will cater to the existing and forecast worker and resident community and address Gap Area CL1.	GE Developer	High
6.5A-2	Provide a new Local open space in the north of the precinct between Kooyong and Hawthorn Roads utilising part of the Caulfield Hospital site. The location will preferably be to the north east of the site and accessible via the local street network and provide open space for the employment community.	GE Caulfield Hospital	High
6.5A-3	Provide a new Small Local open space between Hawthorn and Bambra Roads to address Gap Area CL2. The location is to be accessible from the Neighbourhood Centre.	GE Developer	Very High/ Urgent
6.5A-4	Provide a new Small Local open space between Bambra Road and Kambrook Roads for both the existing and forecast community in the Glen Huntly Emerging Major Activity Centre and the Balance of Suburb and address Gap Area CL3.	GE Developer	Medium

B Open space links

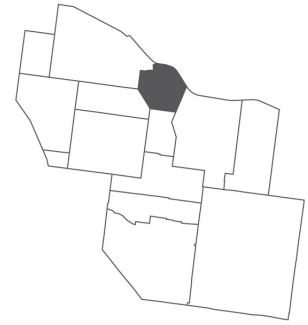
No specific actions

6.5.5c Individual open space recommendations for Caulfield

C Small Local open space

No.	Recommendation	Respons- ibility	Priority
6.5C-1	Lirrewa Grove Reserve Undertake major upgrade by implementing the recently approved Landscape Design Plan.	GE	High

6.6 Caulfield East



6.6.1 Existing conditions

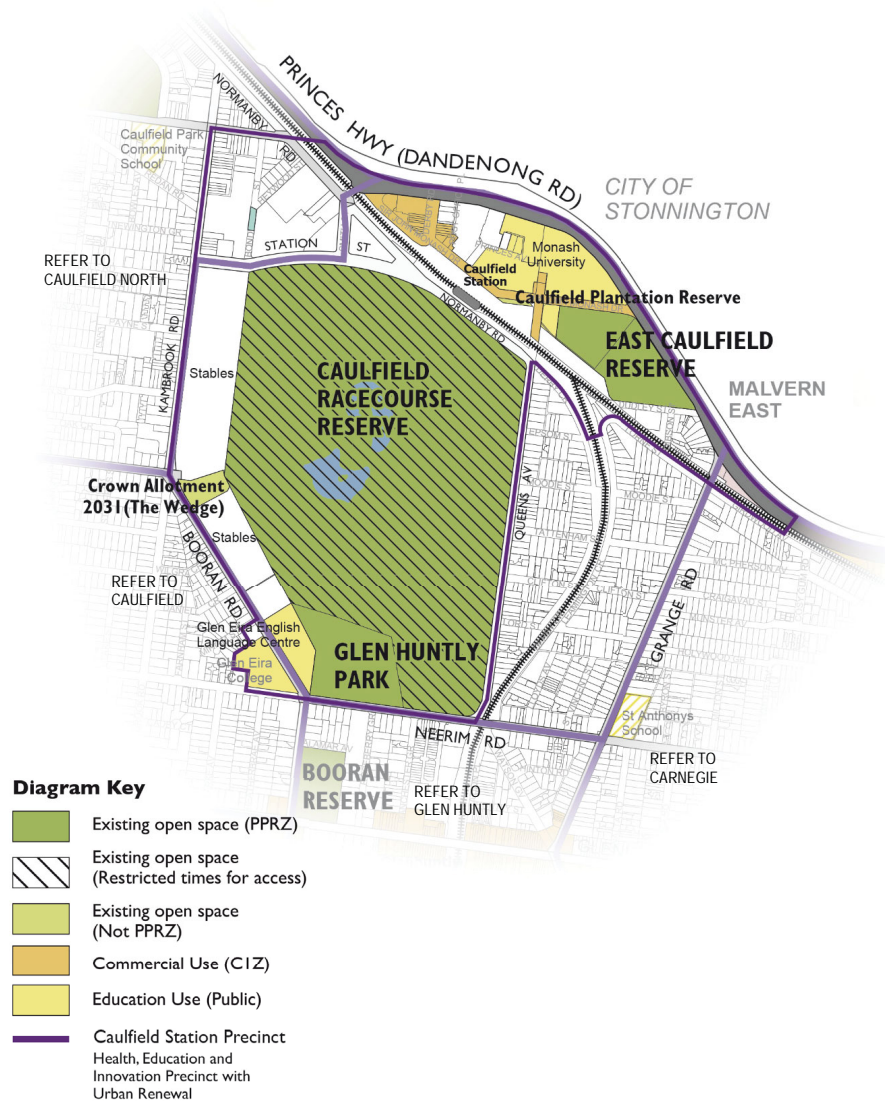


FIGURE 6.6A Existing open space in Caulfield East

6.6.1a Overall Precinct description (Open space in Caulfield East)

Public open space

The Caulfield Racecourse is zoned Public Park and Recreation Zone, however only the centre of the racecourse is accessible at specified times during the day apart from race days and during major events. Caulfield Racecourse provides informal and unstructured

open space facilities in the centre of it, including open grassed areas, circuit path around the wetland, a barbecue and picnic area and small play facility. The public can access these at specific times during the day and need to enter the space through underpasses under the racecourse. The tunnel entry points are available for use at different times however, given the restricted hours for access and also the access arrangements via underpasses, it is not as accessible as other open space reserves. The Strategy has therefore referred to Caulfield Racecourse as restricted open space, meaning it is not freely available at all times for the public to use.

Originally reserved on plans dated 1856 and approximately 54 hectares in size, the racecourse was first used as this by the Caulfield Amateur Turf Club in 1859 (*City of Glen Eira Heritage Management Plan 1996*). Caulfield Racecourse has continued to operate from this site since that time and Caulfield East has grown up and evolved around the site. The railway, which separates the Racecourse from the Derby Road precinct was built in 1879 and this provided access to the racecourse which has been the venue for the Caulfield Cup since that year.

Glen Huntly Park and East Caulfield Park are the two major open spaces in Caulfield East. Both of the parks are sporting reserves with outdoor sportsgrounds, multi-use courts, cricket training nets, pavilions and car parking. Both reserves have other unstructured and informal facilities as well, with East Caulfield Reserve including a walking path and playground. Informal facilities at Glen Huntly Park include a golf birdie cage and playground. East Caulfield Reserve is impacted by traffic noise and movement from Dandenong Road, which has an impact on the peaceful enjoyment of the park. Since the 2014 Strategy was prepared East Caulfield Reserve has received upgrades including converting the tennis courts to the multi-use courts, a new perimeter fence, playground upgrade and the path connection to the new Djerring Trail along the Pakenham/Cranbourne railway reserve. Glen Huntly Park has also been upgraded to include a path network including connections to the Neerim Road access point into Caulfield Racecourse along with car park upgrades and removal of the tennis hit up wall.

Crown Allotment 2031 (The Wedge) provides a dedicated dog off-leash area. The total size of the Allotment is 5,584 sqm, however the southern side of the land is leased to the Melbourne Racing Club for training stables. Caulfield Plantation Reserve adjacent to Sir John Monash Drive (part of Avenue Place originally) includes established feature trees including palms that contribute to the historical landscape character of the precinct.

Ancillary open space

The Pakenham/Cranbourne railway line easement provides off-road shared trail access under the overhead railway via the Djerring Trail. The elevated railway viaducts have also improved north-south connectivity between East Caulfield Reserve and the residential area to the south. The Frankston railway line easement provides some greening to the precinct.

Monash University campus has some accessible outdoor spaces on campus, however the built character of the University and its location in the north east adjacent to Princes Highway means this makes only a limited contribution to the open space character and use.

The main entry to Caulfield Racecourse along Station Street, provides ancillary open space with large established shade trees that contribute visually to the landscape character and it is accessible for informal use at selected times.

Land use and character

Caulfield East is dominated by two non-residential land uses being the Caulfield Racecourse and Monash University Caulfield Campus. Other uses include residential and some retail at the Derby Road shopping area that forms part of the Phoenix precinct. The residential precinct between Queens Avenue and Grange Road is primarily single and double storey detached dwellings. North of the railway adjacent to East Caulfield Reserve, residential use is a combination of medium to higher density dwellings. Within the Phoenix Precinct north of Station Street, the built form is predominantly high density residential.

6.6.1b Quantity of open space in Caulfield East

Following is a brief summary of the key statistics for quantity of open space in Caulfield East:

- 8.81 hectares of open space and 7 hectares of restricted open space, with a total of 15.81 hectares if the restricted open space is included (increased by 0.56 hectares since the 2014 Strategy was prepared with the provision of Crown Allotment 2031).
- 7.0 per cent of the total suburb area is open space
- 5.2 per cent of the total open space in the City of Glen Eira
- 20 sqm of open space per person, based on the estimated population for 2016 (combined with Caulfield North)
- Other major areas of open space within 400 metres walking distance of Caulfield East is Caulfield Park.

6.6.1c Open space hierarchy and character in Caulfield East

Table 6.6-1 List of existing open space type and character classification

Open space	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Caulfield Plantation Reserve	0.08	Small Local	Significant road reservation	Botanical
Crown Allotment 2031 (The Wedge)	0.56	Municipal	Informal	
East Caulfield Reserve	4.32	Municipal	Sporting	Informal
Glen Huntly Park	3.86	Municipal	Sporting	Informal
Total area	8.81			

Heritage values of open space

Refer to 6.6.1a.

6.6.1d Distribution of open space in Caulfield East

The racecourse and the Frankston Railway Line form major barriers to safe walking access to open space for many residents in Caulfield East. The recent Level Crossing Removal Project on the Pakenham/Cranbourne railway line has substantially improved pedestrian connectivity between East Caulfield Reserve and the residential community to the south.

The proposed high-density residential area to the north of Station Street is further than easy and safe walking distance to any open space. Residents in the east between East Caulfield Reserve and the railway have good access to East Caulfield Reserve.

Refer to Figure 6.6B.

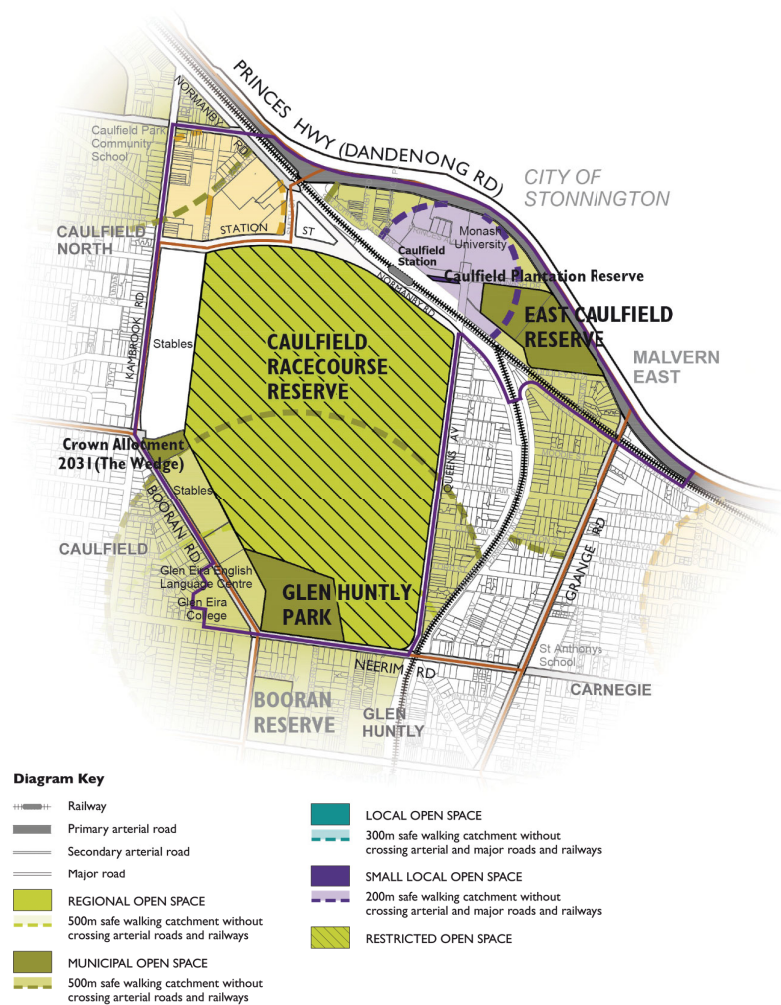


FIGURE 6.6B Open space distribution analysis for Caulfield East

6.6.2 Community characteristics for Caulfield East

6.6.2a Demographic summary of existing population and forecast trends

Source: ABS Census data, 2016 (.id Consulting 2018)

Refer to Section 6.7.2, Caulfield North.

6.6.2b Summary of household survey outcomes for Caulfield East

A total of six household surveys were received from residents of Caulfield East, in 2012, therefore while the data is reported separately, refer also to responses from Caulfield North where more than 100 surveys were received and which, including Caulfield East respondents, represents 11.1% of the total number of surveys received. This is slightly less than the proportion of Caulfield East and Caulfield North residents in the Glen Eira population, which is 12.4%.

Recommendations in the Strategy will be based on responses from Caulfield North rather than Caulfield East.

Most frequently visited open space reserves:

Please note, due to there being only six responses for Caulfield East, the numerical rather than percentage value has been used in this table, which is different from other precinct chapters.

No.	Open space	Reasons to visit	Suggested improvements
Open space within walking distance			
4	Caulfield Racecourse	peaceful (3) exercising (2)	Improve access and provide more entry points.
3	Caulfield Park	sport (2) trees, including shade and character (2) walking/paths (2)	Provide additional seating and trees and keep open space uncluttered.
3	Glen Huntly Park	play (2)	Upgrade the existing playground and provide more soccer facilities.
Open space beyond walking distance			
2	Caulfield Park	Diverse reasons but all with only one response so not included.	Improve path surfaces.
2	Packer Park	Sport and velodrome	Not completed

Types of open space used (top four):

100% small local parks

100% sporting reserves

100% local streets for exercise

83% large parks and gardens (non sporting)

Values (top four):

100% place to relax and unwind
100% spacious
100% trees
83% escape built environment

Activities and facilities in open space (top four):

100% public toilets
100% walking paths
83% cycling paths
83% open grassed areas

Facility provision and maintenance:

The survey respondents identified there is a lack of walking paths and cycling paths, along with open grassed areas and drinking fountains. Generally, facilities are well maintained with the exception of public toilets, and overwhelmingly they responded that club-based sporting facilities and playgrounds are well provided for.

General comments:

- Improvements to maintenance and design and layout.

For further details on household survey outcomes, refer to Appendix A of the Strategy.

6.6.2c Implications of community characteristics on future open space planning in Caulfield East

Refer to Section 6.7.2c in Caulfield North.

6.6.3 Future change in Caulfield East

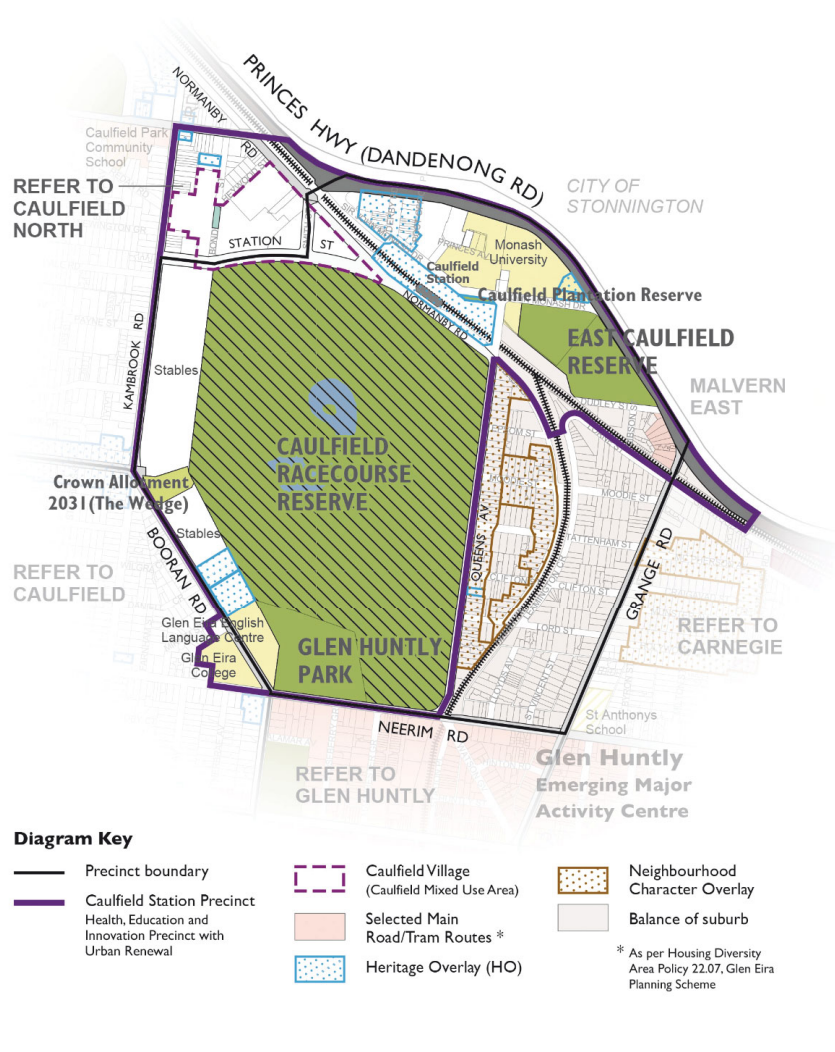


FIGURE 6.6C Future change in Caulfield East

The forecast residential population increase in Caulfield East is combined with Caulfield North. It represents 14 per cent of the total population with a forecast increase of approximately 7,881 people across both Caulfield North and Caulfield East. The boundary between the two suburbs runs through the Caulfield Mixed Use Area (Caulfield Village). Figure 6.6C includes part of Caulfield North for context.

In Caulfield Village, 2,770 (35 per cent) of the forecast population will be living there by 2031. Caulfield Village is outside the scope of this Strategy as the provision of new open space for Caulfield Village is guided by *Clause 53.01 Schedule 2 of the Priority Development Zone* in the Glen Eira Planning Scheme and the *Caulfield Mixed Use Area Incorporated Plan 2014*. In the Caulfield Station Precinct, 998 (13 per cent) of the forecast population will be living there by 2031. The boundary of the Station Precinct spans both the Caulfield North and Caulfield East suburbs. The Victorian Planning Authority (VPA) is currently preparing a Structure Plan for the Caulfield Station Precinct to guide future change. In the Balance of suburb, 560 additional residents are forecast to be living in Caulfield North and Caulfield East by 2031. There is no breakdown of how many will be specifically living in the Balance of suburb area in Caulfield East only.

Refer also to Section 6.7, Caulfield North for the distribution of the remainder of the distribution of the forecast population.

Figure 6.6C also shows the extent of existing Heritage Overlay and Neighbourhood Character Overlay areas within Caulfield East. While redevelopment may occur within these areas, it is anticipated they will receive a lower intensity of redevelopment.

Given the complexity of the different areas within Caulfield East, they are described in more detail below, and then briefly summarised in the open space needs assessment table, Table 6.3-2.

Caulfield Village

Figure 6.6D illustrates the different areas within the Caulfield Village, and this Figure is an extract from the Glen Eira Planning Scheme. The forecast growth for Caulfield Village has not been taken into consideration when assessing the open space needs for Caulfield East as it has already been determined as part of a separate process and is set out in Clause 53.01 Schedule 2 of the Priority Development Zone in the Glen Eira Planning Scheme.

Caulfield Mixed Use Area Precinct Plan

The *Caulfield Mixed Use Area Incorporated Plan (2014)* provides guidelines for Areas 1, 2 and 3 in the Caulfield Mixed Use Area as shown in Figure 6.6D. This includes medium to high density development, ranging from 12 to 20 storey developments in Area 3 of the Incorporated Plan and as shown in Figure 6.6D.

Area 1 is the residential precinct with a transition in scale and density between the existing houses on Kambrook Road and the recent developments which are up to 5 storeys in height. Area 2 is the Mixed Use Precinct and includes a combination of neighbourhood retail, leisure, commercial and residential accommodation. Area 3 is referred to as Smith Street Precinct and is a mix of leisure, commercial, service retail and residential accommodation. Student accommodation is excluded from the Caulfield Mixed Use Area.

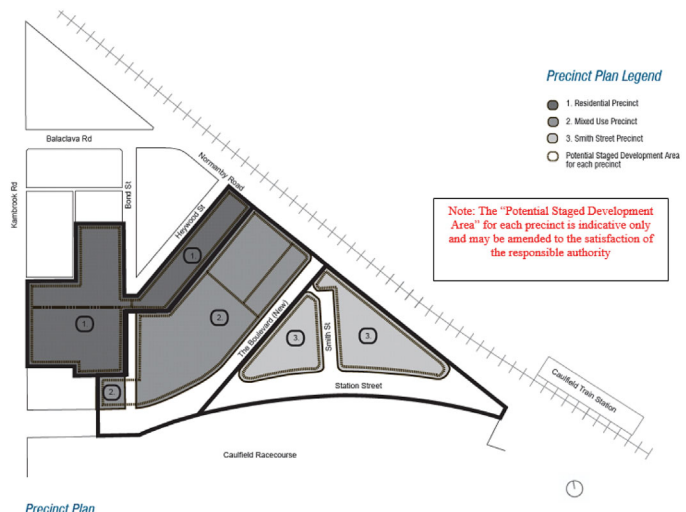


FIGURE 6.6D Caulfield Mixed Use Area Precinct Plan
Source: Clause 57.06 Glen Eira Planning Scheme August 2019

The Caulfield Mixed Use Area is also referred to as Caulfield Village. The open space requirements for the development in Caulfield Village has been specified in Clause 37.06 of the Glen Eira Planning scheme as shown below:

9.0
07/07/2011
C60

Open Space Requirement

Prior to the occupation of buildings on the land, or at such other time as is agreed with Council, the owner must make a monetary public open space contribution to Council as follows:

- 5% of the site value of the land which is contained within the Mixed Use Precinct and the Smith Street Precinct; and
- 4% of the site value of the land which is contained within the Residential Precinct.

Caulfield Station Precinct including Caulfield Racecourse Reserve

The VPA is currently preparing the Caulfield Station Precinct Structure Plan to provide a long-term plan for the proposed significant transformation in this precinct. This includes addressing the increasing demands of the expanded Caulfield Station transport hub, changing needs and use of Caulfield Racecourse Reserve, continued development at Monash University's Caulfield campus and the forecast population growth across the municipalities of Glen Eira and Stonnington. The Department of Land, Water and Planning (DELWP) is a key partner in the process and have overseen the appointment of the newly established Caulfield Racecourse Reserve Trust (CRRT). The CRRT have responsibility for the planning, development, management, operation and use of Caulfield Racecourse Reserve for the purposes of racing, recreation and public park in accordance with the *Caulfield Racecourse Reserve Act 2017*.

To prepare the Structure Plan, the VPA has convened a project steering group consisting of representatives from relevant planning agencies including Glen Eira City Council, Transport for Victoria (TfV) and Stonnington City Council.

Monash University is the largest landholder and employer in this area and is the core education and business/research facility in Glen Eira. At the time the 2014 Strategy was prepared, there were approximately 11,000 full time students and 2,000 staff working at the campus who travel through and in this precinct, additional to the resident population. The ongoing development of this University influences the surrounding area, including the use of open space. The Policy recognises the need to improve the interface between Monash University and its surrounding urban context including Caulfield Station, Derby Road and Caulfield Plaza Shopping Centre.

The *Monash University Caulfield Masterplan Update 2017-2030* (Monash University) presents a longer term vision for the site. The overall intent of the plan expands the built form to the perimeter of the site and removes vehicles from within it, converting the central core of the grounds to a pedestrianised precinct and open space for the campus.

Caulfield Racecourse Reserve

The Caulfield Racecourse Reserve is Crown Land and is managed by the recently formed Caulfield Racecourse Reserve Trust (CRRT) that was established under Part 2 of the *Caulfield Racecourse Reserve Act 2017* (the Act). The CRRT are responsible for:

- The planning, development, management, operation and use of the Reserve for the purposes of racing, recreation and a public park

- Financial management of the reserve
- Acting as a committee of management under the *Crown Land (Reserves Act) 1978*.

The CRRT will prepare a land management plan for the reserve as per the Act. This plan will include a statement of objectives and direction for the promotion, management and use and development of the reserve for racing, recreation, and public park purposes. The Act requires that the CRRT consult with all relevant ministers, the public and stakeholders before formalising the plan. The formation of the CRRT and the preparation of a land management plan for the site are all changes that have occurred since the 2014 Strategy was prepared.

In relation to land in the centre of the racecourse, landscape improvements were undertaken prior to the 2014 Strategy and the area is open to the public during specified time periods, which are shown on the signs at the entry gates. Access into the centre is provided via the existing underpasses under the racetrack. The path surfaces are unsealed, the tunnels are dark and access requires visitors to negotiate the internal maintenance roads to reach the facilities. Once in there, the circuit path around the wetland, picnic and barbecue area, a small playground and an informal grassed area are available for use. These works formed part of the existing Open Space Requirement as stipulated in Schedule 2 to the PDZ2 - Caulfield Mixed Use Area in the Glen Eira Planning Scheme.

From the analysis of the provision of open space in Glen Eira, this Strategy concludes that it would be more efficient use of public open space if the centre of the racecourse also caters for structured club-based sporting use. The objective of doing this is to cater to the existing unmet demand for sportsground use, particularly soccer and the additional sporting needs of the forecast increased population. This will free up time and space at other reserves for unstructured and informal use of existing sportsgrounds that are currently subject to high levels of use. Detailed assessment of the structured sporting needs of the existing and forecast population is contained in the *GET ACTIVE* report and provides specific direction regarding this.

The rationale for including structured sporting use in the centre of the racecourse is to extend the useability of the open space beyond the existing restricted hours during the day. This will potentially include the evenings subject to formal arrangements for access between the racecourse and sporting clubs.

Crown Allotment 2031 (The Wedge)

The land exchange involving part of the Caulfield Racecourse Reserve and freehold land of the Melbourne Racing Club has set aside land referred to as Crown Allotment 2031, and shown on Drawing GEOSS 01 near the intersection of Glen Eira, Booran and Kambrook Roads. These works form part of the existing Open Space Requirement as stipulated in Schedule 2 to the PDZ2 - Caulfield Mixed Use Area in the Glen Eira Planning Scheme. The size of this open space is approximately 5,584 sqm, which equates to a Local open space. At the time the 2014 Strategy was prepared the State Government asked whether Council was prepared to accept appointment as Committee of Management for this land, and Council referred this decision to this Open Space Strategy.

Assessment of this site in relation to the criteria included in the Table 5-2 of this Strategy concludes the land does not meet all the criteria for Local open space including:

- Accessibility
- Amenity
- Equity
- Location/Linkages
- Condition

This site is not located within safe walking distance of the proposed higher density residential precincts to the north of the site which are between 0.6 and 1 kilometre walking distance from this proposed Local open space. Booran Road forms a barrier to safe and easy access to this site from the existing gap areas west of the site.

The 2014 Strategy recommended that Council liaises with the relevant Victorian Government department regarding the rationale for provision of this land area for open space, to determine if an alternative area of open space could potentially be set aside in the north western area of the Caulfield Racecourse site. The aim of requesting this was to better address the criteria for open space in Table 5-2 including being within safe and easy walking distance of the proposed high density residential areas. If this is not feasible, then the Strategy recommends that the relevant Victorian Government department undertakes due diligence to investigate measures to address the criteria that the Crown Allotment 2031 does not meet. Since the preparation of the 2014 Strategy, Crown Allotment 2031 has now been accepted as open space by Council, and has been developed as a dedicated dog exercise park, which accommodates the issues associated with its location adjacent to a busy intersection, limited visibility and poor connections to the surrounding areas.

Balance of suburb

The Balance of suburb is divided into two distinct areas by the Frankston line and there is currently no existing open space within them. West of the railway, residents can access Glen Huntly Park and the centre of the racecourse from Neerim Road to the south. With the Level Crossing Removal Project on the Pakenham/Cranbourne line, residents to the east of the railway can now access East Caulfield Reserve, however there is still a potential need for new Small Local open space to be provided relatively central to this residential area near the underpass to the Frankston railway line at Moodie Street so the community can access open space via the local street network.

6.6.4 Open space needs assessment for Caulfield East

Refer to the Future Change Diagram, Figure 6.6C for the sub-precincts described in Table 6.6-2.

Table 6.6-2 Open space needs assessment for Caulfield East

Description	Assessment
Caulfield Station Precinct	
<ul style="list-style-type: none"> The extent of the Caulfield Station Precinct is illustrated in Figure 6.6C. East Caulfield Reserve is a Municipal open space with structured sporting and unstructured recreation facilities. Caulfield Plantation Reserve is primarily for the protection of mature trees. Caulfield Racecourse Reserve provides primarily for the Regional use as a racecourse. The centre of the racecourse currently provides circuit walking paths and picnic facilities that can be accessed when it is not being used for race days, major events and training. Each entrance has different access times, which is generally after 9.30/9.45 in the morning until sunset. Neerim Road entry is also closed between 1.30 and 4.00pm. Caulfield Village is included in the study area for the Caulfield Station Precinct, however Schedule 2 to the Priority Development Zone in the Glen Eira Planning Scheme provides the framework for the redevelopment of Caulfield Village including provision of open space. Refer to Section 6.6.3 for a description of the existing and forecast population and the different components of this precinct. Please note that the majority of Caulfield Village is located in Caulfield North. 	<ul style="list-style-type: none"> Based on the substantial population change likely in this precinct, which is currently forecast to be an additional 998 residents by 2031, an additional Small Local open space in the vicinity of Derby Road and Caulfield Station is required. This also factors in the likely increase in the worker and student population given the proximity to and expansion of Monash University and the intensification of urban densities in the Derby Street catchment. Given the lack of a new Local or Neighbourhood open space being provided as part of Caulfield Village, the community will use Caulfield Park to meet the majority of their open space needs. It is therefore recommended that Council continue to advocate for a new Neighbourhood or Local open space to be provided on or near to the northern side of the Caulfield Racecourse Reserve.

Description	Assessment
Balance of suburb	
<ul style="list-style-type: none"> • The extent of the Balance of suburb is shown on Figure 6.6C. • There is no existing open space. • The land is predominantly residential with a combination of detached and semi-detached single and double storey dwellings. The Frankston Railway Line separates the precinct into two, with the Moodie Street underpass providing access between them. • The recent Level Crossing Removal Project on the Pakenham/Cranbourne Railway Line has opened up north south pedestrian access between this area and East Caulfield Reserve. • The current resident population forecasts for Balance of suburb in Caulfield North and Caulfield East is an additional 560 additional people living in the area by the 2031. 	<ul style="list-style-type: none"> • Investigate the need for a new Small Local open space in the longer term located near the railway crossing point. This is not anticipated to be required in this current planning period, however it may be required in the future pending the future railway upgrades.

6.6.5 Recommendations for Caulfield East

6.6.5a Summary of overall intent

Provision and distribution

The open space needs of the forecast growth associated with the PDZ2 - Caulfield Mixed Use Area, also referred to as Caulfield Village, were provided for in the centre of Caulfield Racecourse, within the agreements already in place regarding open space provision.

This Strategy recommends that if there is any potential for a review of the future provision of open space in Caulfield East, that a new Neighbourhood or at a minimum a new Local open space is provided near to the Caulfield Village, preferably in the northern part of the Racecourse.

A new Small Local open space is recommended to be provided in the vicinity of Derby Road and Caulfield Station. This will primarily be for the forecast community in the remainder of the area outside of Caulfield Village. The existing residential area between Caulfield Racecourse and Grange Road may require a centrally located additional Small Local open space in the longer term.

Quality and design

East Caulfield Reserve will receive a significant upgrade to improve the character and role of this open space. The future Small Local open space in the vicinity of Derby Road and the Caulfield Station is to include urban greening to ensure it has a role in urban heat mitigation in the heart of this future high density precinct.

6.6.5b Precinct recommendations for Caulfield East

The priorities shown in the Recommendation tables are indicative only. The priorities provide guidance on the expected sequence and timeframes for the commencement of actions and may change pending the allocation of suitable funding and resources, along with the actual rate and location of forecast future growth and development.

A Additional open space

No.	Recommendation	Respons- ibility	Priority
6.6A-1	Council to advocate as part of the future Land Management Plan to be prepared for Caulfield Racecourse Reserve by the Caulfield Racecourse Reserve Trust (CRRT) to set aside a future Neighbourhood or as a minimum Local open space reserve on the northern extent of the reserve. The new open space is to be directly accessible to the forecast population and designed to meet the local resident and worker community open space needs.	GE CRRT	Very High
6.6A-2	Provide a new Small Local open space in the Balance of suburb east of the Queens Avenue in the vicinity of the Moodie Street underpass, primarily for the existing population and also for the forecast population.	GE	Long term

No.	Recommendation	Responsibility	Priority
6.6A-3	Provide a new Small Local open space in the vicinity of the Caulfield Railway Station and Derby Street, primarily for the forecast population north of the railway.	GE	Very High

B Open space links

No.	Recommendation	Responsibility	Priority
6.6B-1	Investigate the potential to improve pedestrian accessibility in the street network in gap area to improve amenity and safety of access to Glen Huntly Park via the local and major streets as part of the Caulfield Station Precinct Structure Plan.	GE	Very High
6.6B-2	Improve the pedestrian and cycle amenity in Station Street if future development occurs in this area, including safe crossing points into the future open space in the northern part of the racecourse site as part of the Caulfield Station Precinct Structure Plan.	GE Developer	Very High
6.6B-3	Investigate the potential to improve pedestrian/cycle amenity between Caulfield Plantation Reserve, East Caulfield Reserve and any long term direction to provide a public open space associated with Caulfield Station as part of the Caulfield Station Precinct Structure Plan.	GE Monash University Developer	Very High

6.6.5c Individual open space recommendations for Caulfield East

C Municipal open space

For Caulfield Racecourse refer to Recommendation 5.1B in this Strategy.

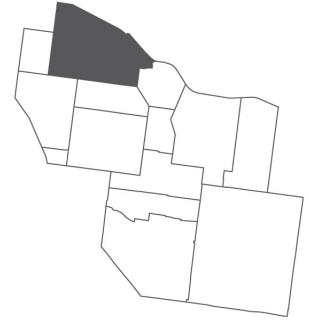
No.	Recommendation	Responsibility	Priority
6.6C-1	<p>East Caulfield Reserve</p> <p>Undertake a major review/update of the existing Masterplan to address the contemporary issues associated with the design of the park and incorporating the improvement suggested by the community in this Strategy including:</p> <ul style="list-style-type: none"> Substantial increased population in the catchment of this Municipal open space (located west of the railway in Caulfield Village). Improve the diversity of unstructured and informal uses provided for at East Caulfield Reserve for nearby residents. <p>Following completion of the Masterplan, implement actions in accordance with priorities in the Masterplan. Note: This Strategy does not support any increased use of East Caulfield Reserve by Monash University for rainwater harvesting or university based sporting use as previously proposed by the University, as the population of Glen Eira need this open space for structured sport and recreation facilities.</p>	GE	Very High

No.	Recommendation	Respons- ibility	Priority
6.6C-2	Glen Huntly Park Continue to undertake major upgrades to Glen Huntly Park, including provision of a diversity of unstructured recreation facilities and other social and informal facilities to cater to the future increased community use.	GE	High

D Small Local open space

No.	Recommendation	Respons- ibility	Priority
6.6D-1	Caulfield Plantation Reserve Continue to retain the mature trees in this reserve, and options to integrate unstructured recreational use as a cycle/pedestrian spine/link between East Caulfield Reserve and the future civic space at the station. Refer to Action 6.6B-3.	GE	Medium

6.7 Caulfield North



6.7.1 Existing conditions



FIGURE 6.7B Existing open space in Caulfield North

6.7.1a Overall Precinct description

Public open space

Caulfield Park is the major open space in Caulfield North and the most popular open space for the whole city. It provides a wide diversity of open space characters and facilities in the one open space. This includes extensive sporting fields to the east, the public garden elements of the park to the west including the lake, memorial and established shade trees with lawns. Between these two distinctive character areas are the playground and the bushland area that includes interpretive information on native birds, along with picnic and barbecue facilities. Since the 2014 Strategy was prepared an updated Masterplan has been adopted. The Conservatory in the park was relocated to Ripponlea Estate creating an additional area of useable open space in the park.

Memorial Park is a Local open space in Caulfield North located on Kooyong Road near the Crimea local shopping centre which was upgraded in 2015 as recommended in the 2014 Strategy. Eskdale Park is a Small Local open space which has been added to the network since the 2014 Strategy.

Ancillary open space

Caulfield Junior College, located on Balaclava Road is the only public school in the precinct and the school grounds contribute visually to the landscape character of the immediate surrounds. The low fence means that some informal use of the open area may occur after hours, although this requires confirmation. Melbourne Grammar School Junior Campus is located at the corner of Balaclava Road and Orrong Road, contributing to the landscape character of this area particularly with mature canopy trees. No informal access is permitted to the grounds out of school hours. The St Mary's Anglican Church fronts Glen Eira Road, and is unfenced and accessible, while the Shelford Girls Grammar School located north of this provides some contribution to the landscape character of the precinct, however it is fenced and is not accessible to informal access.

Land use and character

Caulfield North is predominantly residential land use with retail, business and commercial use in the main strip shopping precincts and some private and public schools. Caulfield North has a combination of single and double storey detached dwellings on larger lots, and smaller more compact dwelling types including terraces and flats particularly towards Hotham Street. Some sub-precinct areas are recognised for their unique architectural character including:

- Caulfield North Estate - immediately north of Caulfield Park, this precinct has mainly intact late 19th century character up to WW1.
- Park Crescent - located east of Caulfield Park, this area is locally important for its aesthetic value as a prominent row of late inter-war houses in the Classical, Mediterranean and Spanish Mission styles in a landscaped setting.
- Glen Eira Road - between Linlithgow Avenue and Kambrook Road, is distinguished by the variety of inter-war houses of high architectural quality.

6.7.1b Quantity of open space in Caulfield North

Following is a brief summary of the key statistics for quantity of open space in Caulfield North:

- 26.28 hectares of open space
- 6.3 per cent of the total suburb area is open space
- 15.2 per cent of the total open space in the City of Glen Eira
- 20 sqm of open space per person, based on the estimated population for 2013 (combined with Caulfield East)
- Other major areas of open space within 400 metres walking distance of Caulfield North include Glen Huntly Park and Caulfield Racecourse (restricted areas in the centre of the racecourse).

6.7.1c Open space hierarchy and character in Caulfield North

Table 6.7-1 List of existing open space type and character classification

Open space	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Caulfield Park	25.97	Municipal	Sporting (East) & Public garden (West)	Heritage, Restricted recreation, Water feature, Botanical
Eskdale Park	0.05	Small Local	Linking space	Formal
Memorial Park	0.31	Local	Formal	Water feature, Informal
Total area	26.33			

Heritage values of open space

The western end of Caulfield Park is included in a Heritage Overlay (HO4) including tree controls that apply to a range of species.

6.7.1d Distribution of open space in Caulfield North

Caulfield Park is the most popular open space for all of Glen Eira and is located in Caulfield North and the community living and working in Caulfield North visit it frequently to participate in informal and unstructured recreation activities as well as participation in sport. While it is extremely well used it is surrounded by busy roads that form barriers to safe and easy access to it. West of Hawthorn Road, Memorial Park provides an alternative Local open space for the community and Eskdale Park is accessible to the community south of Balaclava Road. There are gaps in open space distribution to the north and south-west of Caulfield North, which are shown in Figure 6.7B, and a description of these and solutions to address them is included in Section 6.7.4.

Refer to Figure 6.7B on the following page.

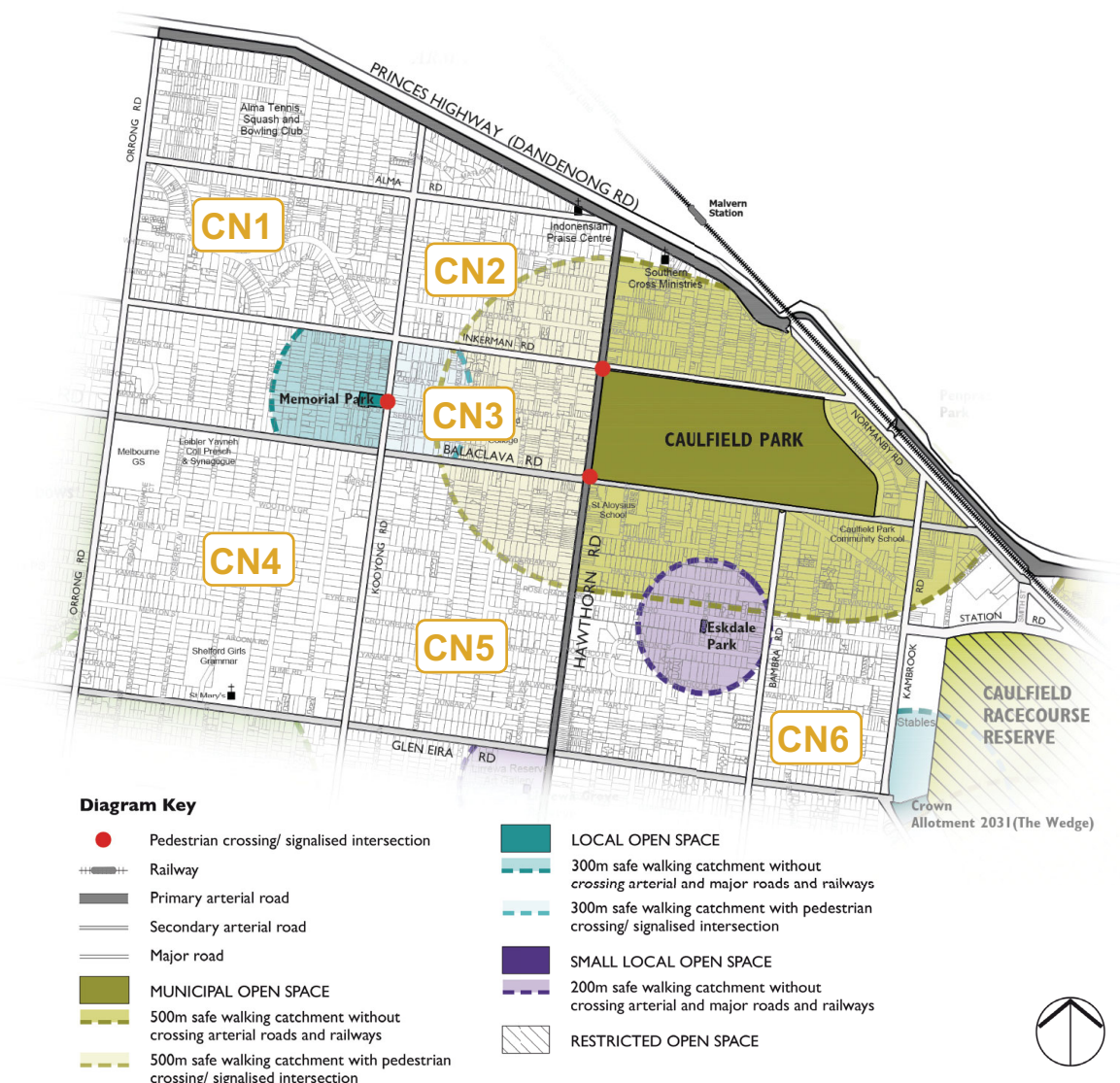


FIGURE 6.7B Open space distribution analysis for Caulfield North

6.7.2 Community characteristics for Caulfield North

6.7.2a Demographic summary of existing population and forecast trends

Source: ABS Census data, 2016 (.id Consulting 2018)

Age structure:

The most populous age group is 25 to 34 years with the 35 to 49 age range forecast to become more populous by 2031. The age group of 70 plus is forecast to increase while the 50 to 69 age range will slightly decrease. Compared with the Municipal-wide average, there is a higher proportion of people aged between 18 and 34, and lower proportion of people aged under 18 years.

