



Yarra Open Space Strategy 2019

Technical Report

DRAFT V2

Prepared by

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and
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Acknowledgement

Yarra City Council acknowledges the Wurrundjeri as the Traditional Owners of this country, pays tribute to all Aboriginal and Torres Strait Islander people in Yarra and gives respect to Elders past and present.

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1. Introduction

1.1 Project scope and purpose

1.1.1 Project scope

The project brief prepared by the City of Yarra identified that the Open Space Strategy will be:

The overarching, longer term strategic document on public open space in the City. It will set the vision and direction to guide future provision, planning, design and management of open space in Yarra. It will consider the current challenges and pressures inner city municipalities such as Yarra face in achieving a cohesive, linked and well managed open space network to meet the full range of current and future needs for residents, workers and visitors to the City.

The project brief identified that the primary objective of the new Strategy is to address the inequity in open space distribution and to increase the amount of public open space in areas with the least access. It will also review the current 4.5 per cent Public Open Space Contribution rate, which may not be adequate to provide an adequate level of funding to service new populations through the open space program.

1.1.1a Key issues addressed in the Strategy

The following is a brief summary of the key issues arising from the research, consultation and analysis in preparing the 2019 Strategy compared with existing conditions and the 2006 Open Space Strategy. These include:

- **Climate change** including the impacts of extreme weather events including periods of extended drought and more severe storms.
- **Urban heat island effect**, particularly in the context of climate change.
- **Substantial population growth**, particularly over the past six years and the impacts this has had on open space.
- **Substantial forecast future population growth through to 2031** including the resident and employment population.

- **Increased urban densities** including impacts of increased levels of use and overshadowing from adjoining built form.
- **Changing patterns of community use of open space** including a visiting open space for a greater variety of reasons. Key changes include:
 - Dog walking is more common
 - Walking is lower as a reason to visit open space
 - Social reasons to visit open space are higher including meeting friends and picnics
 - Relaxing is more frequently given as a reason to visit open space
- **Changing community values of open space** with people valuing the trees more highly now than in 2006. They also place a higher value on open space being a place for them to relax and unwind compared with 2006.
- **The high cost and difficulties associated with providing new areas of open space.** This includes difficulties negotiating land area contributions during the development application process and adequate funds being available to acquire land on the open market when suitable sites are identified.
- **The existing 4.5% open space contribution rate is inadequate** to provide sufficient funds for purchasing sites for new public open space, to provide open space improvements to serve the new population, and it does not apply to non-residential uses which is an increasing development type in Yarra.

1.1.1b The Wurrundjeri people as custodians of the land now known as the City of Yarra

The Wurundjeri people are the cultural custodians of the land now known as the City of Yarra. They cared for the land for many thousands of years before being displaced by European settlers from the 1830s. Council acknowledges the profound impacts of these changes and today celebrates the rich and enduring culture of Yarra's Traditional Owners. Council Plan 2017-2021.

1.1.2 Strategy purpose

The purpose of the Open Space Strategy 2019 is to provide strategic direction for the future planning, provision, design and management of open space in the City of Yarra through to 2031. This includes understanding and addressing the open space needs of the existing population and planning ahead to address the open space needs of the forecast community. This includes both the residential and employment community.

The Strategy is consistent with the broader policy context set out in the State planning documents including Plan Melbourne and Planning Practice Note | 70 – Open Space Strategies.

The Open Space Strategy 2019 addresses the open space needs of both the existing and forecast community 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 in the Yarra Planning Scheme. In order to achieve this the Strategy provides an Action Table for which broad opinions of cost have been allocated to each action where an open space contribution is anticipated for project

budgeting. For reference, projects that are not eligible for a contribution are those where the forecast new population is not creating a need for the project. The Strategy will commit Council to a 15-year framework of actions that will be funded from a variety of Council revenue sources including rates, grants, fees and open space contributions.

The Yarra Open Space Strategy 2019 is referred to as 'the Strategy' throughout the report to differentiate it from other government strategies referred to.

The Strategy comprises the following documents:

- **Technical Report** which provides the detailed analysis, conclusions and recommendations including the Action Table for each of the 10 precincts.
- **Summary Report** which provides a summary of the key issues and recommendations from the Strategy and is the main document that community and Council officers outside of the open space planning area are likely to refer to. The Summary Report will be prepared following acceptance of the Technical Report.

1.2 Definition of public open space

1.2.1 Open space

The following definition of open space is based on the refinements made to the definition included in the 2006 Open Space Strategy with some refinements, as follows:

Public open space includes all the publicly owned land that is set aside primarily for outdoor recreation, passive outdoor enjoyment and nature conservation and is open to the sky. It includes public parks, gardens, reserves, waterways and squares. Access may be restricted at certain times or at all times on a fee paying basis. It is generally zoned for public park, recreation or conservation purposes when held in public ownership.

Public open space referred to in the Strategy includes:

- Public land that is owned and managed by Council.
- Crown Land that is managed by Council, for example Edinburgh Gardens, Darling Gardens, Mayors Park, Citizens Park, Barkly Gardens, Burnley Park and the majority of the open space along the Yarra River.
- Crown Land that is managed by other government agencies and their delegates as public open space, for example Yarra Bend Park which is managed by Parks Victoria and Collingwood Children's Farm which is managed by the Collingwood Children's Farm Committee of Management.
- Public land owned and managed by Melbourne Water which is reserved for drainage and flood management purposes and also has a recreational function and use.
- Restricted open space is land that is zoned for public park and recreation purposes but only available on a membership or fee paying basis. Examples include Burnley Golf Course and Richmond Union Bowls Club.

Throughout the Strategy, public open space is referred to as 'open space'.

1.2.3 Ancillary open space

The term ancillary open space is used to differentiate parts of the public realm that are not included in the definition of public open space. This includes streetscapes, urban spaces between buildings, school and educational facility grounds and community facility grounds, for example, neighbourhood houses.