Forecast trends through to 2031 include:

- an overall increase in age groups over 70 years
- a proportional decrease in people aged under 15 years
- largest group forecast to be 35 to 49 years

Household type:

Approximately 28 per cent of households are couples with children, 28 are couples without children and 28 per cent are lone person households. Compared with the Municipal-wide average, there is a lower proportion of couple families and a higher proportion of couples without children and slightly higher proportion of lone person households.

Forecast trends through to 2031 include:

- Couple families with dependents is forecast to increase slightly.
- Group households to increase slightly

Dwelling type:

Compared with the Municipal-wide average, there are fewer separate houses and more medium and high density housing in Caulfield North. Between 2011 and 2016, the greatest growth was in medium density housing which increased from 43 to 49 per cent along with high density housing which increased from 7 to 10 per cent, with a corresponding 10 per cent decrease in separate houses.

Total population (2016): 17,849*

Forecast population in 2031: 25,730* (increase of 7,881)

**Source: .id Consulting forecasts for Glen Eira suburbs, November 2018*

6.7.2b Summary of household survey outcomes for Caulfield North

A total of 114 household surveys were received from residents of Caulfield North, in 2012, which represents 10.6 per cent of the total number of surveys received. This is slightly less than the proportion of Caulfield North residents in the Glen Eira population, which is 12.4 per cent.

Most frequently visited open space reserves:

No.	Open space	Reasons to visit	Suggested improvements
Open space within walking distance			
88%	Caulfield Park	walking (31%) dog walking (18%) exercising (18%) close to home (12%) meeting people/friends (12%) relaxing (12%)	Provide additional toilets, trees and shade sails. Enforce dog off lead areas and regularly clean the lake.
14%	Princes Park	dog walking (4%) exercising (3%) meeting people/friends (3%) playground (3%) convenience (1%)	Provide additional BBQ's, cycling paths, dog waste bags/bins, fencing, lighting, playgrounds and trees. Enforce dog off lead areas, maintain trees and develop guidelines to improve consistency in vegetation.
8%	Greenmeadows Gardens	gardens (3%) closest to home (2%) dog walking (2%) open space ambience and beauty (2%) playground (2%)	Maintain vegetation
6%	Harleston park	BBQ's (4%) playground (3%) family friendly (1%) meeting people/friends (1%) picnics (1%)	Upgrade existing playground.
4%	Memorial Park	close to home (2%) playground (2%)	Provide more shade sails
Open space beyond walking distance			
16%	Princes Park	dog walking (5%) playground and equipment (3%) playing sport (3%) walking (3%) meeting people/friends (2%)	Additional car parking, dog drinking facilities, dog off-lead areas, seating, trees and vegetation. Enforce dog off-lead areas and undertake regular maintenance and cleaning.
12%	Caulfield Park	walking (3%) dog walking (2%) playground with grandchildren (2%)	Enforce dog off-lead areas.
7%	Harleston Park	playground and equipment (4%) BBQ's (2%)	Enforce dog off-lead areas and provide more shade and shelters with BBQ's.
7%	Other Open Space	events (2%) relaxation (2%)	Provide more seating

Types of open space used (top four):

91% large parks and gardens (non sporting)

87% sporting reserves

75% local streets for exercise

56% medium sized parks

Values (top four):

76% place to relax and unwind

74% trees

59% health and wellbeing

57% fitness

Activities and facilities in open space (top four):

75% walking paths

65% seats

62% open grassed areas

57% playgrounds

Facility provision and maintenance:

Survey respondents would like seats, drinking fountains, walking paths and public toilets and cafe/kiosk facilities better provided for. Generally respondents are satisfied with the maintenance levels of facilities with the exception of public toilets.

General comments:

- Additional open space is required, particularly as density increases.
- Acquire private land for future open space.
- Keep/retain existing open space.
- Enforce dog off-lead regulations.
- Provide more sporting facilities.

For further details on household survey outcomes, refer to Appendix A of the Strategy.

6.7.2c Implications of community characteristics on future open space planning in Caulfield North

The main change in the forecast population is a slight increase in people aged over 70 years of age and a continued higher representation of people in the 18 to 34 year age group.

Therefore future open space planning will increase the diversity of facilities for everyone, including those that encourage them out into open space to maintain physical and social health and wellbeing. It will be important to maintain a diversity of facilities to meet the needs of all age groups.

6.7.3 Future change in Caulfield North

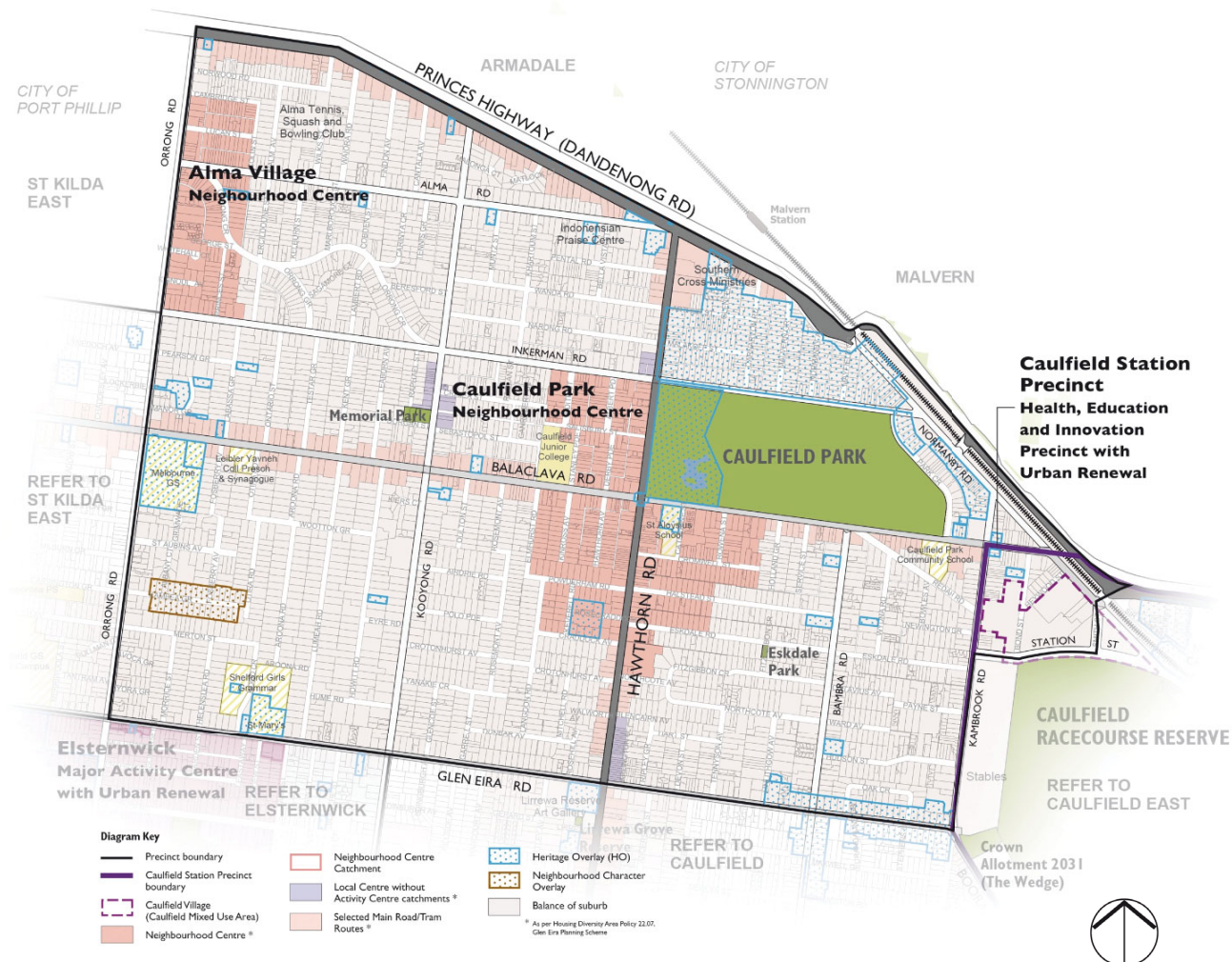


FIGURE 6.7C Future change in Caulfield North

The *Glen Eira Housing and Local Economy Growth Assessment Report* (SGS, 2018), the *Activity Centre, Housing and Local Economy Strategy 2017* (ACHLES) and the *22.07 Housing Diversity Area Policy* in the Glen Eira Planning Scheme provides direction on future growth in Caulfield North.

Between 2016 and 2031 the residential population is forecast to increase by 44 per cent, with 7,881 additional residents forecast to be living in Caulfield North and Caulfield East by 2031. Of these, approximately 35 per cent or 2,770 are forecast to live in the Caulfield Village. Refer to Section 6.6 for further description of this.

Approximately 23 per cent or 1,795 are forecast to live in the Caulfield Park Neighbourhood Centre in Caulfield North, 16 per cent or 1,241 are forecast to live in the selected main roads in both Caulfield North and Caulfield East.

Approximately 13 per cent or 998 are forecast to live in the Caulfield Station Precinct with 7 per cent or 560 in the Balance of suburb in both Caulfield North and Caulfield East.

Approximately 7 per cent or 517 are forecast to be living in the Alma Village Neighbourhood Centre by 2031.

Caulfield Village

As previously noted in Section 6.6, open space contributions for the PDZ2 - Caulfield Mixed Use Area have already been determined and included in Schedule 2 in the Glen Eira Planning Scheme. While this is the most significant area of change, the provision of open space in this precinct has already been determined and is not included in this Strategy. The 2014 Strategy noted that a Small Local open space is to be provided through street closures in Precinct 1 of the Caulfield Village Mixed Use Area (formerly the Phoenix Precinct), and the future design of this space is to meet the criteria and guidelines included in this Open Space Strategy. Particular attention is to be given to ensuring that the future open space is functional and useable by everyone and that the adjoining development interface does not overwhelm the scale of the open space. As part of the review of the 2014 Strategy, it is evident that the Small Local open space that has been provided in the east-west street closure is substantially overshadowed and is not clearly identified as public open space. Assessment of future areas of public open space to be provided to Council will need to better address the suitability criteria for open space included in this Strategy.

Caulfield Park Neighbourhood Centre

The ACHLES identifies the following vision statement for the Caulfield Park Neighbourhood Centre:

Caulfield Park will be a local hub which embraces its strong culture and heritage. A transport junction anchored by green open space, the centre will maintain a strong sense of community and connected village feel.

The *Housing Diversity Area Policy 22.07* in the Glen Eira Planning Scheme encourages residential use in the commercial centre with shop top housing and apartment developments transitioning to predominantly single storey detached dwellings in the catchment.

Alma Village

The ACHLES identifies the following vision statement for the Caulfield Park Neighbourhood Centre:

Alma Village will be a charming and accessible local centre with quality shopping and eating options that cater for residents' everyday needs.

The *Housing Diversity Area Policy 22.07* in the Glen Eira Planning Scheme encourages residential use in the commercial centre with shop top housing and apartment developments transitioning to predominantly single storey detached dwellings in the catchment.

Main roads and tram routes

The *Housing Diversity Area Policy 22.07* in the Glen Eira Planning Scheme encourages residential use along the main roads, including Dandenong Road with apartment developments.

Balance of suburb

In these areas protection of the existing neighbourhood character will support extensions to existing dwellings, new single dwellings and dual occupancies.

Employment population change

The forecast employment population change is an additional 2,666 workers over the 2016-2031 period, representing a 39 per cent increase (SGS, 2018).

Figure 6.7C also shows the extent of existing Heritage Overlay and Neighbourhood Character Overlay areas within Caulfield North. While redevelopment may occur within these areas, it is anticipated they will receive a lower intensity of redevelopment.

6.7.4 Open space needs assessment for Caulfield North

Refer to the Future Change Diagram, Figure 6.7C for the sub-precincts described in Table 6.7-2.

Substantial forecast increase in the resident and worker population will place increased pressure on the already very well used Caulfield Park. The high density dwellings in the Caulfield Village Mixed Use Area will result in a major increase in use given it is within the 500 metre walking catchment. A network of additional open spaces is needed to improve accessibility to open space for both the existing and forecast community.

Table 6.7-2 Open space needs assessment for Caulfield North

Description	Assessment
Caulfield Station Precinct	
<ul style="list-style-type: none"> Refer to Section 6.6 for a detailed description of Caulfield Station Precinct in both Caulfield North and Caulfield East. 	Refer to Section 6.6
Caulfield Park Neighbourhood Centre north of Balaclava Road	
<ul style="list-style-type: none"> The extent of the Caulfield Park Neighbourhood Centre is shown on Figure 6.7C. There is no existing open space in the catchment of the centre. The core of the centre is opposite Caulfield Park within the retail and commercial land use on Balaclava Road, Hawthorn Road and Inkerman Road. 70 per cent of the dwellings that were forecast in 2014 for the Caulfield Park Neighbourhood Centre have been constructed. The forecast rate of dwelling growth is similar to the rate between 2016 and 2031 with 1,795 people forecast to be living in the catchment of the centre by 2031. These figures apply to the whole catchment both North and South of Balaclava Road. 	<ul style="list-style-type: none"> Upgrade Caulfield Park to cater to the increased levels of use by expanding the facilities in the reserve to cater to the additional population.

Description	Assessment
Caulfield Park Neighbourhood Centre south of Balaclava Road	
<ul style="list-style-type: none"> • The extent of the Caulfield Park Neighbourhood Centre catchment is shown on Figure 6.7C. • Eskdale Park is a new Small Local open space in the catchment of the Neighbourhood Centre east of Hawthorn Road. • The core of the centre is the retail and commercial land along Hawthorn and Balaclava Roads. • 70 per cent of the dwellings that were forecast in 2014 for the Caulfield Park Neighbourhood Centre have been constructed. The forecast rate of dwelling growth is similar to the rate between 2016 and 2031 with 1,795 people forecast to be living in the catchment of the centre by 2031. These figures apply to the whole catchment both North and South of Balaclava Road. 	<ul style="list-style-type: none"> • Provide a new Small Local open space in the catchment of the Caulfield Park Neighbourhood Centre, south of Balaclava Road and west of Hawthorn Road to address gap area CN5. This will cater to both the forecast and existing population in the catchment and the Balance of suburb. • In the longer term, identify opportunities to improve the function and character of Eskdale Park.
Alma Village Neighbourhood Centre	
<ul style="list-style-type: none"> • The extent of the Alma Village Neighbourhood Centre is shown in Figure 6.7C. • There is no existing open space. • The core of the centre is the retail and commercial land along the east side of Orrong Road between Dandenong and Inkerman Roads. • Almost double the number of dwellings that were forecast for the 2013-2026 period in the Alma Village NC had been constructed by 2016. The forecast rate of dwelling growth slows to a 25 per cent increase with an additional 517 people forecast to be living in the catchment of the centre by 2031. 	<ul style="list-style-type: none"> • While there has been a substantial increase in the number of residents living in the catchment of Alma Village since the 2014 Strategy was prepared, there has been no new open space provided during this period. • There is a need to provide a new Local open space as a priority given the higher numbers of people now living in the centre compared to when the 2014 Strategy was prepared. The new Local open space will be for both the existing and forecast population.

Description	Assessment
Balance of suburb and main roads/tram routes	
<ul style="list-style-type: none"> The extent of the Balance of Suburb for Caulfield North is shown in Figure 6.7C. Caulfield Park is the major Municipal open space for Caulfield North and the City of Glen Eira. It provides a diverse range of facilities and landscape character settings. Memorial Park is located on Kooyong Road and includes a memorial and the play area and has been upgraded since the 2014 Strategy was prepared. There are gaps in the provision of open space in Caulfield North, some of which will be addressed by the proposed new open space within the catchment of the Neighbourhood Centres with the exception of gap area CN4. 60 per cent of the forecast dwellings for the Balance of suburb during the 2013-2026 period had been constructed by 2016. The rate of forecast dwelling growth will slow to 24 per cent increase with an additional 560 people forecast to be living in the Balance of suburb by 2031. Additionally, there is forecast to be an additional 1,241 living in the selected main roads/tram routes in the Balance of suburb areas. 	<ul style="list-style-type: none"> Based on the combined forecast of approximately 1,800 additional residents to be living in the Balance of suburb areas in the future, a new Small Local open space is recommended in Gap area CN4. This will be for both the existing and forecast population.

6.7.5 Recommendations for Caulfield North

6.7.5a Summary of overall intent

Provision and distribution

The lack of the Local open space network in Caulfield North is to be addressed with recommendations for additional Local and Small Local open space in the precinct. Other improvements include addressing accessibility via the street network to open space.

Quality and design

The objectives are to improve the design of Memorial Park and provide a diversity of new Small Local open spaces in the precinct to appeal to different age groups including a diversity of facilities and overall landscape character to meet existing and forecast population needs.

6.7.5b Precinct recommendations for Caulfield North

The priorities shown in the Recommendation tables are indicative only. The priorities provide guidance on the expected sequence and timeframes for the commencement of actions and may change pending the allocation of suitable funding and resources, along with the actual rate and location of forecast future growth and development.

A Additional open space

No.	Recommendation	Responsibility	Priority
6.7A-1	Provide a new Local open space in the Alma Village Neighbourhood Centre catchment to meet the needs of the existing and forecast population. This will address gap area CN1.	GE Developer	Very High/Urgent
6.7A-2	Provide a new Small Local open space in the Balance of Suburb area in the south west part of Caulfield North to primarily meet the needs of the existing population and the forecast population. This will address the gap area CN4.	GE Developer	Very High/Urgent
6.7A-3	Provide new Small Local open space in the catchment of the Caulfield Park Activity Centre, between Kooyong and Hawthorn Roads and south of Balaclava Road. This is to meet the needs of the existing and forecast population in gap area CN5. If feasible, an alternative is to investigate provision of a Local open space that would be accessible to both gap areas CN4 and CN5. Opportunities for this should be investigated in the Sub-precinct analysis - refer to Recommendation 5.1C.	GE Developer	Medium

B Open space links

No.	Recommendation	Respons- ibility	Priority
6.7B-1	Investigate the potential to improve pedestrian accessibility in the street network in gap area CN2 to improve amenity and safety of access to Caulfield Park, including investigation of signalled or pedestrian crossings at intersections with key local streets.	GE	High
6.7B-2	Investigate the potential to improve pedestrian accessibility in the street network in gap area CN3 to improve amenity and safety of access to Memorial Park and Caulfield Park.	GE	High
6.7B-3	Continue to liaise with VicRoads regarding the potential to improve pedestrian accessibility in the street network in gap area CN6 and across Booran Road and Kambrook Road to future open space associated with Caulfield Racecourse.	GE	Medium

6.7.5c Individual open space recommendations for Caulfield North**C Municipal open space**

No.	Recommendation	Respons- ibility	Priority
6.7C-1	Caulfield Park Continue to implement the recently completed and approved updated Masterplan in accordance with the direction and priorities in the Masterplan.	GE	High

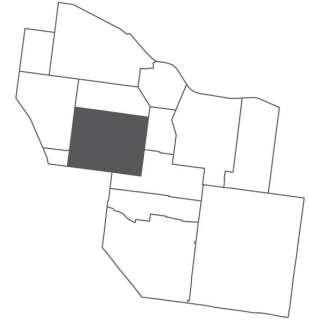
D Local open space

No.	Recommendation	Respons- ibility	Priority
6.7D-1	Memorial Park Continue to maintain the recently upgraded park, which is a completed action from the 2014 Strategy.	GE	Ongoing

E Small Local open space

No.	Recommendation	Respons- ibility	Priority
6.7E-1	Eskdale Park Continue to maintain the recently established Small Local open space as an action from the 2014 Strategy. In the longer term (beyond the timeframe of this Strategy), investigate the option to expand or upgrade the design of this open space to improve its function and use.	GE	Ongoing

6.8 Caulfield South



6.8.1 Existing conditions



FIGURE 6.8A Existing open space in Caulfield South

6.8.1a Overall Precinct description

Public open space

Princes Park is central to the precinct and is one of the most popular parks in the municipality. The eastern extent has a range of sporting fields and facilities and the western end is designed for unstructured recreational use. Princes Park is popular for sport, walking, exercising, dog walking and play and is the most frequently used open space for residents of Caulfield South and the third most frequently visited open space in the municipality.

Marara Road Reserve is a linear east-west link between Bambra and Booran Roads. Caulfield South Primary School directly adjoins the northern boundary of the reserve contributing to the sense of open space given the views over the school grounds. The reserve has a shared trail along its length, seats, open grassed areas, trees and forms part of the former Rosstown Railway reserve and east-west cycle and walking link between Princes Park and EE Gunn Reserve.

Spring Road Reserve is a wide central median with grass, large trees and a small seating area at the southern end near North Road.

Ancillary open space

Caulfield South Primary School is located adjacent to Marara Road Reserve and has an athletics track however it is not accessible to the public outside school hours. The Caulfield Primary School located along Glenhuntly Road in the Caulfield South Neighbourhood Centre contributes to the open space character and part of the grounds are accessible outside school times. This school was built in the late 1800s and contributes to the heritage character of the precinct.

The historic Brighton Cemetery is accessible from North Road during daylight hours and has a garden style layout with curved pathways and plantings. The high brick wall built around the boundary in 1924 means the cemetery contributes more to the built rather than natural character of the precinct.

Land use and character

Caulfield South is predominantly residential land use and was first developed in the 1850s. Another key land use is the heritage listed Brighton Cemetery, originally reserved in 1853 and opened in 1855 at a similar time to St Kilda Cemetery. Among the notable internments includes William Guilfoyle (Landscape gardener, botanist and former Director of the Royal Botanic Gardens in Melbourne) and General Sir John Monash (Civil engineer and Australian military Commander in the First World War). Other land uses include the retail and business uses in the main strip shopping precinct of Caulfield South Neighbourhood Centre. This is the site of the original early settlement in the Caulfield area known as Camden Town. Additionally, there are two public schools and a few small private schools in the precinct.

Caulfield South is predominantly single storey detached dwellings with some double storey dwellings as well. They are a mix of Californian bungalow and contemporary style

dwellings with some inter-war dwellings and a few Edwardian style dwellings. Some sub-precinct areas recognised for their unique architectural character include:

- Caulfield South Neighbourhood Centre (NC) - heritage values derived from its links with Camden Town, the main service centre for Caulfield during its initial development in the early to mid 1800s. It is also recognised for its inter-war architectural character.
- Clarinda Street - located within the Caulfield South NC, this street is significant for its intact pre-war cottages and a number of renovated Victorian homes.
- Hillcrest Estate - Located south of Marara Road Reserve, this is the first housing estate undertaken by AV Jennings in the 1930s. It is distinguished by the combination of diverse house styles and landscaped gardens.
- Crompton Court - small court off Booran Road, is an example of an early garden suburb estate.

6.8.1b Quantity of open space in Caulfield South

Following is a brief summary of the key statistics for quantity of open space in Caulfield South:

- 15.39 hectares of open space (increased by 0.16 hectares since 2014 Strategy)
- 4.7 per cent of the total suburb area is open space
- 9 per cent of the total open space in the City of Glen Eira
- 12 sqm of open space per person, based on the estimated population for 2016
- Other major areas of open space within 400 metres walking distance of Caulfield South includes EE Gunn Reserve and Glen Huntly Park.

6.8.1c Open space hierarchy and character in Caulfield South

Table

6.8-1

List of existing open space type and character classification

Open space	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Aileen Avenue Park (Future)	0.09	Small Local	Undeveloped	
Curraweena Road Reserve	0.06	Small Local	Significant road reservation	Linking space
Marara Road Reserve	2.04	Neighbourhood	Linear	Informal, Heritage recreation, Linking space
Princes Park	12.40	Municipal	Sporting	
Spring Road Reserve	0.80	Local	Significant road reservation	Botanical, Undeveloped
Total area	15.39			

Heritage values of open space

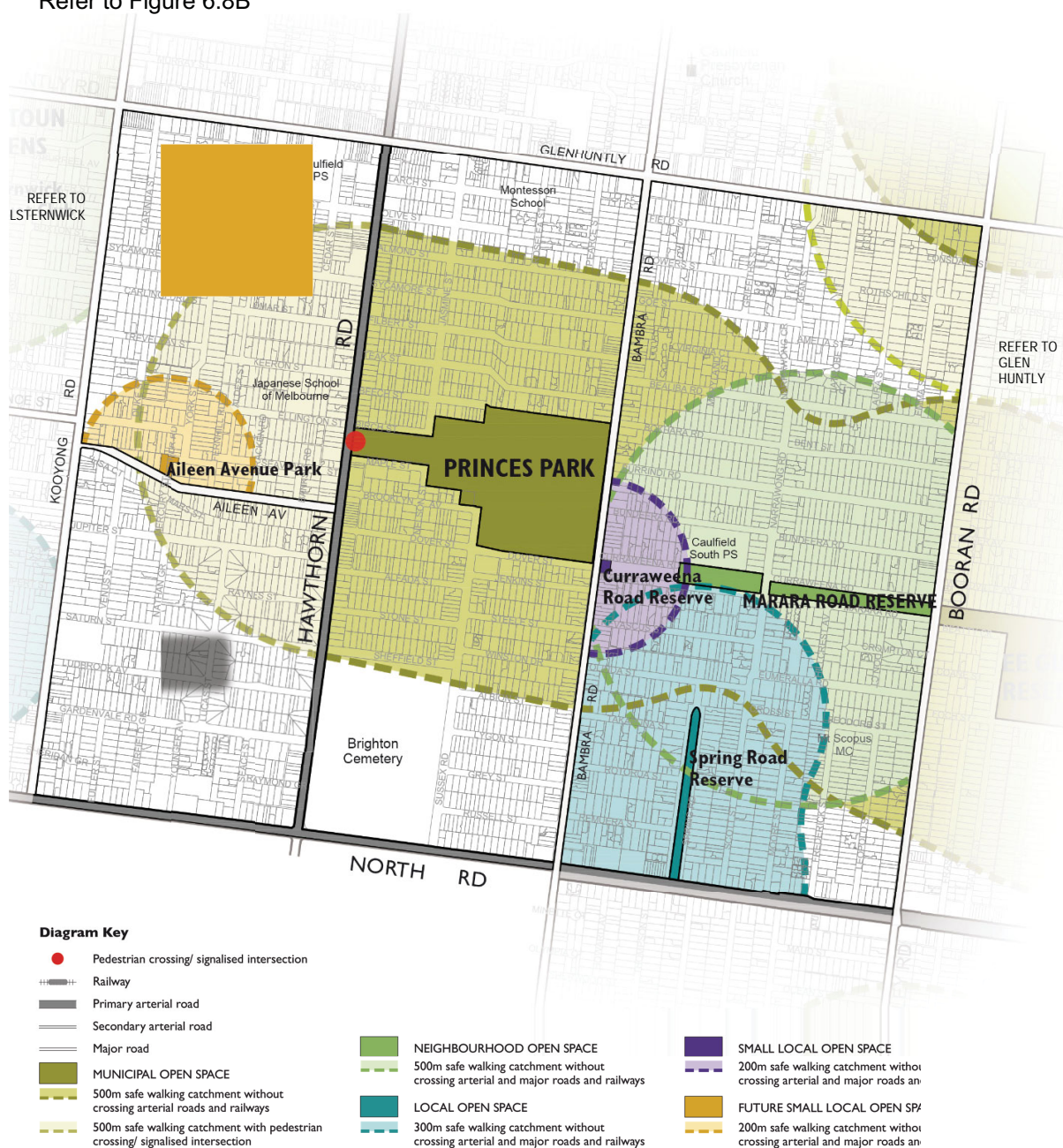
Marara Road Reserve is the former alignment of the Rosstown Railway, and forms part of the Rosstown Rail Trail route through the municipality that extends from Elsternwick Station in the west to Warrigal Road in the east.

6.8.1d Distribution of open space in Caulfield South

Princes Park is a Municipal open space with a broader catchment for its structured sporting facilities. Located relatively central to the precinct Princes Park is framed on two sides by busy roads, with Hawthorn Road to the west and Bambra Road to the east. West of Hawthorn Road the recently acquired future Aileen Avenue Park will provide a new Small Local open space within a safe and easy walk via the local street network for the local community. Bambra Road, Marara Road Reserve and Spring Road Reserve provide open space within easy and safe walking distance of the community to the east of Bambra Road.

The former Rosstown Railway alignment provides east-west pedestrian connectivity through Caulfield South with Marara Road Reserve and Princes Park.

Refer to Figure 6.8B



6.8.2 Community characteristics for Caulfield South

6.8.2a Demographic summary of existing population and forecast trends

Source: ABS Census data, 2016 (.id Consulting 2018)

Age structure:

The most populous age group is 35 to 49 and between 2011 and 2016 the greatest increase is in people aged in the 60 to 69 age group. Compared with the Municipal-wide average, there is a slightly higher proportion of people aged 12 to 17 and 60 to 69, while there is a lower proportion of people aged 18 to 34.

Forecast trends through to 2031 include:

- An overall increase in people aged 60 to 84 years
- A decline in people aged between 18 and 34 years.

Household type:

Approximately 36 per cent of the households are couples with dependents, 24 per cent couples without dependents, 23 per cent lone person households, 8 per cent one parent families and 4 per cent group households. Compared with the Municipal-wide average, there is a slightly higher proportion of couple families with and without dependents, and slightly lower proportion of lone person households.

Forecast trends through to 2031 include:

- Couple families with dependents is forecast to decrease
- Couple families without dependents is to increase slightly
- Lone person households to increase.

Dwelling type:

Compared with the Municipal-wide average, there are slightly more separate houses with 52 per cent of all dwellings being separate houses. 44 per cent of all dwellings are medium-density housing which is almost the same as the municipal average and approximately 4 per cent is high density housing, which is less than the municipal average. Between 2011 and 2016 there was no significant change in trends to housing types in Caulfield South.

Total population (2016): 12,536*

Forecast population in 2031: 13,479* (increase of 943)

**Source: .id Consulting forecasts for Glen Eira suburbs, November 2018*

6.8.2b Summary of household survey outcomes for Caulfield South

A total of 89 household surveys were received from residents of Caulfield South, in 2012, which represents 8.3 per cent of the total number of surveys received. This is slightly less than the proportion of Caulfield South residents in the Glen Eira population, which is 8.6 per cent.

Most frequently visited open space reserves:

No.	Open space	Reason to visit	Suggested improvements
Open space within walking distance			
79%	Princes Park	walking (32%) exercising (16%) close to home (14%) dog walking (12%) playground (7%)	Enforce dog off-lead areas. Additional dog off-lead areas, seating, toilets, trees and indigenous trees required.
26%	Caulfield Park	walking (8%) exercising (5%) diverse range of activities (3%) playground (3%) trees (3%)	Improve path surfaces and provide more seating.
15%	EE Gunn Reserve	dog walking (3%) close to home (2%) exercising (2%) good quality paths (2%) playground (2%)	Provide more rubbish bins and enforce dog off-lead areas.
7%	Hopetoun Gardens	play safe for children (2%) walking (2%)	Enforce dog off-lead areas.
Open space beyond walking distance			
35%	Caulfield Park	lake (8%) playground(7%) events (5%) trees (5%) walking (5%)	Provide maintenance to toilets and additional trees.
10%	Packer Park	playground(2%) playing with children (2%) velodrome (2%)	Increase the diversity of playground equipment for a range of age groups and provide additional trees.
4%	Dendy Park (Bayside City Council)	diversity of areas (1%) jogging/running (1%) playground (1%) relaxation (1%) shade (1%) playing sport 1%)	Prohibit dog off-leash areas, upgrade open space and locate playgrounds near toilets.
4%	Princes Park	dog walking (3%) playground (3%)	Provide more dog drinking facilities and increase the diversity of playground equipment for a range of age groups.
4%	Other open space (outside Glen Eira)	walking (2%)	Not completed

Types of open space used (top four):

91% sporting reserves

83% large parks and gardens (non sporting)

76% local streets for exercise

61% small local parks.

Values (top four):

61% place to relax and unwind
 61% trees
 55% place for kids to play
 53% health and wellbeing.

Activities and facilities in open space (top four):

87% walking paths
 78% open grassed areas
 75% seats
 65% public toilets.

Facility provision and maintenance:

Respondents use walking paths, open grassed areas and playgrounds. They would like to see additional public toilets, seats, drinking fountains and cycle paths. Generally facilities are well maintained with the exception of public toilets.

General comments:

- Additional open space is required, particularly as density increases.
- Open space is well maintained.
- Enjoy using local open space.
- Personal safety issues in open space.
- Enforce dog off-lead areas.

For further details on household survey outcomes, refer to Appendix A of the Strategy.

6.8.2c Implications of community characteristics on future open space planning in Caulfield South

The main change in the forecast population is an increase in people over 60 years of age, the decrease in the younger age groups and increase in lone person households. Therefore future open space planning will take account of the need to increase the diversity of facilities being provided for older people in open space, including those that encourage them out into open space to maintain physical and social health and wellbeing. It will be important to maintain a diversity of facilities to meet the needs of all age groups, recognising that families will still be the dominant household type. Open space planning will also need to provide open space within easy walking distance for both family groups and people in the 60+ age range.

6.8.3 Future change in Caulfield South

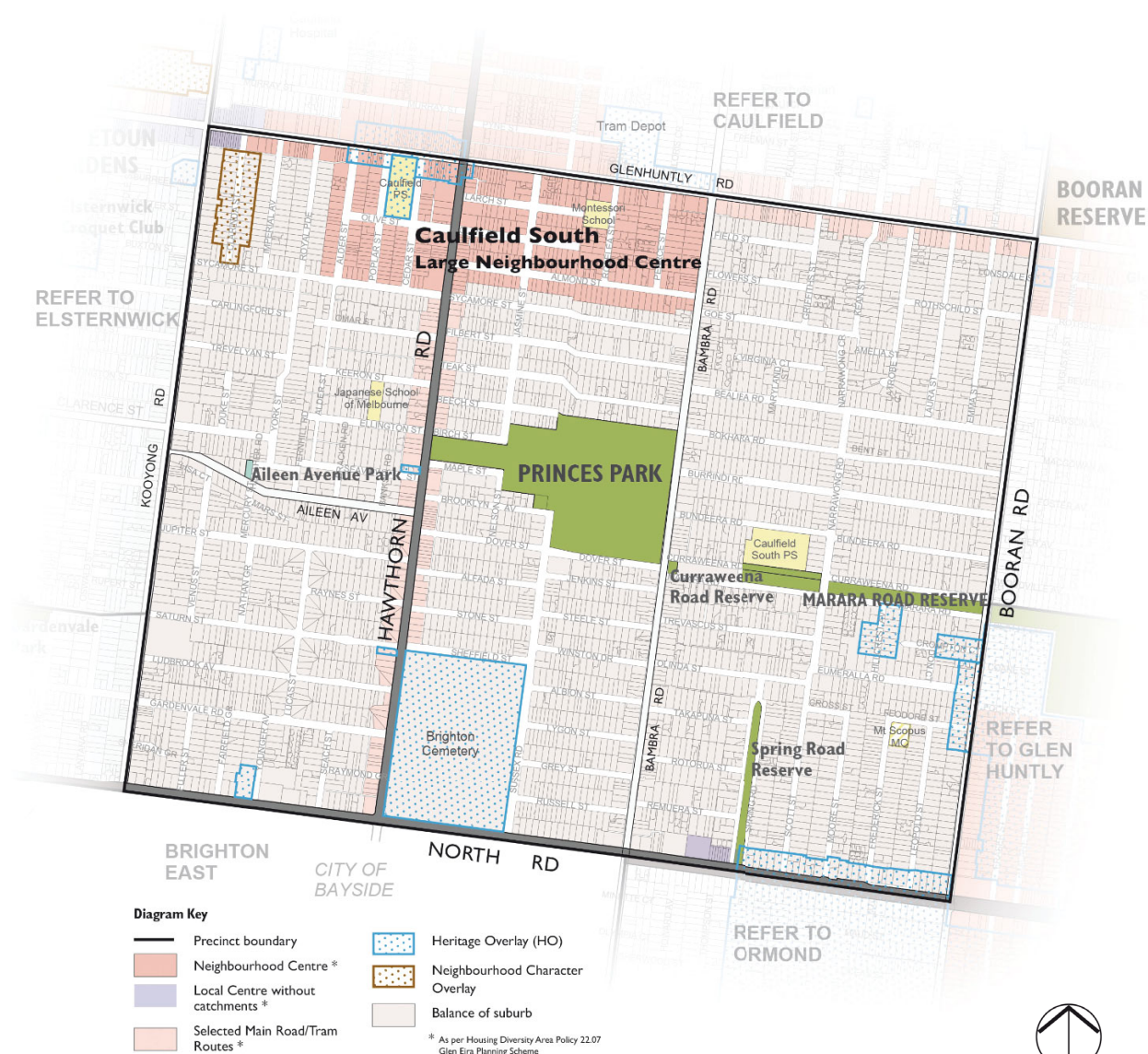


FIGURE 6.8C Future change in Caulfield South

The *Glen Eira Housing and Local Economy Growth Assessment Report* (SGS, Dec 2018) and *22.07 Housing Diversity Area Policy* in the Glen Eira Planning Scheme (accessed 28 February 2019) provides direction on future growth in Caulfield South. The spatial location of the different areas of growth referred to in the reports and policies are reflected in Figure 6.8C.

An 8 per cent increase in the residential population is forecast for the suburb of Caulfield South between 2016 and 2031. This equates to a forecast increase of 943 residents. For reference this is different from the resident population forecasts in the 2014 Strategy. At that time the forecast was for a 5 per cent increase with an additional 547 residents by 2026. Over 85 per cent (458) of the forecast residents were living in Caulfield South by 2016.

Approximately 40 per cent of the forecast residents are planned to live in the Caulfield South Neighbourhood Centre, 40 per cent in the Selected main road/tram routes with the remaining 20 per cent in the Balance of suburb. Refer to Figure 6.8C for the spatial extent of the different catchments and Balance of suburb.

Caulfield South Large Neighbourhood Centre

This centre is predominantly retail with a mix of mainly food and other convenience retailing, commercial offices and other services. The ACHLES includes the following vision statement for the centre:

Caulfield South will be a convenient, diverse and attractive shopping strip that is vibrant both during the day and at night. Enhanced pedestrian and cycling amenity and greenery will foster an active, safe and friendly environment.

Parts of this centre are in heritage overlay areas which are recognised for their inter-war architecture as it was largely developed by 1924. The Housing Diversity Area Policy 22.07 in the Glen Eira Planning Scheme encourage residential use in the commercial centre with shop top housing and apartment style developments, transitioning to the predominantly single storey detached dwellings in the catchment. In the catchment multi-unit developments could be appropriate. It is noted that developments can build up to three stories in height.

Balance of suburb

Across the remaining areas of Caulfield South the forecast population increase is relatively low, and these minimal change areas are intended to retain the existing neighbourhood character with extensions to existing dwellings, single new dwellings and dual occupancies identified as being feasible.

Employment population change

The forecast employment population change is an additional 1,101 workers over the 2016-2031 period, representing a 19 per cent increase (SGS, 2018).

Figure 6.8C also shows the extent of existing Heritage Overlay and Neighbourhood Character Overlay areas within Caulfield South. While redevelopment may occur within these areas, it is anticipated they will receive a lower intensity of redevelopment.

6.8.4 Open space needs assessment for Caulfield South

Refer to the Future Change Diagram, Figure 6.8C for the sub-precincts described in Table 6.8-2.

The scale of development in Caulfield has been greater than was forecast when the 2014 Strategy was prepared. It appears the growth has mainly occurred in the catchment of the Caulfield South and Glen Huntly Activity Centres along Glenhuntly Road. This redevelopment is mainly changing from the single storey attached or detached dwellings to medium to high density dwellings. This results in a reduction in private open space for the community who will rely to a greater extent on public open space. Currently there is no open space within a safe and easy walk of the Caulfield South Neighbourhood Centre.

Another overall factor that influences the open space needs assessment is the forecast increase in the older population and increase in lone person households. There will need to be a focus on increasing facilities that appeal to and keep older adults active and social.

Table 6.8-2 Open space needs assessment for Caulfield South

Description	Assessment
Caulfield South Neighbourhood Centre	
<ul style="list-style-type: none"> • The extent of the Caulfield South Neighbourhood Centre catchment is shown on Figure 6.8C. • Princes Park is within the catchment of the Caulfield South Neighbourhood Centre. This major Municipal open space provides both structured sporting and unstructured recreation and informal facilities. • The future Aileen Avenue Park is located adjoining the catchment. • The Caulfield South Neighbourhood Centre is a retail strip and commercial centre along Glenhuntly Road. There are two primary schools in the catchment of the Centre with the Caulfield South Primary School providing greening in the heart of the centre. • Urban densities have started to increase over the past 5 years with 2 and 3 levels of apartments above the commercial properties on Glenhuntly Road, and with medium density and apartments replacing the single detached dwellings in the catchment south of the centre. • The residential population is forecast to increase by 943 in the centre catchment by 2031 along with a more than 60 per cent increase in the commercial and retail floor area by 2036. • The previous policy notes that shop top housing and small apartment style development would be appropriate in the core of the Caulfield South Neighbourhood Centre. 	<ul style="list-style-type: none"> • Provide a new Small Local open space close to Glenhuntly Road to primarily cater to the existing and forecast population in the Caulfield South Neighbourhood Centre. Investigate the option to convert exiting Council owned land in the centre. • Continue to undertake improvements and expansion of the social and unstructured recreation facilities at Princes Park to primarily cater to the forecast community.