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 their transport function and purpose. Streets contribute to the use and value of the open space network and will be recognised as providing this complementary role in the Strategy.

The Strategy recognises the contribution that ancillary open space provides including opportunities such as schools that can partner with Council, however school land is not reserved for open space and can be sold for other purposes or converted through building construction. The lack of certainty over this land being available to supplement the open space system is the reason the use of school grounds is not referred to in the Strategy as it does not replace the need for public open space.

Other public land that falls into the ancillary open space category is railway corridors where they have not already been developed and secured as public open space. A simple test for distinguishing public open space from other public land is whether the land is suitable for inclusion in the Public Parks and Recreation Zone or the Public Conservation and Resource Zone.

This Strategy focuses on planning for the adequate provision, design and management of a public open space network that is secured for future generations to enjoy. This means that the open space is publicly owned, without the ability for that land to be sold or converted to another use without clear demonstration that it is no longer required by the community as open space.

The future provision, design and funding for ancillary open space is guided by a range of other plans and strategies prepared by Council and other State Government agencies and will not form part of the open space capital works program in this Strategy.

1.2.4 Publicly accessible private open space

Some publicly accessible private open space complements the public open space system including church grounds and private forecourts to buildings. These will be referred to as publicly accessible private open space, but will not be relied on as a replacement for public open space as Council does not have direct control over them. Other private land that contributes to the open space system is private golf courses, which are available to members on a fee paying basis. These areas contribute to the natural and unbuilt quality of the landscape, have some benefits in mitigating urban heat island effect associated with climate change, and contribute to the environmental values and landscape character of an area.

1.3 Objectives and principles

1.3.1 Council Plan Objectives

The Council Plan 2017-2021 includes seven objectives based on the community engagement process that identified what the community love about Yarra and what they identify as the top issues that need to be addressed.

1. *A HEALTHY YARRA*
Community health, safety and wellbeing are a focus in everything we do.
2. *AN INCLUSIVE YARRA*
Inclusion, diversity and uniqueness are welcomed, respected and celebrated.
3. *A SUSTAINABLE YARRA*
Council leads on sustainability and protects and enhances its natural environment.
4. *A LIVEABLE YARRA*
Development and growth are managed to maintain and enhance the character and heritage of the city.
5. *A PROSPEROUS YARRA*
Local businesses prosper and creative and knowledge industries thrive.
6. *A CONNECTED YARRA*
Connectivity and travel options are environmentally sustainable, integrated and well-designed.
7. *A LEADING YARRA*
Transparency, performance and community participation drive the way we operate.

The following table describes how the Strategy aims to meet the Council Plan Objective:

Council Plan Objective	How the Strategy will meet the objective
A healthy Yarra	<ul style="list-style-type: none"> • Upgrade the existing open spaces to encourage the community outdoors to exercise and socialise in them. • Provide additional public open space so that everyone lives and works within a safe and easy walk of open space. • Encourage greening of open space so open space contributes to urban cooling. • Protect and improve habitat and biodiversity values of open space including along the waterway corridors and across the network where appropriate.

Council Plan Objective	How the Strategy will meet the objective
An inclusive Yarra	<ul style="list-style-type: none"> Open space is accessible to everyone and requires no membership of an organisation or payment to use it. Everyone lives and works within a safe and easy walk of open space.
A sustainable Yarra	<ul style="list-style-type: none"> Encourage use of sustainable materials in open space. Maximise urban greening. Protect and improve habitat and biodiversity values of open space including along the waterway corridors and across the network where appropriate.
A liveable Yarra	<ul style="list-style-type: none"> Identify the need for and areas where new open space is required in response to the <i>Yarra Housing Strategy 2018</i> and the <i>Yarra Spatial Economic and Employment Strategy 2018</i>. The design guidelines require the inclusion of sustainable water re-use and urban greening including additional large canopy trees to promote the role of open space in mitigating urban heat island effect.
A prosperous Yarra	<ul style="list-style-type: none"> The Actions in the Strategy are costed and form the basis of the open space contribution rate that is included in the Strategy. The Strategy provides certainty for Council, the community and developers regarding the location and type of new open space that is required over the 15 year timeframe to 2031.
A connected Yarra	<ul style="list-style-type: none"> Strengthen the linear connections and sustainable transport options.
A leading Yarra	<ul style="list-style-type: none"> The Strategy is based on best practice provision of open space and facilities for established areas and high density precincts.

1.3.2 Open Space Strategy Principles

The following principles are taken from the 2006 Strategy and updated to address some of the contemporary issues including climate change and urban heat island effect, the importance of green open space to community health and wellbeing and increased urban densities and population growth. These principles are of equal priority and are listed in alphabetical order.

Principle	Aim
Accessible	Provide open space that is easily accessible and appeals to people of all ages and abilities and is well serviced by a range of sustainable transport options.
Adaptable	Design and manage open space to accommodate changing community needs and other influences including climate change.
Cultural	Recognise, protect and support diverse Indigenous and non-Indigenous historical and contemporary cultural values of open space.
Diverse	Reflect the natural, social, urban and cultural diversity of Yarra and meet the diverse range of organised and informal recreational needs in open space.
Ecological	Enhance and link ecologically viable remnants and established urban bushland to improve biodiversity values.
Sustainable	Open space to be designed and managed to support sustainable water use; contribute to urban greening; mitigate urban heat island effect; support large canopy trees; promote sustainable transport options; and contribute to the liveability of higher density precincts in the city.

The following three principles guide Council's method of implementing the Strategy.

Principles	Description
Inclusive	Involve the community and stakeholders in the decision making process for the design of existing and new open space.
Advocate	Protect and expand Yarra's open space network by advocating to all levels of government and the broader community.
Demonstrate	Demonstrate best practice management approach to meet the principles in the Strategy.

1.4 Importance of open space

Since the preparation of the existing Yarra Open Space Strategy in 2006, there has been extensive additional local and international research into the positive influence of open space and natural features on community health and wellbeing and liveability. Open space is recognised as having a range of benefits that extend beyond recreation, and the research has identified there are measurable improvements to both people's physical and mental health if they live near green open space. Open space is an essential part of creating sustainable urban communities.

Research from the following key documents has been reviewed:

- The Victorian Parliamentary Legislative Council Inquiry into Environmental Design and Public Health in 2012
- Urban Green Spaces and Health, A review of evidence, by the World Health Organization (WHO), 2016.
- Beyond Blue to Green, The benefits of contact with nature for mental health and well-being by Deakin University, 2010

The purpose of the *Inquiry into Environmental Design and Public Health* was to inform the Victorian Government's preparation of Plan Melbourne. The Inquiry found there is compelling evidence linking the rise in the rates of serious chronic diseases with the key risk factors being physical inactivity and the planning and design of the urban environments. The evidence links the improvement to the provision, design and accessibility of open space with increased participation in physical activity. Green open spaces provide opportunities for physical activity which also benefits mental health and leads to multiple positive physical, mental and social health benefits to living close to green open space.

The WHO Report, *Urban Green Spaces and Health A Review of Evidence*, concludes that there is evidence to support that green open space makes a contribution to people's mental health and wellbeing if they live within 300 metres of it and if the open space is at least 0.5 hectares in size or closer to smaller areas of open space.

The *Beyond Blue to Green* study links peoples access to green open space to their mental health and wellbeing including having a positive influence of people healing and recovering from illness.

Based on the wide range of published research and the consultation undertaken for this Strategy, public open space contributes to community health and wellbeing, the natural and the urban character of the city. The community health and wellbeing benefits include:

- A place to relax and unwind
- Physical fitness and exercise
- Access to natural sunlight and fresh air, particularly during the winter to retain adequate levels of Vitamin D
- Social connection to the local community, friends and family
- Children's play including their physical, social and cognitive development
- Restorative influence of being in a natural space as a contrast to built form
- Mitigation of urban heat island effect, particularly in high density precincts where heat exhaustion can be particularly serious for the vulnerable including the frail and the elderly.

The contribution of open space to the natural and urban character of the City includes:

- Improve biodiversity values, particularly along the waterway corridors and across the network via linear links.
- Distinctive neighbourhood character changes across the city and a unique sense of place that people identify with.
- The Indigenous and non-Indigenous cultural values in both a contemporary and historical context.
- Provides a break in the built form and character.
- Opportunity for urban greening with natural features that contrast to built form.
- Space for large broad spreading canopy trees that contributes to mitigating urban heat island effect.
- Provide green and natural public open spaces with trees, garden beds and grass close to where people living in high density precincts.
- A sense of space with long vistas and views to and from open space as a contrast to the built form.

The recent research has found there are measurable health benefits to the community if they live near and access public open space compared to those who do not. The World Health Organisation's report concluded that the preference is for people to live 300 metres to green open space of a minimum of 0.5 hectares in size and closer to smaller areas of open space. In the City of Yarra people living and working in the central and southern parts of the City currently do not have this level of access to green open space. Sections 2.4 and 5.3 of the Strategy has further discussion regarding this issue.

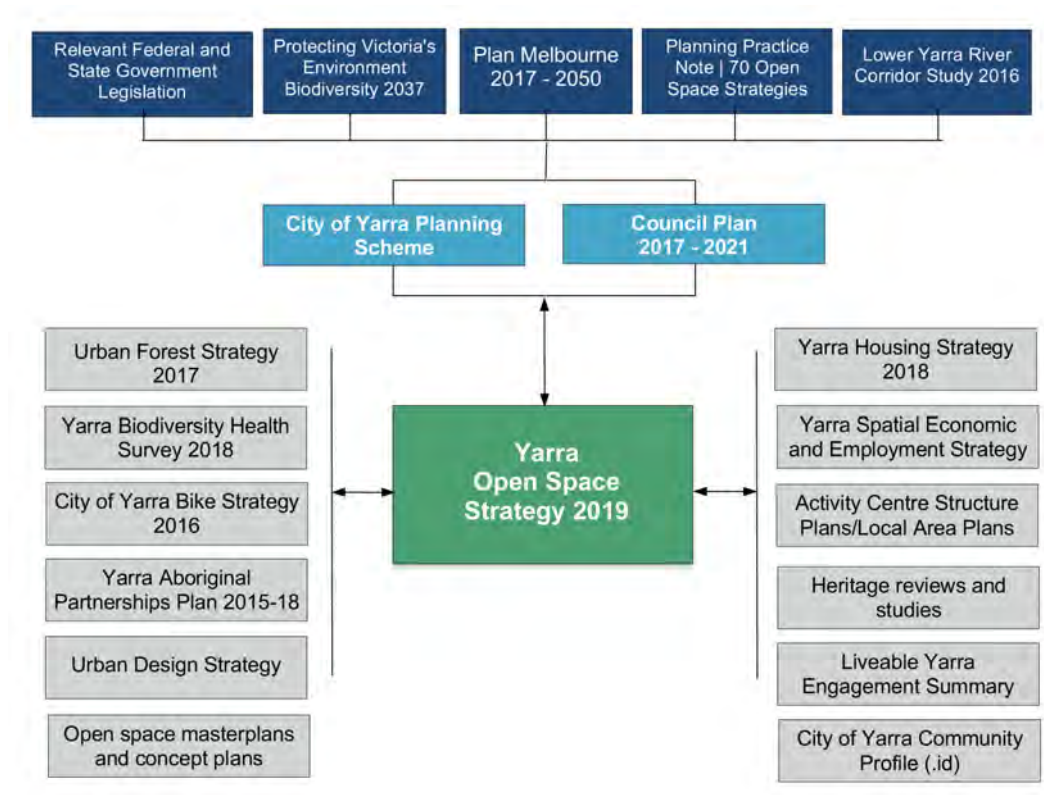
The City of Yarra has experienced significant population growth and urban development over the past twelve years, and particularly over the past six years. These significant levels of growth are forecast to continue over the next 25 years, which means there is a need to plan ahead to ensure that the City improves accessibility to a diversity of green open spaces as the population grows and the municipality redevelops and intensifies to accommodate this population growth.