Description	Assessment
Caulfield South Balance of Suburb including the Selected main roads/tram routes	
<ul style="list-style-type: none"> • The extent of the Balance of Suburb and Selected main roads/tram routes are shown on Figure 6.8C. • Marara Road Reserve is the Local open space in east of Bamba Road. It provides an east-west path link between Princes Park and EE Gunn Reserve (in Ormond). The reserve also includes trees, seating, picnic and open grassed areas. • Spring Road Reserve is a Local open space in the southern part of the precinct. The wide grassed central median supports mature trees and also includes some seating. • West of Hawthorn Road the future Aileen Avenue Park will be a new Small Local open space that will assist to address Gap Area CS2. • Minimal change is forecast to occur in the Balance of suburb, with some change along the Selected main roads/tram routes. 	<ul style="list-style-type: none"> • Future major upgrade of Spring Road Reserve to encourage improved use of this existing open space. • The construction of Aileen Avenue Park in the future will add to the open space network west of Hawthorn Road. • Improve the crossing point over Aileen Avenue to improve access to the future open space for the community in Gap Area CS2.

6.8.5 Recommendations for Caulfield South

6.8.5a Summary of overall intent

Provision and distribution

The lack of any open space in Caulfield South west of Hawthorn Road has been addressed since the 2014 Strategy was prepared with the purchase of a site in Aileen Avenue for a new park. An additional Small Local open space is recommended close to the Caulfield South Neighbourhood Centre and Glenhuntly Road to provide easily accessible open space for the existing and forecast community living and working in the centre.

Quality and design

Improve the design and use of Marara Road Reserve and Spring Road Reserve in the future to appeal to different age groups and better meet the open space needs of the existing and forecast population.

6.8.5b Precinct recommendations for Caulfield South

The priorities shown in the Recommendation tables are indicative only. The priorities provide guidance on the expected sequence and timeframes for the commencement of actions and may change pending the allocation of suitable funding and resources, along with the actual rate and location of forecast future growth and development.

A Additional open space

No.	Recommendation	Responsibility	Priority
6.8A-1	Provide a new Small Local open space in the Caulfield South Neighbourhood Centre catchment close to Glenhuntly Road. This could include investigating options to provide open space on part or all of the Senior Citizens Club site in the longer term if an alternative location was identified for them to use. This is to address the Gap Area CS1.	GE Developer	Very High
6.8A-2	Provide a new Small Local open space in the south of Gap Area CS1 to meet the needs of the existing and forecast population. The site has been purchased and will be developed as a park in Aileen Avenue in the FY 20/21. In the future design, an improved pedestrian crossing over Aileen Avenue will be required to ensure that this open space is easily and safely accessible to the local community from the south in Gap Area CS2, as per Recommendation 6.8B-3.	GE Developer	Very High

B Open space links

No.	Recommendation	Responsibility	Priority
6.8B-1	Investigate the potential to improve pedestrian accessibility within the precinct by provision of a signalled crossing over Bambra Road in the vicinity of Dover Street to improve the connectivity between Princes Park and Marara Road Reserve. Completed.	GE	Medium
6.8B-2	Improve pedestrian connectivity between Spring Road Reserve and Marara Road Reserve utilising Narrawong Road as a key north-south link. This includes assessment of and improvements where required to street tree planting for shade, footpath condition, kerb ramps and crossing points.	GE	High
6.8B-3	Improve pedestrian access over Aileen Avenue at the future Aileen Avenue Park to improve access to this new open space for the community south of Aileen Avenue in Gap Area CS2.	GE	High

6.8.5c Individual open space recommendations for Caulfield South**C Municipal open space**

No.	Recommendation	Responsibility	Priority
6.8C-1	Princes Park Undertake a review/update of the existing Masterplan to address the issues identified including: <ul style="list-style-type: none"> • Dog management in the open space. • The need for increased unstructured recreational facilities. • Whether a future skate facility as previously proposed is still required. • Improved shared trail access and circulation through the park. • Other issues to be identified in the Masterplan as part of the consultation process. 	GE	Medium

D Neighbourhood open space

No.	Recommendation	Responsibility	Priority
6.8D-1	Marara Road Reserve Continue to implement the Concept Plan with the future upgrades to the path alignment following the Stage 1 and 2 works already completed which included unstructured recreational facilities and social spaces into the reserve.	GE	Medium

E Local open space

No.	Recommendation	Responsibility	Priority
6.8E-1	Spring Road Reserve Develop and implement a Landscape Plan to guide a major upgrade to this reserve once the major drainage upgrade works in the area are complete.	GE	Medium

F Small Local open space

No.	Recommendation	Respons- ibility	Priority
6.8F-1	Aileen Avenue Reserve Establish the new Aileen Avenue Reserve ensuring the new open space includes facilities that appeal to the local community in Gap Areas CS1 and CS2.	GE	Very High

6.9 Elsternwick and Gardenvale

6.9.1 Existing conditions



FIGURE 6.9A Existing open space in Elsternwick and Gardenvale

6.9.1a Overall precinct description

Public open space

Hopetoun Gardens and Harleston Park are the two Neighbourhood open spaces in Elsternwick and Gardenvale Park is the only Local open space in Gardenvale which functions as a Neighbourhood open space. Hopetoun Gardens has a formal and heritage character with well-established shade trees including some with botanical interest, formal layout and display gardens, the war memorial along the Glenhuntly Road frontage, playground and picnic area. The Elsternwick Croquet Club at the southern end of the gardens is the only structured sporting facility on public land in Elsternwick.

Harleston Park is popular for its large playground and associated barbecue and picnic facilities and has well established shade trees and facilities that encourage people to visit the park for social gatherings.

Gardenvale Park is a popular and well-used Local open space which caters to a range of activities including play, informal games on the open grassed areas and picnic facilities. It has been expanded with the purchase of additional land directly adjoining the reserve since the 2014 Strategy, which has added an additional open grassed area and seating.

Elsternwick Plaza, a Local open space located in the heart of the Elsternwick Major Activity Centre adjacent to the Elsternwick Station, was upgraded following the recommendations in the 2014 Strategy. A new Small Local open space has also been added to the network in Elsternwick since the 2014 Strategy, Riddell Park has an open grassed area and seating in a sub-precinct that lacked any open space and appears to be well used and appreciated by the local community.

Ancillary open space

Rippon Lea Estate is a heritage property that is owned and run by the National Trust. Originally built by Sir Frederick Sargood in the late 1880s, the building represented an architectural milestone. The grounds were once much more extensive and were progressively subdivided in the early 1900s for the residential areas surrounding them today. Rippon Lea has extensive gardens and the mature tree canopy contributes significantly to the landscape character of the area. The gardens are popular for events and include large open lawns, feature planting, a lake, childrens playground and other features including kitchen gardens and orchards. Admission is on a membership or paid basis and it is open all year, generally during the daytime with the exception of private events. Following the 2014 Strategy Council established an agreement with the National Trust to provide free access to Rippon Lea for Glen Eira residents. In exchange, Council makes a contribution to the National Trust. This is to address the lack of public open space in this area, however it is still important to identify opportunities to expand the public open space network given that the Gardens are not always open and available to the public.

The Sandringham railway line traverses through Elsternwick. The established vegetation along the railway contributes to the landscape character, including to biodiversity values in the southern extent where there are large and potentially remnant River Red Gums. There is no continuous linear path along and over the rail line and it therefore forms a physical barrier to easy and safe walking access to open space.

The private schools in the precinct provide some visual ancillary open space value with established trees and outdoor court areas, however they are not formally accessible. St Joseph's Church grounds include open grassed areas surrounding the building and some shade trees. The grounds are unfenced and contribute to the open space character of the precinct. The privately run Elsternwick Club is a heritage building referred to as Stanmer Park, built in 1885. The Club is set back from the street with large unfenced gardens that are visually accessible, and the lawn bowling greens at the rear of the building contribute to the unbuilt character.

Land use and character

Elsternwick and Gardenvale are predominantly residential areas with retail, business and commercial use located in the Elsternwick Major Activity Centre and the smaller Gardenvale Local Centre. The area, including the Glenhuntly Road retail strip is characterised by original Victorian and Edwardian buildings. The vibrant retail strip is supported by a range of service and entertainment facilities including Classic Cinemas and a new arts and cultural precinct in Selwyn Street. Gardenvale Local Centre includes retail, service and business uses within it.

The other major land use is education with a number of private schools in the suburb. The Sandringham railway runs along the western side of Elsternwick, with the station being a key component of the Elsternwick Major Activity Centre. Council has prepared the Elsternwick Structure Plan 2018-2031 to guide future growth and change in this Major Activity Centre. This is further described in Section 6.9.3.

Elsternwick dates from the 1880s with recognised heritage precincts and values within the main retail centre and surrounding residential areas. North of Glenhuntly Road includes a predominance of period detached and semi-detached dwellings, while south of Glenhuntly Road there is a combination of detached and semi-detached dwellings with unit developments. Gardenvale is an intact inter-war residential area with predominantly detached dwellings dating from the slightly later period. More recently, high density residential development has occurred in Elsternwick in the core of the Elsternwick Major Activity Centre either on or near to Glenhuntly Road.

Some of the key historic and neighbourhood character precincts include:

- St James Parade and Downshire Road Neighbourhood Character Overlay Area, Elsternwick - located south of Glenhuntly Road, these precincts adjoin the eastern side of the railway line. To the north of Riddell Parade there is a concentration of detached Victorian and Edwardian dwellings, and south is a predominance of inter-war homes.
- Elsternwick Heritage Area - large area generally between Glen Eira and Glenhuntly Roads, featuring late 19th and early 20th Century residential and commercial areas, including Elsternwick Urban Village. This area includes construction of large villas such as Glenmore in St Georges Road.
- Gladstone Parade, Elsternwick - Locally significant as Glen Eira's most imposing Land Boom subdivision in 1888 on an elevated location overlooking Port Phillip Bay, with a number of two storey 19th Century Queen Anne and Elizabethan style dwellings.
- Bruce Court, Elsternwick - Small court of 10 dwellings built from 1928 to 1933 reflecting the Garden Suburb subdivision style.

6.9.1b Quantity and distribution of open space in Elsternwick and Gardenvale

Following is a brief summary of the key statistics for quantity of open space in Elsternwick and Gardenvale. For reference, the total quantity of open space in Elsternwick and Gardenvale has increased since the 2014 Strategy was prepared by 0.09 hectares in Elsternwick and 0.08 hectares in Gardenvale.

Elsternwick

- 3.55 hectares of open space
- 1.3 per cent of the total suburb area is open space
- 2 per cent of the total open space in the City of Glen Eira
- 3 sqm of open space per person, based on the estimated population for 2016 (combined with Gardenvale)
- There are no other major areas of open space within 400 metres walking distance of Elsternwick. Greenmeadows Garden in St Kilda East is the nearest and this is 400 metres from the northern boundary of Elsternwick.

Gardenvale

- 0.45 hectares of open space
- 1.5 per cent of the total suburb area is open space
- 0.3 per cent of the total open space in the City of Glen Eira
- 3 sqm of open space per person, based on the estimated population for 2016 (combined with Elsternwick)
- There are no other major areas of open space within 400 metres walking distance of Gardenvale. The nearest open space without crossing major roads is Hopetoun Gardens in Elsternwick which is 900 metres from the northern end of Gardenvale.

6.9.1c Open space hierarchy and character in Elsternwick and Gardenvale

Table 6.9-1 List of existing open space type and character classification in Elsternwick

Open space	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Elsternwick Plaza	0.51	Local	Public square	Heritage, Railway easement/siding
Harleston Park	1.18	Neighbourhood	Informal	
Hopetoun Gardens	1.77	Neighbourhood	Public garden	Heritage, Restricted sporting
Riddell Park	0.09	Small Local	Informal	
Total area	3.55			

Table 6.9-2 List of existing open space type and character classification in Gardenvale

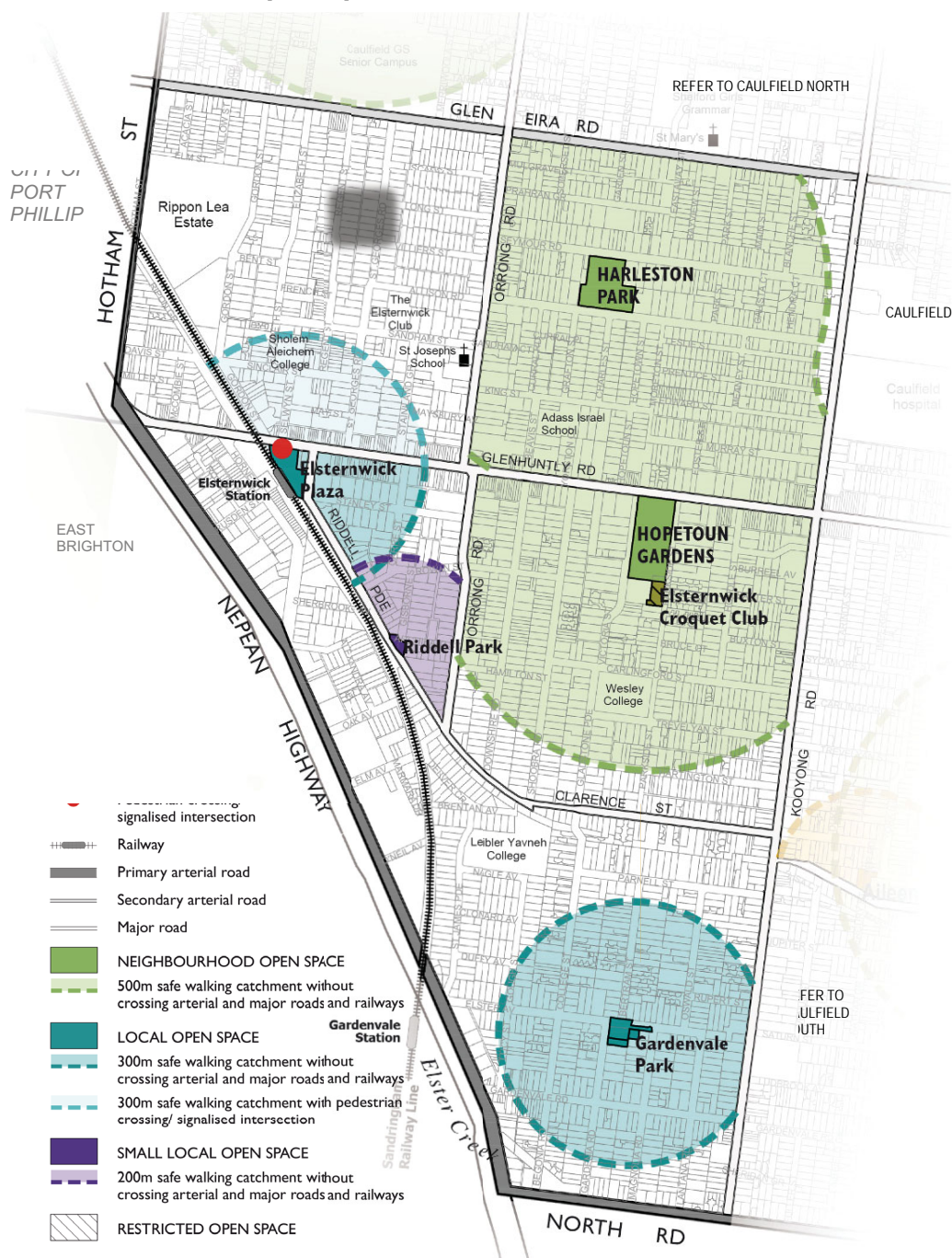
Open space	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Gardenvale Park	0.45	Local	Informal	
Total area	0.45			

Heritage values of open space

Elsternwick Plaza is included in Heritage Overlay 72 for the mature established trees located in it. These trees are the only remaining historical feature from former public gardens that were once present on this site, with the other built and planted landscape features in Elsternwick Plaza being from more recent times. The former post office and the Rifle Club buildings are located to the east of the gardens. The *City of Glen Eira Heritage Management Plan (1996)* refers to the former rotunda being removed and the gardens are now set out in a contemporary manner.

Hopetoun Gardens site was purchased by Council in 1907 as part of a proactive beautification program.

6.9.1d Distribution of open space in Elsternwick and Gardenvale



In Elsternwick, the two Neighbourhood sized open spaces, Hopetoun Gardens and Harleston Park are accessible to people living and working east of Orrong Road, north and south of Glenhuntly Road. Elsternwick Plaza is near Elsternwick Station and located in the heart of the Activity Centre, and the recent upgrade has improved its appeal and use given the previous facilities and overall condition was in poor repair.

Gardenvale Park is a Local open space that is very well located and popular in Gardenvale. The park has increased in size through purchase of an adjoining property and has now been incorporated into the park. This larger open space caters to the needs of the local community.

As noted in Section 4.2.3 of this Strategy, there is a lack of Municipal open space in this part of Glen Eira, with people needing to travel more than 1 kilometre to reach any Municipal open space. Currently, the Elsternwick Croquet Club located at the southern end of the Hopetoun Gardens is the only sports facility located on public land in the suburb. While there is a privately owned bowling green and some sports facilities in the private school grounds, there are no structured sporting facilities within 1 kilometre of Gardenvale and Elsternwick.

6.9.2 Community characteristics for Elsternwick and Gardenvale

6.9.2a Demographic summary of existing population and forecast trends

Source: ABS Census data, 2016 (.id Consulting 2018)

Age structure:

The most populous age group is 35 to 49 years and this is forecast to continue. The second most populous age group is 25 to 34 years followed by the 50 to 69 years. Compared with the municipal-wide average, there is a lower proportion of people in the younger age groups (18-24 years) and a higher proportion of people in the 25 to 49 and 60 to 69 age range, and less in the 70+ age group.

Forecast trends through to 2031 include:

- an overall increase in the 35 to 49 age group
- the greatest proportional increase is in people aged 70 to 84
- decline in people aged 25 to 34 and 60 to 69 years.

Household type:

The most populous household type is lone person households. When compared with the Municipal-wide average, there is a lower proportion of couple families with children and single parent families; and a higher proportion of lone person households, group households and couples without children.

Forecast trends through to 2031 indicate the current proportions as noted above are set to continue, with lone person households remaining the most numerous.

Dwelling type:

Compared with the Municipal-wide average, there are fewer separate houses and more medium and high density housing in Elsternwick and Gardenvale. Between 2011 and 2016, the greatest growth was in medium density housing.

Total population (2016): 12,061*

Forecast population in 2031: 14,007* (increase of 1,946)

**Source: .id Consulting forecasts for Glen Eira suburbs, November 2018*

6.9.2b Summary of household survey outcomes for Elsternwick and Gardenvale

Elsternwick

A total of 79 household surveys were received from residents of Elsternwick, which represents 7.3 per cent of the total number of surveys received. This is slightly less than the proportion of Elsternwick residents in the Glen Eira population, which is 8.3 per cent at the time the survey was undertaken in 2012.

Most frequently visited open space reserves:

No.	Open space	Reasons to visit	Suggested improvements
Open space within walking distance			
54%	Hopetoun Gardens	relaxing (11%) trees (11%) playground (10%) close to home (9%) play safe for children (9%)	Provide more exercise equipment, extend open space and maintenance to trees.
41%	Harleston Park	play safe for children (10%) relaxing (9%) closest to home (8%) meeting people/friends (6%) playground (6%)	Provide shade to playgrounds and regular maintenance and cleaning required.
19%	Elsternwick Park	dog walking (4%) large open space (4%) relaxing (4%) walking (3%)	Provide additional trees.
14%	Caulfield Park	walking (6%) exercising (3%) jogging/running (3%) meeting people/friends (3%)	Regular maintenance and cleaning required.
13%	Princes Park	dog walking (6%) walking (4%) exercising (3%) jogging/running (3%)	Provide more exercise equipment.
Open space beyond walking distance			
37%	Caulfield Park	walking (11%) exercising (8%) diversity of areas (4%) relaxation (4%)	Improve/upgrade existing buildings, maintain paths and provide additional rubbish bins, signs and trees and locate toilets near playground.
11%	Other open space	walking (3%)	Reduce car park fees, improve open space grass quality and provide more vegetation.
5%	Packer Park	Playground (3%) ball games (1%) events (1%) variety of play spaces (1%) playing with children (1%)	Provide more drinking fountains and provide more events.
4%	Princes Park	dog off-lead area (3%)	Not completed.
3%	Allnutt Park	BBQ's (3%)	Provide more toilets

Types of open space used (top four):

90% local streets for exercise
 89% medium sized parks
 87% sporting reserves
 78% large parks and gardens (non sporting)

Values (top four):

82% trees
 75% place to relax and unwind
 71% escape built environment
 56% health and wellbeing

Activities and facilities in open space (top four):

86% seats
 85% walking paths
 84% open grassed areas
 70% drinking fountains

Facility provision and maintenance:

The survey respondents would like to see better provision of drinking fountains, public toilets, seats and open grassed areas. They are generally satisfied with maintenance of facilities with the exception of public toilets and drinking fountains.

General comments:

- Additional open space is required, particularly as density increases.
- More information about the range of open space and facilities provided.
- Additional trees required.

Gardenvale

A total of 9 household surveys were received from residents of Gardenvale therefore, while the data is reported separately, refer also to responses from Elsternwick where more surveys were received. Recommendations in the Strategy will be based on responses from Elsternwick and Gardenvale.

Most frequently visited open space reserves:

No.	Open space	Reason to visit	Suggested improvements
Open space within walking distance			
78%	Gardenvale Park	play safe for children (33%) close to home (22%) walking (22%)	Enforce dog off-lead areas, improve organisation for events, extend the open space and provide more rubbish bins, shade and toilets.
22%	Princes Park	dog walking (22%)	Not answered
Open space beyond walking distance			
11%	Beach/Foreshore	dog walking (11%)	Not answered
11%	Caulfield Park	walking (11%)	Not answered
11%	Princes Park	oval (11%)	Not answered

Types of open space used (top four):

89% small local parks
 67% local streets for exercise
 56% medium sized parks
 56% sporting reserves

Values (top four):

67% just being outside
 56% health and wellbeing
 56% place for kids to play
 44% natural character

Activities and facilities in open space (top four):

67% open grassed areas

67% seats

56% dog off-lead areas

56% picnic tables

Facility provision and maintenance:

There is a higher level of dissatisfaction with facility provision, which is mainly a result of the lack of open space. This includes walking and cycling paths, drinking fountains and public toilets. Generally facilities are well maintained with the exception of public toilets and to a lesser extent dog off lead areas.

General comments:

- Additional open space is required.

For further details on household survey outcomes, refer to Appendix A of the Strategy.

6.9.2c Implications of community characteristics on future open space planning in Elsternwick and Gardenvale

The patterns of visitation to open space in Elsternwick and Gardenvale confirm that the Local and Small Local open spaces are well used for a variety of reasons including play, relaxation and socialising, while the larger Municipal open spaces are used for exercise including walking, jogging and dog walking. Survey respondents requested additional facilities in open space and the provision of new open space. Since the survey was completed in 2012 Council has upgraded Elsternwick Plaza, Harleston Park, Hopetoun Gardens and expanded the size of Gardenvale Park. Council has also provided the new Small Local open space Riddell Park.

The main change in the forecast population is a slight increase in people aged over 70 years of age and people in the 35 to 49 years of age. The most populous age group will continue to be the 35 to 49 year olds. There will be a slight decline in children under 11 years of age, however the increase in the 70 plus age group can mean an increase in grandparents who take their grandchildren to open space.

Therefore future open space planning and design will increase the diversity of facilities for older adults, including those that encourage them to be out into open space to maintain physical and social health and wellbeing. People in the 70 plus age group are generally not working and will therefore potentially use open space more regularly during the day. It will be important to maintain a diversity of facilities to meet the needs of all age groups, recognising the most populous age group will remain the 35 to 49 age range.

The *Elsternwick Structure Plan 2018-2031* (Glen Eira City Council, 2018), *Glen Eira Housing and Local Economy Growth Assessment Report* (SGS, Dec 2018) and *22.07 Housing Diversity Area Policy*, Glen Eira Planning Scheme (29/03/18 Version) provides direction on future growth in Elsternwick. The spatial location of the different areas of growth referred to in the reports is illustrated in Figure 6.9C.

A 16 per cent increase in the residential population is forecast for the suburbs of Elsternwick and Gardenvale. This equates to a forecast increase of 1,946 residents living there by 2031. For comparison, over the period of 2013 to 2016 the residential population growth was consistent with this scale of change, with an additional 829 estimated to be living in the suburb when the 2014 Strategy was prepared. Of the forecast growth, approximately 76 per cent of the residents will live in Elsternwick Structure Plan area by 2031, mostly located along Glenhuntly Road and in the Urban Renewal Area south west of the railway line. East of the Elsternwick Activity Centre catchment along Glenhuntly Road approximately 10 per cent of the are planned to live there with the remaining 14 per cent distributed in the Balance of suburb.

Elsternwick Major Activity Centre

The Elsternwick Structure Plan concentrates forecast growth and change between the railway and Nepean Highway and along Glenhuntly Road. The Vision statement in the Structure Plan is:

Elsternwick will be a safe, accessible and liveable centre that embraces its historic character and strong cultural and village feel. The centre will be a destination for its longstanding cultural and entertainment offerings, business and employment opportunities, and a range of quality local retail outlets and community spaces.

The Structure Plan supports the provision of additional public open space in the centre along with other improvements to the public realm including increasing pedestrian priority in some of the key streets and laneways to activate the businesses and encourage outdoor tables and a cafe/restaurant culture in the centre.

The dwelling and population forecasts for this precinct are based on the existing planning framework which does not include the Urban Renewal Area adjacent to the Nepean Highway. The Elsternwick Structure Plan 2018 - 2031 identifies a proposed Urban Renewal Area which is forecast to become a medium and high density mixed use precinct accommodating a substantial increase in the population. A new public open space - being a Neighbourhood open space is shown in the heart of the Urban Renewal Area in the vicinity of the proposed multi-level buildings. This Strategy supports the provision of a new Neighbourhood open space as a minimum to cater to the forecast substantial change in use and urban density. This is due to the lack of any existing public open space in the Urban Renewal Area due to the existing land use being large format vehicle show rooms with low numbers of workers. The future Neighbourhood open space will need to meet the winter sunlight access requirements included in this Strategy and provide a sensitive transition between the existing and future communities.

Selected main roads/tram routes including Caulfield South Neighbourhood Centre

The selected main roads/tram route along Glenhuntly Road east of the Elsternwick MAC is forecast to change from 458 residents in 2016 to 653 in 2031, representing an approximate 43 per cent increase. Between 2013 and 2016 there was a 23 per cent increase in dwellings, which indicates that there was a faster rate of growth than originally forecast when the 2014 Strategy was prepared.

Gardenvale Neighbourhood Centre and Balance of suburb

The remainder of the suburb including the Gardenvale Local Centre is forecast to have an additional 272 residents by 2031. Between 2013 and 2016 there was a 1 per cent increase in dwellings, which indicates that there was a slower rate of growth than the 3 per cent rate originally forecast when the 2014 Strategy was prepared.

The Activity Centre, Housing and Local Economy Strategy describes the following vision for the Gardenvale Neighbourhood Centre:

Gardenvale will be a friendly neighbourhood centre with tree lined streets and public amenity, which supports social interaction. The centre will provide for residents' everyday needs and encourage strong connections between the community and traders.

Employment population change

The forecast employment population change in Elsternwick - Gardenvale is an additional 1,910 workers representing a 34 per cent increase by 2031.

Figure 6.9C shows the extent of the existing Heritage Overlay and Neighbourhood Character Overlay areas within Elsternwick and Gardenvale, which are described in 6.9.1a. While redevelopment may occur within these overlay areas, it is anticipated they will receive a lower intensity of redevelopment.

6.9.4 Open space needs assessment for Elsternwick and Gardenvale

Refer to the Future Change Diagram, Figure 6.9C for the sub-precincts described in Table 6.9-2.

The gaps in the distribution of open space in Elsternwick and Gardenvale are shown in Figure 6.9B. While the gaps are a key factor to consider in relation to whether open space needs are adequately addressed, other key factors include the existing and proposed urban layout and densities and mitigating urban heat island effect. Within the Elsternwick Major Activity Centre there is forecast to be approximately 1,460 additional residents plus an employment population that is forecast to grow.

Urban densities will increase in the Elsternwick Major Activity Centre including in parts of the centre that currently have little or no public open space. Higher density development will increase the reliance on public open space given there will be little, or no private open space associated with the higher density living. Additionally, there is a need to provide unencumbered public open space with a sense of naturalness and greening. This means that people will be able to be close to green open spaces that contribute to mitigating urban heat and provide natural green spaces in close proximity to residents and workers in the centre.

Table 6.9-2 Open space needs assessment for Elsternwick and Gardenvale

Description	Assessment
Elsternwick Major Activity Centre east of the railway	
<ul style="list-style-type: none"> The extent is defined in the <i>Elsternwick Structure Plan 2018-2031</i> and summarised and shown on Figure 6.9C. Hopetoun Gardens is a Neighbourhood open space located at the eastern extent of the Activity Centre and south of Glenhuntly Road. The gardens have heritage features and character. The Elsternwick Croquet Club adjoins the southern extent of the gardens. Harleston Park is a Neighbourhood open space located to the north of Glenhuntly Road and east of Orrong Road. It is very well used and has been recently upgraded to accommodate additional uses. Elsternwick Plaza is a Small Local open space adjoining Elsternwick Railway Station on the south side of Glenhuntly Road. It has been recently upgraded, consistent with the recommendations in the 2014 Strategy. The Elsternwick Structure Plan identifies a number of strategic sites with 6-8 storey heights. The Structure Plan proposed a new public open space on the Council owned Standiland Grove Car Park 	<ul style="list-style-type: none"> On the north side of Glenhuntly Road the Strategy supports the provision of two new open spaces shown in the Structure Plan. These spaces will address the existing Gap area E1 and partially for E2 via the existing footbridge over the railway. This includes the new Small Local open space proposed in Standiland Grove and the new Local open space as part of the redevelopment of the ABC site in Gordon Street Support the new Small Local open space on the Standiland Grove Car Park as shown in the Elsternwick Structure Plan, ensuring that future built form controls protect winter sunlight access as described in this Strategy, and achieving east-west pedestrian access through additional land purchase to the east of the site. Support the provision of a new Local open space on the former ABC Studio Site, consistent with Recommendation 6.9A-1 from the 2014 Strategy. Being located directly adjacent to the Rippon Lea Estate will add to the sense of space and natural character of the new Local open space. If this new Local open space is not provided on

Description	Assessment
<p>adjacent to Elsternwick Library. This was identified by TBLD as part of the sub-precinct assessment following the 2014 Strategy. Part of the basis for selecting this site as future open space is its close proximity to the centre, its location north of the adjoining library facility and potential for the space to be accessible to both the existing and planned future population. There is an excellent opportunity to reconfigure this space so that the upgraded community facility is accommodated in a high density built form to the south of the site, that provides an active interface to the future open space to its north, with car parking under the future built form.</p> <ul style="list-style-type: none"> The Structure Plan includes an additional open space on the former ABC Studio site, consistent with the recommendations from the TBLD open space sub-precinct assessment and Recommendation 6.9A-1 in the 2014 Strategy. 	<p>the ABC Studio Site it is still required in the nearby area.</p> <ul style="list-style-type: none"> Provide a new Small Local open space north of Standiland Grove towards Glen Eira Road and west of Orrong Road. This is consistent with the Recommendation 6.9A-3 of the 2014 Strategy and the Refresh. This is primarily for the existing population to address Gap Area E1. Support the provision of a new Neighbourhood open space in the Urban Renewal Area between the railway and Nepean Highway south of Glenhuntly Road, as illustrated in the Elsternwick Structure Plan (2018). This new Neighbourhood open space will be designed to be accessible to the existing and new residents and located to the north east of the proposed high density development to meet the sunlight controls noted in this Strategy. Improve Hopetoun Gardens to the south of Glenhuntly Road to cater to forecast increased residents and workers in the precinct. Consider the potential to relocate the Elsternwick Croquet Club to increase the amount of unrestricted public open space available in the reserve to cater to the increased population. This is consistent with Recommendation 6.9D-2 from the 2014 Strategy.
Elsternwick Major Activity Centre west of the railway urban renewal area	
<ul style="list-style-type: none"> The extent is defined in the <i>Elsternwick Structure Plan 2018-2031</i> and summarised and shown on Figure 6.9C. Currently there is no public open space west of the railway. The Structure Plan includes a proposed new Neighbourhood open space in the southern part of the Urban Renewal Precinct. The Structure Plan designates two Urban Renewal Areas, with one located north and south of Glenhuntly Road and the other further south associated with the large commercial sites on Nepean Highway. The Structure Plan supports the Urban Renewal Areas becoming mixed use precincts that includes high density residential and business use. 	<ul style="list-style-type: none"> North of Glenhuntly Road, a new Small Local open space may potentially be required if the future change is significant. Support the proposed new Neighbourhood open space (or two Local open spaces) to be located in the proposed Urban Renewal Precinct south of Glenhuntly Road as shown in the Structure Plan. Provide an additional Small Local open space in the northern part of the urban Renewal area to cater primarily to the new population planned for this urban renewal area. This green open space will assist with mitigating urban heat island effect within a future high density precinct.

Description	Assessment
Selected Main Roads/Tram Routes within the Caulfield South Neighbourhood Centre	
<ul style="list-style-type: none"> The location is shown on Figure 6.9C. There is no existing open space in the catchment, however Hopetoun Gardens directly adjoins the catchment to the west, and Harleston Park to the north. The forecast population change is in the order of 200 additional residents, representing an approximate 40 per cent increase. 	<ul style="list-style-type: none"> The forecast population will place additional demands on the facilities and use levels of Harleston Park and Hopetoun Gardens.
Gardenvale Neighbourhood Centre and Balance of suburb	
<ul style="list-style-type: none"> The Gardenvale Neighbourhood Centre and catchment is illustrated on Figure 6.9C. Gardenvale Park is located within the catchment of this neighbourhood centre. The forecast population change is in the order of 250 to 300 additional residents, representing a minor increase. 	<ul style="list-style-type: none"> The forecast population distributed through this catchment and in the Balance of suburb are likely to use the existing open space. This will increase the demand for provision and expansion of facilities in the existing open space network.

6.9.5 Recommendations for Elsternwick and Gardenvale

6.9.5a Summary of overall intent

Provision and distribution

The lack of open space in Elsternwick and Gardenvale is to be addressed with recommendations for the additional open space within the Elsternwick Structure Plan area, including in the Urban Renewal Area west of the railway. Review the design of Hopetoun Gardens including the use levels of the Elsternwick Croquet Club within the context of the lack of open space in this part of the municipality and forecast growth that is to occur.

Quality and design

Review the level of facility provision in the new open spaces to ensure there is a balance of natural qualities in open space with the provision of facilities. The new open spaces in the high density precincts will need to fulfil the role of mitigating urban heat as well as providing for the diverse open space needs of people with little or no private open space.

6.9.5b Precinct recommendations for Elsternwick and Gardenvale

The priorities shown in the Recommendation tables are indicative only. The priorities provide guidance on the expected sequence and timeframes for the commencement of actions and may change pending the allocation of suitable funding and resources, along with the actual rate and location of forecast future growth and development.

A Additional open space

No.	Recommendation	Respons- ibility	Priority
6.9A-1	Provide a new Local open space in the south west part of gap area E1 to meet the needs of the existing and forecast population. The <i>Elsternwick Structure Plan 2018-2031</i> has identified this to be located on the former ABC Studio site, however if this is not achieved, a new location for this open space will still be required.	GE Developer	Very High
6.9A-2	Provide a new Small Local open space in the northern part of Gap Area E1 primarily for the existing population in Elsternwick and also the existing and forecast population in the southern part of St Kilda East.	GE Developer	Very High
6.9A-3	Provide a new Small Local open space in gap area E3 to primarily meet the needs of the existing population and also for the forecast population.	GE Developer	Very High
6.9A-4	Provide a new Small Local open space in gap area E4 to meet the needs of the existing and forecast population. This has been completed with the provision of Riddell Park.	GE Developer	Complete

No.	Recommendation	Responsibility	Priority
6.9A-5	Provide a new Small Local open space in the core part of the Activity Centre on the north side of Glenhuntly Road. This is located on the Council owned Standiland Grove car park in the <i>Elsternwick Structure Plan 2018-2031</i> and is primarily for the forecast new worker and resident population in the Glenhuntly Road area.	GE Developer	Very High
6.9A-6	Provide a new Neighbourhood open space in the Urban Renewal Area between Nepean Highway and the railway, south of Glenhuntly Road, consistent with the <i>Elsternwick Structure Plan 2018-2031</i> . The new public open space is to be located where it is shown in the Structure Plan at the interface between the existing and forecast community for the following reasons: <ul style="list-style-type: none"> • The location will facilitate meeting the winter sunlight access requirements included in this Strategy, with lower built form to the north-west of the proposed new open space, • Provide excellent integration between the existing established area to the north and the proposed new higher density development to the south. 	GE Developer	Very High
6.9A-7	Investigate options to relocate the Elsternwick Croquet Club to a new location to open up this area of open space to community access given the extent of forecast growth in the activity centres adjoining Hopetoun Gardens. Currently this area is classified as Restricted sporting as access is only available on a club membership basis. The site area is currently included in the size of Hopetoun Gardens shown in Table 6.9-1 in this Strategy.	GE Developer	Very High

B Open space links

No.	Recommendation	Responsibility	Priority
6.9B-1	Investigate the potential to improve pedestrian accessibility in the street network and over the Sinclair Street Footbridge between Gap areas E2 and E1, to improve accessibility to future Local open space in E1 from E2.	GE	High
6.9B-2	Improve accessibility in the street network between Hopetoun Gardens and Gardenvale Park, via the new Small Local open space to be established in Gap area E4. If feasible, establish a walking route/circuit that encourages fitness and walking using the street network between the open spaces.	GE	High

6.9.5c Individual open space recommendations for Elsternwick and Gardenvale

D Neighbourhood open space

No.	Recommendation	Respons- ibility	Priority
6.9D-1	Harleston Park Continue to maintain the upgrades to Harleston Park. The upgrades were implemented as an action from the 2014 Strategy.	GE	Ongoing
6.9D-2	Hopetoun Gardens Investigate the need for a conservation management plan to protect the heritage features in the Gardens. The future conservation management plan will inform the recently completed Landscape Masterplan as per the original 2014 Strategy Recommendation. This will include a review of the ongoing use of Elsternwick Croquet Club for this purpose in the context of the future growth. Refer also to Recommendation 6.9A-6 regarding conversion of the Elsternwick Croquet Club to unrestricted open space.	GE	High

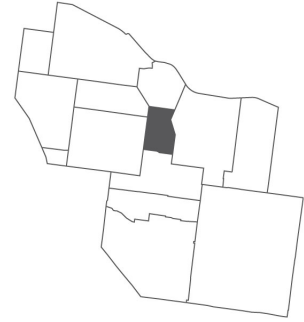
E Local open space

No.	Recommendation	Respons- ibility	Priority
6.9E-1	Elsternwick Plaza Glen Eira City Council to liaise with the Victorian Government to identify the most effective method to secure this site as open space permanently. Recently a long-term lease was signed for this site. In the longer term if this site cannot be secured permanently as open space, then Council will need to seek land contributions towards open space on the south side of Glenhuntly Road. Continue to maintain the reserve following the major upgrade in 2015, as part of the implementation of the 2014 Strategy.	GE VicTrack	Ongoing
6.9E-2	Gardenvale Park Continue to maintain this highly used open space, following the expansion of the size of this open space since the 2014 Strategy was prepared.	GE	Ongoing

F Small Local open space

No.	Recommendation	Respons- ibility	Priority
6.9F-1	Riddell Park Continue to maintain this open space, which was established to address Gap Area E4 as the implementation of Recommendation 6.9A-4 in the 2014 Strategy.	GE	Ongoing

6.10 Glen Huntly



6.10.1 Existing conditions

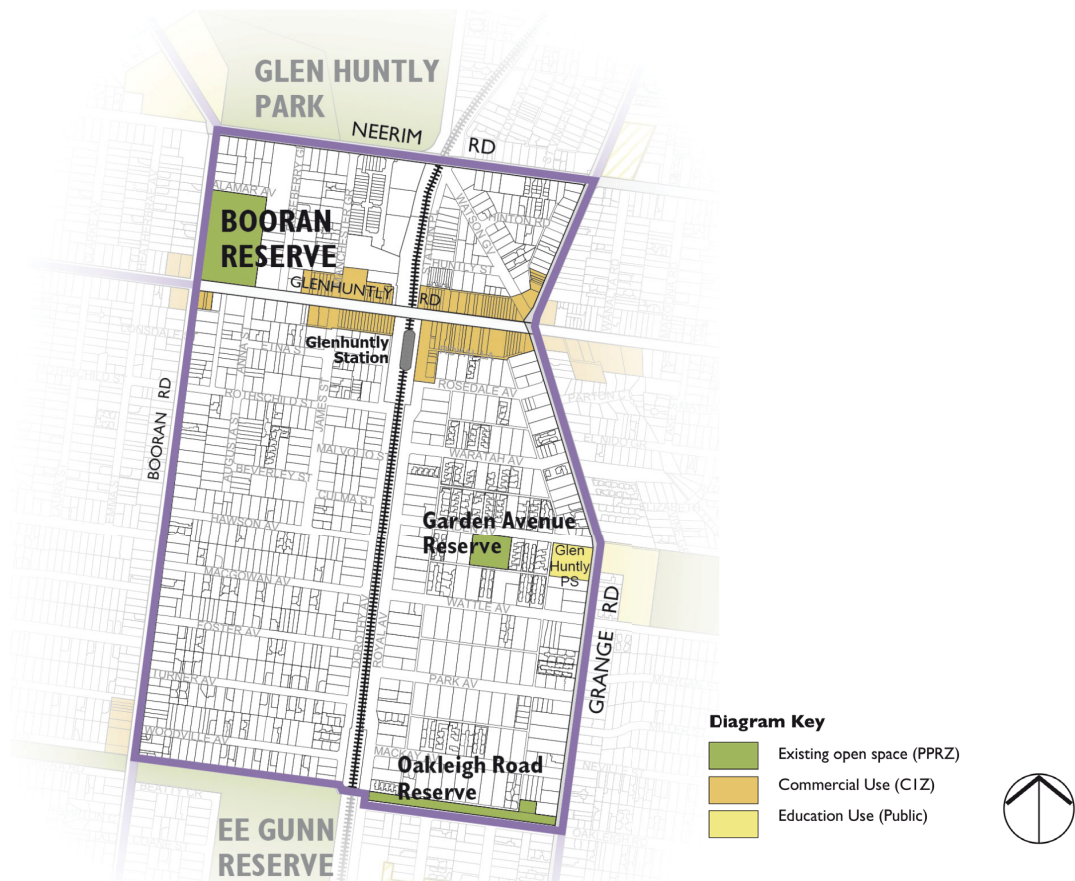


FIGURE 6.10A Existing open space in Glen Huntly

6.10.1a Overall Precinct description

Public open space

Booran Reserve has recently been developed on the former Booran Road Reservoir site. This major new Regional open space includes a regional playspace that attracts visitors from the entire municipality and further away. Oakleigh Road Reserve and Garden Avenue Reserve are the other two existing areas of open space.