In the established urban context it is difficult to provide new land area as open space, particularly larger areas of open space. In the City of Yarra some of the larger former industrial sites are yet to be redeveloped and these provide opportunities to potentially seek future larger land areas as public open space including Local and Neighbourhood open space up to 1 hectare in size, along with the conversion of public land including roads. These opportunities will be identified and investigated through the analysis phase of this project.

2. Policy context

2.1 Strategic context

2.1.1 Relevant Victorian government strategies and directions



2.1.1a Plan Melbourne 2017 – 2050

Plan Melbourne is ‘a metropolitan planning strategy that defines the future shape of the city and state over the next 35 years. Integrating long-term land use, infrastructure and transport planning, Plan Melbourne sets out the strategy for supporting jobs and growth, while building on Melbourne’s legacy of distinctiveness, liveability and sustainability.’ (Plan Melbourne web pages). There are 9 principles with 32 policy directions. The relevant directions and policies have been considered in preparing this Strategy and this Strategy in turn will support the achievement of Plan Melbourne within the Yarra municipality.

Housing and employment

Plan Melbourne supports locating housing close to jobs and services, which can easily be achieved in Yarra. For Melbourne overall, the plan seeks to locate at least 65 per cent of new housing in established areas of Melbourne and no more than 35 per cent in growth areas. The inner region, of which Yarra is a part (with Melbourne and Port Phillip), will add an estimated 215,000 new dwellings between 2015 and 2051. This pattern is already evident in Yarra today and in the population forecasts. There is continuing focus on the 20-minute walkable neighbourhood, including access to public open space, to ensure good amenity, liveability and local access to community and other services.

The inner region will be a driver of industry and employment with a focus on the following key industries: professional scientific and technical services; finance and insurance services; healthcare and social assistance; public administration and safety. Up to 233,000 new jobs are anticipated in the inner region.

There is a health and education precinct identified that is centred on St Vincent’s Hospital and Australian Catholic University Precinct, partly in Fitzroy. The Amcor Paper Mill site in Alphington is identified as a significant urban renewal site for Yarra, planned as a mixed use precinct including open space, with local jobs and up to 2,500 homes for around 5,000 residents.

Plan Melbourne designates five Major Activity Centres in Yarra: Brunswick Street and Smith Street in Fitzroy and Victoria Street, Bridge Road and Swan Street in Richmond.

The combination of the major activity centres and the health and education precincts will contribute significant change during the life of the Strategy with important residential and employment population increases. This Strategy responds to population growth and change by recommending new public open space and upgrades to existing open space reserves to respond to local need.

Open space

In addition to identifying new housing and employment opportunities, Plan Melbourne promotes public open space. Plan Melbourne defines this as follows:

Includes land reserved for natural landscape, parklands, recreation and active sports, as well as waterways and bays.

Direction 5.4 reinforces the need for public open space:

- to green the city
- provide urban amenities including recreation and leisure
- support habitat conservation.

This direction includes the need for ‘a network of accessible, high-quality, local open spaces’ at policy 5.4.1.

There is also emphasis on greening the city to mitigate the urban heat island effect and ensuring resilience to natural hazards and risks, and a changing climate. The overall urban heat island profile diagram from Plan Melbourne illustrates the scale of this liveability and health and wellbeing issue for the City of Yarra in the context of the CBD and other parts of Melbourne.

Sustainable energy, water and waste practices including the use of water sensitive urban design to protect waterways and bays, and protection from air pollution and excessive noise are all key policy directions.

In Direction 6.4, two policy statements in relation to open space include:

- Policy 6.4.1
Support a cooler Melbourne by greening urban areas, buildings, transport corridors and open spaces to create an urban forest.
- Policy 6.4.2
Strengthen the integrated metropolitan open space network. The description in this notes that better planning, design and use of new and existing public open space is critical. It also advocates for developing innovative approaches to access and make use of other types of public land such as waterways, school ground and utility easements. Open space is to be accessible to people of all ages, gender, ability and location.

To assist achievement of the Plan Melbourne aims, a metropolitan open space strategy is in preparation. This strategy is expected to provide future direction on Regional open space in the Yarra River, Merri Creek and Darebin Creek corridors.

2.1.1b Open Space Strategies Planning Practice Note | 70, 2015

The Department of Land, Water and Planning prepared this practice note to guide councils on the preparing an Open Space Strategy. It includes the reasons for preparing an Open Space Strategy, the methodology or process to undertake it and the inputs and outputs that can be considered in the process. In summary the document covers the topics of documenting the existing open space assets, data collection and consultation at the early stages of the process, confirm an agreed open space classification, determine the future open space needs and recommendations to address the need. It is noted that the process and outputs of this Strategy are consistent with the Practice Note.

2.1.1c Protecting Victoria's Environment – Biodiversity 2037

The Strategy sets a Vision that:

Victoria's biodiversity is healthy, valued and actively cared for.

The Strategy recognises that our natural environment is fundamental to the health and wellbeing of every Victorian. It also identifies the importance of the natural environment and biodiversity values to Victoria's economy in many ways including for tourism; assisting the community to stay healthy thereby reducing medical costs; water purification; flood protection; coastal protection; and carbon sequestration. The Strategy acknowledges that Victoria's biodiversity is not as healthy and diverse as it once was and the Strategy aims to stop the decline of species diversity in Victoria.

2.1.1d Lower Yarra River Corridor Study, 2016

The Victorian Government is committed to protecting the Yarra River from inappropriate development and safeguarding public access. The Department of Environment, Land, Water and Planning (DELWP) commissioned this study (that was completed in 2016) to better understand and assess the need for new amended planning controls and design guidelines for land between Richmond and Bulleen.