Garden Avenue Reserve is located central to an area where unit developments are the dominant housing type, meaning residents have little or no open space. The reserve includes a large playground central to the open space, with open grassed areas and a seating area, along with other seating with views to a rose garden, providing an area away from the playground.

Oakleigh Road Reserve is a linear open space with heritage values as part of the former Rosstown Railway reserve. It has well-established mature trees and garden bed planting along the northern boundary between the residents to the north and the reserve. The shared trail links to the west into EE Gunn Reserve and to the east the trail continues via the street network.

Ancillary open space

The Frankston railway line traverses north-south through Glen Huntly, with an off-road shared trail on the east side, and a grassed reserve with trees to the west. The shared trail on the east extends beyond the precinct boundaries between Ormond and Glenhuntly Station, however the off-road shared trail does not continue north of Glenhuntly Road. While the shared trail connectivity is appreciated the railway corridor land is not identified as public open space as it is required for railway purposes. A future Level Crossing Removal Project is planned for Glenhuntly and Neerim Roads similar to the grade separation projects recently implemented further south.

Glen Huntly Primary School is the only public school in the precinct and the grounds are fenced with no access outside of school hours.

Land use and character

Glen Huntly is predominantly residential land use with the retail, commercial and business use associated with the Emerging Glen Huntly Major Activity Centre. It is more densely settled with the highest proportion of multi-unit developments in Glen Eira. As a result of this development pattern there is a high proportion of small households. There are no heritage precincts in Glen Huntly.

Since the preparation of the 2014 Strategy, Glen Huntly has now been identified as an Emerging Major Activity Centre.

6.10.1b Quantity of open space in Glen Huntly

Following is a brief summary of the key statistics for quantity of open space in Glen Huntly:

- 2.73 hectares of open space
- 3.1 per cent of the total suburb area is open space
- 1.6 per cent of the total open space in the City of Glen Eira
- 5 sqm of open space per person, based on the estimated population for 2016
- Within 400 metres of the precinct, other major areas of open space include Lord Reserve, Glen Huntly Park and EE Gunn Reserve. The most accessible of these is EE Gunn Reserve, whereas major roads form barriers to easy and safe walking access to the others.

6.10.1c Open space hierarchy and character in Glen Huntly

Table
6.10-1

List of existing open space type and character classification

Open space	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Booran Reserve	1.73	Regional	Play	Heritage
Garden Avenue Reserve	0.44	Local	Public garden	Play
Oakleigh Road Reserve	0.57	Local	Linear	Public garden, Heritage
Total area	2.73			

Heritage values of open space

Refer to description in 6.10.1a.

6.10.1d Distribution of open space in Glen Huntly

The railway reserve creates a north south barrier to east-west access within the precinct, and this is shown in the gap analysis diagram. The at grade pedestrian crossing over the railway near Wattle Avenue provides some connectivity, however there are inherent safety issues with at grade crossings. Glenhuntly Road forms a barrier to safe north-south access within the precinct.

East of the railway and south of Glenhuntly Road, Garden Avenue Reserve and Oakleigh Road Reserve are two Local open spaces with reasonably good access to them via the linear path along the railway in Royal Avenue. To the west of the railway, there is no off-road linear path, and people use the existing footpath for north-south access. With a predominance of east-west streets, the railway and the local north-south streets abutting it are important pedestrian links to the existing open space. It does result in longer actual travel distances for people to reach the open space and this is referred to as gap area G2.

North of Glenhuntly Road the new Booran Reserve provides both local and regional access to the new open space west of the railway. East of the railway there is no open space within an easy and safe walking distance without crossing major roads and the railway. This is referred to as Gap Area G1.

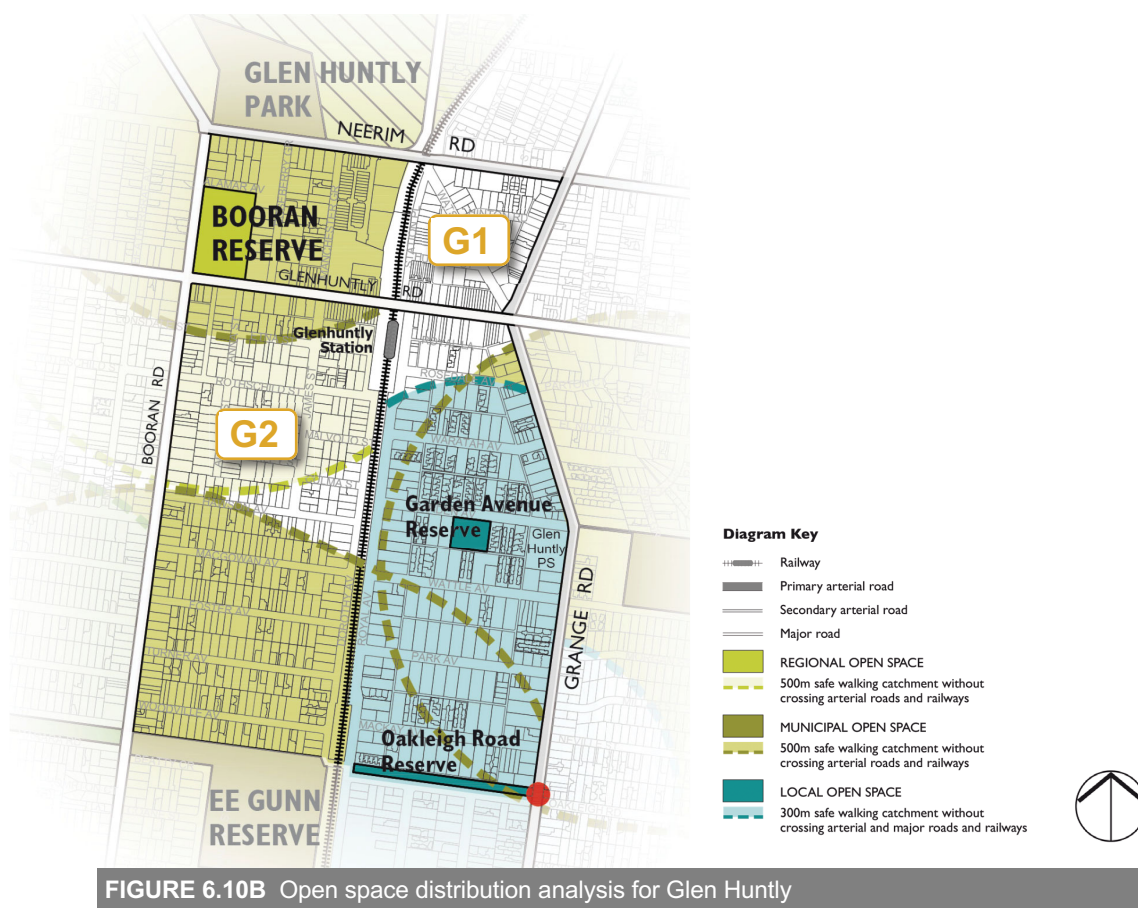


FIGURE 6.10B Open space distribution analysis for Glen Huntly

6.10.2 Community characteristics for Glen Huntly

6.10.2a Demographic summary of existing population and forecast trends

Source: ABS Census data, 2016 (.id Consulting 2018)

Age structure:

The most populous age group is 25 to 34 years, however other age groups that are also well represented include 35 to 49 years followed by 18 to 24 years. Compared with the municipal-wide average, there is a lower proportion of people in the 0 to 17 and the 25 to 34 year age ranges, and substantially less in the 35+ and older age groups.

Forecast trends through to 2031 include:

- A more pronounced increase in the 35 to 49 year age range so they become the most populous age group by 2031.
- An overall increase in the older age groups, and decline in the younger age groups.

Household type:

More than 28 per cent of the households are lone person households, followed by 25 per cent couples without dependents and 24 per cent couples with dependents. Compared with the Municipal-wide average, there is a lower proportion of couple families with dependents, and a higher proportion of lone person and group households.

Forecast trends through to 2031 include:

- Overall forecast to continue with lone person households being the most populous.
- Lone person households to increase slightly.
- Group households to decline slightly with a corresponding slight increase in couple families with dependents.

Dwelling type:

Compared with the Municipal-wide average, there are substantially more medium and high density housing in Glen Huntly, and substantially fewer separate houses. In Glen Huntly approximately 61 per cent of the population live in medium density housing, 14 per cent in high density and 24 per cent in separate houses. Between 2011 and 2016, the greatest growth was in separate houses.

Total population (2016): 5,318

Forecast population in 2031: 6,193* (increase of 875)

**Source: .id Consulting forecasts for Glen Eira suburbs, November 2018*

6.10.2b Summary of household survey outcomes for Glen Huntly

A total of 43 household surveys were received from residents of Glen Huntly, in 2012, which represents 4 per cent of the total number of surveys received. This is slightly more than the proportion of Glen Huntly residents in the Glen Eira population, which is 3.6 per cent. Note that the open space survey was undertaken prior to Booran Reserve being changed from a reservoir into a new open space.

Most frequently visited open space reserves:

Use	Open space	Reason to visit	Suggested improvements
Open space within walking distance			
56%	EE Gunn Reserve	walking (30%) dog walking (12%) exercising (12%) close to home (9%)	Provide more seating.
19%	Glen Huntly Park	close to home (7%) walking (7%) dog off-lead area (5%) exercising (5%)	Provide more dog drinking facilities, additional dog off-lead areas and dog waste bags/bins. Provide more drinking fountains, lighting, trees and seating in shaded areas. Maintain/upgrade picnic tables, undertake regular rubbish removal and remove dead and dangerous trees.
16%	Princes Park	walking (9%) large open space (7%)	Provide more café/kiosk facilities, increase diversity of playground equipment for a range of age groups and provide more seating and trees. Reduce sporting facilities, upgrade tennis facilities and provide more water (pond or lake).

Use	Open space	Reason to visit	Suggested improvements
16%	Lord Reserve	walking (9%) close to home (5%)	Provide connecting cycle paths, more informal recreational facilities, shade, recycled storm water system, additional trees and more flowing water. Reduce sporting facilities and protect deciduous trees.
16%	Garden Avenue Reserve	playground (7%) relaxing (5%) walking (5%)	Upgrade existing fencing and playground. Provide more picnic tables and seating.
Open space beyond walking distance			
23%	Caulfield Park	walking (7%) diversity of areas (5%) walking paths (5%)	Provide additional garden beds, seating and trees. Undertake regular maintenance and cleaning.
12%	Princes Park	diversity of areas (2%) dog walking (2%) large open space (2%) good quality paths (2%) playground and equipment (2%)	None
9%	Other open space outside the Glen Eira	gardens (2%) meeting people/friends (2%) open space uncluttered (2%) picnics (2%) relaxation (2%)	None
7%	Boyd Park	natural bushland environment (5%) birdlife watching (2%) provides a link (2%) picnics (2%) trees (2%)	Provide additional lighting and toilets and improve path surfaces.
5%	Koornang Park	cricket (2%) meeting people/friends (2%) sport (2%)	Provide more toilets

Types of open space used (top four):

88% large parks and gardens (non sporting)

86% local streets for exercise

84% sporting reserves

79% small local parks

Values (top four):

72% place to relax and unwind

72% trees

58% escape from the built environment

58% health and wellbeing

Activities and facilities in open space (top four):

86% walking paths

77% seats

74% open grassed areas

67% public toilets

Facility provision and maintenance:

Walking paths, seats and open grassed areas are the most frequently used as nominated in the open space survey. Provision of drinking fountains, seats and public toilets could be improved. There is a good level of satisfaction with the maintenance of facilities, with the exception of public toilets.

General comments:

- Booran Road Reservoir should be a public open space.
- Too many sporting facilities are provided.
- Enjoy using local open space.
- Provide more garden beds.

For further details on household survey outcomes, refer to Appendix A of the Strategy.

6.10.2c Implications of community characteristics on future open space planning in Glen Huntly

A high proportion of people live in medium to high density housing in Glen Huntly and more than 70 per cent are lone person households or couples without children. A common theme in the consultation outcomes for Glen Huntly is to increase the diversity of spaces and facilities. The future designs for open space are to incorporate spaces and facilities that encourage people of all ages outdoors and into the open space for fitness, social contact and overall health and wellbeing. Booran Reserve provides a major play facility and the proposed new open spaces will be important to focus on social spaces for older people.

6.10.3 Future change in Glen Huntly

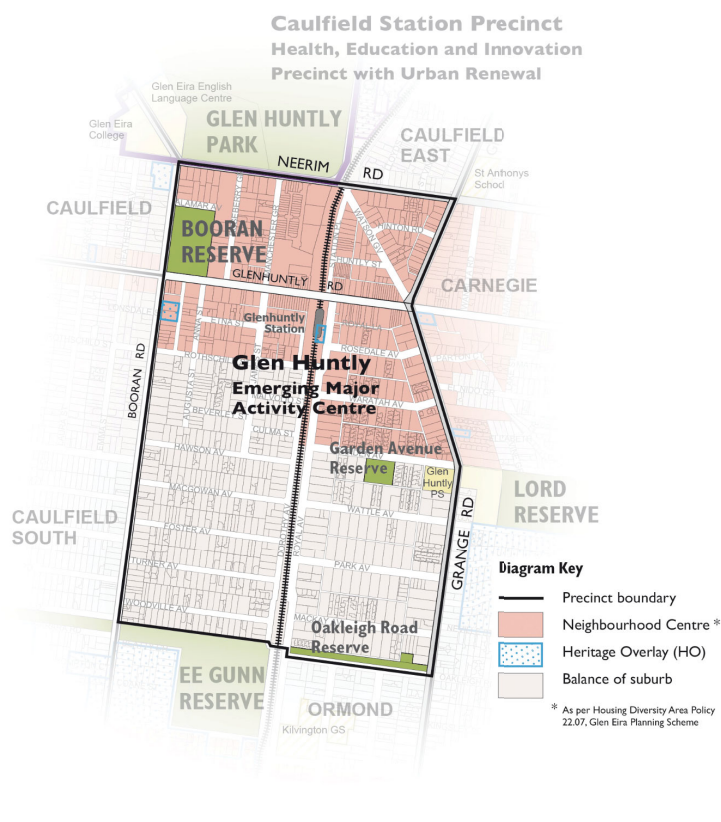


FIGURE 6.10C Future change in Glen Huntly

The *Glen Eira Housing and Local Economy Growth Assessment Report* (SGS, Dec 2018) and *22.07 Housing Diversity Area Policy* in Glen Eira Planning Scheme provides direction on future growth in Glen Huntly. The spatial location of the different areas of growth referred to in the reports and policies are reflected in Figure 6.13C. The future Glen Huntly Structure Plan (not yet prepared) will guide future growth in the emerging Glen Huntly Major Activity Centre.

A 16 per cent increase in the residential population is forecast for the suburb of Glen Huntly between 2016 and 2031. This equates to a forecast increase of 875 residents. For reference this is approximately 4 times the 222 residents that were forecast at the time the 2014 Strategy was prepared. The population data indicates that between 2013 and 2016 that more than this number (256) of new residents forecast moved into Glen Huntly.

Glen Huntly Emerging Major Activity Centre

The Glen Huntly Emerging Major Activity Centre is centred on Glenhuntly Road as the key spine, extending north to Neerim Road and south to Lord Reserve along Grange Road. The Activity Centre, Housing and Local Economy Strategy (ACHLES) describes Glen Huntly Emerging Major Activity Centre as

Glen Huntly will use Booran Reserve and the emerging cultural offerings to become a new, exciting destination that acts as a focal point for the local community with a diverse range of retail and hospitality experiences. The centre will be attractive, clean and safe, and support pedestrian and cycle access.

The Housing Diversity Area Policy 22.07 in the Glen Eira Planning Scheme encourages residential use in the commercial centre with shop top housing and apartment style developments, transitioning to the predominantly single storey detached dwellings in the catchment. In the catchment multi-unit developments could be appropriate. It is noted that developments can build up to three stories in height.

Employment population

The forecast employment population change in Glen Huntly is an additional 306 workers representing a 34 per cent increase.

Figure 6.13C also shows the extent of existing Heritage Overlay and Neighbourhood Character Overlay areas within Ormond. While redevelopment may occur within these overlay areas, it is anticipated they will receive a lower intensity of redevelopment.

6.10.4 Open space needs assessment for Glen Huntly

There are some gap areas in the distribution of open space in Glen Huntly as shown on Figure 6.10B. The recommendations to address the gap areas are included in the table below.

As noted, the scale of development in Glen Huntly is greater than forecast in the 2014 Strategy. From review of the aerial photos between 2012 and 2019, the growth has mainly occurred in the core of the Activity Centre in the vicinity of Neerim and Glenhuntly Roads.

Another factor that influences the open space needs assessment is the overall change in dwelling type with the increase in people living in medium and high density housing with less private open space within the Activity Centre.

Table 6.10-2 *Open space needs assessment for Glen Huntly*

Description	Assessment
Glen Huntly Emerging Major Activity Centre north of Glenhuntly Road	
<ul style="list-style-type: none"> The extent of the Glen Huntly Emerging Major Activity Centre north of Glenhuntly Road is shown on Figure 6.10C. West of the railway line, Booran Reserve is a recently developed Regional open space with a major playspace and picnic facilities that encourages visitors from across the municipality and the region. East of the railway there is no open space within a safe and easy walk of residents and workers via the local street network without crossing major roads or the railway. This is referred to as Gap Area G1. The Glen Huntly Emerging Activity Centre is focused around the railway station and retail and commercial strip along Glenhuntly Road. Built form is progressively increasing the amount of medium and high density development, particularly along Neerim and Glenhuntly Roads. The residential growth is forecast to continue with 744 additional residents forecast to live in the centre (north and south of Glenhuntly Road) by 2031 and 131 in the Balance of suburb, being a combined total of 875 residents. The commercial and retail floor area expansion means the worker population is also anticipated to increase. 	<ul style="list-style-type: none"> Provide a new Small Local open space between the railway and Grange Road in Gap Area G1 to meet the needs of the existing and forecast community. The focus of this Small Local open space will be to provide social facilities for residents and workers to enjoy and provide some greening in this future higher density precinct.

Description	Assessment
<ul style="list-style-type: none"> Over recent years additional high density housing has been constructed in the core of the Activity Centre. 	
Glen Huntly Emerging Major Activity Centre and Balance of suburb, south of Glenhuntly Road	
<ul style="list-style-type: none"> The extent of the Glen Huntly Emerging Major Activity Centre south of Glenhuntly Road is shown on Figure 6.10C. West of the railway line, Booran Reserve there is no existing open space and this is referred to as Gap Area G2. East of the railway Garden Avenue Reserve is an existing Local open space with playground, open grassed areas, established exotic planting and picnic facilities. It is located in the area of predominantly multi-unit developments. Oakleigh Road Reserve is a linear open space with mature established exotic trees and east-west linear shared trail connectivity. 	<ul style="list-style-type: none"> Provide a new Small Local open space west of the railway and south of Glenhuntly Road to address Gap Area Area G2 and meet the needs of the existing and forecast community. The focus of this Small Local open space will be to provide social facilities for residents and workers to enjoy as a point of difference from the major play facility at Booran Reserve.

6.10.5 Recommendations for Glen Huntly

6.10.5a Summary of overall intent

Provision and distribution

With the presence of the railway and Glenhuntly Road through the suburb, open space within safe and easy walking distance will be improved by establishing an off-road shared path to the west side of the railway line in Dorothy Avenue. Two additional Small Local open spaces are recommended to be established in and within easy and safe walking distance of the Glen Huntly Emerging Major Activity Centre to cater for the existing and forecast community.

Quality and design

The design of the new open space will need to focus on providing social facilities and a point of difference from the major new play facility at Booran Reserve. The high proportion of lone person households adds to the need for this and the other open spaces to include facilities that have well integrated social spaces.

6.10.5b Precinct recommendations for Glen Huntly

The priorities shown in the Recommendation tables are indicative only. The priorities provide guidance on the expected sequence and timeframes for the commencement of actions and may change pending the allocation of suitable funding and resources, along with the actual rate and location of forecast future growth and development.

A Additional open space

No.	Recommendation	Responsibility	Priority
6.10A-1	Investigate feasibility to establish a new municipal open space off-road shared path along the west side of the railway on council owned land (not VicTrack land). Include tree planting, and plant establishment as a barrier to deter access to the railway. This is primarily to improve accessibility to EE Gunn Reserve, adjoining the south-west boundary of this precinct. Complete.	GE (VicTrack)	High
6.10A-2	Provide a new Small Local open space north east of the railway and north of Glenhuntly Road. This is to address the existing Gap Area G1 and provide open space that is easily accessible for the existing and forecast community in this future high density precinct.	GE Developer	Very High
6.10A-3	Provide a new Small Local open space west of the railway and south of Glenhuntly Road. This is to address the existing Gap Area G2 and provide open space that is easily accessible for the existing and forecast community. It is also an opportunity to provide an open space with a focus on social facilities without a dominance of play.	GE Developer	Medium

B Open space links

No.	Recommendation	Responsibility	Priority
6.10B-1	Improve the condition, alignment, safety and accessibility of the off-road shared path system between EE Gunn Reserve and Oakleigh Road Reserve. Complete.	GE	Complete
6.10B-2	Recognise the importance of the east-west link through the precinct along Wattle Avenue and McGowan Avenue over the railway. Negotiate to retain a crossing point where feasible in any future rail line upgrades. This allows residents on the west of the railway to access Garden Avenue Reserve and Lord Reserve to the east.	GE	Ongoing
6.10B-3	Recognise the importance of the north-south link along the railway easement. With the Level Crossing Removal Project it is understood that the reserve may not be retained in the future, however an off-road north south shared trail link should be provided in Royal Avenue road reserve if feasible.	GE	Very High

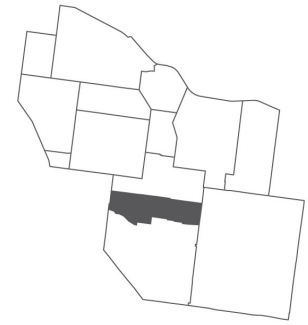
6.10.5c Individual open space recommendations for Glen Huntly**C Neighbourhood open space**

No.	Recommendation	Responsibility	Priority
6.10C-1	Booran Reserve The open space opened in April 2017. Continue to maintain.	GE	Ongoing

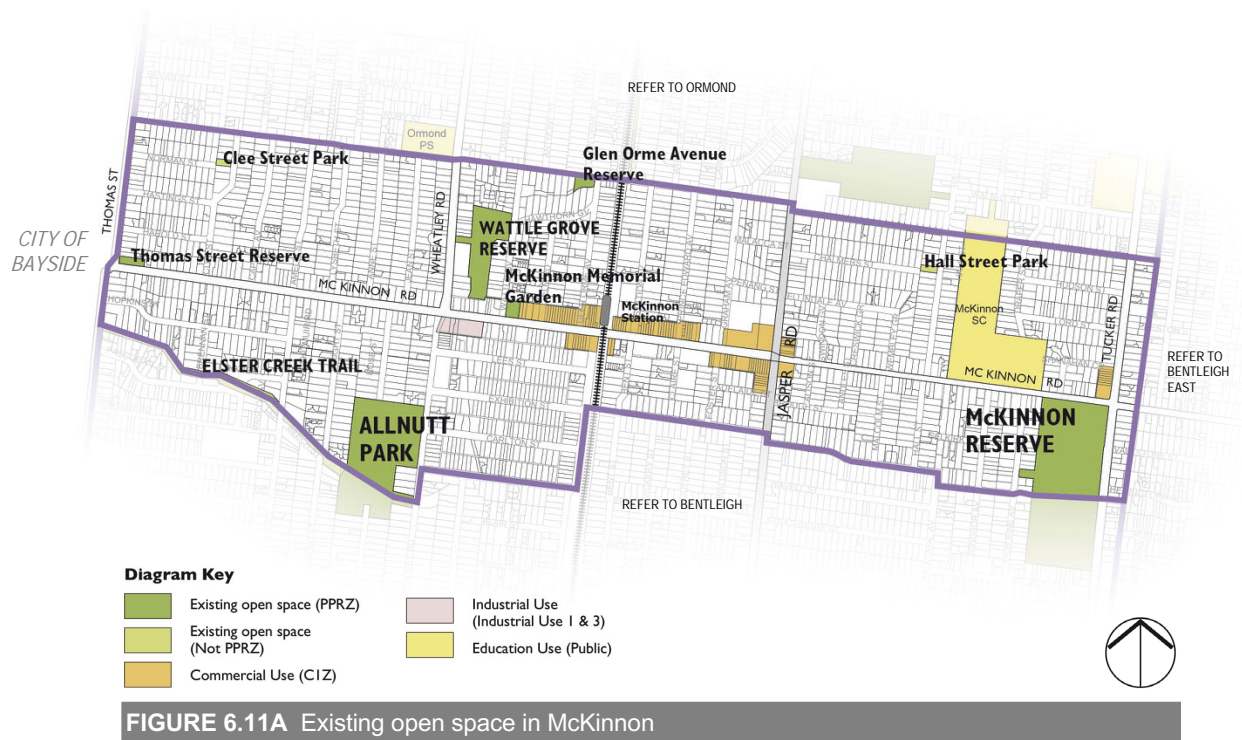
D Local open space

No.	Recommendation	Responsibility	Priority
6.10D-1	Garden Avenue Reserve Continue to maintain this open space for informal recreational use by the existing and future population. Minor upgrade required to improve informal use. Complete.	GE	Ongoing
6.10D-2	Oakleigh Road Reserve Review, update, prepare and implement a Concept Plan. This includes identifying opportunities to include facilities that expand its role in the open space network beyond a linear link only. Ensure the historical planting character is retained and improved with any proposed changes and new openings to the north.	GE	Very High
6.10D-3	Royal Avenue Shared Trail Define and rezone the existing council owned land that includes the existing shared trail along the east side of the railway, including the established trees. Council to advocate for portion of this shared path as part of the grade separation project.	GE	High

6.11 McKinnon



6.11.1 Existing conditions



6.11.1a Overall Precinct description

Public open space

McKinnon Reserve, Allnutt Park and Wattle Grove Reserve are the major areas of open space in McKinnon. Allnutt Park and Wattle Grove Reserve provide for informal and unstructured recreational use with a focus on their botanical interest and public garden setting. Allnutt Park is one the most popular parks in the municipality and is nominated in the household survey outcomes as the most popular open space in McKinnon. This is particularly for walking, play and social events. The walking path network is designed for strolling and encourages appreciation of the natural setting and character. Wattle Grove Reserve is the second most visited reserve and is popular for walking, dog walking and enjoying the ambience from the planting character in the reserve. The third most visited open space is Joyce Park, located outside the precinct in Ormond.

McKinnon Reserve has relatively low levels of use in the household survey despite this being the largest open space. The lower levels of use are in part due to the younger age group who primarily use this reserve for playing sport, and who are not well represented in the household survey outcomes. This reserve primarily caters to structured sporting use with ovals for cricket and football fields, along with an area for unstructured use in the

north with the upgraded playground and additional tree planting. A basketball half-court and climbing wall is under construction and will enhance the multi-use facilities for all ages.

For McKinnon particularly, there has been a significant level of development and change since the open space survey was undertaken in 2012 with the construction of more high density dwellings, resulting in high levels of use of the open space network.

The Elster Creek Trail connects from Allnutt Park as a linear reserve along the former creek alignment in an east-west direction. The linear reserve continues into Brighton East in the adjoining municipality, and includes a shared trail and predominantly native tree planting.

A range of other Small Local open spaces provides a diversity of spaces across McKinnon.

Ancillary open space

The recent grade separation work to the Frankston Railway Line has meant that the linear open space and shared trail previously located south of McKinnon Road on the west side of the railway line is no longer there.

McKinnon Secondary College is located north of McKinnon Reserve and has two large sports fields, however they are enclosed by adjoining residential properties and therefore not visible from the adjoining streets. Informal access to these is available out of school hours.

Land use and character

McKinnon is predominantly residential land use with the McKinnon Neighbourhood Centre providing a commercial and retail centre with convenience stores and specialty outlets along McKinnon Road. The railway station is located in the heart of the centre and with the recent grade separation works, the commercial street is more cohesive and east west pedestrian access along McKinnon Road is greatly improved.

The dominant architectural form was single storey detached dwellings, with some multi-unit developments, however this has changed significantly over the past 5 years within the McKinnon Neighbourhood Centre, particularly east of the railway to Jasper Road where medium density dwellings are now becoming the dominant dwelling type. The other major land use is education with McKinnon Secondary College.

McKinnon was developed during the inter-war period and part of the Ormond Heritage Area extends down into McKinnon. Recognised heritage and neighbourhood character precincts include:

- Field Street and Exhibition Street McKinnon Neighbourhood Character Area - significant for their mostly intact inter-war homes with uniform setbacks and well established gardens.
- Ormond Heritage Area - a small part of this extends into McKinnon and is centred on Hawthorn Grove with some Victorian houses. In McKinnon Road there is a long terrace of two storeys from Elm Grove to Glen Orme Avenue.

6.11.1b Quantity of open space in McKinnon

Following is a brief summary of the key statistics for quantity of open space in McKinnon:

- 14.18 hectares of open space, however it is noted that Allnutt Park and McKinnon Reserve extend south into Bentleigh.
- 9 per cent of the total suburb area is open space
- 8.3 per cent of the total open space in the City of Glen Eira
- 21 sqm of open space per person, based on the 2016 population (this is down from 24 sqm per person based on the estimated 2013 population)
- Within 400 metres of the precinct, other major areas of open space include Joyce Park.

6.11.1c Open space hierarchy and character in McKinnon

Table

6.11-1 List of existing open space type and character classification

Open space	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Allnutt Park	4.78	Municipal	Public garden	Informal
Clee Street Park	0.06	Small Local	Informal	
Elster Creek Trail	0.87	Local	Linear	Service easement, Nature conservation
Glen Orme Avenue Reserve	0.12	Small Local	Heritage	Botanical
Hall Street Park	0.06	Small Local	Linking space	Informal
McKinnon Memorial Garden	0.13	Small Local	Formal	
McKinnon Reserve	6.61	Municipal	Sporting	Informal, Botanical
Thomas Street Reserve	0.11	Small Local	Undeveloped	Significant Road Reservation
Wattle Grove Reserve	1.45	Neighbourhood	Public garden	Informal
Total area	14.18			

Heritage values of open space

Glen Orme Avenue Reserve

Included in the Heritage Overlay 75 as part of the Ormond Historic Area, the significance is likely to be derived from its contribution to the garden character of the streetscape, which is influenced by the gardens of the Arts and Crafts movement prevalent during the inter-war era.

6.11.1d Distribution of open space in McKinnon

As illustrated in Figure 6.11B, there is good distribution of open space across McKinnon with a range of different open space types and characters. The only area without open space within walking distance is immediately south of McKinnon Road, between Jasper Road and the railway. This corresponds with where the most development activity has occurred in the past five years with a significant increase in medium density housing in this location. The 2014 Strategy forecast negative population in this precinct, and therefore there were not recommendations for additional open space, with the gap area

to be addressed by the provision of the new Local open space in the Bentleigh Town Centre.



6.11.2 Community characteristics for McKinnon

6.11.2a Demographic summary of existing population and forecast trends

Source: ABS Census data, 2016 (.id Consulting 2018)

Age structure:

The most populous age group is 35 to 49 years, followed by 50 to 59 years. The other age groups indicate there is a dominance of family households with older dependents. Compared with the municipal-wide average, there is a higher proportion of the 35 to 59 age range, along with the 12 to 17 age range, and less 25 to 34 year olds and also less in the 60+ age range.

Forecast trends through to 2031 include:

- A pronounced increase in the 50 to 69 age range
- A pronounced decrease in the 35 to 49 age range, along with the 5 to 17 year olds.

Household type:

Approximately 45 per cent of the households are couples with dependents, 20 per cent are lone person households and 20 per cent are couple families without dependents. Compared with the Municipal-wide average, there is a higher proportion of couple families with dependents and a lower proportion of couple families without dependents and lone person households.

Forecast trends through to 2031 include:

- Couple families with dependents will decrease
- Couple families without children will increase and a slight increase in lone person households

Dwelling type:

Compared with the Municipal-wide average, there are more separate houses and less medium and high density housing in McKinnon. In McKinnon approximately 64 per cent of the population live in separate houses, 32 per cent in medium density and 3 per cent in high density dwellings. Between 2011 and 2016, the greatest growth was in medium density housing, followed by high density housing, with a corresponding decline in separate houses.

Total population (2016): 6,605*

Forecast population in 2031: 7,376* (increase of 771). By comparison the 2014 Strategy was forecasting a -27 person decline in the population. Taking the 2013 estimated population of 5,981, between 2013 and 2016 there was a population increase of 624.

**Source: .id Consulting forecasts for Glen Eira suburbs, November 2018*

6.11.2b Summary of household survey outcomes for McKinnon

A total of 64 household surveys were received from residents of McKinnon, in 2012, which represents 5.9 per cent of the total number of surveys received. This is slightly more than the proportion of McKinnon residents in the Glen Eira population, which is 4.1 per cent.

Most frequently visited open space reserves:

Use	Open space	Reason to visit	Suggested improvements
Open space within walking distance			
66%	Allnutt Park	walking (19%) dog walking (16%) play safe for children (11%) close to home (8%) meeting people/friends (8%) playground (8%)	Additional trees and garden bed improvements required.
27%	Wattle Grove Reserve	dog walking (8%) walking (6%) open space ambience and beauty (5%) play safe for children (5%)	Additional dog off-lead areas required and enforce or prohibit dog off-leash areas.
20%	Joyce Park	play safe for children (6%) dog walking (3%) meeting people/friends (3%) relaxing (3%) walking (3%)	Provide additional trees, drinking fountains and toilets.
14%	McKinnon Reserve	close to home (6%) dog walking (3%) exercising (3%) play safe for children (3%) playground (3%) walking (3%)	Provide additional paths, toilets and trees.
9%	Elster Creek Trail	dog walking (6%) relaxing (3%)	Enforce dog off-lead areas. Undertake improvements to garden beds and landscape design. Provide more dog waste bags/bins, rubbish bins, seating, trees and small native plants/grasses. Undertake regular rubbish removal and pruning of vegetation.
Open space beyond walking distance			
11%	Caulfield Park	walking (8%) birdlife watching (2%) jogging/running (2%) lake (2%) native vegetation (2%)	Undertake maintenance to paths.
8%	Packer Park	gardens (3%) events (2%) use it regularly (2%) green open space (2%) large open space (2%)	Provide more toilets and shade trees.
6%	Princes Park	convenience (2%) cycle paths (2%) dog walking (2%) meeting people/friends (2%) large open space (2%)	Provide more dog drinking facilities.
5%	Allnutt Park	convenience (3%) exercising (2%) meeting people/friends (2%) walking (2%)	Plant additional trees.

Types of open space used (top four):

91% large parks and gardens (non sporting)
 80% local streets for exercise
 78% sporting reserves
 69% small local parks

Values (top four):

77% trees
 67% place to relax and unwind
 61% place for kids to play
 58% health and wellbeing

Activities and facilities in open space (top four):

89% walking paths
 83% seats
 75% open grassed areas
 72% drinking fountains

Facility provision and maintenance:

The respondents noted that playgrounds, walking paths and open grassed areas are well provided for. Not well provided for included drinking fountains, seats and public toilets. There is a good level of satisfaction with maintenance levels, the only main exception being public toilets.

General comments:

- Additional open space required, particularly as density increases.
- Existing open space is well maintained and should be retained.
- Value the choice and variety of open space in Glen Eira.
- Provide more unstructured recreational facilities for young people.
- Provide community gardens.

For further details on household survey outcomes, refer to Appendix A of the Strategy.

6.11.2c Implications of community characteristics on future open space planning in McKinnon

In McKinnon the most popular open space is Allnutt Park which has more than double the visitation of other open spaces. The large non-sporting reserves are the most widely visited and residents highly value trees followed by as a place to relax and unwind. They appreciate the open space and identified the need for more open space as urban densities increase.

In McKinnon the population is forecast to age, with an increase in lone person and couple households without children. Providing a diversity of facilities that encourage physical and mental health and wellbeing of all ages in open space will be important. There are good levels of satisfaction with the existing open space, however a greater diversity of facilities will be required in the future. Additionally, designs that encourage people to spend time in open space for social contact will be important as more people live alone in McKinnon in the future.

6.11.3 Future change in McKinnon

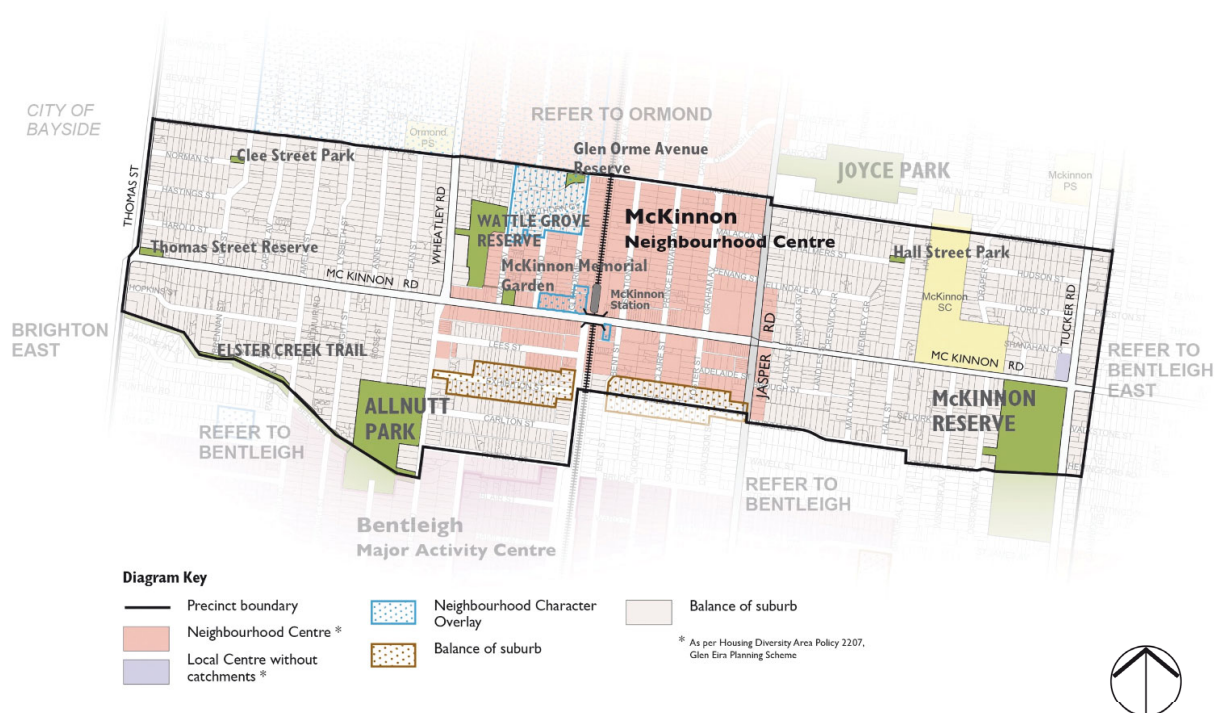


FIGURE 6.11C Future change in McKinnon

The *Glen Eira Housing and Local Economy Growth Assessment Report* (SGS, Dec 2018) and *22.07 Housing Diversity Area Policy* in the Glen Eira Planning Scheme (accessed 28 February 2019) provides direction on future growth in McKinnon. The spatial location of the different areas of growth referred to in the reports and policies are reflected in Figure 6.11C.

A 12 per cent increase in the residential population is forecast for the suburb of McKinnon between 2016 and 2031. This equates to a forecast increase of 771 residents. For reference this is significantly different from the reduction in the resident population for McKinnon in the 2014 Strategy. At that time the forecast was for a loss of 27 residents by 2026, and the 2016 population data indicates that between 2013 and 2016 an additional 624 people moved into McKinnon.

Approximately 70 per cent of the forecast residents are planned to live in the McKinnon Neighbourhood Centre with the remaining 30 per cent in the balance of the suburb, which includes the catchments of the East Village Precinct and the Bentleigh East Neighbourhood Centre.

McKinnon Neighbourhood Centre

The McKinnon Neighbourhood Centre on McKinnon Road has been experiencing some substantial change in its catchment over the past five years, particularly south of McKinnon Road between the railway and Jasper Road. The vision for the centre set out in the ACHLES is:

McKinnon will be an accessible centre with a strong village feel, which recognises and celebrates its heritage and local history. With a unique offering of retail and hospitality options, the centre will cater for the local community while retaining its charm.

The Housing Diversity Area Policy 22.07 in the Glen Eira Planning Scheme encourages residential use in the commercial centre with shop top housing and apartment style developments, transitioning to the predominantly single storey detached dwellings in the catchment. In the catchment multi-unit developments could be appropriate. It is noted that developments can build up to three stories in height.

Employment population change

The forecast employment population change is an additional 472 workers over the 2016-2031 period, representing a 40 per cent increase (SGS, 2018).

As noted earlier there is forecast to be a 12 per cent growth in the resident population in McKinnon, which is a significant change from the forecast residential population decrease of 27 people in McKinnon when the 2014 Strategy was prepared. Based on the 2013 estimated population in the 2014 Strategy and the 2016 population figures, there has been 624 more people move into the suburb.

6.11.4 Open space needs assessment for McKinnon

As noted, the scale of development in McKinnon has been greater than forecast, and this may have been partly due to the level crossing removal project improving the train station and overall amenity in the urban centre. Specifically, the growth over the past 5 years or so has been strongest in the area south of McKinnon Road and this corresponds with the only gap area in McKinnon.

Another factor that influences the open space needs assessment is the overall change in household size and structure. There will be a decline in the proportion of young families and increase in couple and lone person households. Therefore, in future open space design there will be a focus on increasing facilities that appeal to adults to attract them outdoors to be active and social.