The objective was to achieve consistent development outcomes along the Lower Yarra River corridor to ensure further development does not encroach on the river's landscape, environmental, aesthetic, cultural and recreational values. The study's focus was on managing the interface between the public and private land along the corridor. The outcomes of this study have informed the current controls in the planning scheme for the Yarra River, including DDO1 and SLO1. The extent of these overlays are shown in Figures 3B and 3C in the Strategy.

2.1.1e Yarra River Action Plan, 2017

The Victorian Government prepared the Yarra River Action Plan in 2017. The plan states that the Yarra is fundamental to Melbourne's sustainability, liveability and prosperity. The plan states it will guard the river from inappropriate development and promote the rivers health and amenity. A central part is the introduction of the Yarra River Protection Bill to enshrine the protections and commitments in legislation. The plan included the Traditional Owners on the working group so they were integrally involved in the Action Plan including the objectives for the river. The objectives are:

- A healthy river
- The great Yarra Parklands
- A culturally diverse riverscape
- Securing the Yarra footprint
- Modern governance

This Plan supports the level of importance the Yarra River and the open space corridor that adjoins it to the City of Yarra. This Regional open space caters to the broader metropolitan Melbourne population.

2.1.1f Yarra River Strategic Plan (in preparation)

The following summary is taken from Melbourne Water's website (October 2018).

Melbourne Water is leading the development of the Yarra River Strategic Plan which will give effect to the community's 50 year long-term vision for the Yarra River and provide the basis for future planning of the river corridor and each of its reaches.

The Victorian Government's Yarra River Action Plan was released early in 2017 with 30 actions to ensure the long-term protection of the Yarra River and its environs and parklands. One of the actions was to develop a 50 year Community Vision for the Yarra which will become the foundation for an overarching Yarra Strategic Plan. The Yarra River Protection (Willip-gin Birrarung Murrn) Act 2017 identifies the Yarra River and the many hundreds of parcels of public land it flows through as one living, integrated natural entity for protection and improvement. There are four key elements that will guide Melbourne Water's development of the Yarra Strategic Plan.

- The overall environmental health of the river (the waterway and the riparian land).

- Community use, access and amenity of the river and parklands.
- The river's landscape setting and interface of the river corridor with adjacent land use.
- Cultural and heritage values.

Whole of river vision

The following is an extract from the Imagine the Yarra Website:

Inner-city reach vision

Our Yarra River, Birrarung is a thriving river for our thriving city. It provides a unique place of transition, both spiritually and physically. Here the river and its treasured banks and backdrops are Melbourne's meeting place; an inclusive and iconic place for connection, celebration, recreation and learning. Our love for its vast and expanding green spaces and clean waters provide a healthy habitat for all.

The Strategic Plan will strengthen the role and importance of the Yarra River and assist Council with future capital works projects and ongoing maintenance of the open space along the Yarra River.

2.1.1g Flood Management Strategy – Port Phillip and Westernport

Prepared by Melbourne Water in 2016, this Strategy aims to improve how we manage and reduce flood risks across Port Phillip and Westernport. It is alignment with the Victorian Floodplain Management Strategy emergency management arrangements and planning policy. Climate scientists project that the intensity of heavy rainfall events will increase and that sea level will continue to rise increasing the severity and regularity of flood events. Climate change increases the challenges faced in managing flood risk in the future. This is included in the context of the Yarra River and the adjoining open space corridor being a key feature of the Yarra's open space system.

2.1.1h Active Victoria – A strategic framework for sport and recreation in Victoria 2017 – 2021

Prepared by the Victorian Department of Health and Human Services Active Victoria is a plan to strengthen the sport and recreation sector, boost participation and ensure every Victorian has a chance to be involved. The Plan highlights the benefits of sport and active recreation including a healthier community, economic growth and jobs, community cohesion and liveability.

The Vision:

An increased proportion of Victorians participate in sport and active recreation

The plan also acknowledges there are key changes and challenges to adequately providing for this in the future including some that are specifically relevant to Yarra:

- Population growth
- Ageing population
- Changing lifestyles and expectations
- Increasing female participation in sport
- Land availability for facilities

The strategic directions in this Plan are consistent with some of the issues raised during the consultation phase of the project including:

Meet the demand, including:

- Increase the capacity of sport and active recreation infrastructure.
- Create flexible and innovative participation options.
- Find new sources of investment
- Invest in a network of international, metropolitan, regional and local infrastructure.

Broader and more inclusive participation, including:

- Providing affordable participation options
- Address racism, discrimination and harassment
- Continue investment in female participation
- Support increased participation of Aboriginal Victorians
- Provide support and flexible participation options for other under-represented communities including people with disability, LGBTI people and disengaged youth.

Additional focus on active recreation, including:

- Invest in infrastructure that enables active recreation.

2.1.1i IMAP Regional sport & recreation Strategy

Prepared by SGS Economics and Planning for the Inner Melbourne Action Plan (IMAP) in 2019, this Strategy is a departure from traditional sport and recreation strategies. It recognises that historic approaches will not be enough to meet current and future demand for sport and recreation needs due to the high cost of land and quantum of forecast growth for the region. The Cities of Maribyrnong, Melbourne, Port Phillip Yarra and Stonnington have participated in this Strategy. The Strategy states that between 2016 and 2036 the employment and resident population of the IMAP region is expected to grow by 50 per cent and this will place increased pressure on sport and recreation facilities that are already stretched to capacity. The region needs to provide sport and recreation facilities to cope with this growth.

The Strategy notes that it *sets out an innovative and progressive regional approach to provide clear strategic direction to assist IMAP Councils.*

The principles are:

- *Sharing the challenge: regional solutions to sports planning*
- *Pro-active Council led management of facilities*
- *Equitable use of facilities*
- *Opportunities for the local community to participate*
- *Sharing of assets*
- *Well located facilities*
- *Resilient facilities*

The Strategy identifies a list of projects for each of the participating councils.