**Table
6.11-2**

Open space needs assessment for McKinnon

Description	Assessment
McKinnon Neighbourhood Centre (South of McKinnon Road)	
<ul style="list-style-type: none"> The extent of the McKinnon Neighbourhood Centre catchment South of McKinnon Road is shown on Figure 6.11C. West of the railway line, the northern extent of Allnut Park, a Municipal open space is located in this catchment. The survey outcomes note this is the most popular open space and the mature trees, undulating topography and size contribute to its unique character. 	<ul style="list-style-type: none"> Upgrade and expand the facilities in Allnut Park to cater to the recent and forecast new population in the Neighbourhood Centre along with the forecast additional population in the Bentleigh Major Activity Centre. Undertake a minor upgrade to McKinnon Memorial Garden to provide more seating opportunities and activate the interface to McKinnon Road and the adjoining commercial use to increase the use of this

Description	Assessment
<ul style="list-style-type: none"> • Elster Creek Trail includes a shared trail that follows the alignment of the creek and provides off-road shared trail connectivity for residents in this catchment to Allnutt Park. • The McKinnon Neighbourhood Centre is a retail strip and commercial centre along McKinnon Road. The recent Level Crossing Removal Project has improved pedestrian access within the centre with the grade separation work and the new station construction. • Urban densities have substantially increased in the catchment of McKinnon Road over the past five years, particularly between the railway and Jasper Road, south of McKinnon Road. The single detached dwellings have changed to three and four storey apartments meaning people have little or no private open space. • In 2014, the population was forecast to decline by 27 in the McKinnon Neighbourhood Centre catchment. By contrast, the population has increased over the 2011 to 2016 period by 137 people and the rate of dwelling growth is forecast to continue at a similar pace, with an additional 316 dwellings or 540 people forecast to be living in the catchment of the Neighbourhood Centre by 2031. These figures apply to the whole catchment both North and South of McKinnon Road. • The previous policy notes that shop top housing and small apartment style development would be appropriate in the core of the McKinnon Neighbourhood Centre. Similarly in the residential catchment of the centre, developments of up to three stories may be supported. 	<ul style="list-style-type: none"> • reserve. This is primarily for the existing and also for the forecast population. • Provide a new Small Local open space between the Railway and Jasper Road to address the existing gap area and provide an open space within safe and easy walking distance of existing and forecast residents and workers.

Description	Assessment
McKinnon Neighbourhood Centre (North of McKinnon Road)	
<ul style="list-style-type: none"> The extent of the McKinnon Neighbourhood Centre north of McKinnon Road is shown on Figure 6.11C. West of the railway line McKinnon Memorial Garden is a Small Local open space on McKinnon Road with a formal setting and the war cenotaph at the centre of the reserve. Wattle Grove Reserve is a Neighbourhood open space with a playground, picnic and barbecue and multi-use court. Glen Orme Avenue Reserve is a Small Local open space with mature trees and garden beds. East of the railway the only open space is the linking space - Hall Street Park, which includes a path link to the school. The land use is predominantly residential with commercial use along the northern side of McKinnon Road. Refer to the description of forecast growth in the McKinnon Neighbourhood Centre (South of McKinnon Road). 	<ul style="list-style-type: none"> People living and working on the west side of the railway have access to a diversity of open space. There is scope to improve the design of the McKinnon Memorial Garden to improve and activate the interface to the McKinnon Road and adjoining commercial use to make it more accessible. Undertake minor upgrades to Wattle Grove Reserve to improve the function of this open space, particularly in the southern extent of the reserve. This will better cater to the open space needs of the recent and forecast future residents and workers in the Neighbourhood Centre.
Balance of suburb	
<ul style="list-style-type: none"> The balance of suburb includes the western extent of McKinnon towards Thomas Street and the eastern extent to Tucker Road, as shown in Figure 6.11C. McKinnon Reserve is a key Municipal sporting reserve. Currently the playground is being upgraded in the north of the reserve to cater to a range of age groups including young adults. Thomas Street Reserve includes large mature exotic trees with seating and functions as a gateway entry being on the corner of two major roads. Clee Street Park functions as a Small Local open space with a small play facility, trees, seats and a linking path. This residential precinct has predominantly detached dwellings with limited change with a forecast 231 additional residents by 2031. McKinnon Secondary College provides some ancillary open space in the east towards Tucker Road. 	<ul style="list-style-type: none"> With McKinnon Reserve currently being upgraded no additional upgrades are required once complete. Undertake an upgrade to Hall Street Park to improve its character and role in the open space network by adding seating and improved planting. Undertake minor improvements to the landscape character of Clee Street Park.

6.11.5 Recommendations for McKinnon

6.11.5a Summary of overall intent

Provision and distribution

Open space is reasonably well provided for and distributed across McKinnon. With the focus of increased urban densities and population growth in the catchment of the Town Centre and specifically in the gap area, a new Small Local open space is recommended close to or on McKinnon Road.

Quality and design

The design of the existing open spaces will be upgraded to incorporate a greater diversity of facilities for unstructured recreational use and social spaces to appeal to the changing demographics towards a lower proportion of young families and higher proportion of adults in the 50 to 69 age range.

6.11.5b Precinct recommendations for McKinnon

The priorities shown in the Recommendation tables are indicative only. The priorities provide guidance on the expected sequence and timeframes for the commencement of actions and may change pending the allocation of suitable funding and resources, along with the actual rate and location of forecast future growth and development.

A Additional open space

No.	Recommendation	Respons- ibility	Priority
6.11A-1	Provide an additional Small Local open space in McKinnon between the railway and Jasper Road and south of McKinnon Road. This will provide open space in the heart of the higher density precinct that has and is forecast to continue to change to predominantly apartments where people have little or no private open space. This is primarily for the recent and forecast community and will address gap area MK1.	GE Developer	Very High

6.11.5c Individual open space recommendations for McKinnon

B Municipal open space

No.	Recommendation	Respons- ibility	Priority
6.11B-1	Allnutt Park Prepare a Landscape Masterplan/and or undertake major improvements to and expand the social facilities including the picnic and barbecue areas, seating and unstructured recreation facilities for older people. This is primarily to cater to the recent and forecast population in McKinnon and Bently.	GE	Very High

No.	Recommendation	Responsibility	Priority
6.11B-2	McKinnon Reserve Continue to implement the major upgrade works to the unstructured recreation and social facilities in the reserve.	GE	Very High

C Neighbourhood open space

No.	Recommendation	Responsibility	Priority
6.11C-1	Wattle Grove Reserve Undertake minor upgrade to improve circulation through the reserve including connectivity between seating areas and facilities and improved layout and design of the southern end of the reserve, including additional large canopy trees to add scale and character.	GE	Medium

D Local open space

No.	Recommendation	Responsibility	Priority
6.11D-1	Elster Creek Trail Continue to maintain this linear open space link.	GE	Ongoing

E Small Local open space

No.	Recommendation	Responsibility	Priority
6.11E-1	Clee Street Park Continue to maintain this open space and improve landscape amenity and character with additional trees and planting to the perimeter of the reserve.	GE	Medium
6.11E-2	Glen Orme Avenue Reserve Minor upgrade including provision of additional seating/social facilities for the existing and forecast community consistent with the established exotic and heritage character.	GE	Medium
6.11E-3	Hall Street Park Undertake a minor upgrade to improve the character and role of this linking space to include seating and additional planting to improve the character.	GE	Medium
6.11E-4	McKinnon Memorial Garden Undertake a major upgrade retaining the primary purpose as a memorial garden while increasing the levels of use through activating the interface to McKinnon Road with additional seating, planting and paths.	GE	High
6.11E-5	Thomas Street Reserve Continue to maintain upgraded reserve that was completed in 2015.	GE	Ongoing

6.12 Murrumbeena

6.12.1 Existing conditions

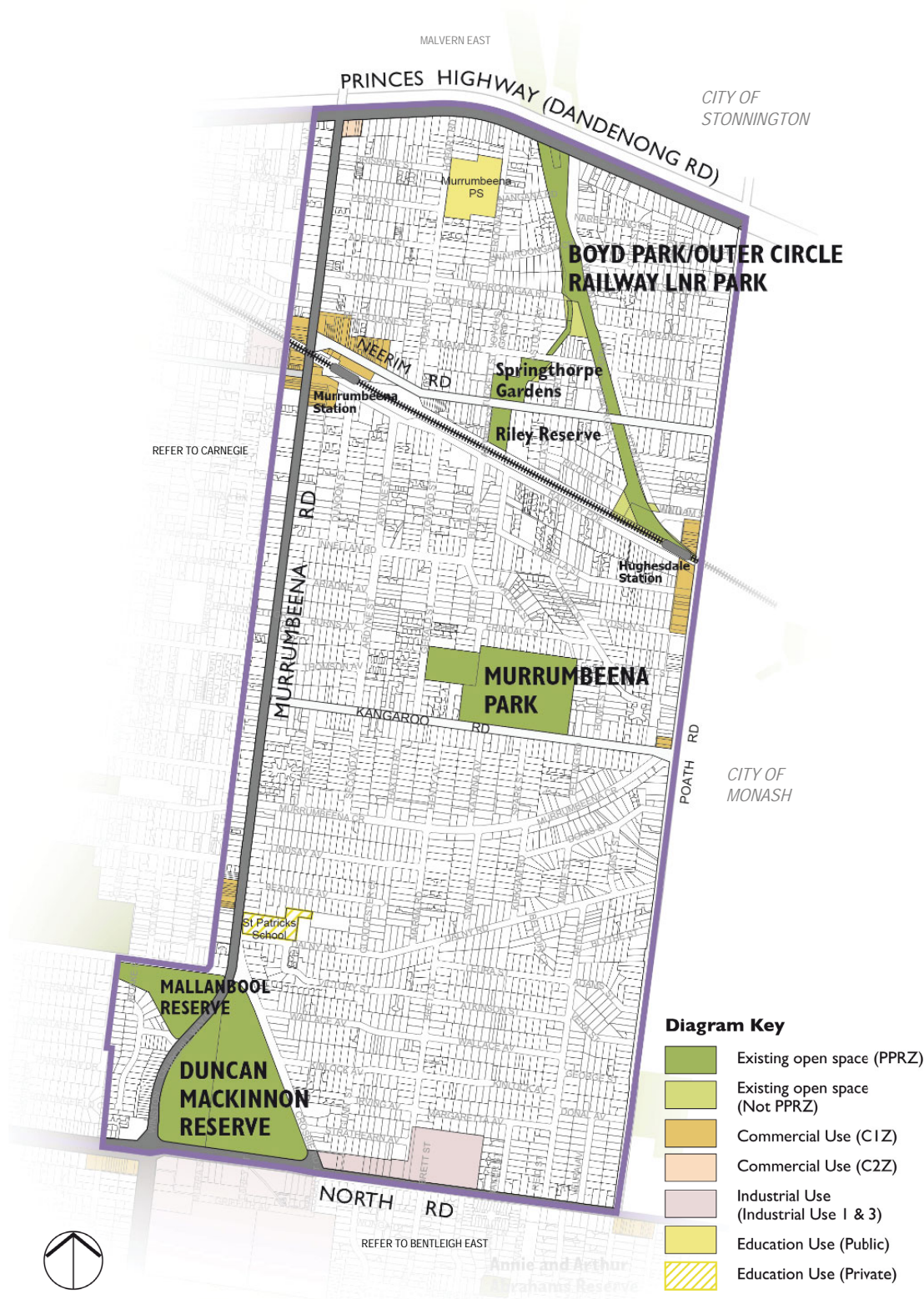


FIGURE 6.12A Existing open space in Murrumbeena

6.12.1a Overall Precinct description

Public open space

Murrumbeena Park, Duncan Mackinnon Reserve and Boyd Park are the three major Municipal open space reserves in Murrumbeena. The open space surveys identified that Boyd Park is the most popular followed by Murrumbeena Park and Duncan Mackinnon Reserve, however site visits indicate all three are well used and popular.

Boyd Park is a linear open space and part of the former Outer Circle Railway that originally extended further north to Kew East. Boyd Park also links south to the Hughesdale Station. As part of the former Outer Circle Railway it is recognised for its heritage values and its environmental character including significant stands of indigenous vegetation including some very large remnant Red Gums. The main reasons people visit the reserve is for walking, dog walking, visiting the playground, cycling, convenient/close by and its natural character and trees.

Murrumbeena Park is popular for walking, dog walking, the playground, exercising and participating in sport. The major playground and picnic area is popular and a new Pavilion/Community Hub is currently in the design phase. The sports field is used by the Murrumbeena Football Netball Club, Murrumbeena Junior Football Club and Murrumbeena Cricket Club. The Murrumbeena Park Bowls Club are based at the reserve as well.

Duncan Mackinnon Reserve is popular for walking, jogging, exercising and to a lesser extent dog walking. The reserve has received major upgrades in the past few years including construction of a new sports pavilion for the netball and athletics clubs, inclusive of two grandstands of 450 seats for viewing the athletics events and 100 seats for viewing netball events. The athletics facility is now one of the highest quality athletics venues in metropolitan Melbourne. The sports field is used for cricket, soccer and football with a range of clubs based at the reserve. The athletics track is available for use by the community when not being used for training by the clubs and schools. Other features and facilities include outdoor netball courts which have recently been expanded and the 1.2 kilometre circuit perimeter unsealed walking/jogging track is popular as well. Duncan Mackinnon Reserve provides expansive views over the reserve from the northern end, and the large remnant River Red Gum in the reserve adds scale and character.

At a neighbourhood scale, Mallanbool Reserve provides open space connectivity between the popular Packer Park (in Carnegie) and Duncan Mackinnon Reserve. The landscape treatment including ephemeral water quality treatment wetland features and the trail system with interpretive signage, reflects some of the original landscape character of Glen Eira when there were numerous low lying swamps and River Red Gum woodland. The tennis facility at this reserve contrasts to the natural landscape character of the remainder of the reserve.

Major upgrades to the Melbourne Water drainage system through the linked smaller open space reserves including Springthorpe Gardens and Riley Reserve will result in the upgrades to both these reserves when the drainage works are complete. The exotic character of these reserves provides diversity in landscape character from the predominantly native and indigenous landscape character of the nearby Boyd Park.

The Level Crossing Removal Project and elevated rail has provided north south connectivity within the precinct, which is a significant change from the previous barrier that the railway line presented to pedestrian access and movement. The new Djerring Trail, a continuous shared linear path along the railway easement improves the recreational opportunities within the precinct.

Ancillary open space

The Pakenham/Cranbourne Line railway runs east-west through Murrumbeena and with implementation of the Level Crossing Removal Project has created a linear open space corridor with the Djerring Trail extending between Caulfield and Dandenong. The elevated rail viaduct has improved north south connectivity through Murrumbeena making it easier for people to access the activity centres and open space on foot and by bicycle.

Murrumbeena Primary School grounds are located in the north of the precinct near Boyd Park and contribute to the open space character.

Land use and character

Murrumbeena is a predominantly residential suburb with mixed character and housing types. North of the Dandenong railway line is a more diverse housing style and character while further south there are predominantly single detached dwellings. The area to the north was largely developed during the inter-war period and in the south are predominantly post war dwellings. Between the railway and Kangaroo Road, and also east of Boyd Park there is a predominance of California Bungalows, and north west of the railway is a mixture of Edwardian and inter-war period dwellings.

The recently completed Level Crossing Removal Project on the Cranbourne/Pakenham railway line has transformed the heart of the Murrumbeena and Hughesdale. This project has involved the complete reconstruction of railway as two elevated rail viaducts opening up the railway corridor at ground level to provide an off-road linear Djerring shared trail, car parking and other community uses including seating spaces at the station entries. At Carnegie there is a multi-purpose space with features including courts, outdoor table tennis and fitness equipment which is accessible via the shared trail.

Areas within Murrumbeena recognised for the heritage and neighbourhood character values include:

- Boyd Park Area - this is significant for its tree-lined streets grading down to Boyd Park and the picturesque inter-war and post-war homes with landscaped gardens.
- Beauville Estate - an early AV Jennings Estate purchased in 1933 associated with the small group of shops on Murrumbeena Road, this represents an early estate development incorporating a range of features including roads, shops, recreation facilities and housing. Located directly to the north of this precinct is the Lindsay Avenue area that is an intact street of Californian Bungalows.

6.12.1b Quantity of open space in Murrumbeena

Following is a brief summary of the key statistics for quantity of open space in Murrumbeena:

- 21.20 hectares of open space
- 8.1 per cent of the total suburb area is open space
- 12 per cent of the total open space in the City of Glen Eira
- 20 sqm of open space per person, based on the population for 2016 (this was 21 sqm per person in 2014).
- Within 400 metres of the precinct, other major areas of open space include Packer Park and Urban Forest Reserve (Stonnington).

6.12.1c Open space hierarchy and character in Murrumbeena

**Table
6.12-1**

List of existing open space type and character classification

Open space	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Boyd Park	3.79	Municipal	Linear	Nature conservation
Duncan Mackinnon Reserve	8.68	Municipal	Sporting	Informal, Nature conservation
Mallanbool Reserve	2.21	Neighbourhood	Nature conservation	Restricted sporting, Informal, Linking space
Murrumbeena Park	5.34	Municipal	Sporting	Informal
Riley Reserve	0.41	Local	Informal	
Springthorpe Gardens	0.75	Local	Heritage	Public garden
Total area	21.20			

Heritage values of open space

Boyd Park Outer Railway Linear Park, Springthorpe Gardens and Riley Reserve are recognised for their significant landscape character values including remnant indigenous and exotic vegetation and the contribution they make to the surrounding neighbourhood character. Refer to Section 2.5.1 of this Strategy for descriptions of the specific values.

6.12.2 Community characteristics for Murrumbeena

6.12.2a Demographic summary of existing population and forecast trends

Source: ABS Census data, 2016 (.id Consulting 2018)

Age structure:

The most populous age group is 35 to 49 years, followed by 25 to 34 years and the 50 to 59 years. Compared with the Municipal-wide average, there is a slightly higher proportion of the young workforce (25 to 34) and a slightly lower proportion of 60+ year olds.

Forecast trends through to 2031 include:

- A minor decrease proportionally in the 25 to 34 and 50 to 59 age range.
- An increase proportionally in the 60 to 84 age range.

Household type:

Approximately 28 per cent of the households are lone person, and 32 per cent couple families with dependents, followed by 23 per cent as couples without children. Compared with the Municipal-wide average, there is a higher proportion of lone person households and slightly lower proportion of couple families with dependents.

Forecast trends through to 2031 include:

- A slight increase in couple families without children.
- A slight decrease in couple families with children.

Dwelling type:

Compared with the Municipal-wide average, there are more medium density dwellings in and less separate houses in Murrumbeena. Approximately 49 per cent of the population live in medium density while 47 per cent live in separate houses (compared to 49 per cent as the municipal average). Approximately 5 per cent live in high density dwellings. Between 2011 and 2016, the greatest growth was in medium density housing.

Total population (2016): 10,095

Forecast population in 2031: 11,621* (increase of 1,526, with forecast population from the 2014 Strategy already exceeded by 2016)

*Source: .id Consulting forecasts for Glen Eira suburbs, November 2018

6.12.2b Summary of household survey outcomes for Murrumbeena

A total of 77 household surveys were received from residents of Murrumbeena, in 2012, which represents 7.1 per cent of the total number of surveys received. This equals the proportion of Murrumbeena residents in the Glen Eira population, which is 7.1 per cent.

Most frequently visited open space reserves:

Use	Open space	Reason to visit	Suggested improvements
Open space within walking distance			
51%	Boyd Park	walking (17%) dog walking (13%) playground (10%) relaxing (8%)	Provide additional toilets and trees.
40%	Murrumbeena Park	walking (12%) dog walking (10%) playground (10%) dogs off-lead area (6%) exercising (6%)	Provide shade to playgrounds, provide additional trees and toilets and enforce dog off-lead areas.
23%	Duncan Mackinnon Reserve	walking (9%) jogging/running (6%) exercising (5%) dog walking (4%) fitness (4%)	Provide additional lighting.
18%	Packer Park	exercising (5%) playground (5%) dog walking (4%) play safe for children (3%) velodrome (3%)	Improve basketball ring/half court. Provide additional BBQ's, dog drinking facilities, dog off-lead areas, fencing, garden beds, shade and trees. Undertake maintenance to graffiti and toilets.
10%	Other open space outside Glen Eira	walking (3%) birdlife watching (1%) dogs socialising (1%) dog walking (1%) facilities (1%)	Improve access, plant more native/indigenous vegetation to attract birdlife, expand open space and provide more sporting facilities.
Open space beyond walking distance			
13%	Packer Park	playground and equipment (8%) large open space (3%) dog off-lead areas (1%) events (1%) exercising (1%)	Provide more equipment, trees, vegetation and seating in shaded areas. Improve access. Undertake graffiti removal and maintenance to toilets. Upgrade existing sporting facilities, reduce risk of lake to children and keep open space uncluttered.
12%	Caulfield Park	picnics (3%) lake (3%) ambience and beauty (1%) convenience (1%) diversity of areas (1%)	Provide more café/kiosk facilities, events, sporting facilities, toilets and native/indigenous planting.
9%	Duncan Mackinnon Reserve	exercising (4%) walking (4%) netball (3%)	Provide more seating.

Use	Open space	Reason to visit	Suggested improvements
		ambience and beauty (1%) dog walking (1%)	
8%	Other open space outside Glen Eira	playing with children (3%) convenience (1%) cycling (1%) dog off-lead area (1%) meeting people/friends (1%)	Provide additional seating near playground.
4%	Boyd Park	BBQ's (1%) cycling paths (1%) meeting people/friends (1%) walking paths (1%)	Not completed.

Types of open space used (top four):

90% sporting reserves
81% local streets for exercise
79% outer circle linear park
75% small local parks

Values (top four):

65% trees
58% place to relax and unwind
55% health and wellbeing
53% Refuge for native plants and animals

Activities and facilities in open space (top four):

94% walking paths
78% seats
77% open grassed areas
66% drinking fountains

Facility provision and maintenance:

The provision of facilities could be improved for drinking fountains and public toilets.
Generally facilities are well maintained.

General comments:

- Additional open space required, particularly as urban density increases.
- Maintain the existing character of open space and keep/retain what there is.
- Dog off-lead areas require enforcement; there are some personal safety concerns.
- Additional dog off-lead areas required.

For further details on household survey outcomes, refer to Appendix A of the Strategy.

6.12.2c Implications of community characteristics on future open space planning in Murrumbeena

The survey outcomes in 2012 identified that Boyd Park is the most frequently visited open space in Murrumbeena, followed by Murrumbeena Park and Duncan Mackinnon Reserve. Walking is the most popular activity and facility used in open space and this is reinforced by people nominating they use local streets for exercise as the second most popular type of open space following large sporting reserves. While large sporting reserves are the

most popular type of open space, the reasons they visit them is primarily for unstructured recreation use and not structured sport. Trees are the most valued feature of open space followed by it being a place to relax and unwind. There were comments that additional open space is required as urban densities increase and confirmation that the existing character of open space is appreciated and to be protected.

In Murrumbeena there will continue to be a combination of families and lone person households and a trend towards more people living in medium to high density housing. The age range will remain fairly consistent with the most populous age groups being adults between 24 and 50 years of age, along with an increase in the proportion of older people. Open space needs to be designed to accommodate all age groups with an emphasis on older age groups, including social spaces.

6.12.3 Future change in Murrumbeena



FIGURE 6.12C Future change in Murrumbeena

The *Glen Eira Housing and Local Economy Growth Assessment Report* (SGS, Dec 2018) and *22.07 Housing Diversity Area Policy* in the Glen Eira Planning Scheme (accessed 28 February 2019) provides direction on future growth in Murrumbeena. The spatial location of the different areas of growth referred to in the reports and policies are reflected in Figure 6.12C.

Approximately 50 per cent of the forecast residents are planned to live in the Murrumbeena Neighbourhood Centre, 30 per cent are planned to live in the Hughesdale Neighbourhood Centre and 20 per cent in the balance of the suburb.

A 9 per cent increase in the residential population is forecast for the suburb of Murrumbeena between 2016 and 2031. This equates to a forecast increase of 974 residents. For reference this is approximately 1.5 times greater than the forecast resident population for Murrumbeena in the 2014 Strategy. At that time the forecast was for an additional 648 residents by 2026, and the 2016 population data indicates that all those forecast to live in Murrumbeena by 2026 were already living there by 2016.

Murrumbeena Neighbourhood Centre

Murrumbeena Neighbourhood Centre is centred on the east side of Murrumbeena Road and north and south of Neerim Road and Railway Parade. The Activity Centre, Housing and Local Economy Strategy (ACHLES) describes Murrumbeena Neighbourhood Centre as

Murrumbeena will be a leafy and green local centre with a strong community and environment focus. With a mix of local businesses to meet residents' daily needs, the accessible, pedestrian-friendly centre will maintain a safe village feel and embrace its local history.

The Housing Diversity Area Policy 22.07 in the Glen Eira Planning Scheme encourages residential use in the commercial centre with shop top housing and apartment style developments, transitioning to the predominantly single storey detached dwellings in the catchment. In the catchment multi-unit developments could be appropriate. It is noted that developments can build up to three stories in height.

Hughesdale Neighbourhood Centre

Hughesdale Neighbourhood Centre is centred on the west side of Poath Road and north and south of the new Hughesdale Railway Station. The ACHLE describes Hughesdale Neighbourhood Centre as

Hughesdale will be a rejuvenated and inviting centre with a mix of small local businesses, cafes and restaurants boosted by strong transport connections. The family-friendly centre will have a cohesive community feel enhanced by consistent urban treatments, including green spaces and opportunities for social interaction.

Figure 6.12C illustrates the extent of the two Neighbourhood Centres and the Balance of suburb. It also shows the extent of existing Heritage Overlay and Neighbourhood Character Overlay areas within Murrumbeena as described in 6.12.1a. While redevelopment may occur within these overlay areas, it is anticipated they will receive a lower intensity of redevelopment.

Employment population change

The forecast employment population change is an additional 460 workers over the 2016-2031 period, representing a 33 per cent increase (SGS, 2018).

6.12.4 Open space needs assessment for Murrumbeena

Refer to the Future Change Diagram, Figure 6.12C for the sub-precincts described in Table 6.12-2.

The gap in the distribution of open space in Murrumbeena is located in the Murrumbeena Neighbourhood Centre where the largest proportion of the forecast residents are planned to live. This is also exacerbated by the gap in the provision of open space west of Murrumbeena Road in the remainder of the Centre located in Carnegie. Medium density development is forecast to occur within the Centre with 473 additional residents living in the centre and more workers based on the forecast expansion to the floor area available for both commercial and retail use. People will be living and working in higher density dwellings with less private open space and therefore will rely more on public open space. The provision of unencumbered open space (including open to the sky) will assist with creating sustainable liveable medium to high density precincts. It will provide the community with access to natural features and winter sunlight for their mental and physical health and wellbeing and contribute to mitigating urban heat island effect.

Table 6.12-2 Open space needs assessment for Murrumbeena

Description	Assessment
Murrumbeena Neighbourhood Centre (part)	
<ul style="list-style-type: none"> The extent of the Murrumbeena Neighbourhood Centre is shown on Figure 6.12C. Part of Boyd Park/Outer Circle Railway Linear Park is located east of the centre. It includes remnant indigenous vegetation, linear shared trail, play facilities and seating. Springthorpe Gardens and Riley Reserve are connected to Boyd Park and provide a contrast with predominantly mature exotic trees, seating and open grassed areas. The Pakenham/Cranbourne railway reserve is a key ancillary open space. It provides excellent east-west pedestrian and cycle connectivity, including links to Springthorpe Gardens, Riley Reserve and Boyd Park. The previous directions in the 2014 Strategy for the Murrumbeena Neighbourhood Centre included encouraging shop top housing and apartment style development in the retail and mixed use section of the centre. In the residential catchment significant levels of multi-unit developments surround the centre to the east. To the north and south the larger lots contain existing apartments which have the potential to be refurbished and potentially achieve higher yield. Currently, there is no existing open space in the heart of the Murrumbeena Neighbourhood Centre. 	<ul style="list-style-type: none"> There is forecast to be an additional 470 people living in the centre by 2031, which represents a 15 per cent increase from the 2016 estimated population of 3,130. Given that the only existing open space is located east of main centre, recommend providing a Local open space in the heart of the centre. There is an opportunity to provide this to the north of the Murrumbeena Station facing Neerim Road. This would function as a green square in the heart of the centre. If this location is not viable, an alternative site in the centre in or close to the commercial centre with excellent access, visibility, opportunity for greening and winter sunlight access. Continue to undertake minor upgrades to Riley Reserve and Springthorpe Gardens to improve their function and use and reinforce their exotic landscape character. Refer also to Carnegie for the western extent of the Murrumbeena Neighbourhood Centre.

Description	Assessment
Hughesdale Neighbourhood Centre	
<ul style="list-style-type: none"> • The extent of Murrumbeena Neighbourhood Centre is shown on Figure 6.12C. • Boyd Park is located immediately adjoining the commercial heart of the Hughesdale Neighbourhood Centre. It is directly accessible from the new Hughesdale Railway Station. The park has magnificent remnant River Red Gums and the indigenous vegetation that significantly contributes to the landscape character of this centre. • Murrumbeena Park is located directly adjacent to Hughesdale Neighbourhood Centre, south of the railway. The Municipal open space includes a circuit path, large playground and adjoining picnic and barbecue facilities, two sports fields, bowls club and sports pavilion. The Murrumbeena Park Masterplan Refresh was recently adopted. • The Pakenham/Cranbourne railway reserve is a key ancillary open space. It provides excellent east-west pedestrian and cycle connectivity, including links to Springthorpe Gardens, Riley Reserve and Boyd Park. • The previous directions in the 2014 Strategy for the Hughesdale Neighbourhood Centre included encouraging shop top housing existing in the commercial area of the centre. In the residential catchment, significant multi-unit developments have already taken place and residential development of up to three stories may be supported. 	<ul style="list-style-type: none"> • There is forecast to be an additional 292 people living in the centre by 2031, which represents a 30 per cent increase from the 2016 estimated population of 958. • Open space is well provided for with diverse character and facilities. Minor upgrades are required to Boyd Park to provide additional facilities to better meet the needs of the forecast population living and working in the Centre.
Balance of suburb	
<ul style="list-style-type: none"> • The balance of suburb outside the neighbourhood centres is shown in Figure 6.12C. • Duncan Mackinnon Reserve has received recent major upgrades to the athletics and netball facilities, including a major upgrade to the athletics track, expansion of the netball facility and a new sports pavilion with grand stands for spectating athletics and netball. • Mallanbool Reserve has a tennis facility, natural bushland and wetland areas with walking paths and interpretive signage. 	<ul style="list-style-type: none"> • There is forecast to be an additional 195 people living in the Balance of suburb by 2031, which represents a 2 per cent increase from the 2016 estimated population of 6,559. • While Gap Area M2 is in this catchment, the area is not forecast to substantially change. Therefore, no additional open space is recommended, however there is a need to improve the local facilities in Duncan Mackinnon Reserve to accommodate ongoing open space needs of the community. • Duncan Mackinnon Reserve provides excellent sports facilities and the 1.2 kilometre circuit fitness trail is also well used. Recommend major upgrades to the local facilities including the playground, picnic facilities and seating.

6.12.5 Recommendations for Murrumbeena

6.12.5a Summary of overall intent

Provision and distribution

Open space is generally well provided for with the only gap area that requires additional open space is in the heart of the Murrumbeena Neighbourhood Centre. This is proposed to be addressed with provision of a new Local open space as a new green town square located on the north side of the new railway station, adjoining Neerim Road. The other gap in open space provision in the south east of the precinct is not forecast to receive substantial change, however if this changes, then additional open space may be required in Gap Area M2 in the future.

Quality and design

The focus of design will be to improve the diversity of facilities for unstructured recreational use, and social spaces to appeal to the diverse demographics of the community.

6.12.5b Precinct recommendations for Murrumbeena

The priorities shown in the Recommendation tables are indicative only. The priorities provide guidance on the expected sequence and timeframes for the commencement of actions and may change pending the allocation of suitable funding and resources, along with the actual rate and location of forecast future growth and development.

A Additional open space

No.	Recommendation	Respons- ibility	Priority
6.12A-1	Provide a new Local open space as a new green town square in the heart of the Murrumbeena Neighbourhood Centre for the existing and forecast community living and working in the main commercial centre. Council is to continue to advocate to the Victorian Government to convert the land on the north side of the railway line and east of the railway to open space. If this land cannot be secured as open space, investigate options to provide a new Local open space elsewhere in the town centre.	GE LXRA/ Victorian Government	Very High

B Open space links

No specific recommendations.

6.12.5c Individual open space recommendations for Murrumbreena

C Municipal open space

No.	Recommendation	Respons- ibility	Priority
6.12C-1	Boyd Park/Outer Circle Railway Linear Park Finalise and implement the 2019 Management Plan with an emphasis on strengthening the indigenous and landscape character of this reserve.	GE	Ongoing
6.12C-2	Duncan Mackinnon Reserve Continue to implement the Masterplan with a focus on upgrade to the picnic, seating and play facility with an emphasis on local community use of these facilities adjacent to Crosbie Road so they are more easily accessible to people living nearby.	GE	Medium
6.12C-3	Murrumbreena Park As part of the Masterplan refresh and new Pavilion/Community Hub, retain informal community use and access and minimise future built form and vehicle access within the open space.	GE	Very High

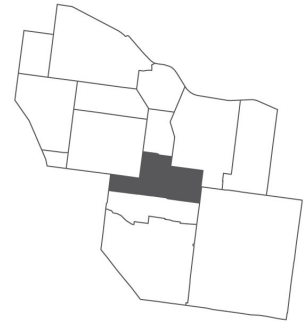
D Neighbourhood open space

No.	Recommendation	Respons- ibility	Priority
6.12D-1	Mallanbool Reserve Continue to adhere to the recommendations of the reports into site contamination. Improve the native and indigenous landscape character of the reserve by redesigning the car park to the tennis club facility to improve its visual, function and landscape qualities.	GE	Medium

E Local open space

No.	Recommendation	Respons- ibility	Priority
6.12E-1	Riley Reserve Undertake a major upgrade to the reserve following the major Melbourne Water drainage upgrade works and the Level Crossing Removal Project. Upgrade works to be guided by the 2019 Outer Circle Railway Linear Park Management Plan.	GE	Very High
6.12E-2	Springthorpe Gardens Undertake a major upgrade to the gardens following the major Melbourne Water drainage works which included removal of trees. The future works are to be guided by the 2019 Outer Circle Railway Management Plan that recommends providing social facilities and strengthening the exotic character.	GE	Very High

6.13 Ormond



6.13.1 Existing conditions

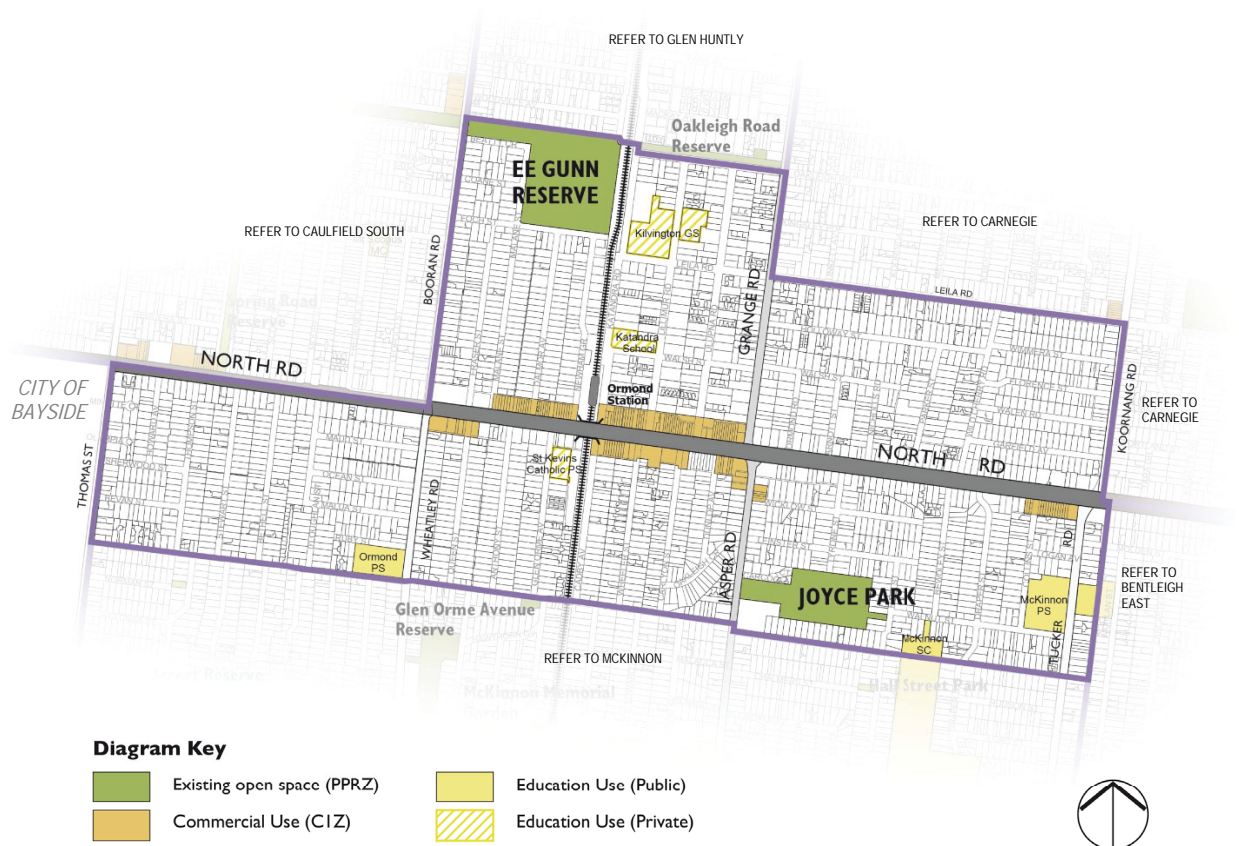


FIGURE 6.13A Existing open space in Ormond

6.13.1a Overall Precinct description

Public open space

EE Gunn Reserve and Joyce Park are the two major areas of open space in Ormond. They have quite different characters and uses. The Jasper Road frontage to Joyce Park is formal with a heritage and public garden character, while the eastern part is more informal with open grassed areas and planting. A playground and picnic area is located centrally to the north of the substantial Glen Eira McKinnon Bowls Club and Box Cottage.

EE Gunn Reserve has two major sports fields, club rooms and car parking along with two playgrounds, picnic and barbecue area and a path network for unstructured and informal use. The linear open space to the north west forms part of the historical Rosstown Railway Reserve and connects to Marara Road Reserve to the west and to Oakleigh

Road Reserve to the east via the recently constructed shared trail link through the northern boundary of EE Gunn Reserve.

The recent Level Crossing Removal Project for the Frankston Railway Line through Ormond has modified the former Cadby Avenue Reserve. While an off-road shared trail link is provided, the railway easement now includes more rail infrastructure and reduced recreational use and amenity. It now functions as an ancillary open space.

Ancillary open space

The Frankston Railway Line traverses north south through Ormond with a shared trail located on the east side on a combination of the railway easement and road reserve for the majority of its length between Glenhuntly Station in the north and McKinnon Station in the south. The railway easement on the west is used for car parking and in other locations is hidden from view by adjoining housing.

McKinnon and Ormond Primary Schools and McKinnon Secondary College are located in the precinct. Ormond Primary school grounds are mainly fenced and not available to public access, as they have two synthetic outdoor surfaces. The outdoor area of McKinnon Primary School is available for informal use after school and contributes to the open space character.

Land use and character

Ormond is predominantly residential land use with Ormond Neighbourhood Centre providing a significant retail area along North Road, along with Ormond Station located in the heart of the centre. The Level Crossing Removal Project improved the east-west pedestrian connectivity in the centre with the grade separation under North Road. The residential character is predominantly single and double storey detached dwellings set back from the street with the front gardens contributing to the streetscape character.

The other major land use is education with the three public schools as previously mentioned, and Katandra School, St Kevins Primary School and Kilvington Grammar School.

Ormond dates mainly from the inter-war period and a high proportion of the suburb is protected including:

- Ormond Heritage Area - covers a large part of the precinct to the west of the railway line, and is primarily to protect the inter-war architectural character including many California bungalows.
- The Hillcrest Estate Historic Area - a small precinct noteworthy as the first housing estate undertaken by AV Jennings during the 1930s, with a diversity of housing styles and landscaped gardens.

6.13.1b Quantity of open space in Ormond

Following is a brief summary of the key statistics for quantity of open space in Ormond:

- 9.39 hectares of open space (reduced from 9.67 hectares in 2014)
- 4.5 per cent of the total suburb area is open space (reduced from 4.7 per cent in 2014)
- 5.5 per cent of the total open space in the City of Glen Eira

- 11 sqm of open space per person, based on the 2016 population
- Within 400 metres of the precinct, other major areas of open space include Packer Park, Lord Reserve and McKinnon Reserve.

6.13.1c Open space hierarchy and character in Ormond

Table
6.13-1

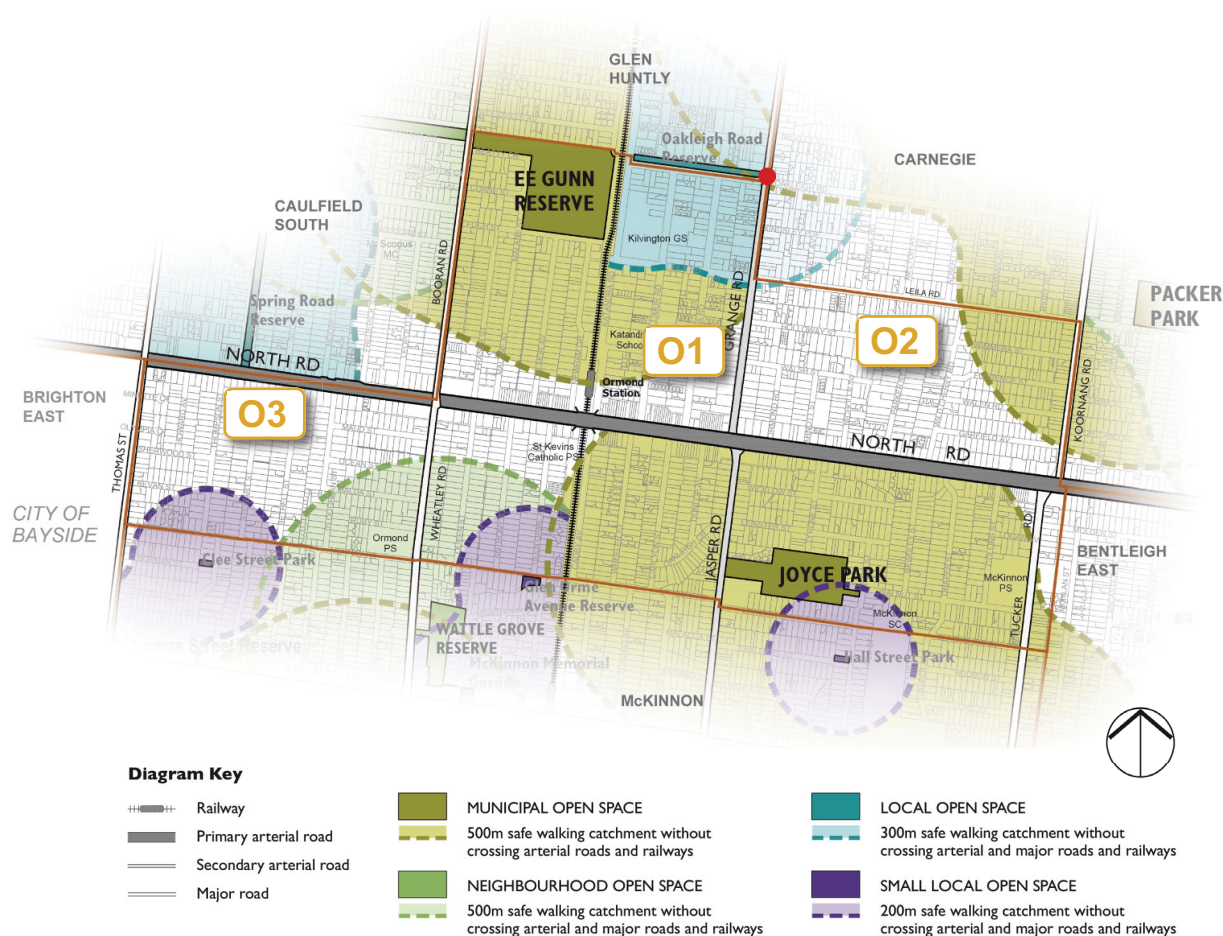
List of existing open space type and character classification

Open space	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
EE Gunn Reserve	6.07	Municipal	Sporting	Linear, Informal, Heritage
Joyce Park	3.32	Municipal	Public garden	Heritage, Informal, Restricted recreation
Total area	9.39			

Heritage values of open space

Refer to description in 6.13.1a.

6.13.1d Distribution of open space in Ormond



EE Gunn Reserve is located in the north west and Joyce Park in the south east of the precinct. Central to the Ormond Neighbourhood Centre there is no existing open space however EE Gunn Reserve and Joyce Park are just over 500 metres from the centre.

North Road runs east west through the centre of the precinct and creates a barrier to safe and easy north south walkability. The railway along with other major north south roads are barriers to safe east west access.

The walking distances shown in Figure 6.13B illustrate other open spaces outside the precinct to the south and the north of Ormond that are within safe and easy walking distance.

6.13.2 Community characteristics for Ormond

6.13.2a Demographic summary of existing population and forecast trends

Source: ABS Census data, 2016 (.id Consulting 2018)

Age structure:

The most populous age group is 35 to 49 years, however other age groups that are also well represented include the 25 to 34 years followed by the 50 to 59 year olds.

Compared with the municipal-wide average, there is a higher proportion of the 25 to 34 year age range, and a slightly higher proportion of the 35 to 49 year age range and the 60+ and older age groups.

Forecast trends through to 2031 include:

- a more pronounced increase in the 60+ age range
- an overall decrease in the 25 to 34 year groups and the 5 to 17 year olds.

Household type:

Approximately 35 per cent of the households are couples with dependents, 27 per cent are lone person households, followed by 20 per cent couples without dependents.

Compared with the Municipal-wide average, there is a slightly higher proportion of couple families with dependents and lone person households, and a lower proportion of couples without dependents.

Forecast trends through to 2031 include:

- Couple families with children will decrease slightly.
- Couple families without children and lone person households to increase slightly.

Dwelling type:

Compared with the Municipal-wide average there is a similar amount of medium density housing and separate houses. In Ormond approximately 47 per cent of the population live in medium density housing, 6 per cent in high density and approximately 47 per cent in separate houses. Between 2011 and 2016, the greatest growth was in high density housing, followed by separate houses.

Total population (2016): 8,850

Forecast population in 2031: 9,392* (increase of 542)

*Source: .id Consulting forecasts for Glen Eira suburbs, November 2018

6.13.2b Summary of household survey outcomes for Ormond

A total of 73 household surveys were received from residents of Ormond, in 2012, which represents 6.8 per cent of the total number of surveys received. This is slightly more than the proportion of Ormond residents in the Glen Eira population, which is 5.9 per cent.

Most frequently visited open space reserves:

Use	Open space	Reason to visit	Suggested improvements
Open space within walking distance			
32%	Packer Park	walking (11%) dog walking (7%) exercising (6%) close to home (4%) cricket (4%) meeting people/friends (4%)	Enforce dog off-lead areas.
32%	EE Gunn Reserve	exercising (6%) sport spectator (6%) walking (6%) close to home (4%) dog walking (4%) jogging/running (4%)	Provide additional seating and fencing and enforce dog off-lead areas.
25%	Allnutt Park	meeting people/friends (6%) BBQ's (4%) dog walking (4%) exercising (4%) facilities (4%) walking (4%)	Provide more noise barriers, shade trees and native/indigenous planting. Provide shade to playgrounds and upgrade and undertake maintenance to existing toilets.
22%	Joyce Park	dog walking (8%) relaxing (6%) walking (6%) closest to home (3%) playground (3%)	Improvements to drainage and clean up vandalism.
15%	Princes Park	walking (6%) dog walking (4%) exercising (3%) football (3%) jogging/running (3%)	Retain existing trees and maintain mature trees. Address concerns about proximity of phone reception tower to open space.
Open space beyond walking distance			
23%	Caulfield Park	walking (7%) meeting people/friends (6%) ambience and beauty (3%) cycling (3%) large open space (3%) relaxation (3%)	Provide additional seating and toilets. Provide more challenging playground equipment. Undertake regular maintenance to BBQ's. Enforce dog off-lead areas and improve/upgrade open space and buildings.
15%	Duncan Mackinnon Reserve	netball (6%) exercising (4%) cricket (3%) walking paths (3%)	Improve path surfaces and undertake path maintenance and provide additional car parking.
5%	Packer Park	diversity of activities (1%) large open space (1%)	Provide more playgrounds and shade and upgrade existing sporting facilities.

Use	Open space	Reason to visit	Suggested improvements
		playground with grandchildren (1%) velodrome (1%) walking (1%)	
5%	Other open space	exercising (3%) BMX track (1%) cycling (1%) natural bushland environment (1%) peaceful (1%)	Undertake maintenance to cycling paths and provide more drinking fountains.
4%	Princes Park	dog off-lead area (1%) dog walking (1%) exercising (1%) football (1%) paths (1%)	Provide more dog drinking facilities.

Types of open space used (top four):

93% sporting reserves
90% large parks and gardens (non sporting)
89% local streets for exercise
84% small local parks

Values (top four):

78% place to relax and unwind
74% trees
70% escape built environment
60% health and wellbeing

Activities and facilities in open space (top four):

86% walking paths
82% open grassed areas
75% seats
66% public toilets

Facility provision and maintenance:

Respondents identified they frequently use walking paths, open grassed areas and seats in open space. Facilities not adequately provided for include seats, drinking fountains and cycling paths. Generally facilities are well maintained with the exception of public toilets.

General comments:

- Additional open space required, particularly as density increases and private gardens become smaller.
- Existing open space is well maintained and should be kept/retained.
- Dog off-lead areas require enforcement.
- Informative, instructional and navigational signage required.
- Improve maintenance to toilets.
- Connecting shared paths required.

For further details on household survey outcomes, refer to Appendix A of the Strategy.

6.13.2c Implications of community characteristics on future open space planning in Ormond

Almost half of the population live in medium density housing with limited private open space while 6 per cent live in high density housing. This, coupled with the diversity of household types including lone person households, couples with children and with a large proportion of the population between the 34 and 59 age range, means that the open space is catering to a variety of age groups and a diversity of open space uses. The household survey outcomes identify that people value open space for meeting people and friends, and future open space designs will need to cater to these social needs along with the physical activity and recreational needs.

6.13.3 Future change in Ormond

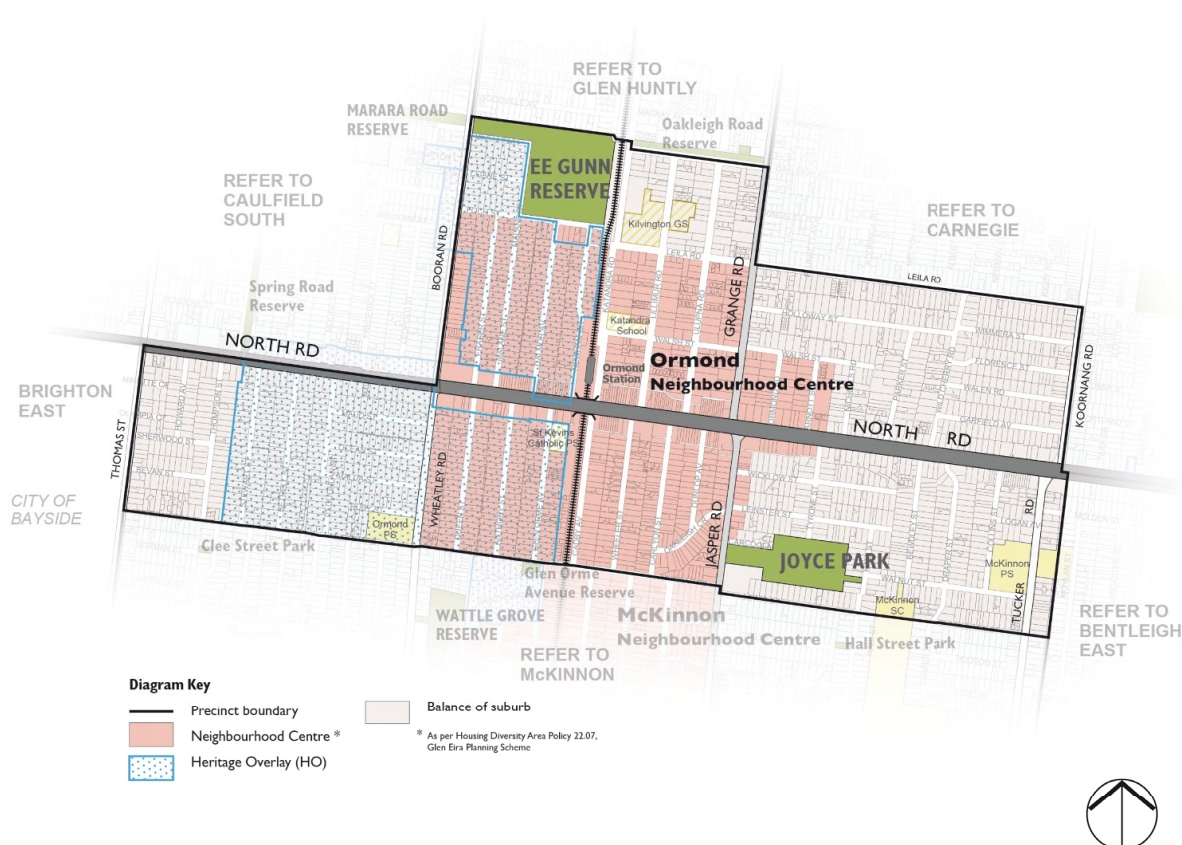


FIGURE 6.13C Future change in Ormond

The *Glen Eira Housing and Local Economy Growth Assessment Report* (SGS, Dec 2018) and *22.07 Housing Diversity Area Policy* in Glen Eira Planning Scheme provides direction on future growth in Ormond. The spatial location of the different areas of growth referred to in the reports and policies are reflected in Figure 6.13C.

A 6 per cent increase in the residential population is forecast for the suburb of Ormond between 2016 and 2031. This equates to a forecast increase of 542 residents. For reference this is more than the 2.5 per cent increase or 213 residents that were forecast at the time the 2014 Strategy was prepared. The population data indicates that between

2013 and 2016 more than twice the number (464) of new residents forecast moved into Ormond.

Approximately 70 per cent of the forecast residents are planned to live in the Ormond Neighbourhood Centre with the remaining 30 per cent in the balance of the suburb.

Ormond Neighbourhood Centre

The Ormond Neighbourhood Centre on North Road has been experiencing some change over the past 5 years. The vision for the centre set out in the ACHLES is:

Ormond will maintain a local feel with a strong sense of community connection, which is enhanced by greenery and landscaping. Embracing its local character and heritage, the centre will be an accessible and well-connected destination for urban retail and dining.

The Housing Diversity Area Policy 22.07 in the Glen Eira Planning Scheme encourages residential use in the commercial centre with shop top housing and apartment style developments, transitioning to the predominantly single storey detached dwellings where heritage overlays occur and in other areas multi-unit developments could be appropriate. It is noted that developments can build up to three stories in height, and this has been occurring more recently in Ormond.

Employment population change

The forecast employment population change is an additional 695 workers over the 2016-2031 period, representing a 36 per cent increase (SGS, 2018).

Figure 6.13C also shows the extent of existing Heritage Overlay and Neighbourhood Character Overlay areas within Ormond. While redevelopment may occur within these overlay areas, it is anticipated they will receive a lower intensity of redevelopment.

6.13.4 Open space needs assessment for Ormond

There are some gap areas in the distribution of open space in Ormond as shown on Figure 6.13B. The recommendations to address the gap areas are included in the table below.

As noted, the scale of development in Ormond has been greater than forecast in the 2014 Strategy, and this may have been partly due to the level crossing removal project improving the train station and overall amenity in the urban centre. From review of the aerial photos between 2012 and 2019, the growth has mainly occurred in the core of the Neighbourhood Centre between the railway and Grange Road and along North Road.

Another overall factor that influences the open space needs assessment is the overall change in dwelling type with the increase in people living in medium and high density housing with less private open space within the Neighbourhood Centre. Outside of the centre it is anticipated a higher proportion of single detached dwellings will remain and therefore no additional open space is identified to be required in the short to medium term. If this changes, there could be a need for additional open space in Gap Area O3.

Table 6.13-2 *Open space needs assessment for Ormond*

Description	Assessment
Ormond Neighbourhood Centre and Balance of suburb, north of North Road	
<ul style="list-style-type: none"> The extent of the Ormond Neighbourhood Centre north of North Road is shown on Figure 6.13C. West of the railway line, EE Gunn Reserve is a key Municipal open space. The survey outcomes note this is one of the most popular open spaces and has been recently upgraded in response to the 2014 Strategy recommendations and also the Level Crossing Removal Project. East of the railway, Oakleigh Road Reserve is a linear open space that directly adjoins the northern boundary of this precinct and provides east-west connectivity to EE Gunn Reserve under the railway. There is a gap in open space distribution in the vicinity of North Road, shown as Gap Areas O1 and O2 on Figure 6.13B. The Ormond Neighbourhood Centre is a strip retail and commercial centre along North Road. The recent Level Crossing Removal Project has improved pedestrian access within the centre with the grade separation work and the new station construction. 	<ul style="list-style-type: none"> Provide a new Small Local open space between the railway and Grange Road in Gap Area O1 to meet the needs of the existing and forecast community, particularly those working and living on and near North Road. Investigate opportunities to utilise part or all of one of the existing car parks to the north of North Road as future open space, including opportunities to activate the interface between the open space and adjoining sites to the south. The focus of this Small Local open space will be to provide social facilities for residents and workers to enjoy and provide some greening in this future higher density precinct. Provide a new Small Local open space between Grange Road and Koornang Road in Gap Area O2 to cater primarily for the existing and also the forecast population. This Small Local open space will provide play and social facilities to cater to the family demographic. It is recommended this be located relatively central in the gap area between Leila and North Roads.

Description	Assessment
<ul style="list-style-type: none"> • Built form is progressively increasing with medium and high density development outside of the Heritage Overlay areas. • The growth between 2013 and 2016 was more than double the total forecast. Growth is forecast to continue with 380 additional residents forecast to live in the centre (north and south of North Road) by 2031 and 163 in the Balance of suburb, with a total of 542. The commercial and retail floor area expansion means the worker population is also anticipated to increase. • The residential catchment of the centre already includes some multi-unit developments on the north east side and there is potential for further redevelopment outside of the Heritage Overlay areas. 	
Ormond Neighbourhood Centre and Balance of suburb south of North Road	
<ul style="list-style-type: none"> • The extent of the Ormond Neighbourhood Centre south of North Road is shown on Figure 6.13C. • West of the railway line, there is no existing open space and this is referred to as Gap Area O3. • East of the railway, Joyce Park is a popular Municipal open space that includes Box Cottage that houses the Moorabbin Historical Society, mature exotic trees, gardens, rotunda, playground, path network and a Bowling Club. One of the bowling greens has been returned to public open space and now includes multi-purpose ball sports play area. • The Ormond Neighbourhood Centre is a retail strip and commercial centre along North Road. The recent Level Crossing Removal Project has improved pedestrian access within the centre with the grade separation work and the new station construction. • Refer to Ormond Neighbourhood Centre north of North Road for the growth forecasts. • The previous policy notes numerous opportunities exist for mixed use/retail, shop top housing and apartment style development, particularly on the south side of North Road. 	<ul style="list-style-type: none"> • West of the railway line the heritage overlay extends over the majority of the residential catchment, which means there is likely to be minimal change. While this is Gap Area O3, there is existing Local and Small Local open space that is accessible via the local street network to the south. • The current improvements to Joyce Park will benefit the existing and forecast population east of the railway.

6.13.5 Recommendations for Ormond

6.13.5a Summary of overall intent

Provision and distribution

Municipal open space is well provided for, however there are gaps in the local open space network. The Strategy recommends providing two additional Small Local open spaces to provide open space within the easy and safe walking distance of the existing and forecast community in Ormond.

Quality and design

Ormond is forecast to continue to retain single detached dwellings with couple families with dependents, combined with couple families without dependents and older people living in medium and high density housing in the centre. The two new Small Local open spaces are to cater to the different user groups with the one in Gap Area O2 providing play facilities while the other in Gap Area O1 provides social and seating facilities.

6.13.5b Precinct recommendations for Ormond

The priorities shown in the Recommendation tables are indicative only. The priorities provide guidance on the expected sequence and timeframes for the commencement of actions and may change pending the allocation of suitable funding and resources, along with the actual rate and location of forecast future growth and development.

A Additional open space

No.	Recommendation	Responsibility	Priority
6.13A-1	Provide a new Small Local open space in Gap area O1 within the core part of the Ormond Neighbourhood Centre, east of the railway for both the existing and forecast population. This open space will cater to the residents and workers in the vicinity of North Road.	GE Developer	Very High
6.13A-2	Provide a new Small Local open space in Gap area O2 for the existing population and the forecast population in the Ormond Neighbourhood Centre east of Grange Road. This will focus on the provision of play facilities for the couple families in the catchment.	GE Developer	High

B Open space links

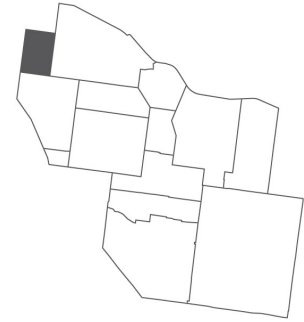
No.	Recommendation	Responsibility	Priority
6.13B-1	Improve the legibility, safety, accessibility and amenity of the streetscapes in Gap area O3 with an emphasis on continuing to encourage access to existing open space south of this gap area in McKinnon.	GE	Ongoing

6.13.5c Individual open space recommendations for Ormond

C Municipal open space

No.	Recommendation	Respons- ibility	Priority
6.13C-1	EE Gunn Reserve Continue to implement the Masterplan prepared in 2017 including upgrades to the unstructured and social facilities including the playground and picnic area.	GE	Medium
6.13C-2	Joyce Park The recent park expansion works following the return of one bowling green to open space has resulted in the inclusion of unstructured sporting facilities. Undertake minor upgrade to provide additional seating and shade trees to the perimeter of the informal open grassed areas in the east of the reserve.	GE	Medium

6.14 St Kilda East



6.14.1 Existing conditions

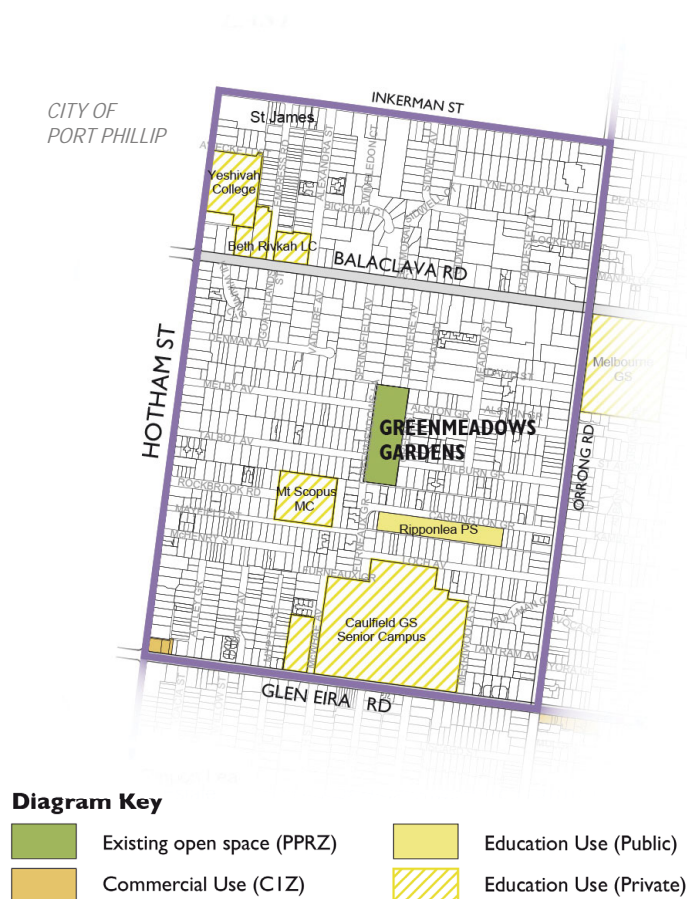


FIGURE 6.14A Existing open space in St Kilda East

6.14.1a Overall Precinct description

Public open space

Greenmeadows Gardens are recognised for their heritage value as part of the Lempriere Avenue garden suburb development constructed during the 1920s. Central to the garden suburb concept is that entire streets including the front gardens and nature strips were conceived as a cohesive landscaped space with vistas to Greenmeadows Gardens. This creates a sense of the gardens being located central to the neighbourhood - a character that has still been retained today. A major play facility is located at the southern end of the gardens and the remainder of the gardens includes open grassed areas, strolling paths lined with mature canopy trees and palms with display feature gardens beds located along the perimeter and at key points. While the trees are mainly exotic there is a

large mature remnant River Red Gum in the gardens, which the *City of Glen Eira Heritage Management Plan 1996* notes pre-dates European Settlement.

Ancillary open space

Ripponlea Primary School is the only public school in the precinct and the grounds are accessible after hours on an informal basis. The largest of the private schools is Caulfield Grammar, and the sports oval contributes visually to the open space character but is not accessible for informal access. Other private schools include the Yeshivah College, Beth Rivkah and Mt Scopus Colleges, all of which do not have major outdoor open space areas and they are not available for informal public use.

Land use and character

St Kilda East is predominantly a combination of residential and education land use.

It includes some significant heritage areas with the land being subdivided from the late 1800s through the early 1900s. The specific heritage precincts, as described in the *Draft Housing and Residential Development Strategy (2002)* include:

- Lempriere Avenue and Greenmeadows Gardens - a garden suburb development constructed during the 1920s.
- Bailey Avenue and Myrtle Avenue - small heritage area off Glen Eira Road with a high number of post federation dwellings from the early 1900s. The area was bought by builder William Bailey and shows the role of speculative developers in Glen Eira during the early 1900s.
- Vadhur Avenue is a locally important group of substantial middle class houses of the inter-war period including exceptional Spanish Mission and English Domestic influenced houses and gardens.

6.14.1b Quantity of open space in St Kilda East

Following is a brief summary of the key statistics for quantity of open space in St Kilda East:

- 1.35 hectares of open space
- 1.4 per cent of the total suburb area is open space
- 0.8 per cent of the total open space in the City of Glen Eira
- 3 sqm of open space per person, based on the estimated population for 2013
- There are no other major areas of open space within 400 metres walking distance of St Kilda East.

6.14.1c Open space hierarchy and character in St Kilda East

**Table
6.14-1**

List of existing open space type and character classification

Open space	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Greenmeadows Gardens	1.35	Neighbourhood	Public garden	Botanical, Heritage
Total area	1.35			

Heritage values of open space

Refer to description in 6.14.1a.

6.14.1d Distribution of open space in St Kilda East

Greenmeadows Gardens is located central in the precinct between Balaclava and Glen Eira Roads. As noted previously in 6.14.1a, the street layout was designed to have vistas towards Greenmeadows Gardens and the gardens are easily accessible for residents in the surrounding area. North of Balaclava Road there is currently no open space and no ancillary open space. The street layout south of Greenmeadows Gardens limits accessibility to the open space with poor north-south and east-west connectivity. This means people in the south-western part of the precinct need to walk along major roads in order to access the only existing open space. For this reason, people living and working in the southern part of St Kilda East will be more likely to use the future open space in Elsterwick in Gap area E1.



FIGURE 6.14B Open space distribution analysis for St Kilda East

6.14.2 Community characteristics for St Kilda East

6.14.2a Demographic summary of existing population and forecast trends

Source: ABS Census data, 2016 (.id Consulting 2018)

Age structure:

The most populous age group is 35 to 39 years, however other age groups that are also well represented include the 25 to 34 years and the 0 to 11 years. Compared with the municipal-wide average, there is a substantially higher proportion of children in the 0 to 17 age range, slightly higher in the 25 to 34 year age range and less in the 35+ and older age groups.

Forecast trends through to 2031 include:

- An increase in the 25 to 49 year age range, along with an increase in the 70 to 84 age range
- A decrease in the 0 to 11 year age range.

Household type:

Compared with the Municipal-wide average, there is a higher proportion of couple families with dependents, and a slightly higher proportion of couple families without dependents, and a lower proportion of lone person households.

Forecast trends through to 2031 include:

- Couple families without dependents and lone person households and group households are forecast to slightly increase.

Dwelling type:

Compared with the Municipal-wide average, there are fewer separate houses and a higher proportion of medium and high density housing. Between 2011 and 2016, the proportion of separate houses declined from 53 to 38 per cent, with a corresponding increase in medium and high density housing.

Total population (2016): 4,358

Forecast population in 2031: 4,400* (increase of 42)

*Source: .id Consulting forecasts for Glen Eira suburbs, November 2018

6.14.2b Summary of household survey outcomes for St Kilda East

A total of 19 household surveys were received from residents of St Kilda East, in 2012, which represents 1.8 per cent of the total number of surveys received. This is slightly less than the proportion of St Kilda East residents in the Glen Eira population, which is 2.9 per cent. Note that the 50-59 age range is over-represented in the survey outcomes for St Kilda East.

Most frequently visited open space reserves:

No.	Open space	Reasons to visit	Suggested improvements
Open space within walking distance			
89%	Greenmeadows Gardens	close to home (32%) playground (32%)	Improve garden beds, upgrade playground and equipment

No.	Open space	Reasons to visit	Suggested improvements
		relaxing (21%) play safe for children (16%)	including safety fencing and shade and additional seats.
37%	Caulfield Park	walking (21%) playground (16%) large open space (11%)	Additional drinking fountains, soccer facilities and trees, improve path maintenance and provide walking groups.
11%	Harleston Park	close to home (5%) meeting people/friends (5%) green open space (5%) playground (5%)	Not completed
5%	Alma Park	meeting people/friends (5%)	Not completed
Open space beyond walking distance			
32%	Caulfield Park	exercising (11%) playground and equipment (11%)	Increase diversity of playground equipment, additional seating and improve tennis facilities.
21%	Princes Park	dog walking (11%) large open space (11%)	Additional shelter

Types of open space used (top four):

95% Sporting reserves
 89% Large parks and gardens (non sporting)
 89% Medium sized parks
 89% Local streets for exercise

Values (top four):

84% place to relax and unwind
 84% trees
 58% fitness
 58% health and wellbeing

Activities and facilities in open space (top four):

100% walking paths
 89% open grassed areas
 89% seats
 74% picnic tables

Facility provision and maintenance:

The survey respondents identified that there is inadequate provision of seats, shelters, walking paths, cycle paths, drinking fountains and public toilets. Generally respondents consider facilities are well maintained, with the exception of public toilets and drinking fountains.

General comments:

- Additional infrastructure including BBQ's, rotunda, shelters, picnic tables and signage.
- Improve garden beds including choice of planting.
- Ensure open space is well maintained and easily accessible to the entire municipality.

For further details on household survey outcomes, refer to Appendix A of the Strategy.

6.14.2c Implications of community characteristics on future open space planning in St Kilda East

St Kilda East has a high proportion of young families and this is forecast to continue. Greenmeadows Gardens is currently the only open space within safe walking distance of people living in the precinct, and this is an important consideration regarding the ability of children to access open space independently as they grow and develop. The consultation outcomes have identified a lack of facilities in open space. The other influence is the substantial decrease (16 per cent) in the proportion of separate dwellings and an increase in the medium and high density dwellings, meaning the community has less private open space.

Future open space planning will need to continue to provide facilities that are suitable for young families, including a diversity of facilities to encourage the adults to participate in activities additional to walking in open space in the future. The survey outcomes have requested additional walking paths, cycle paths, informal recreation facilities along with shelters and seating in open space. A balance of a diverse range of facilities additional to playspaces is an important consideration for future open space design.

6.14.3 Future change in St Kilda East

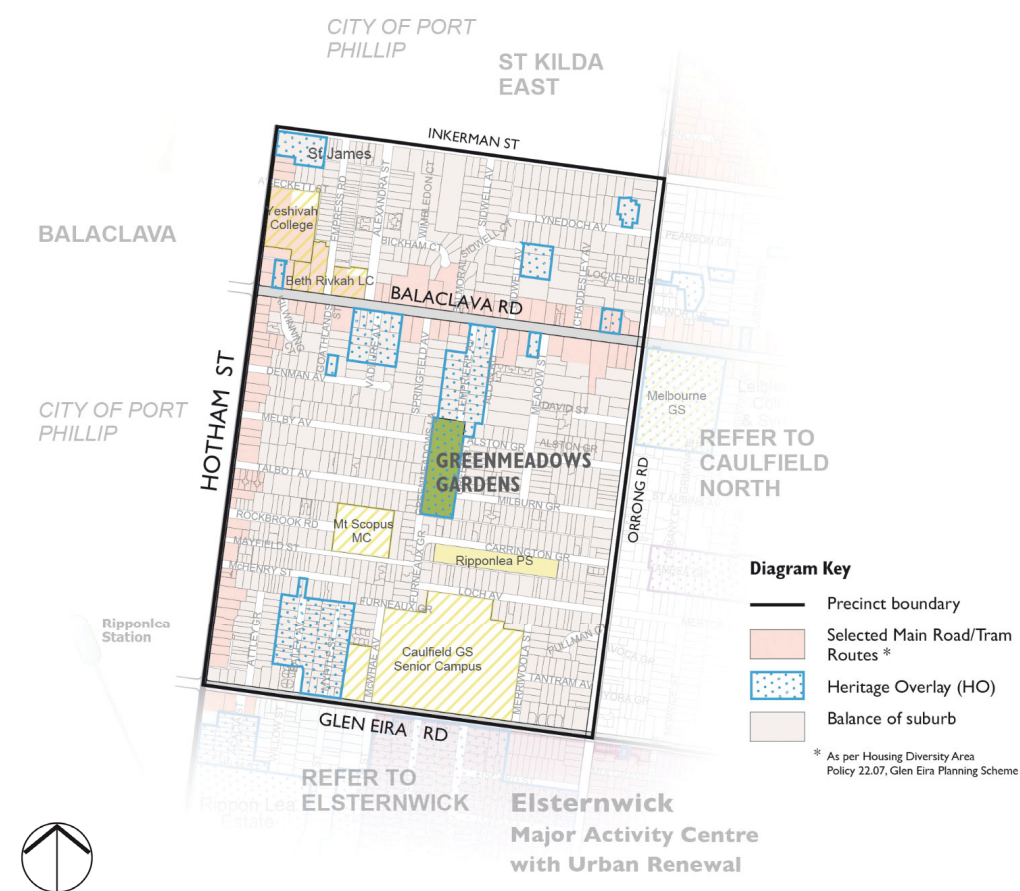


FIGURE 6.14C Future change in St Kilda East

The *Glen Eira Housing and Local Economy Growth Assessment Report* (SGS, Dec 2018) and *22.07 Housing Diversity Area Policy*, Glen Eira Planning Scheme provides direction on future growth in St Kilda East. The spatial location of the different areas of growth referred to in the report is summarised in Figure 6.14C.

Between 2016 and 2031 the resident population is forecast to increase by only 1 per cent, with 42 additional residents forecast to be living in St Kilda East. This will mainly occur along the selected main roads and in the Ripponlea Neighbourhood Centre.

Selected tram routes and main roads

As described in the *Draft Housing and Residential Development Strategy (2002)* multi-unit developments are encouraged along Hotham Street and Balaclava Road. The population forecasts are for 38 additional residents to be living along the tram routes and main roads by 2031.

Ripponlea Neighbourhood Centre

The Ripponlea Neighbourhood Centre on Glen Eira Road has been upgraded from a Local Centre to a Neighbourhood Centre in the recent ACHLES. The core of this centre is located west of Hotham Street in the City of Port Phillip, and is described for context.

The vision for the centre set out in the ACHLES is:

Ripponlea will be an intimate and unique centre, which embraces its culture and heritage charm. The centre will provide a mix of retail and dining offerings, creating a vibrant street life and community feel, which is consistent throughout the centre

Currently, the Housing Diversity Area Policy 22.07 in the Glen Eira Planning Scheme for Local Centres applies, and no specific forecast growth has been allocated to this centre.

By comparison the population forecast in the 2014 Strategy was higher, with approximately 3 per cent of the population with a forecast increase of 321. Between 2013 and 2016 the increase was 134 people.

Employment population change

The forecast employment population change is an additional 1,400 workers over the 2016-2031 period, representing a 55 per cent increase (SGS, 2018). Compared to the resident population forecasts, this represents a significant increase in the employment population.

Figure 6.14C also shows the extent of existing Heritage Overlay areas within St Kilda East. While redevelopment may occur within these areas, it is anticipated they will receive a lower intensity of redevelopment.

6.14.4 Open space needs assessment for St Kilda East

There is one gap area in the distribution of open space in St Kilda East as shown on the Figure 6.14B. The recommendations to address each gap area is included in the table below. Note, the gap areas without any labels are locations where people live or work further than easy walking distance of open space, but where some open space is accessible via the local street network without the need to cross any major roads or railways.

**Table
6.14-2**

Open space needs assessment for St Kilda East

Description	Assessment
Tram routes and selected main roads	
<ul style="list-style-type: none"> The tram routes and selected main roads are shown in Figure 6.14C. There is no existing open space. Land use is predominantly residential combined with private school use - Yeshivah College and Beth Rivkah Ladies College. The majority of recent development along Hotham Street and Balaclava Road includes town houses and apartments. The forecast residential population change is for an additional 38 residents by 2031. 	<ul style="list-style-type: none"> Provide a new Small Local open space north of Balaclava Road to address Gap Area SK1 primarily for the existing population and also for the forecast population.
Balance of suburb	
<ul style="list-style-type: none"> The extent of the Balance of suburb is shown in Figure 6.14C. Greenmeadows Gardens is a Neighbourhood open space between Balaclava and Glen Eira Roads. It includes play, open grassed areas, picnic facilities and significant established trees including a large remnant Red Gum. Between Inkerman Street and Balaclava Road there is no existing open space. Land use is predominantly residential along with two private schools including Mt Scopus and Caulfield Grammar School. Ripponlea Primary School provides some ancillary open space with the school grounds being available for informal use out of school hours. The population growth forecast for the Balance of suburb is 4 additional residents. 	<ul style="list-style-type: none"> People living and working in the Balance of suburb south of Balaclava Road can reach Greenmeadows Gardens. Continue to maintain and protect the heritage conservation values of Greenmeadows Gardens.

6.14.5 Recommendations for St Kilda East

6.14.5a Summary of overall intent

Provision and distribution

With Greenmeadows Gardens being the only open space in this precinct, there is a need to provide additional open space to cater to primarily to the existing population and also for the forecast population. The forecast growth is minor, however if any larger additional sites come up for redevelopment beyond the levels currently forecast, additional open space will be required in the precinct beyond what is currently recommended.

Quality and design

Greenmeadows Gardens is to retain its heritage character, and the additional Small Local open space will need to complement this and provide also for childrens play given the high proportion of young families.

6.14.5b Precinct recommendations for St Kilda East

The priorities shown in the Recommendation tables are indicative only. The priorities provide guidance on the expected sequence and timeframes for the commencement of actions and may change pending the allocation of suitable funding and resources, along with the actual rate and location of forecast future growth and development.

A Additional open space

No.	Recommendation	Respons- ibility	Priority
6.14A-1	Provide a new Small Local open space in gap area SK1 to primarily meet the needs of the existing and also the forecast population. In regard to the location, refer also to Recommendation 6.14B-1.	GE Developer	Very High

B Open space links

No.	Recommendation	Respons- ibility	Priority
6.14B-1	In future provision of the new Small Local open space in the gap area SK1, maximise accessibility to the open space via the local street network in regard to its final location within the precinct.	GE	Very High
6.14-2	Continue to protect and where appropriate improve the walkability of the local street network in St Kilda East with appropriate street trees, footpath condition, kerb ramps and links and connections.	GE	High

6.14.5c Individual open space recommendations for St Kilda East

C Neighbourhood open space

No.	Recommendation	Respons- ibility	Priority
6.14C-1	Greenmeadows Gardens Prepare a Conservation Management Plan to document heritage values. Following these, prepare a Landscape Design Plan to guide future upgrade works to include a greater diversity of facilities in the Gardens. This will also include directions for appropriate horticultural management of the gardens and any protection measures required for the remnant River Red Gum.	GE	High



7. Open space design and management guidelines

7.1 Environmentally sustainable design

In this time of climate change, the focus on sustainability in all aspects of Council's works is important. Open space reserves can become more sustainable by specifying appropriate materials and planting, and incorporating adaptability into designs. Climate change mitigation and adaptation and urban heat mitigation are also issues that open space can contribute to by providing cool spaces for people to retreat to in hot weather, providing a cooling effect through natural spaces that absorb moisture and providing a cooling effect in the urban landscape.

Council can contribute positively to addressing the bigger issues of climate change by being more responsible in the way open space is designed. The Strategy includes information to guide more sustainable design of open space in the future. Also refer to Section 5 regarding overall climate change recommendations.

7.1.1 Sustainable water use in open space

Sustainable water use in open space design aims to reduce potable water use in open space by capturing and reusing water in open space including collection and reuse of rainwater roof runoff, stormwater and potentially grey water.

Council has in place a number of initiatives to reduce and conserve water use including installing water tanks, resurfacing sports grounds with warm season surfaces and installing water efficient fixtures. The Strategy supports these and identifies other measures regarding water use.

There is potential to increase biodiversity values with the establishment of small wetlands or WSUD features in open space where appropriate, representative of the landscape character originally present in the municipality. These would also assist with sustainable water use in open space and urban heat mitigation.

Guidelines regarding sustainable water management in open space design:

- a) Future masterplans and landscape design plans for reserves to include consideration of the best practice principles for water sensitive design as part of the analysis process, and incorporate into the design where feasible.
- b) Continue to investigate opportunities for stormwater treatment, harvesting and re-use in open space.
- c) Continue rainwater harvesting from buildings in open space and reuse options within the building and/or in open space.
- d) Consider the benefits of mitigating urban heat and strengthening biodiversity values as part of the evaluation of appropriate stormwater quality treatment systems proposed for open space, particularly where a system can introduce some habitat diversity – e.g. stormwater quality treatment wetlands.
- e) In future master plans and open space designs use permeable surface treatments where appropriate, to reduce concentrations of stormwater runoff.
- f) Select materials and designs that minimise transport of sediments and pollutants to the stormwater system by treating and where possible reusing all runoff.
- g) All upgrades and new car parks in open space are to at least treat, if not re-use stormwater runoff.
- h) Continue to support introduction of warm-season grasses to reduce irrigation needs in open space.
- i) Investigate synthetic surfaces (subject to Council policy) at selected locations to reduce pressure on the natural turf fields and reduce water use for clay tennis courts
- j) Use indigenous and native species, where appropriate, to reduce water use.
- k) Future water features in open space will need to demonstrate the water supply is fully sustainable from non-potable sources and contributes to the environmental and/or landscape character of the reserve.

7.1.2 Vegetation selection

Currently open space reserves have a range of different species, many with a mix of native and exotic plantings that require various levels of irrigation. Selection of species for future designs that contribute to the overall sustainability principles is supported. This includes species that improve the microclimate of the reserve, contribute to habitat values, and minimise the need for other structures or active cooling and heating systems to buildings in open space.

In selecting plants for use in public open space reserves, consider the following guidelines:

- a) Plants that minimise the need for excessive watering and are drought tolerant.
- b) For smaller open space in urban centres, vegetation selection to consider passive cooling with sustainable water use and overall character of the open space and contribute to mitigating urban heat build-up. This includes increasing retained moisture levels in the soil to promote effective evapotranspiration and cooling overnight during the summer.
- c) In reserves with natural values and a dominant native landscape character, promote the use of plants that are locally indigenous.
- d) Increase presence of trees for shade and character where it is demonstrated this can complement existing and planned future use.
- a) Continue to use warm season grasses where appropriate to reduce irrigation needs in open space including couch and kikuyu.
- e) Where the use of native or indigenous species will conflict with established landscape character, particularly heritage reserves, use of non-indigenous or non-native exotic species will be encouraged consistent with the heritage character.

7.1.3 Infrastructure material use and design

There is an opportunity for Council to continue to promote sustainable material use and environmentally sustainable design principles in building design including passive solar access, water harvesting and re-use and energy efficiency. There will be opportunities to apply sustainability principles to future design, as open space infrastructure requires replacement or upgrade. Additionally, multi-use of built facilities in open space assists with sustainability.

In selecting materials for use in future open space construction adhere where appropriate to the following guidelines to minimise material use:

- a) Investigate timbers including review of sustainable harvesting and supply and potential to use alternatives e.g. radial sawn timber or recycled timbers. Review the standard off-shelf furniture items used in open space.
- b) Investigate use of sustainable or ecologically preferable materials. This may include materials that are durable, sourced locally, recyclable (including recycled plastics, rubber and concrete), made from post-consumer materials, refurbished or rapidly renewable.
- c) Appropriate dimensioning of material to suit the particular use to minimise the bulk of and quantity of material used.
- d) Minimise structural elements in open space to reduce unnecessary material use and visual bulk - for example, the use of suitable kerb barrier or low post and rail/cable fencing to prevent vehicle access into open space rather than use of bollards.
- e) Alternative power source for lighting (refer to lighting Guidelines in 7.4.9).
- f) Siting and design of buildings in open space including passive solar orientation to minimise the need for heating and cooling systems.