2.1.2 Relevant Council strategies

2.1.2a Council Plan 2017-2021

Council Plan community consultation (referred to as Liveable Yarra) identified what the community love about Yarra:

1. Social connectedness
2. Open space
3. Sustainable transport
4. Recreation and leisure
5. Vibrant activity centres
6. Diverse/inclusive

Council Plan community consultation (referred to as Liveable Yarra) identified the following top issues:

1. Sustainable transport
2. Drugs, alcohol/community safety
3. Open space
4. Growth and change
5. Social connectedness

The Council Plan has seven objectives which open space has a role in contributing towards, including:

1. A healthy Yarra
Community health, safety and wellbeing are a focus in everything we do.
2. An inclusive Yarra
Inclusion, diversity and uniqueness are welcomed, respected and celebrated.
3. A sustainable Yarra
Council leads on sustainability and protects and enhances its natural environment.
4. A liveable Yarra
Development and growth are managed to maintain and enhance the character and heritage of the city.
5. A prosperous Yarra
Local businesses prosper and creative and knowledge industries thrive.
6. A connected Yarra
Connectivity and travel options are environmentally sustainable, integrated and well-designed.
7. A leading Yarra
Transparency, performance and community participation drive the way we operate.

2.1.2b Yarra Housing Strategy 2018

The Housing Strategy addresses housing trends in Yarra, changes in demographic characteristics and population numbers, future housing needs, a capacity analysis and a future growth strategy. It addresses the challenges that Yarra faces as development preferences move to a greater number of high density projects and there are significant population increases and concentrations of people.

An understanding of where the population is housed now and into the future has informed the precinct recommendations in the Strategy.

2.1.2c Yarra Spatial Economic and Employment Strategy 2018

The Spatial Economic and Employment Strategy provides a detailed assessment of six retail (mixed use) and seven commercial/industrial precincts in terms of future land uses, floor space demand and the like. It also contains recommendations for transitional precincts. The traditional role of some areas is changing but Yarra recognises that it is important to maintain an economic base and that some of its commercial/industrial areas should be protected from competition from housing development.

The Open Space Strategy 2019 has used the non-residential floor area estimates to inform the estimated changes in worker numbers across the different employment precincts. This has informed the precinct recommendations regarding the provision and design of open space. A discussion of how the SEES informs the Strategy is included in Section 4.2.

2.1.2d Urban Forest Strategy 2017

The *City of Yarra Urban Forest Strategy* provides a clear direction for the future care and management of trees in the city. As part of the research, Aerial thermal imaging was prepared for the City of Yarra identifying thermal hot spots along with an image of the tree canopy cover from 2014. The priorities for future tree management have been framed around the addressing the thermal hotspots. The Urban Forest Strategy provides evidence that the public open space system accommodates a large proportion of the tree canopy cover in the City of Yarra and is a cooling influence on the city. Currently the City of Yarra has a 17 per cent tree canopy cover with an aim to increase to 21.25 per cent by 2040, which represents a 25 per cent increase. Combined the private realm and streetscapes have 13 per cent canopy cover while the parks and public spaces have 34 per cent canopy cover.

The Strategy identifies the location for new public open space to be provided, with many of these being in areas of either existing or forecast high density precincts including in some of the thermal hot spots identified in the Urban Forest Strategy. The Strategy recommendations also identify the need to improve the focus on urban greening in public open space with a focus on planting broad spreading canopy shade trees and moisture absorbing surfaces. This will assist with achieving the target of increased canopy cover the Urban Forest Strategy.

2.1.2e City of Yarra Biodiversity Health Survey, Discussion Paper, 2018

Prepared by Practical Ecology for the City of Yarra, the paper summarises the City of Yarra Biodiversity Health Survey (BHS). This BHS establishes baseline data on biodiversity values of open space areas within the municipality that are managed by the City of Yarra. A total of 30 open space reserves were assessed with an area greater than 0.5 hectares in size, along with an additional 10 pocket parks and 12 streetscapes that are located adjacent to the linear open space corridors.

The assessment included parklands that are not typically assessed for their biodiversity values including European style parks. In an urban context, these parks provide important refuge habitat for common indigenous fauna and links between areas of higher quality habitat. The recommendations in the Discussion Paper include adding bushland areas into a number of existing areas of open space, and planting additional street trees.

2.1.2f Yarra Aboriginal Partnerships Plan 2015-18

The *Yarra Aboriginal Partnerships Plan 2015-18* is the third Aboriginal Partnerships Plan, which has grown out of the input and advice that Council received from Yarra's Aboriginal community during an extensive consultation process. The Plan and its actions respond to the issues and ideas identified as most important to the community.

Through this plan, Council demonstrates its ongoing commitment to advocate for respect and social justice, to take a strong stand against racism, and to promote awareness of our rich Aboriginal history and culture.

The priority actions in this plan includes consulting with the Wurundjeri community about creative ways to acknowledge the Wurundjeri as the Traditional Owners. The acknowledgment might take the form of public art, interpretive signage or landscape treatments focusing on the river and other sites.

2.2 Summary of the Yarra Open Space Strategy 2006

2.2.1 Overview

The existing Open Space Strategy (2006) has guided the open space planning, design and works program over the past 12 years. More than 70 per cent of the actions from the 2006 Strategy are either complete or partially complete.

A total of five new open space reserves have been established in the following locations:

- Peel Street Park in Collingwood
- Oxford Street Park in Collingwood
- Butler Street Park in North Richmond
- Richmond Terrace Park in Central Richmond
- Mollison Street, Abbotsford

One new open space reserve are currently in the process of being designed and implemented including:

- New Small Local open space on Reid Street, Fitzroy North

Two existing open space reserves have been expanded in size including:

- Condell Street Reserve in Fitzroy, converting the western part of the reserve from a car park to open space.
- Barkly Gardens in South Richmond via the closure of Barkly Street between Coppin and Mary Streets.