- g) Appropriate siting and design of facilities to minimise additional structures, particularly regarding shade.
- h) Integrate stormwater runoff from roofs of shelters or buildings into the open space design where practical.
- i) Use permeable surfaces where possible to minimise urban water runoff and maximise moisture retention in open space for UHI mitigation.
- j) Select and specify materials that are durable and have lower on-going maintenance requirements.
- k) Where infrastructure upgrade is required, consider sustainability of material use, and investigate opportunities for use of green infrastructure (e.g. trees in place of structures for shade).
- l) Where water tanks are required in open space they are to preferably be co-located with the existing built form and where feasible underground. In locations they cannot be co-located with existing built form, their size and location is to demonstrate no detrimental impact on the recognised amenity, recreation and landscape character values and safety of the open space.

7.1.4 Reduce reliance on vehicle use to access open space

Council's *Bicycle Strategy (2010)* identifies an increase in the number of people cycling in Glen Eira. The bicycle network in the city consists mostly of east-west connections via on-road cycle links along main roads, while the Frankston Railway Line path provides good north-south connectivity, with some sections where cyclists are required to ride on-road, cross busy streets and navigate local streets.

Recommendations in this Open Space Strategy are focused on encouraging people to walk or cycle to open space. This is specifically encouraged through improved linkages between on-road and off-road facilities and implementation of existing Council strategies such as the *Bicycle Strategy*. Overall, this direction will reduce reliance on vehicles and encourage fitness through walking and cycling.

Refer to guidelines in Sections 7.3 and 7.4.

7.2 Natural values and features

Glen Eira has very little remnant vegetation remaining in the municipality, with Boyd Park containing some remnants of the original River Red Gum Woodland that would have once been more extensive in the municipality. The other major vegetation community originally present was the wetland and swamp areas, which were drained to allow for development. With the relatively flat topography, the lack of significant natural waterway corridors has meant that only limited areas of either remnant or reinstated vegetation communities are present. There are also some individual remnant or large established indigenous trees in some open spaces and these are noted in the precinct analysis in Section 6 of the Strategy.

Mature trees and natural surfaces in open space contribute to mitigating urban heat island effect, carbon sequestration values, and the benefits of the community having access to natural features in open space. There is potential to increase these values with additional tree planting and use of natural surfaces in open space design where appropriate. Natural surfaces include garden beds and natural turf, but not synthetic turf. While these natural features require higher levels of ongoing maintenance when compared to paved surfaces, they contribute to liveability particularly as urban densities increase. Refer to Section 4.3.1 of the Strategy which outlines the benefits .

7.2.1 Large trees in open space

Trees are the most highly valued feature of open space, and many open space improvements requested by the community are for additional vegetation, trees and shade in open space. These are consistent with the sustainability principles of increased biodiversity values and mitigating the urban heat island effect. The existing established mature trees in open space in Glen Eira include native and exotic species and these large trees provide shade and character to open space. This Strategy recommends preparation of a Tree Strategy – refer to Recommendations 5.2K.

Design guidelines to protect mature trees in open space:

- a) Protect existing established mature trees including existing non-indigenous and non-native mature overstorey trees, which provide shade and character to open space and may provide habitat value in the absence of other mature vegetation.
- b) Retain, where feasible and safe to do so, mature dead trees for habitat purposes considering risk management issues associated with falling limbs.
- c) Improve community understanding of native fauna habitat values with design and sensitive installation of interpretive signage where appropriate.
- d) Where appropriate, utilise existing and plant new large canopy trees for shade in place of structures in open space.

7.2.2 New indigenous planting to enhance biodiversity values

Council has an *Environmental Sustainability Strategy 2016-2021* that includes the objective to conserve or enhance Council managed land, biodiversity and environmental heritage in the City. The Strategy provides clear guidance on Council's commitment to environmental sustainability. Refer Section 7.1 for guidelines on environmentally sustainable design.

The *Environmental Sustainability Strategy 2016-2021* identifies Council's commitment to protecting its remnant vegetation as well as actively planting native and indigenous plants, where appropriate, in its parks and reserves.

While there are few examples of remnant vegetation in the municipality, the presence of the individual remnant trees, e.g. the individual remnant Red Gums in Woorayl Reserve and the remnant Red Gum Woodland in Boyd Park/Outer Circle Railway Linear Park in Murrumbena provide environmental features in the open space. There is potential in some areas to consider the introduction of additional woodland and wetland character to open space to provide some character diversity and contact with nature for the community. Any future provision of additional natural areas would primarily be for character and educational purposes. These would most appropriately be located to expand on the smaller existing remnants.

Design guidelines for new indigenous planting:

Indigenous planting is appropriate:

- a) In open space that contains remnant indigenous vegetation including single remnant/mature indigenous trees.
- b) As feature planting in key Municipal open space to demonstrate original landscape character.

7.2.3 Open space in and around higher density precincts

As described in Section 4.3, higher density redevelopment is occurring and will continue to increase within the catchments of the activity centres, neighbourhood centres and selected transport routes. Increased urban densities contribute to the build-up of urban heat, and open space can play an important role in assisting to reduce the effects of this with appropriate design.

The following guidelines encourage open space design in urban centres to incorporate natural features and elements to assist with urban heat mitigation, and provide residents with easy access to green, natural spaces close to home that have a positive influence on community health and wellbeing.

Guidelines for incorporating natural elements into the design of public squares and small open space in higher density urban areas:

- a) Include large broad spreading shade trees where feasible into the open space design to assist with passive cooling, along with smaller trees as appropriate for the space.

- b) Where feasible, incorporate surfaces that absorb and retain moisture to minimise the urban heat island effect. This includes grassed areas and garden beds and investigating the potential irrigation of open grassed areas for informal use to improve the resilience of them to high levels of use during summer.
- c) Incorporate sustainable water use principles into the open space design.
- d) Provide a variety of seating opportunities including in the shade and the sun to encourage people into open space.
- e) In play area designs, integrate some natural elements and materials into the design including natural mulch and planting to provide children with easy access to natural areas close to home.

It is acknowledged that increasing natural elements in Small Local open space in high use areas will increase the maintenance levels required.

7.3 Accessibility

Overall open space in Glen Eira is well used and accessible, with some issues identified in the open space surveys and site assessment work associated with access. Broadly these relate to the need for improved all-ability access, improving existing path surfaces and providing additional paths to improve the diversity of people who can access open space, and links through open space.

7.3.1 All-ability/universal access

Future open space designs where recreational access is encouraged to meet the current best practice guidelines for universal access and all-ability access design principles, where possible.

Guidelines to improve all-ability access to open space:

- a) Demonstrate an inclusive approach to the design and management of open space that maximises access and use by everyone. This includes the principles of accessibility and adaptability.
- b) When designing new and upgrading existing facilities investigate opportunities to improve their adaptability to a range of uses.
- c) Aim to meet current standards for all-ability/universal access on grades and widths for paths from at least one entry point into all open space in accordance with current Australian Standards.
- d) Adequate provision of other types of paths to meet the anticipated uses including for strolling, cycling and exercise.
- e) Provide connections to public transport, the surrounding shared trails, footpath networks and car parking.
- f) Aim to meet current best practice standards for universal access to major structured sporting, unstructured recreation and informal/social facilities in open space.
- g) Regular maintenance of paths to maintain an even surface.
- h) Clear line of sight into the reserve to allow safe access.
- i) Provide a diversity of seating to meet the principles of all-ability/universal access including seats with back rests, seats with armrests and bench seats.
- j) Future designs for play areas to include some all-ability/universal access as an integrated approach to all play areas.

7.3.2 Diversity, type and condition of facilities

People will visit open space if there is a reason to go there, and this promotes a healthier community both socially and physically. Increasing the diversity of facilities in regard to their design, character and function will increase the level of appeal to the diverse community.

Guidelines for diversity of facilities in open space:

- Increase the diversity of unstructured recreation facilities including those that encourage physical fitness in people of all ages - refer also to guidelines in 7.4.
- Minimise duplication of facilities in Small Local open spaces to provide a diversity of recreational activities in open spaces within a local area, e.g. one Small Local open space could be predominantly for play facilities, while the next provides passive seating and open grassed areas.
- Promote multi-use of existing and new facilities where feasible, especially where open space is in short supply.
- Install facilities that improve access for all.
- Consult with the community during the preparation of masterplans and concept plans for open spaces to ensure the open spaces are catering to the needs of the local community including diversity of cultural groups and changes in demographics across the municipality.

7.3.3 Personal safety

From Council officer workshops, it was noted that safety is a key consideration addressed in open space design including utilising CPTED principles. The open space survey reinforced the success of Glen Eira's consistency of approach to this, with very few people identifying personal safety issues as a barrier to accessing open space.

Guidelines for consideration of personal safety in future open space design and management:

- a) Continue to incorporate Crime Prevention Through Environmental Design Principles in future open space design and management.
- b) Retain clear lines of sight into the open space at all entry points.
- c) Retain clear lines of sight from paths through open space. Consider path layout and suitable vegetation adjacent to the paths.
- d) Where feasible improve passive surveillance from adjoining areas.
- e) Continue regular maintenance inspections and independent audits of all playgrounds to ensure they meet the safety requirements consistent with the current playground standards.
- f) Educate and enforce appropriate behaviour by dog owners regarding adherence to the on and off leash areas.
- g) Continue current maintenance levels of open space.

7.4 Unstructured recreational infrastructure in open space

There is a range of existing recreational infrastructure in open space for structured sporting use and unstructured recreation. This includes fencing, goal posts, cricket nets, multipurpose courts, fitness equipment etc. The design and placement of infrastructure in open space affects the use, landscape character and value of the site.

The open space survey outcomes have identified that open space is well used and highly valued for unstructured and informal use.

Guidelines for provision of unstructured recreational infrastructure in open space:

- a) Provide a diverse range of unstructured recreational activities to encourage health and wellbeing for all ages particularly as urban densities increase.
- b) Placement and design of these facilities is to minimise unreasonable visual and noise impacts on adjoining land use, particularly in relation to noise and activity in proximity to adjoining residents.
- c) Location of active unstructured recreation facilities to consider other identified structured, unstructured and informal uses in the open space and the overall character of the reserve.
- d) Rationalise the number of facilities in some open spaces, particularly where there are conflicts between existing uses. This can be achieved by potentially relocating some of these uses to new open spaces identified in the Strategy.

7.4.1 Shared trails in open space

Shared trails and sustainable transport options are valued by the Council and are supported in open space where feasible, and in line with the *Glen Eira Integrated Transport Strategy 2018-2031*.

Design issues that the proposed guidelines in the Strategy can address include:

- Trail surface condition.
- Path gradient.
- Path surface material - unsealed paths generally appeal more to pedestrians. Advantages of unsealed paths include lower impact for walkers and joggers, slows cyclists, and pedestrians can hear cyclists approach from behind. Disadvantages of unsealed path surfaces include generally higher levels of ongoing maintenance to ensure they remain accessible, may not be durable enough for high use areas or for steeper grades, can restrict access during wet weather and discourage commuter cyclists.
- Layout including alignment and curve radius, which affects sight lines.
- Vegetation adjoining paths.
- Proximity of paths and trails to other features and facilities including edges of playing fields, playgrounds, dog off-lead areas etc.

The following guidelines are intended to assist with the assessment of existing shared trails and to guide the design of new future shared trails in open space:

Guidelines for review and design of shared trails in open space:

- a) Gradients and clearances on existing and proposed paths to meet the standards for access and mobility and relevant standards for shared trails, currently referred to as the Austroad Standards.
- b) Sightlines to allow clear visibility along paths, particularly near changes in direction without low overhanging vegetation.
- c) Width of paths to be designed for the anticipated use and level of activity, including whether the trails accommodate both recreational and commuter cycling uses.
- d) Surface of the trail to be appropriate to the character, location and usage levels of the path and the open space.
- e) Where dog walkers are permitted, clearly sign the shared paths so that appropriate levels of control are shown and all trail users can adjust their behaviour accordingly.
- f) Education (via signage) for all shared trail users of appropriate behaviour on shared trails including cyclists, pedestrians, dog walkers, pram pushers, inline skaters and skateboarders.
- g) Adhere to current best management practice guidelines for trails including in relation to flood management.
- h) Continue to implement the *Towards Sustainable Transport 2011-2014* and the *Glen Eira Bicycle Strategy (2010)* for commuter and recreational cyclists needs, including design recommendations for shared trails.

7.4.2 Paths in open space

The design of paths influences the levels and types of use, and their impact in the open space environment. The open space survey results indicate that the most popular reason for people to visit open space was for walking. Given the high levels of participation in walking, the future design and alignment of paths is a key issue to address. Improving all-ability access to open space is also important and guidelines for this are included in Section 7.3.1.

Guidelines for review and design of paths in open space:

- a) Alignment and surface design to complement and be consistent with the open space location, usage levels and inherent landscape character.
- b) To be a width that accommodates the intended levels of use and meet usage levels and intent - including consideration of walking for different purposes including strolling and exercise.
- c) Where possible, meet the current standards or best management practice for access and mobility including paths between facilities and destination points.
- d) Minimise points where the paths cross vehicle entries.
- e) Pram crossings and connections to the existing footpath network in at least one location to improve access from adjoining streets into the open space.
- f) Safe crossing points and junctions with adjoining streets.

- g) Surface runoff from paths to be directed into adjacent garden beds, grass areas or utilised on site and minimise discharge into underground drainage systems, where feasible.

7.4.3 End of trip bicycle parking

Safe and secure bicycle parking in open space will encourage the community to cycle to open space. Structured sport and recreation facilities are to integrate this into any new or upgrade of facilities. The *Glen Eira Bicycle Strategy (2010)* provides guidelines for bicycle parking examples and design. Bicycle Victoria has also prepared *The bicycle parking handbook* that is a useful guideline for appropriate design of bicycle parking facilities.

The following guidelines are to complement Council's existing policies, guidelines and strategies as noted above in terms of provision of bicycle parking.

Guidelines for end of trip bicycle parking in open space:

- a) To be provided in Municipal and Neighbourhood open space where there are end of trip facilities/destination point for visitors.
- b) Siting and design to meet the current relevant standards including for location, access, quantity and safety.
- c) Bicycle rails and drinking fountains are to be in accordance with Council standards and consistent with any identified heritage values of open space.
- d) Number and location to meet the anticipated use levels of the proposed facility.
- e) Integrated into the existing built form in the open space where possible.
- f) Where the facility is independent of existing built form, ensure the facility does not block views or access into the open space, complements its character, is visible and safe and located close to path/shared trail entry to the open space.

7.4.4 Car parking

Car parking is provided in most of the Municipal open spaces. The design and size of the car park in proportion to the reserve can impact on the informal use, safety and enjoyment of the reserve. The position of the car park in the open space has an impact on the length of road and vehicle movement through the reserve to access it and associated division within the open space that this causes. In most locations the car parks and road systems are sealed which formalises them and leads to increased traffic speed within the reserves. Whilst some car parking is required at selected Municipal and some Neighbourhood open space for accessibility for people visiting the reserve, particularly for those with mobility issues, the extent and location has a significant impact on its appeal, use and safety of the open space. Alternative forms of transport and access are to be encouraged to open space including public transport, walking and cycling. Part of this can be provision of bicycle parking facilities in open space along with well designed and safe shared trail access to and within the reserves. Lack of parking in the open space with sport and other major recreation facilities can also impact on the surrounding residential streets with parking and traffic movement.

In reviewing the need for existing and future car parking designs and requirements for open space, assess them in accordance with the following guidelines:

Guidelines for car parking in open space:

- a) Identify the quantity of parking required to meet the existing or proposed change to the open space including disabled parking.
- b) Demonstrate how the parking will be accommodated in the area without undue impact on adjoining land use or undue loss of existing open space area.
- c) Demonstrate there is safe pedestrian access and circulation to, around and through the car park.
- d) Proposed design and construction practices to adhere to best management practice principles of sustainability.
- e) Stormwater runoff is to be captured and re-used or treated prior to entering stormwater drains where possible.
- f) Incorporate planting into car parks where feasible, to improve aesthetics, manage vehicle speeds and mitigate the build-up of urban heat with consideration of adequate sight lines for safety. Trees to be selected to provide shade and to have clear trunks to maintain view lines.
- g) Ensure the proposed size, material use and design of car parking does not compromise the desired landscape character of the open space.
- h) Lighting car parks in open space is generally not required, except where the open space facilities are in use outside daylight hours by a large number of park users or where there is insufficient ambient light.
- i) Encourage, where appropriate, multiple use of car parking in open space (i.e. surface that is available for other recreational uses when not being used as a car park - e.g. Carnegie Swim Centre car park).
- j) Include priority areas for bicycle parking within car parks or adjacent leisure amenities where applicable.

7.4.5 Seats

The provision of seats varies with some open space well provided for, in others seats are absent altogether and in some they are only provided next to the playgrounds. The design and placement of seats affects their use and access. The Household Surveys identified that seats are the second most frequently used facility in open space and are not well provided for in open space. Additional seats were requested in some of the reserves. Seats provide resting places for people exercising and walking and also for relaxation and enjoyment of the space. The seats should include a variety of styles including bench seats, seats with backs, some seats with arm-rests and in a range of settings including grouped and placed in a variety of locations.

The following guidelines are to be referred to for future proposals for seats in open space:

Guidelines for review and design of seats in open space:

- a) Positioned to face activity and paths, take advantage of views or features within the reserve and a variety of settings including some in groups and some alone.

- b) Variety of locations with some in the shade and others in the sun to provide for a diversity of needs, and take advantage of views.
- c) Integrate informal seating arrangements into open space design.
- d) Variety of seat types including bench seats, seats with back rests and some including armrests to improve all-ability access.
- e) Located in open space and along shared trails and streets that are major pedestrian links between open space reserves.
- f) Located adjacent to paths or paved areas to allow for access to them.
- g) Avoid locating seats in permanent shade.

7.4.6 Picnic shelters and barbecue facilities

Shelters

These facilities encourage people to use open spaces as a social meeting place, as well as allowing use of the reserves in all weather. Shelters are provided in many of the Municipal and Neighbourhood open spaces and some local parks. Shelters to include seating and tables, and will frequently have other picnic tables located outside of the shelter but nearby to provide a variety of options for visitors. Council officers noted that the shelters are being booked more often and receiving higher levels of use since the 2014 Strategy was prepared. This is consistent with the higher proportion of people living in medium and high density dwellings who have less private open space in which to have social gatherings.

Barbecues

As with the picnic shelters, barbecues are located in a number of reserves including some of the smaller Local open spaces. In some locations they are co-located with picnic shelters and in other parks they are stand-alone facilities with picnic tables. Some barbecues also service sports pavilions. Barbecues are generally not appropriate in Small Local open space where the level of use is low. The high cost maintenance for Council cannot generally be justified in the Local and Small Local open space, except where they are located in higher density precincts. As noted previously, people in higher density dwellings typically have less private open space and rely on public open space for social gatherings, picnics and barbecues.

Guidelines for review and design of picnic and barbecue facilities in open space:

- a) Positioned to be near car parking and/or main pedestrian access into the reserve and located with other picnic tables nearby.
- b) Co-located with other facilities including playgrounds and community facilities where they will be well used. This includes Local and Small Local open space in higher density precincts where appropriate.
- c) Shelters to be designed to respond to the open space character and sized to meet the anticipated regular use, providing a diversity of facilities. This includes progressive upgrades of them to provide a variety of sizes and designs and cater for the increased demand for these facilities.
- d) Sustainability principles to be incorporated into future designs including material use, water collection/runoff, energy efficiency and waste management.

- e) Barbecue design to minimise fire risk or public nuisance.
- f) Designed to allow all-ability access and use of the facility.
- g) Adequate waste management facilities to meet the size and needs of the proposed facility and integrated recycling.
- h) Provide adequate bicycle parking nearby.

7.4.7 Playgrounds

Over the past 15 years, Council has had an ongoing upgrade program for playgrounds in open space. Feedback from the household survey has identified the community is satisfied with the level of their provision and maintenance. More recently there has been a number of custom designed play areas provided in Glen Eira. Council officers noted that the increased use of equipment manufactured outside of Australia has required long lead-times for repair or replacement of equipment when it is damaged compared with the equipment that is manufactured in Australia.

The design of the play area, its location in the reserve and the range of activities it provides influences the desirability and use of the playground and park. Play areas are often spaces that are also informally used by older children to hang out and in some open spaces are the only place for social seating.

Providing a diverse range of playground sizes and types in a neighbourhood is ideal, giving children varied experiences and challenges within walking distance of home. The Household Surveys included some requests for increased diversity of play equipment to meet a diversity of age groups and provide creative play spaces, general upgrades and some requests for shade to play areas. Shade can be achieved with the placement of the playground by selecting locations with established shade rather than the need for shade structures, thereby minimising resource use and ongoing maintenance costs. Other facilities associated with the playground (such as seating, picnic areas, drinking fountains, open grassed areas, plantings including dense stands of trees nearby) can contribute to the overall play experience and appeal of the reserve. The *Playground Strategy (2010)* guides the current provision and upgrade of playgrounds around the municipality.

Guidelines for upgrade to existing and provision of new play areas:

- a) Play areas to provide diverse activities and equipment to meet different age groups and skill development including physical, social and cognitive play, scaled to meet intended size and use level.
- b) Natural play settings in open space are to be considered in future open space design, allowing for informal and unstructured play to be accessible for most children in open space.
- c) Integrate all-ability/universal access to the major playgrounds and at least to some areas of medium playgrounds.

- d) Fencing to playgrounds should be carefully considered and where possible avoided when it can be demonstrated there is no safety requirement for it. A separation treatment may be appropriate where playgrounds are located immediately adjacent to a main road or where other activities are located in close proximity to the playground and may pose a safety issue for park users, e.g. adjacent to shared trail. Where a separation treatment is determined to be required, investigate alternative designs such as grade separation, seating walls, steps and planting to construction of a vertical fence.
- e) Major play areas to provide diverse play opportunities including some custom designed elements to reflect the natural, urban, landscape, cultural, heritage and social character of the area. Similarly they can be off-shelf items designed to complement the landscape setting that encourages other types of play including social and cognitive play. The play area is to be designed to integrate all-ability access within it where feasible. The play area is to have associated support facilities including seating integrated into the play area, drinking fountains, picnic areas and open grassed areas, trees and shade.
- f) When selecting new play equipment, identify where the equipment is manufactured and the approximate lead times for supply of replacement items and repairs prior to confirming the equipment. Where feasible, source equipment that is manufactured and repaired in Australia to minimise costs and time of repair/replacement of items.
- g) Locate play areas in locations that receive some natural shade during the middle of the day (e.g. between 10am to 2pm) to minimise the need for shade structures. The final proximity of the play area to trees will need to ensure ongoing health of the tree, and that the play area is not in total shade but receives some sunlight during the day.
- h) Provide additional shade trees around playgrounds where feasible. When trees are established or as part of future renewal and upgrade of the playground, investigate removal of shade structures rather than upgrade/replacement.
- i) Seek opportunities to prioritise the use of recycled materials in open space projects where appropriate.

The Bailey Reserve Skate Facility in Bailey Reserve is the only skate and BMX facility in the city. The need for an additional facility has not been investigated in this Strategy and may be required in the future.

The *Skate Facility Guide* prepared by Sport and Recreation Victoria (2001) guides Skate and BMX facility design and would be referenced in future design. Additionally Sport and Recreation Victoria have additional design principles and guidelines available on their website. <https://sport.vic.gov.au/publications-and-resources/design-everyone-guide/sport-and-recreation-settings/skate-parks>

7.4.8 Multi-purpose courts and other minor recreation infrastructure

These facilities are currently provided in a limited number of open space reserves in Glen Eira. Due to the noise associated with backboards and hit up walls, they cannot be located in all reserves and require careful placement and design so they do not result in conflicts between the local communities. Whilst young people traditionally use these facilities, older people are also encouraged to use them for ongoing fitness and health and therefore these facilities need to be easily accessible and also provide all-ability access to them. Full sized multipurpose courts should be considered in open space to facilitate informal access to courts for casual tennis, basketball, futsal and netball. This will potentially provide more unstructured and affordable opportunities for increased participation in exercise and informal activities in Glen Eira.

Guidelines for provision of multi-purpose courts, hit up walls and other minor unstructured recreation infrastructure in open space:

- a) Generally applicable in Municipal, Neighbourhood and selected Local open space.
- b) Siting and design to minimise impacts on adjoining residential properties, and where possible located away from roadways, or have adequate design features to prevent risk of balls entering the road.
- c) Locate facilities where these are easily accessible to the community and provide all ability access to them.
- d) Designed for multi-use to maximise use and appeal in the community.
- e) Include other compatible facilities including seating and drinking fountains.
- f) Locate courts where feasible, in locations that receive some natural shade during the middle of the day (e.g. between 10am to 2pm). The final proximity to trees will need to ensure ongoing health of the tree, and access to some sunlight. This can be either shade from existing trees, or planting suitable tree species to provide shade in the longer term.
- g) Where possible orientate in north/south direction in accordance with current sport facility design standards.
- h) Meet best practice design for fencing, surface drainage, surface materials etc.
- i) Ensure the facility location and design retains clear views and access into the open space.

7.4.9 Lighting in open space

The site assessment work has identified there is lighting in some of the open space, including sports field lighting in many of the Municipal open spaces. Lighting is also provided from street lights in streets adjoining open space. Lighting was not raised as a key issue in the open space survey.

Guidelines for provision of lighting in open space:

- a) Lighting is generally only applicable in high use open space and larger reserves including Municipal and Neighbourhood open space, and in these locations, for specific use or facilities, e.g. sporting ovals and major pedestrian links.
- b) Where new lighting is required, it is to be consistent with best practice principles regarding sustainability.
- c) As a minimum select lighting that: minimises upward glare (to reduce impact on native fauna and adjoining residential amenity), is energy efficient and scaled to meet the specific need identified, is easily maintained and the design complements the character of the reserve, including consideration of heritage values where applicable.
- d) Refer to section 7.3.3 regarding personal safety and CPTED principles when assessing the need for lighting in open space.

7.4.10 Rubbish bins

From site assessments and the household survey, rubbish in open space was not identified as a significant issue. There were some requests for additional rubbish bins however respondents were generally satisfied with maintenance and management of open space.

Guidelines for provision of rubbish bins in open space:

- a) Bins to be provided in Municipal, Neighbourhood and selected Local open space where barbecue and picnic areas are provided. Bins are to be in positions that are both accessible for maintenance purposes and convenient for park users, e.g. near the entry and exit points.
- b) Small Local open space to have no bins with residents encouraged to take their rubbish home with them, except in circumstances where barbecues are located in them or where they are in shopping precincts.
- c) Bins to meet best design management practice and sustainability principles in accordance with Council standards.

Guidelines for provision of rubbish bins at sports pavilions:

- d) The number and type of bins at sports pavilions is to be consistent with Council's recycling policy.
- e) A bin enclosure is to be provided at all sports pavilions, of a size to adequately accommodate a suitable number of bins, and need to be well integrated with existing usage patterns and easily accessed by maintenance vehicles.

7.4.11 Minor park infrastructure

Minor park infrastructure includes facilities such as vehicle control barriers, bollards, fencing, exercise equipment, drinking fountains, etc. From the site assessment work, minor park infrastructure is generally located in open space with facilities that encourage activity. Perimeter park concrete plinths currently being installed to open space are less visually intrusive than fencing they replace.

It should be noted that the provision of increased infrastructure in parks means a subsequent increase in maintenance costs. Therefore the provision and future design of infrastructure needs to consider the longevity and maintenance requirements as part of the design phase. Where these facilities are required, their future design needs are to be consistent with the guidelines below.

Guidelines for minor open space infrastructure:

- a) Designs to reflect diversity in open space landscape, environmental, cultural and heritage character.
- b) Designs to meet best practice guidelines for access for all, safety, quality and sustainability, where possible.
- c) Adhere to sustainability principles in the selection of materials, design and placement in the reserve including investigation into use of recycled materials where appropriate.
- d) Ensure accessibility, including in any future barrier styles in open space to allow multiple informal pedestrian access points into and out of open space.
- e) Fencing to the perimeter of the park is actively discouraged and only include fencing adjacent to major roads if there is a direct safety concern that cannot be managed by other measures.
- f) Fencing to sports fields to include frequent gate openings to ensure they don't form barriers to access.

7.4.12 Interpretive and information signage about open space

The research undertaken for this Strategy identified there is a need to improve information available to residents about open space including the range of open spaces and facilities available across the municipality and interpretive information about cultural heritage values. Information regarding the range of open spaces available within the municipality will be addressed through Council's corporate communications department. In relation to future implementation of interpretive, information and regulatory signage in open space consider the following guidelines.

Guidelines for interpretive and information signage in open space:

- a) Scale the size of the sign in accordance with the open space hierarchy and size of the reserve.
- b) Integrate key regulatory signage with directional signage where applicable
- c) Reflect the character of the open space with the signage style e.g. sporting reserves, heritage gardens etc.

- d) Include interpretive information on the natural and cultural values in open space, where appropriate.
- e) Review clear graphics to effectively communicate regulatory information regarding dogs in open space.

7.4.13 Management of dogs in open space

Dog off-leash areas appear to be well used from the survey, and there is a general level of satisfaction with their provision, as there are off-leash areas in all major open spaces in Glen Eira. The general comments section of the open space survey identified that a number of respondents would like to see improved management of these for the benefit of all park users. This includes enforcement of the on-leash areas, particularly near playgrounds and shared trails and dog owners cleaning up after their dogs. This is generally consistent with Council's *Domestic Animal Management Plan (2017-2021)*, the *Dog off-leash areas in the City of Glen Eira (2011)* and *Dog off-leash areas within Glen Eira 2020* report that dogs must be leashed in designated areas within 20 metres of the following locations relevant to open space:

- The principal location of an organised sporting event, including training.
- A children's play equipment area.
- A permanent barbeque or picnic area.

Designated off-leash reserves include:

- | | |
|--|---|
| • Allnutt Park, McKinnon | • Joyce Park, Ormond |
| • Bailey Reserve, Bentleigh East | • King George VI Memorial Reserve, Bentleigh East |
| • Boyd Park, Murrumbeena | • Lord Reserve, Carnegie |
| • Caulfield Park, Caulfield North | • Mackie Road Reserve, Bentleigh East |
| • Centenary Park, Bentleigh East | • Marlborough Street Reserve, Bentleigh East |
| • Crown Allotment 2031 (The Wedge) | • McKinnon Reserve, McKinnon |
| • Duncan MacKinnon Reserve, Murrumbeena | • Moorleigh Community Village Reserve, Bentleigh East |
| • East Caulfield Reserve, Caulfield East | • Murrumbeena Park, Murrumbeena |
| • EE Gunn Reserve, Ormond | • Packer Park, Carnegie |
| • Glen Huntly Park, Caulfield East | • Princes Park, Caulfield South |
| • Greenmeadows Gardens, St Kilda East | • Springthorpe Gardens, Murrumbeena |
| • Halley Park, Bentleigh | • Victory Park, Bentleigh |
| • Harleston Park, Elsternwick | • Wattle Grove Reserve, McKinnon |
| • Hodgson Reserve, Bentleigh | |
| • Hopetoun Gardens, Elsternwick | |

Dog off-leash areas are designated on some sportsgrounds. This creates ongoing maintenance issues for the Parks and Environment team, particularly when the sportsgrounds are fenced with infill mesh. In these locations, owners tend to let their dogs go without effectively managing them and cleaning up their waste. This reinforces the comments made in the open space survey that dog off-leash areas require improved management and enforcement.

A new dog park has been established in Crown Allotment 2031 (The Wedge) in Caulfield East. This is Glen Eira's first and only fully fenced dog off-leash area. It features turfing areas for exercise, socialisation and obedience training as well as natural elements and

agility equipment. A number of new off leash areas have been provided following the most recent off leash area review, including Wattle Grove Reserve, Mackie Road Reserve and Springthorpe Gardens. An off leash area trial is also planned for a section of Rosanna Street Reserve.

Guidelines for dogs in open space:

- a) Purpose built fencing is not provided for dog off-leash areas in shared use open space as this does not encourage active supervision of dogs or higher levels of compliance.
- b) Consistent with Council's order under the *Domestic Animals Act*, dogs should only be exercised off leash if they are under effective voice control at all times.

7.5 Structured community sport and recreational use of open space

Council's *GET ACTIVE - Future of Sport and Active Recreation 2019* recognises that providing welcoming and attractive spaces, which are conducive to a range of recreational activities, assists in promoting physical activity and other health-affirming behaviours, improving the overall health and well-being of residents. Some of the key issues relevant to open space identified in the study included:

- Glen Eira's population is forecast to increase by 34,000 people between 2018 and 2036.
- There is increasing demand for and requests for a range of informal, casual and multi-sport type facilities.
- The main field based sports of football, soccer and cricket are experiencing growth.
- Sportsgrounds are at capacity based on Council's available resources to maintain grounds to a high standard competition level.
- Council invests heavily in sports and open space infrastructure to cater for increasing sporting and community needs.
- Competing demands for the same area of open space, particularly between scheduled sporting use and informal use of open space.

The preparation of masterplans for major reserves is the ideal time for identifying the appropriate use levels, expansion and addition of all facilities in open space for both structured and unstructured sport and recreation use.

There are some non-open space dependent structured leisure and recreation facilities located in open space. However, due to increasing demands on open space, it is considered appropriate to review whether the existing facilities are retained in open space, and whether new facilities in this category are appropriate to be built in open space in the future. Refer to Section 7.7.1 for guidelines regarding non-open space dependent uses.

7.5.1 Upgrade and replacement of existing structured sporting facilities

The condition of pavilions varies substantially and Council is progressively upgrading them. Where feasible, Council prioritises multiple use of facilities to reduce the number of separate pavilions and buildings in open space. The open space survey results include requests for upgrades to sports pavilions in some of the open spaces. Additionally, the pavilion upgrades are designed to meet ESD principles where feasible.

As part of ongoing upgrades and replacement of structured recreation facilities, opportunities to improve their design, appeal, accessibility and multi-use function are to be investigated as standard procedure. It is recommended that proposals for future upgrades and replacements be evaluated in line with the criteria in Council's Priorities for Pavilion Upgrades Report and utilising the following guidelines to maximise the best use of these facilities in open space.

Guidelines for upgrade and replacement of existing structured sporting facilities:

- a) Demonstrate the need for upgrade/replacement of the facility.
- b) Demonstrate the proposed upgrade/replacement of the facility needs to be located within an open space for its function and viability.
- c) Demonstrate the proposed facility will retain and, where possible, improve access to and use of the open space.
- d) Meets universal design principles including all-ability access principles and standards, and promotes inclusion and use by diverse age range, cultural background, all genders and levels of ability where possible.
- e) Flexible in design to provide for multiple uses or future adaptability to other uses.
- f) Demonstrate that all ESD principles have been addressed in both the design and proposed construction of the facility and it is consistent with current best management practice.
- g) Consistent with the Crime Prevention Through Environmental Design (CPTED) Guidelines or similar.

7.5.2 New structured sporting facilities

Proposals for new structured sporting facilities (including buildings) in public open space will need to demonstrate how the new facility will integrate with the overall open space and be accessible for a diverse range of users. Proposals will be required to meet the following guidelines:

Guidelines for new structured sporting facilities in open space:

- a) Demonstrate the need for the facility.
- b) Demonstrate the proposed facility is dependent on its location in open space for its viability and function.
- c) Meets the criteria listed above in *Guidelines for upgrade and replacement of existing sporting structures and facilities* (c) to (g).

- d) The orientation and design of facility minimises impacts on other structured and unstructured recreational uses, and where possible, adds value to the other activities and informal uses. As a minimum, the proposal will need to demonstrate that it integrates well with them.
- e) Built form including buildings, fencing and other infrastructure to be designed to complement the environmental, landscape and cultural character and values of the open space reserve for its function and viability.
- f) Ensure key view lines into the open space are not blocked or impacted by the facility location.
- g) Where possible, minimise installation of permanent structures that can remain portable to improve adaptability and multiple use of the facility and open space.
- h) Public transport access is preferably available to support the new facility.
- i) Adequate bicycle parking facilities integrated into the facility design.
- j) Demonstrate how the car parking demands for the proposed facility will be met with minimal impact on the open space.
- k) Car park design to meet the criteria listed specifically for car parking in this Strategy.
- l) Demonstrate waste management is adequately provided for including appropriate bin enclosures and recycling initiatives.
- m) Construction activity to minimise environmental impact and disruption to open space.

7.5.3 Non-open space dependent recreation and leisure facilities already located in open space

There are some instances of non-open space dependent recreation and leisure facilities located in open space. The overall aim of this Strategy is for new non-open space dependent recreation and leisure facilities to be located outside of open space, and where possible, for existing ones to be actively relocated out of open space. With ongoing increases in urban densities and the acknowledged lack of open space in Glen Eira, the need to retain and potentially reinstate open parkland from built facilities will continue to be a priority.

Future proposals for upgrade or expansion of existing non-open space dependent recreation and leisure facilities and provision of new facilities in open space will need to meet the following guidelines:

Guidelines for upgrade of existing and new non-open space dependent recreation and leisure facilities in open space:

- a) The proposed facility is compatible with open space.
- b) The installation of the proposed facility results in a net improvement to access and use of the outdoor open space.
- c) The construction of the proposed facility will not have a detrimental impact on environmental and heritage values of the open space and allows continued patterns of recreational use (where applicable) of the existing open space.
- d) Relocate non-open space dependent facilities out of open space where feasible.

- e) Demonstrate that sustainability principles have been met in design and construction.
- f) Public transport access is preferably available to support the new facility.
- g) Adequate bicycle parking facilities integrated into the facility design.
- h) Demonstrate how the car parking demands for the proposed facility will be met with minimal impact on the open space.
- i) Meets the criteria listed in *Guidelines for upgrade and replacement of existing structured sporting facilities (a) to (g) in this Strategy*.

7.5.4 Integration of informal recreation facilities into sporting reserves

The household survey outcomes identified strong participation in informal recreational pursuits. Future open space design will need to consider facilities for informal use as well as organised sporting use to maximise participation in outdoor sport and recreation activities for all.

7.5.5 Sports fields and synthetic turf

Existing sports fields in Glen Eira are currently well used by organised sporting groups and informally by the community at other times. Currently the requests for use of sports fields by seasonal sports clubs exceeds supply and this demand is anticipated to increase with forecast future population growth in the municipality.

Sports clubs training and overlap between sporting seasons put pressure on the sports fields and allows only a narrow window to conduct maintenance and upgrade works on the sports fields. Council has an ongoing program of upgrading the condition of the natural turf to better cater to the drought conditions and achieve the right balance of irrigation, grass type and levels of use.

Establishment of synthetic surfaces could be investigated to primarily cater for training purposes and protect the natural turf grounds for matches. The general community would be also encouraged to use the synthetic surface when it is not in use for training in order to reduce the wear and tear on the natural turf grounds. Synthetic surfaces allow clubs to schedule multiple programs for training on this surface without placing pressure on the natural turf areas.

Synthetic surfaces increase the quantity of impervious surfaces and are not the preferred solution in all cases, as they do not provide for the broad range of other recreational and environmental benefits that natural turf provides, particularly in relation to urban heat island effect mitigation. However they do provide use for training and continuous use and may be a solution to maximise use in concentrated areas. Council will consider the role of synthetic surfaces in the future.

7.5.6 Advertising signage and permanent scoreboards in open space

The following guidelines are to assist in providing consistent direction for provision of advertising signs that do not require a planning permit in open space but do require Council permission to erect a sign on Council land.

Guidelines for review of advertising signage and permanent scoreboards in open space:

- a) Any proposed advertising signs are to be temporary only to be removed at the conclusion of the event for which they are being proposed. Scoreboard advertising is only to be displayed during fixtured competition.
- b) Signs need to be consistent with the scale and the size of the structure on which it is proposed.
- c) Scoreboard size should be consistent with the wider park usage and park character.
- d) Signs and scoreboards are not to obstruct main view lines into the open space reserve from the main pedestrian, vehicle entry points or be visible from adjoining properties.
- e) Minimise the visual prominence of signage and scoreboards when viewed from the broader areas of the open space reserve, not associated with club-based use.
- f) Existing locations of scoreboards may not necessarily be suitable and proposed locations should seek to minimise the visual impact to the broader open space reserve.

7.6 Buildings in open space

Proposed built infrastructure in open space that is not directly related to the use of outdoor open space for sport, leisure and passive recreation is not encouraged and will need to demonstrate how it will improve access and use of an open space reserve prior to approval. Refer to Section 7.5.3 regarding upgrade of existing and non-open space dependent recreation and leisure facilities in open space, as distinct from buildings.

Where buildings are required in open space, guidelines are included to ensure existing and new buildings are complementary to the open space, improve the function, character and value of open space. Refer also to Guidelines included in Section 7.5.

7.6.1 New non-open space dependent buildings

There are some instances of non-open space dependent facilities located in open space. The overall aim of this Strategy is for new non-open space dependent facilities to be located outside of open space. As noted previously, with ongoing increases in urban densities, the open space survey identified the community are concerned about the impact of increased use on existing open space as a place to escape from built form. Therefore, these guidelines are based on the principles of reducing the dominance of built form in open space and ensuring that any expansion to built form is thoroughly assessed and confirmed to be required for sport, recreation and open space related uses and needs.

Improved building design that promotes multi-use has the potential to minimise its physical and ecological footprint and increase the appeal and use of the reserve. This includes investigating the following:

- Multiple use of buildings, e.g. external public access to toilets already provided in existing sports pavilions.
- Building orientation and shape to complement other uses in the reserve.
- Building design to maximise internal use of external decks/verandas when not in use by the clubs.
- Rainwater harvesting/re-use from the building either internally or externally.
- Passive solar design to improve energy efficiency.
- Minimising building footprint in open space.
- Implications of associated constructed facilities such as car parking.

Guidelines for upgrade or provision of new non-open space dependent buildings in open space:

- a) Review whether the existing building is suitable to be adapted to an open space related use, prior to consideration of continuing the existing non-open space dependent use.
- b) If determined to be required, demonstrate how the non-open space dependent building is compatible with and will improve the use and access to the open space as part of the design development process.
- c) Use best practice environmentally sustainable principles in siting and design, particularly in relation to water and energy.

- d) Building siting and design should not block prominent public views to the reserve, not create hidden or unusable areas around them and passively survey the open space.
- e) Demonstrate waste management is adequately provided for including appropriate bin enclosures and recycling initiatives.
- f) Public transport access is preferably available to support new uses associated with the building.
- g) Adequate bicycle parking facilities integrated into the building design.
- h) Provide all-ability access in accordance with current Australian Standards.
- i) Complement the character of the open space.
- j) Construction activity to minimise environmental impact and disruption to open space.