The Strategy has also been used to inform and guide the contribution of new Small Local, Local and Regional open space on the Alphington Paper Mill site in Alphington.

After reviewing where open space contributions have been collected, the following priorities for implementation of the remaining actions are:

- Two new open spaces in Fitzroy
- Three new open spaces in Collingwood
- One new open space in Abbotsford.
- Four new open spaces in Richmond.

The existing 2006 Strategy noted that a major review was recommended after 10 years. Given the actual population growth has been well in excess of what was forecast at the time the Strategy was prepared and it is 12 years since the Strategy was adopted, it is appropriate that a new Strategy is prepared to guide the open space planning, design and management over the next 10 to 12 years.

2.3 Open space and the planning scheme

2.3.1 Municipal Strategic Statement (MSS)

The local policy component of all planning schemes will be transferred to a new format aligned with State planning policy and other VPP tools. This is part of the DELWP Smart Planning initiative and Amendment VC 148. Yarra is participating in the Planning Policy Framework (PPF) translation project, which is programmed to be completed by early 2019. The policy remains in draft format. Due to VPP format changes, some or all of the following information may change. However, the planning principles and requirements are not expected to change even where they may be expressed differently in the future.

The Municipal Strategic Statement (MSS) contains the key local planning directions, and it has been updated since the 2006 open space strategy was prepared. Key policy directions of importance to the new open space strategy include:

- Clause 21.04 Land Use contains a section on parks, gardens and public open space. The objectives are for a linked open space system to meet current and future community needs. This clause supports improved public access to the banks of the Yarra River, the use of the public open space contribution rate, no loss of open space and regulating development adjoining open space.
- Clause 21.05 Built Form encourages creation of new open space in developments, provision of public access through large development sites adjoining parklands and waterways, and sensitive built form adjoining open space.
- Clause 21.06 Transport encourages safe and convenient pedestrian and bicycle networks with reduced reliance on the private motor car and lessening the impacts of traffic.
- Clause 21.07 Environmental Sustainability encourages protection and enhancement of biodiversity and habitat. It recognises the importance of the Yarra River, Darebin Creek and Merri Creek corridors, their ecological and environmental values, recreational potential, and water quality and flow characteristics.
- Clause 21.08 Neighbourhoods sets out directions for these parts of the municipality:
 - Abbotsford
 - Burnley - Cremorne– South Richmond
 - North Carlton - Princes Hill
 - Clifton Hill
 - Collingwood
 - Fairfield – Alphington
 - Fitzroy
 - North Fitzroy
 - North Richmond (north of Bridge Road)
 - Central Richmond (between Swan Street and Bridge Road)

2.3.2 Zones and overlays

The zones and overlays have an important role in governing land use redevelopment to different parts of Yarra. For example, Yarra uses three residential zones and six zone schedules to differentiate the land uses and intensity of development permitted in each residential area. There are two commercial and two industrial zones across the city. Specific sites or areas are zoned with the Special Use Zone (six schedules), the Comprehensive Development Zone (three schedules) and the Priority Development Zone (one schedule).

There are three public zones including the Public Park and Recreation Zone (PPRZ) and the Public Conservation Zone (PCRZ) which apply to public open space and public land with high environmental values.

The overlays may be of relevance to open space where they govern building heights, and built form envelopes, provision of open space, etc. as this may affect existing or proposed future open space. The environmental, landscape and heritage overlays identify special features in Yarra and can trigger specific permit requirements to enable protection of these features. Some of these features will be on public land.