7.6.2 Public toilets

There is a range of public toilet facilities in open space reserves including automated public toilets, stand alone brick toilet blocks, and facilities that are located inside sporting pavilions and other facilities. Where the toilets are located in sporting pavilions these are generally not open to the general public outside of sporting events. There is a range of issues associated with public toilets in open space:

- Some are poor condition and design, and this is being addressed with a renewal strategy to progressively upgrade these.
- Placement within the reserve that can influence use, safety and function of the surrounding area.
- Size in relation to the open space and volume of users.
- Level of maintenance.
- Proximity and relationship to other facilities in open space.

The household survey results included requests for additional toilets in open space and improved and more regular maintenance of these.

Council's existing *Public Toilet Strategy (Review 2015)* provides direction for the provision of public toilets in Glen Eira. Below is a summary of guidelines for provision of new public toilets or upgrades to existing public toilets in open space:

Guidelines for review and design of public toilets in open space:

- a) Appropriate to Municipal and Neighbourhood open space only, based on assessment of other facilities within and in close proximity to the open space, to demonstrate there is a need to provide public toilets.
- b) Where possible, integrate with other buildings in the reserve including consideration of how the other building/s may be modified to allow some public access to existing toilet/change facilities, while retaining secure and separate access for the existing clubs and groups already operating in the buildings.
- c) Located near existing services where available.

- d) Located to avoid the need for park visitors to cross internal roads and car parks where feasible.
- e) Locate within clear sight and walking distance of high use facilities such as barbecues and playgrounds where feasible.
- f) Locate in a position to service the whole reserve thereby minimising the need for more than one public toilet in an open space.
- g) Use best practice environmentally sustainable principles in siting and design, particularly in relation to water and energy use.
- h) Demonstrate waste management is adequately provided for.
- i) Location should not block prominent public views to the reserve and not create hidden or unusable areas around them.
- j) Located with passive supervision from surrounding area where possible.
- k) Provide all-ability access in accordance with current Australian Standards.
- l) Adequate lighting including maximising daylight where possible.
- m) Appropriately sized to meet demands and size of the open space.
- n) Complement the character of the open space, including the heritage values of the open space where appropriate.
- o) Refer to Crime Prevention Through Environmental Design (CPTED) principles in public toilet design.

7.7 Cultural heritage values, public art and memorials

7.7.1 Cultural heritage values

Indigenous cultural heritage values

Refer to recommendations in Section 5.2.5 of the Strategy.

Non-indigenous cultural heritage values

Refer to recommendations in Section 5.2.5 of the Strategy.

7.7.2 Public art

There is no policy or strategy to guide the provision and design of public art in the City including in public open space.

The potential issues associated with providing public art in open space include:

- Community consultation is required.
- Integration and reflection of the intrinsic natural, cultural and community values of a public space.
- The assessment of public safety and risk management.
- The design criteria for longevity in an outdoor public open space environment.
- Potential for vandalism is to be considered.
- Ongoing maintenance and upgrade works are to be considered within the context of the original artist's values and design intent for the work.

The issues above should be identified with relevant actions in any future Public Art Policy prepared by Council.

Guidelines for locating public art in open space:

- a) Future master plans for Municipal open space or highly visible open space such as public squares to consider the integration of public art as a component of the design. This does not include the design of the artwork, but the potential site and design parameters of a future commission, as per the design guidelines of any public art policy or strategy developed by Council in the future.
- b) Installations are to consider ease of maintenance including prevention of vandalism.

7.7.3 Memorials and monuments in open space

Council has a register of key memorials and public art in open space. Major civic monuments contribute to the cultural value of the open space to commemorate significant people, events and places.

With limited amount of open space in the municipality, Council does not support installation of any memorials from community groups and individuals. The following guidelines are for any major civic monuments initiated by different levels of government:

Guidelines for any future major monuments initiated by different levels of government in open space:

- a) The location is to be reviewed for consistency with the intended hierarchy and character classification for the open space.
- b) Any proposed monuments will only be considered if Glen Eira City Council is given full management and maintenance responsibility for it, therefore can assess and ensure it meets all the safety and risk issues associated with the design.
- c) Commemorative plaques will be minimised and only installed where at the initiation of Glen Eira City Council. Future selection, materials, maintenance and risk issues will be at Council's discretion.

7.8 Family gatherings and functions in open space

Council recognises the important role of family gatherings, festivals and community celebrations to build a social connectedness and promote community inclusion, as identified in the *Glen Eira Council and Community Plan* and allows some of its open space to be booked for events.

Additionally Council runs its own community celebrations in open space including Party in the Park, Carols in the Park and free annual outdoor music series held in spring time.

Family gatherings and community celebrations are also held in the parks, with the peak period being in summer. Family gatherings with less than 40 people attending are not required to make a booking. Rotundas are also available for bookings (fee payable) or functions and events and Council officers have noted an increase in demand for these over the past 5 years. Location of rotundas is available on Council's website.

A fee is payable if the open space is to be used for filming/still photography; hot air balloon landing and commercial fitness training.

7.8.1 Community festivals and family gatherings in open space

Council promotes community festivals and family gatherings in open space in the Municipality as it encourages a sense of place and community use of open space. Over-use of open space for this purpose can potentially conflict with regular use of these reserves by the local community or the environmental and heritage values of the reserve.

Selecting the most appropriate reserves for community festivals and family gatherings (i.e. 20 people or more) will minimise conflicts and the guidelines below are to inform the selection of appropriate sites and ensuring they are well managed.

Guidelines for assessing appropriateness of community festivals and family gatherings in open space:

- a) Major festivals and events are promoted at Caulfield Racecourse as this generally has the appropriate level of facilities, public transport access, parking and usage levels appropriate to this use.
- b) Smaller community festivals may be held in Neighbourhood open space subject to review of the type of festival, numbers of people and parking availability.
- c) In selecting festivals and family celebrations to be held in open space encourage those that promote the following:
 - The celebration enhances sense of community and neighbourhood spirit
 - Increases residents' appreciation of the recreational, cultural or natural character and values of Glen Eira.
 - Has relevance to the Glen Eira community and encourages their attendance, participation, and where appropriate, fitness.
 - The festival is compatible with community expectations regarding appropriate use of public open space.

- Minimises the area and length of time that general community access will be restricted to open space.
- d) Applicants are to prepare a festival management plan appropriate to the scale of the event outlining how they will ensure that no damage to the open space occurs during the event.
- e) All festivals to have a minimal impact on the environment in particular being carbon accountable, water efficient and water wise.
- f) Community festivals and celebrations are to meet Council's conditions and requirements as part of the permit, including noise restrictions and damage to the open space.

7.8.2 Commercial or private events and functions in open space

Private functions and events in open space are preferred at Caulfield Racecourse or large non-sporting reserves. Applications for holding a private function or event should be assessed to address the following guidelines:

Guidelines for assessing appropriateness of private events and functions in open space:

- a) Whether there are alternative areas of open space for the community to use in the vicinity of where the event is proposed or they are able to access at least part of the reserve during the event.
- b) Whether the applicant is based in Glen Eira.
- c) If the event will have a positive contribution to the sense of community in the reserve e.g. encourage the local community to visit the open space.
- d) The event and associated infrastructure will not unduly restrict or impact on the use and enjoyment of the open space by nearby/adjoining residents including issues such as traffic and parking.
- e) The event and associated infrastructure will not damage the park grounds, plants or features.
- f) Demonstrates the impact of noise generated from the event is acceptable and meets with Council's requirements in relation to amplified noise.
- g) All events to have a minimal impact on the environment in particular being carbon accountable, water efficient and water wise.
- h) The event complies with Council's liquor consumption guidelines.

If the proposed event meets the guidelines, an event management plan appropriate to the scale of the event will need to be submitted and approved prior to confirmation to proceed.

7.8.3 Commercial or private use of facilities in open space

Existing Council policies and guidelines for commercial activities in open space such as personal training, hot air balloon landing and commercial filming/photography are in place. Fees are payable to conduct these activities in open space. The key ongoing issue for open space is to achieve a balance between commercial and private use of facilities in open space and accessibility and use of these facilities by the general public. Applications to conduct commercial or private activities in open space need to demonstrate the proposed use meets the guidelines, and considers public access to open space as noted below.

Guidelines for assessing appropriateness of commercial or private use of buildings or facilities in open space:

- a) That the proposed use or development complements and enhances the broader community use of the open space.
- b) That the visual and physical access to the open space will not be reduced.
- c) There is a demonstrated community need for the proposal.
- d) All events to have a minimal impact on the environment in particular can demonstrate they meet contemporary best management practice regarding sustainability.
- e) That the proposed uses as a minimum do not conflict with community health and wellbeing principles, and where feasible promote these principles.

7.9 Design and management plans for open space

Council currently has 13 master plans or concept masterplans/management plans for open space. These existing plans are listed below:

Open space	Date
Bentleigh/Hodgson Recreation Reserve Masterplan	2003
Caulfield Park Masterplan Update	2019
Duncan Mackinnon Reserve Masterplan Update	2017
East Caulfield Park – Stage 2 Preliminary Masterplan	1999
EE Gunn Reserve Masterplan	2017
Hopetoun Gardens Landscape Masterplan	2019
Joyce Park Draft Masterplan	2004
Mallanbool Reserve Landscape Masterplan	2000
Murrumbeena Park Masterplan	2019
Outer Circle Railway Linear Park – Boyd park, Springthorpe Gardens and Riley Reserve – Landscape Management Plan	2019
Lord Reserve and Koornang Park Masterplan	2019
Packer Park Masterplan	2000
Princes Park Masterplan	2003

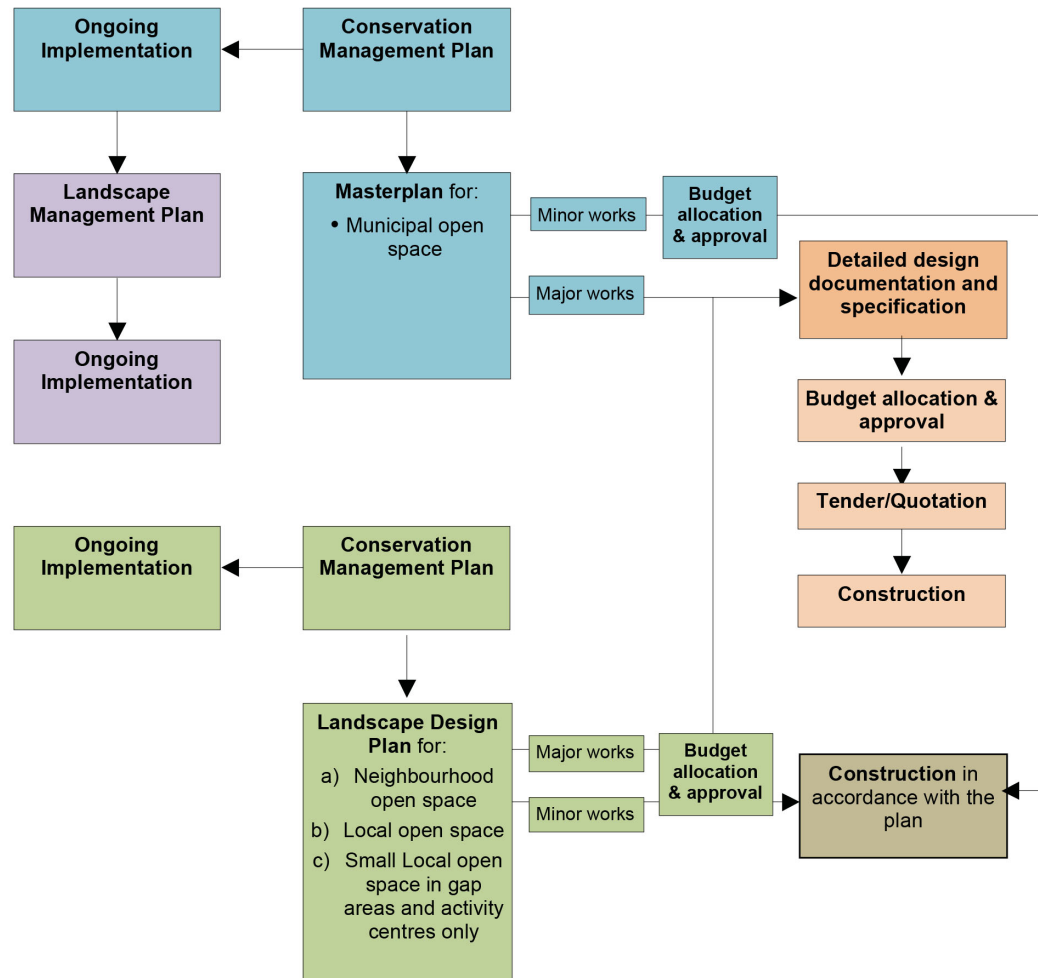
7.9.1 Overview of different plans to guide future works

The design process for open space reserves needs to be scaled to match the size and function of the reserve as illustrated diagrammatically on the following page.

Preparing landscape design plans for reserves allows Council to consult with the community and prepare plans that guide future works and budgets for upgrades to reserves in a fair manner. The Strategy includes guidelines on the type of plans applicable for the different scale of the reserve.

If required, masterplans are to be prepared for Municipal open spaces, and landscape design plans are to be prepared for Neighbourhood, Local and some Small Local open spaces where required. Once the masterplans and landscape design plans are completed, they are implemented subject to Council funding allocation on an annual basis. The masterplans should be internally reviewed every five years to confirm the currency of their recommendations. Where these plans include new infrastructure works, detailed design is undertaken to produce a set of detailed documentation drawings to guide the future works. Where the works are minor and straightforward, Council's Recreation Services department may implement the works directly from the plan.

Figure 7-1 Diagram illustrating the design and management plans required to guide future works in each of hierarchy of open space



7.9.2 Masterplans

Masterplans will guide the future design of Municipal open space across the municipality. Where open space has historical values, a conservation management plan is to be prepared prior to the masterplan if required, or the conservation management plan may be adequate without the need for a masterplan. The following framework guides the future preparation of these plans:

Framework for preparing masterplans:

- Provide an overall design and management direction for the reserve for approximately 10 years, with a review after five years.
- Consultation is typically undertaken with all the groups and clubs who use the site, community stakeholders who may be involved in the site, relevant Agencies who own or manage land within or adjoining the reserve, regular site users and the local community. Consultation is recommended to occur in two stages: at the research phase, and at the draft design phase.

- c) The masterplan will typically be guided by a project working group made up of the Council project manager from the recreation area of council and officers from relevant areas of Council which could include parks services, environment, infrastructure, transport, arts and culture and community services.
- d) Outputs of a masterplan typically would include:
 - scaled drawing of existing conditions
 - scaled drawing of design with explanatory notes, photos, sketches etc.
 - management directions where feasible
 - preliminary estimate of probable cost for all the works
 - staged implementation plan
 - summary masterplan report

7.9.3 Landscape design plans

Landscape design plans will guide the future design of Neighbourhood, Local and some Small Local open space reserves with priority given to the following:

- Gap areas
- Urban Villages and Neighbourhood Centres
- Areas without access to Neighbourhood or Municipal open space.

Framework for preparing landscape design plans:

- a) Provide an overall design and management direction for the reserve for approximately five years, as works are generally implemented within this timeframe.
- b) The landscape design plan is guided by a small working group made up of Recreation Services and other relevant Council officers as required.
- c) Community engagement will be guided by relevant community engagement guidelines and typically includes consultation with local residents within the nominated walking distance of the open space and any groups located in it.
- d) Where appropriate, consultation to occur at the research phase (to identify the issues) and the draft design phase (to receive feedback on the design).
- e) Outputs of a landscape design plan to include:
 - scaled drawing of design with explanatory notes regarding design and management
 - preliminary opinion of probable cost for all the works with priorities for implementation where appropriate.

7.9.4 Conservation management plans

For open spaces with potential heritage values as already identified in existing Heritage Studies prepared by Council, a heritage assessment is recommended prior to any works in the open space, or preparation of further design or masterplans. If an open space is identified as having a higher than local level of heritage significance in current or future heritage studies, a conservation management plan is to be prepared for the open space prior to the preparation of any design plans where they are required. If the existing heritage studies have identified an open space as having local heritage significance, the need for a conservation management plan for the open space is to be investigated.

If a design plan (masterplan or landscape design plan) already exists for an open space with heritage values, the actions from this would be reviewed once the conservation management plan has been prepared.

7.10 Community involvement in open space

The wider community is consulted when developing new or upgrading existing open space via processes appropriate to the scale of the open space. This is described in Section 7.9, Design and management plans for open space. The community will be updated on the implementation of the Strategy via reporting in council newsletters and on the website as described in Section 5.2.6 of this Strategy.

The Reserve Advisory Committees provide advice to Council and practical input on the use, care maintenance and forward planning of the reserves.

7.10.1 Community gardens

The East Bentleigh Village Garden was opened in May 2019 and is located in Moorleigh Village, 90 - 92 Bignell Road, Bentleigh East. This is the only community garden located on Council owned land. All other existing community gardens in Glen Eira are located on ancillary open space and private land. This includes gardens in a number of schools, the Murrumbeena Community Garden at the Koornang Uniting Church and one being established at Caulfield Hospital. It is Council's preference that community gardens continue to be located where feasible on ancillary and private open space given the high demands on the public open space network.

The following guidelines are to be applied to the future assessment for potential sites for community gardens identified in Recommendation 5.2M and the existing and future proposals for community gardens in open space.

Guidelines for existing and future proposals for community gardens in open space:

- a) Demonstrate the use of land as a community garden is benefiting local residents from within the Municipality.
- b) The land area is large enough to sustain a viable community garden including areas for plots, compost, sheds and water storage.
- c) Meets the multiple-use and sustainability principles (e.g. co-located with a Neighbourhood house to share facilities and resources such as rainwater harvesting).
- d) There is adequate public open space available in the surrounding area or on the remainder of the site to retain adequate access to open space for the broader community into the future.
- e) Compatible with adjoining land use for amenity and health risks associated with growing food, and consideration of environmental values of adjoining open space.
- f) The site is suitable for vegetable growing including adequate sunlight access, water, visible and complements and potentially improves the open space character.
- g) The community gardens are run by an incorporated organisation that meets regularly.

- h) The land does not currently have a recognised public open space use or value that benefits the broader community.
- i) The assessment criteria for allocation of plots to give priority to applicants who do not have access to their own gardens.
- j) Should adhere to agreed land management practices and access arrangements as stipulated by Council.
- k) Maintain an agreed edge treatment between the community garden and the public open space reserve.
- l) All infrastructure and plants established as part of the community garden be removed if the land is being returned to Council.
- m) If the land is identified to be required for an alternative public open space use, Council have the right to reclaim the land for that purpose.
- n) Apply sustainable management principles and provide educational opportunities to interpret environmental sustainability principles and practices in the open space.
- o) The proposed location does not negatively impact on heritage or identified environmental values.

7.11 Open space maintenance

Some of the key issues identified from the site assessments, council officer workshops and the household survey outcomes include:

- The consultation results indicate the community is satisfied with the level of maintenance in open space and complement council on this. The main facilities they are concerned about maintenance levels of are public toilets and drinking fountains.
- The sports fields appear to be in good condition and from the site assessment work appear to receive reasonably high levels of unstructured recreation and informal use when not being utilised by the sports clubs.
- From the workshops undertaken to date, it appears the major issue regarding sports field maintenance includes overuse particularly for sports training, adequate irrigation and impacts from informal use, particularly dog waste on fenced sports fields where dog owners appear to not be as attentive to dogs off leads due to presence of fencing.

7.11.1 Vegetation maintenance and management

Trees are one of the most valued features about open space and therefore increasing their presence in open space has the potential to solve some issues with lack of shade. Additional planting in open space will lead to increased maintenance costs, however there are multiple benefits from planting shade trees which cannot be achieved when constructing shade structures.

Weed control

Council is committed to integrated weed control measures in the management of open space. A range of techniques can be used to control weeds including hand weeding, cultivation, mulch, competition and herbicides. Herbicides are currently one of the most common and cost effective methods to control weeds in open space. Other methods of weed control include the use of steam on trial sites. A longer-term objective is to reduce the need for herbicide use in the open space management as it is recognised there are potential risks associated with their use.

Council to continue to develop an integrated pest plant management plan with consideration for the following guidelines:

- a) Council continues with current method of weed control.
- b) Continue to investigate trialling alternative herbicide products to control weeds that do not contain Glyphosate and continue to investigate new options as they become available.
- c) Implement best practice management weed control techniques to minimise environmental impacts.

Native vegetation areas

There are limited areas of remnant native vegetation in open space reserves. Council is to continue to investigate improved methods for managing these and potentially expanding them where appropriate.

Change to maintenance levels in areas of higher density

Current research into use of open space suggests that well maintained open space with natural features such as plants, grass and trees is more highly used in inner urban locations. With the intended expansion of residential populations in Urban Villages and Neighbourhood Centres, there will be a need to provide open space with natural features near to these centres. Currently, the small areas of open space located in these centres include spaces with mainly hard paved surfaces as in Bentleigh and Carnegie.

This Strategy encourages presence of garden beds, trees and grass in high use areas to contribute to mitigation of the urban heat island effect, and community health and wellbeing. This will increase the frequency of maintenance and will need to be considered in future ongoing maintenance programs.

7.11.2 Public toilets

The main community comments on public toilets during the consultation included that toilets require improved maintenance. There were also some requests for additional toilet facilities. Some of this is due to the age, physical condition of the toilets and not just the maintenance levels. Council is to continue review of maintenance levels of the existing public toilet facilities in accordance with the *Public Toilet Strategy (Review 2015)*.

7.11.3 Litter

The issue of litter is expressed in a number of ways including:

- litter in reserves and parks, especially after weekend activities
- rubbish bins which require more frequent emptying
- provision of additional bins
- dog waste disposal including lack of responsible pet ownership and facilities

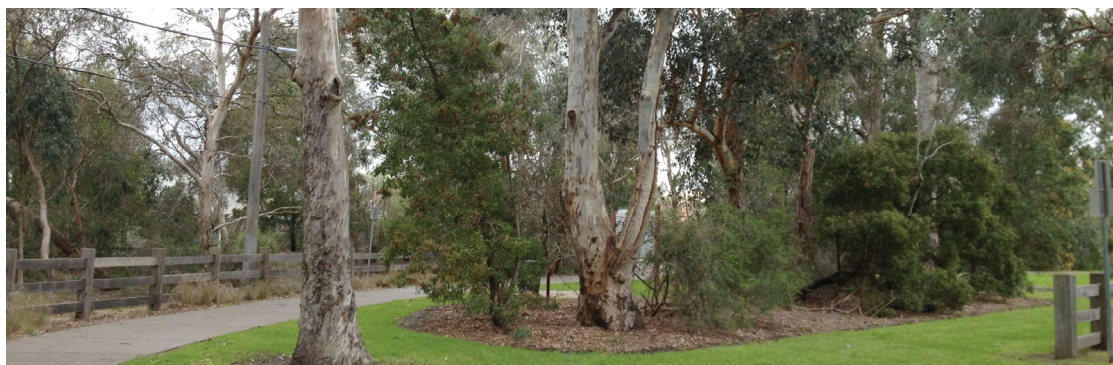
From existing site assessments and the open space survey, littering was not raised as a major issue in Glen Eira. There were some requests for additional bins in open space.

7.11.4 Open grassed areas

Open grassed areas are valued by the community for informal recreational activities but are also moisture absorbing surfaces that assist in minimising urban heat island effect. Maintenance of open grassed areas in Glen Eira was not raised as an issue in the open space survey.

7.11.5 Paths

Almost half of the respondents of the open space survey indicated that paths are adequately maintained in Glen Eira, closely followed by seats and grassed areas. As walking is the most popular activity in open space, continued maintenance of existing walking paths and provision of additional paths where appropriate is required.



8. Implementation

8.1 Responsibilities and actions

Department	Responsibilities
Recreation and Open Space	<p>Implement the overall and precinct recommendations in the Strategy:</p> <ul style="list-style-type: none"> • Undertake open space precinct assessments for the areas identified to require additional open space in this Strategy to identify potential opportunities. • Review the open space component of development applications, including within the context of the open space precinct assessments, to determine where open space land contributions are to be requested in consultation with Statutory and Town Planning. • Plan for provision of new open space including preparation of design plans or input to the design plans prepared by the developer for open space in conjunction with Town Planning, Statutory Planning and Parks Services. • Prepare bids for the capital works program for open space. • Implement the capital works program in open space. • Prepare masterplans and landscape design plans for open space reserves in consultation with the community and relevant stakeholders. • Implement the masterplans and landscape design plans for open space with on-ground works. • Oversee implementation of existing masterplans and landscape design plans for open space reserves in consultation with Parks Services. • Responsible for structured sport and recreation facility and activity provision and management in open space.

Department	Responsibilities
Parks Services	<p>Implement the precinct recommendations including:</p> <ul style="list-style-type: none"> • Ongoing maintenance and management of open space. • Responsible for structured sport and recreation facility and activity maintenance and management. • Annual budget for operational and maintenance expenditure in open space.
Strategic Planning	<p>To ensure the Glen Eira Planning Scheme and other strategic documents are consistent with the Strategy including:</p> <ul style="list-style-type: none"> • Amend the Municipal Strategic Statement to implement key strategic elements of open space; this should occur as part of the next MSS review. • Amend the schedule to clause 52.01 of the planning scheme to introduce the contribution rate/s identified in the Strategy; adopt this rate/s as Council policy when the Strategy is finalised until such time as the amendment is gazetted. • Amend local policy in the planning scheme in relation to open space contributions to provide guidance on how Council will levy contributions and when land or cash will be requested and included in this Strategy. • Require the need for new open space to be acknowledged and future open space included in local plans and policies. • Provide strategic transport direction in terms of encouraging and supporting active modes of accessing community facilities including green space that aims to increase wellbeing, safety and community coherence. • Rezone land in future when parcels are transferred to Council for public open space or Council land is converted to public open space.
Statutory Planning	<ul style="list-style-type: none"> • Administer and collect open space contributions. • Liaise with developers in the initial development application stage to achieve desired outcomes for open space as set out in the Strategy. • Require new open space to be included in Development Plans in accordance with the Strategy. • Conduct referrals with Strategic Planning and Recreation and Youth Services.
Assets and Facilities	<ul style="list-style-type: none"> • Facility upgrade with Recreation and Youth Services. • Provide technical advice on wetlands and other water sensitive urban design infrastructure proposals in open space reserves. • Provide advice on all aspects of sustainability for open space projects. • Project manage and implement projects in collaboration with Recreation and Youth Services.

Department	Responsibilities
Arts and Culture	<ul style="list-style-type: none"> • Responsible for delivery of public art in open space in partnership with Recreation and Youth Services and Parks Services. • Manage Party in the Park events in open space.
Transport Planning	<ul style="list-style-type: none"> • Provide engineering and infrastructure design investigation and advice, particularly for improving on-road pedestrian and bicycle links and road crossings. • Provide technical advice regarding future proposals for change of use on existing Council owned land, for example conversion of part of a road to open space.
Finance	<ul style="list-style-type: none"> • Responsible for allocation of the capital and operational works budgets for open space, consistent with the Strategy priorities and in partnership with Recreation and Youth Services and Parks Services. • Maintain an appropriate recording system for open space contributions to assist appropriate recording and spending of these funds. • Assist with the annual open space budget allocation.
Civic Compliance	<ul style="list-style-type: none"> • Development and enforcement of regulations in open space. • Domestic animal management.

8.2 Funding

8.2.1 Capital works

8.2.1a Existing capital works funding

The existing capital works budget allocation for open space is based on the implementation of works identified in the existing open space masterplans and the Strategy. The open space capital works funding is reported as a broad total that includes unstructured recreation and informal use of open space, along with some structured sporting facility upgrades. These are shown in Table 8-1 below.

Table 8-1 Existing capital works expenditure on open space improvement projects

Financial Year	Council and other funding	Open space contributions
2013/14	\$3,391,000	\$2,581,308
2014/15	\$6,047,187	\$3,667,372
2015/16	\$10,054,746	\$5,864,808
2016/17	\$9,310,686	\$7,811,053
2017/18	\$7,578,616	\$10,348,407

8.2.1b Future capital works funding

Future capital works program and expenditure on open space improvement projects will be aligned to the projects and priorities included and described in this Strategy. The annual allocation will be subject to:

- Allocation of adequate resources, budgets and funding to implement the capital works program.
- The rate at which open space contributions are collected.
- Changes to trends and forecast population change and implementation of projects linked to the forecast change.

8.2.2 Land acquisition

This Strategy will guide the future priorities and location for where additional new open space is required as described in the precinct recommendations in Section 6 of this Strategy. This will be achieved through a range of mechanisms described in Section 5.3.3, with some areas of open space to be contributed either in part or in their entirety as open space contributions from development at Council's discretion.

8.3 Open space contributions to implement the Strategy

8.3.1 Value of contributions

The Strategy recommends changes to how open space contributions will be applied to eligible subdivisions, i.e. changes to the contribution rate. Funding of Strategy projects that are included in the new contribution rate are to be allocated between the existing population, represented by rates, grants and user income, and the forecast population, represented by future open space land acquisition (land contribution or purchase with contribution funds) and cash contributions.

8.3.2 Expenditure of contributions

Open space contributions collected are held in a Reserve account to allow expenditure over consecutive years as there will be varied rates of change in the local precincts. The expenditure of funds on precinct based projects will be tied to the rate of change in the local area and at times will require the collection of funds over more than one year.

The contributions funding component of each open space project included in this Strategy Refresh reflects the proportion of identified need or benefit that will accrue to the new population from that project. As projects are implemented over time, there should be an equitable and balanced distribution of contributions expenditure, so that locations with greater population growth will benefit in line with the level of contributions made during the Strategy implementation period. Council's budget processes will need to allow for this.

No.	Recommendation	Responsibility	Priority
8.3A	Allocation of open space contributions Introduce a revised open space contribution rate in the schedule to Clause 53.01.	Council	Very High
8.3B	Use of the Reserve fund Open space contributions will be held in the Reserve Fund and used to give effect to this Strategy in accordance with the provisions of the <i>Subdivision Act 1988</i> . Allocate open space contributions from the Reserve Fund for land acquisition or capital works depending on the purpose for which the monies were collected. The proportion of project funding should be commensurate with the use by the new population on whose behalf the contributions are collected. The budget should maintain the percentages allocated to open space contributions, especially over the life of the Strategy.	Council	Ongoing
8.3C	Monitoring and reporting Monitor and report the open space contributions component of budgets and project funding to ensure commitments to the new population are delivered.	Council	Ongoing

8.4 Priorities

The priorities identified in this Strategy provide guidance on the intended order in which recommendations are to be implemented. They are broadly based on the following:

- Forecast trends in population growth
- Land use changes
- Community consultation outcomes via the open space survey
- Gap areas where people have to travel further than safe walking distance to reach open space
- Other relevant strategies and plans for open space.

The Strategy has an implementation timeframe of 15 years and will be implemented generally in accordance with the priorities indicated in the Recommendation tables to meet the existing and forecast population open space needs. Many of the recommendations are in response to forecast development trends and population growth. Changes associated with forecast trends and growth will require priorities to be adjusted to respond to these changes. Factors that are likely to influence a change to priorities for action over the 15 years include:

- Changes in land use trends including market trends and directions.
- Changes to forecast population growth.
- Allocation of adequate resources, budgets and funding to implement the works program.
- Other unexpected changes that arise and cannot be foreseen at this stage.

The priorities have been assigned timeframes. Recommendations within each priority are intended to commence within the priority time period, but not necessarily be completed within it. This is due to a number of the recommendations being complex in nature to implement, particularly when they are associated with establishing new open space.

Broad priority time periods over the 15 year timeframe are:

Very High	Years 1 to 4
High	Years 5 to 7
Medium	Years 8 to 10
Low	Years 11 to 15
Ongoing	All years

8.5 Monitoring

Implementation and monitoring of the Strategy will aim to:

- Establish an appropriate system of planning, documenting and recording the works completed from the Strategy.
- Internal Council officer working group to regularly monitor the implementation of the Strategy to assess the progress and success of the recommendations.
- Regularly report on the Strategy progress including the open space contributions program (annually).
- Meet as required with relevant areas of Council to review implementation of the Strategy.
- Internal review of the Strategy every four years for the duration of its operation.
- Integrate the implementation of the Strategy with other existing and future Council plans.

References

- .id Consulting (2018) Population and housing forecasts, data provided by the City of Glen Eira
- Andrew Ward (1996) **City of Glen Eira Heritage Management Plan 1996, Volumes One, Two, Three and Four** prepared for Glen Eira City Council
- City of Glen Eira (2019) **GET ACTIVE The future of recreation and sport**
- City of Glen Eira (2018) **Bentleigh Structure Plan 2018-2031**
- City of Glen Eira (2018) **Carnegie Structure Plan 2018-2031**
- City of Glen Eira (2018) **Elsternwick Structure Plan 2018-2031**
- City of Glen Eira (2018) **Integrated Transport Strategy 2018-2031**
- City of Glen Eira (2018) **Activity Centre, Housing and Local Economy Strategy**
- City of Glen Eira (2017) **Planning Strategy Impacts on Housing Opportunity**
- City of Glen Eira (2016) **Environmental Sustainability Strategy 2016-2021**
- City of Glen Eira (2014-2019) Annual Reports
- City of Glen Eira (2019) **Annual Budget**
- City of Glen Eira (2012) **Conditions for Holders of Allocation Permits for Commercial Health, Recreation and Fitness Operators - Open Space**, prepared by Recreation Services
- City of Glen Eira (2017) **Pavilion Redevelopment Strategy**
- City of Glen Eira (2011) **Profile.id Community Profile** for all suburbs
- City of Glen Eira (2010) **City of Glen Eira Playground Strategy** Updated August 2012
- City of Glen Eira (2010) **Glen Eira Bicycle Strategy**
- City of Glen Eira (2010) **Street Tree Planting Preferred Species Palette**
- City of Glen Eira (2009) **Sustainable Water Use Plan**
- City of Glen Eira (2000) **Outdoor Furniture Strategy for the City of Glen Eira**, prepared March 2000
- City of Glen Eira (2017) **Glen Eira Council and Community Plan 2017-2021**
- City of Glen Eira (2012) **Strategic Resource Plan 2012-2013 to 2021-2022**
- City of Glen Eira (2013) **Glen Eira Municipal Early Years Plan 2013 - 2017**
- City of Glen Eira (2011) **Carbon Emissions Reduction Plan 2011-2020**
- City of Glen Eira (undated) **Personal Training Venues and Maps**
- City of Glen Eira (undated) **Your guide to on and off-leash locations - parks in the City of Glen Eira**, A4 colour leaflet

- Connell Wagner Pty Ltd (2008) **Glen Eira Rail Corridor Strategy Victrack**, prepared for Victrack, 12 December 2008
- Department of Transport (2010) **TravelSmart Map - Glen Eira**
- Gerner Consulting Group Pty Ltd et al (1998) **Phoenix Precinct Urban Design Framework**, prepared for the City of Glen Eira, Victoria Amateur Turf Club and Monash University in association with Greg Tucker & Associates, Pinnacle Property Group and Peter Edgeley
- Glen Eira Planning Scheme **Amendment C14 Explanatory Report - Phoenix Precinct**
- Glen Eira Planning Scheme **Amendment C87 documentation - Neighbourhood Character**
- Glen Eira Planning Scheme** accessed at:
<http://planning-schemes.delwp.vic.gov.au/schemes/gleneira>
- Harlock Jackson Pty Ltd (2011) **Dog off-leash areas in the City of Glen Eira Final Report of the 2010-2011 review of off-leash parks**, prepared for the City of Glen Eira
- Integrated Open Space Services (2011) **Benchmark Park User Satisfaction Survey Program 2011 - 2012**
- Integrated Open Space Services (2012) **Benchmark Park User Satisfaction Survey Program - City of Glen Eira, Round 12 Nov 2011 - Feb 2012**
- JWS Research (2012) **Communication Satisfaction Survey Glen Eira City Council**, Coordinated by the Department of Planning and Community Development
- Melbourne Racing Club (2014) **Caulfield Mixed Use Area Incorporated Plan**, February 2014
- MGS Architects (2011) **Monash Caulfield Masterplan 2011 Executive Summary**, prepared for Monash University
- Parks Victoria (2002) **Linking People and Spaces**
- Planning Panels Victoria (2010) **Glen Eira Planning Scheme Amendment C60 (Caulfield Village) Panel Report**, Panel Alison Glynn, Chair, David Mitchell, Member, Ken Northwood, Member
- Planning Panels Victoria (2010) **Glen Eira Planning Scheme Amendment C75 Panel Report**, Virginia Park Industrial Precinct, Panel Mark Marsden, Chair and Chris McNeill, Member
- Planning Panels Victoria (2002) **Glen Eira Planning Scheme Amendment C14 Panel Report- Phoenix Precinct**, Panel Mr Stephen Sully and Mr Rob McGauran
- SGS Economics & Planning (2018) **Housing and Local Economy Plan - Glen Eira: Available land, capacity and demand analysis**, Prepared for the City of Glen Eira
- VicHealth (2011) **Vichealth Indicators Survey 2011 Results - Glen Eira LGA Profile**
- Victorian Government (2017) **Plan Melbourne 2017–2050 Metropolitan Planning Strategy**
- Victorian Planning Authority (2017) **East Village Strategic Site Draft Plan**, November 2017
- Victorian Planning Authority (2018) **Caulfield Station Precinct Engagement Summary Vision and Key Directions**, prepared by Village Well and MosaicLab for the Victorian Planning Authority and the Department of Environment, Land, Water and Planning

Existing open space in Glen Eira

Alphabetical listing

Open space	Suburb	Hierarchy	Area Ha
Aileen Avenue Park (Future)	Caulfield South	Small Local	0.09
Allnutt Park	McKinnon	Municipal	4.78
Annie and Arthur Abrahams Reserve	Bentleigh East	Local	0.31
Bailey Reserve	Bentleigh East	Municipal	8.28
Bentleigh Reserve	Bentleigh	Municipal	3.56
Booran Reserve	Glen Huntly	Regional	1.73
Boyd Park/Outer Circle Railway Linear Park	Murrumbeena	Municipal	3.79
Brentwood Street Reserve	Bentleigh	Small Local Link	0.03
Caulfield Park	Caulfield North	Municipal	25.97
Caulfield Plantation Reserve	Caulfield East	Small Local	0.08
Centenary Park	Bentleigh East	Municipal	5.92
Clapperton Street Reserve	Bentleigh	Small Local	0.07
Clee Street Park	McKinnon	Small Local	0.06
Colin Street Park	Bentleigh East	Small Local	0.24
Cormick Street Reserve	Bentleigh East	Small Local Link	0.03
Crown Allotment 2031 (The Wedge)	Caulfield East	Municipal	0.56
Curraweena Road Reserve	Caulfield South	Small Local	0.06
Daly Street Mall	Bentleigh	Small Local	0.09
Dega Avenue Park	Bentleigh East	Small Local	0.10
Duncan Mackinnon Reserve	Murrumbeena	Municipal	8.68
East Caulfield Reserve	Caulfield East	Municipal	4.32
EE Gunn Reserve	Ormond	Municipal	6.07
Elster Creek Trail	McKinnon	Local	0.87

Open space	Suburb	Hierarchy	Area Ha
Elsternwick Plaza	Elsternwick	Local	0.51
Eskdale Park	Caulfield North	Small Local	0.05
Garden Avenue Reserve	Glen Huntly	Local	0.44
Gardenvale Park	Gardenvale	Local	0.45
Glen Huntly Park	Caulfield East	Municipal	3.86
Glen Orme Avenue Reserve	McKinnon	Small Local	0.12
Glen Rigney Memorial Reserve	Bentleigh	Small Local	0.06
Greenmeadows Gardens	St Kilda East	Neighbourhood	1.35
Haigh / Kershaw Street Park	Bentleigh East	Small Local	0.12
Hall Street Park	McKinnon	Small Local	0.06
Halley Park	Bentleigh	Neighbourhood	1.73
Harleston Park	Elsternwick	Neighbourhood	1.18
Hodgson Reserve	Bentleigh	Municipal	3.34
Hopetoun Gardens (including Elsternwick Croquet Club)	Elsternwick	Neighbourhood	1.77
Jersey Parade Reserve	Carnegie	Small Local	0.06
Joyce Park	Ormond	Municipal	3.32
King George VI Memorial Reserve	Bentleigh East	Municipal	6.12
Koorang Park	Carnegie	Municipal	5.69
Leckie Street Reserve	Bentleigh	Small Local	0.07
Lirrewa Grove Reserve	Caulfield	Small Local	0.048
Lord Reserve	Carnegie	Municipal	5.08
Mackie Road Reserve	Bentleigh East	Municipal	3.70
Mallanbool Reserve	Murrumbeena	Neighbourhood	2.21
Marara Road Reserve	Caulfield South	Neighbourhood	2.04
Marlborough Street Reserve	Bentleigh East	Municipal	1.78
McKinnon Memorial Garden	McKinnon	Small Local	0.13

Open space	Suburb	Hierarchy	Area Ha
McKinnon Reserve	McKinnon	Municipal	6.61
Memorial Park	Caulfield North	Local	0.31
Moorleigh Community Village Reserve	Bentleigh East	Municipal	3.79
Murrumbeena Park	Murrumbeena	Municipal	5.34
Nina Court Reserve	Bentleigh East	Small Local	0.04
North Avenue Park	Bentleigh	Small Local	0.09
Oakleigh Road Reserve	Glen Huntly	Local	0.57
Packer Park	Carnegie	Municipal	7.94
Pell Street Reserve	Bentleigh East	Small Local	0.17
Princes Park	Caulfield South	Municipal	12.40
Riddell Park	Elsternwick	Small Local	0.09
Riley Reserve	Murrumbeena	Local	0.41
Rosanna Street Reserve	Carnegie	Neighbourhood	1.47
Spring Road Reserve	Caulfield South	Local	0.80
Springthorpe Gardens	Murrumbeena	Local	0.75
Thomas Street Reserve	McKinnon	Small Local	0.11
Victory Park	Bentleigh	Municipal	4.37
Virginia Park	Bentleigh East	Neighbourhood	1.88
Waratah Road Reserve	Bentleigh East	Small Local	0.14
Wattle Grove Reserve	McKinnon	Neighbourhood	1.45
Wingate & Brady Roads Park	Bentleigh East	Local	0.28
Woorayl Street Reserve	Carnegie	Local	0.83
Yarra Yarra Links Estate Reserve	Bentleigh East	Small Local	0.10
Total area			170.89

Glen Eira Open Space Strategy Drawings

Drawing Number	Title
GEOSSR-01	Open Space Strategy Refresh – Existing Open Space
GEOSSR-02a	Open Space Strategy Refresh – Open Space Hierarchy
GEOSSR-02b	Open Space Strategy Refresh – Gap Analysis with pedestrian crossings/signalised intersections
GEOSSR-03	Open Space Strategy Refresh – Future Change Plan