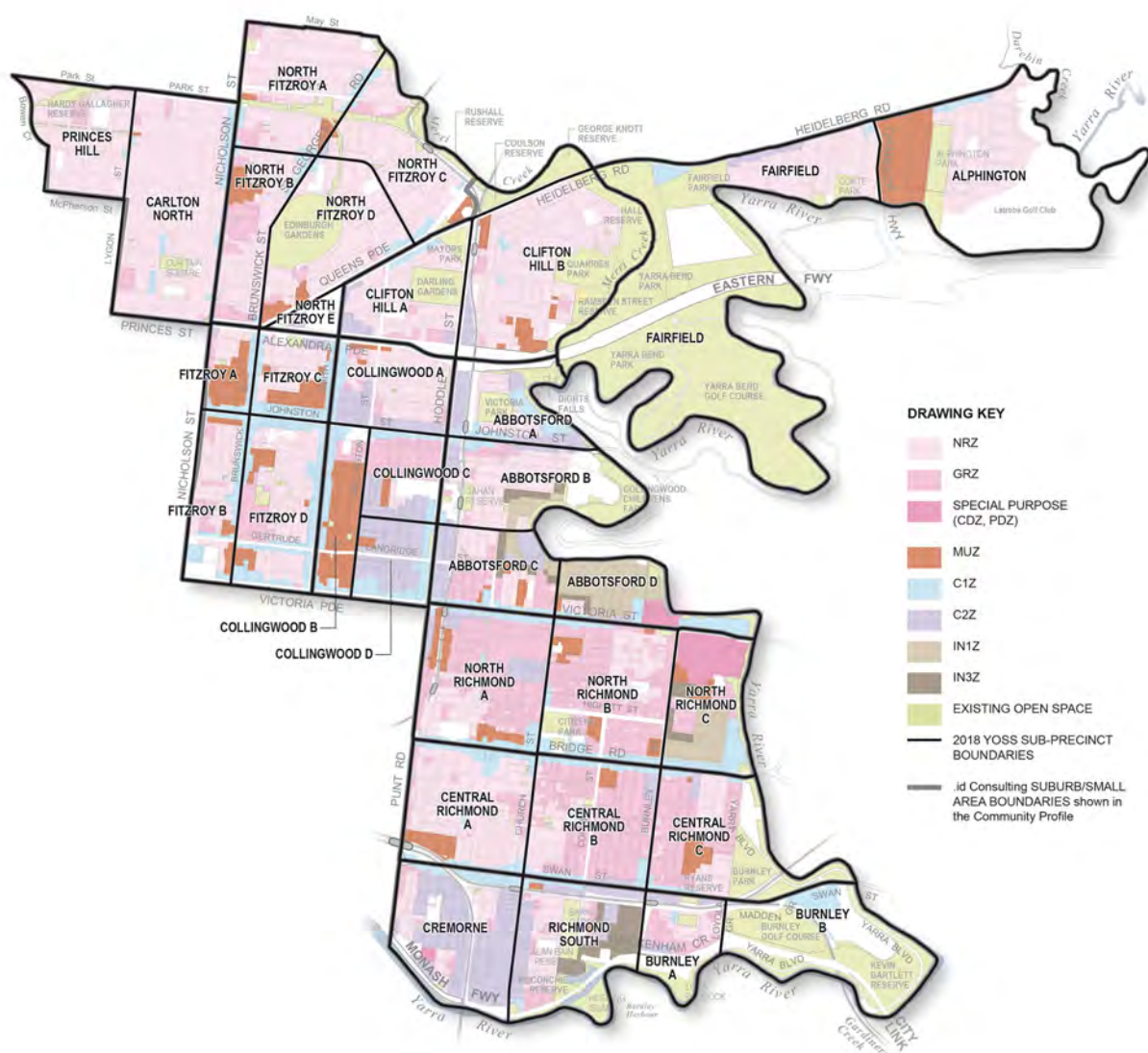


Figure 2A Existing Land Use and Open Space Sub-precinct Boundaries
Extract from Drawing YOSS-04 in Appendix A

2.3.3 Specific overlays for open space expansion and protection of waterways

Public Acquisition Overlay 2 (PAO2) identifies land along sections of the Yarra River Corridor and Darebin Creek for purchase as public open space. The purpose of the overlay is to create a continuous linear park/trail system adjacent to the waterways. The commitment to purchase the land is made by the Minister responsible for administering Part 2 of the Crown Land (Reserves) Act 1978.

The Environmental Significance Overlay is used on private land along Merri Creek (ESO2) and Darebin Creek (ESO3). The overlay is used to recognise ecological, waterway, recreational, landscape, cultural heritage and other local values.

The Significant Landscape Overlay is used along the Yarra (Birrarung) River and was recently updated in accordance with the work undertaken by the Victorian government to acknowledge the significance and protection of the river corridor. There is a strong focus on the contribution that the Yarra River system makes to the landscape, cultural and environmental values of metropolitan Melbourne.

These overlays introduce additional permit requirements, with the aim of ensuring development is sensitive to the identified values.

Environmental and landscape overlays for the Yarra River corridor are supplemented with a Design and Development Overlay (DDO1) that mandates built form setbacks and heights, and regulates materials, colours and overshadowing of the river corridor. The setback line is mapped for several locations in Yarra.

Refer to Figures 3B and 3C in Section 3 for the overlays along the waterway corridors.

2.3.4 Open space provision

The planning scheme includes VPP standards for open space provision which were developed to guide Precinct Structure Plans in growth areas, primarily in Melbourne.

Included in the planning scheme at Clause 56.05, the policy objectives are relevant and the proposed standards for new open space can be used as a comparative guideline to what can be accomplished in high density urban areas such as Yarra.

The policy objectives encourage development of a network of quality, well-distributed, multi-functional and cost-effective public open space that includes local parks, active open space, linear parks and trails, and links to regional open space. This 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.

The standards for open space provision are included in Table 2-1 in Section 2.5.

2.4 Research into the health and wellbeing benefits of open space

2.4.1 Overview

Over the past 10 years there has been a growing body of research undertaken into the health and wellbeing benefits of open space, and specifically green open space. The issue of green open space has become more prominent in recent times given the substantial increase in urban densities in Melbourne with a reduction in overall greening on both public and private land. The Commission for Architecture and the Built Environment, referred to as CAFE in the United Kingdom has undertaken a number of research papers and studies into this from 2004 onwards.

Included below are some of the more recent documents that summarise the key findings from the ongoing research in both Australia and overseas.

2.4.2 Victorian Parliamentary Legislative Council Inquiry into Environmental Design and Public Health in Victoria

Final Report, May 2012

The inquiry was undertaken by the Environment and Planning Reference Committee established under the Standing Orders of the Legislative Council in late 2010. The report explores compelling evidence linking public health challenges with the rising rates of chronic diseases including heart disease, type 2 diabetes, mental illness and respiratory illnesses, to the planning and design of urban environments.

The report emphasises the importance of considering health in the design of our communities. The report was prepared as background material for Plan Melbourne, and a key aim was for it to provide specific direction in developing a healthier built environment. The report emphasised two particular elements of the built environment that promote healthy lifestyle choices – parks and other public open spaces and active transport modes, i.e. walking, cycling and public transport. A key finding of this inquiry is that one of the most important aspects of the built environment that impacts positively on health is provision of parks and other public spaces. Extensive research links multiple positive physical, mental and social health benefits of living near green and open public areas. Green public spaces encourage a range of physical activities, provide opportunities for social interaction and aids in mitigating urban heat island effect.

Implications for the Strategy

The importance of green open space is be emphasised in the Strategy and inform the design and management guidelines in Section 6.

2.4.3 Urban green spaces and health – A review of evidence

World Health Organization European Environment and Health Process, 2016

There is recent interest in the importance of green open space to support healthy living in urban areas. Links between green space and health have been recognised throughout history and one of the driving forces behind the urban parks movement of the 19th Century in Europe and North America. Recent research has identified that urban green spaces in an urban context has the potential to help address social and environmental problems in a preventative way.

At the fifth Ministerial Conference on Environment and Health in Parma, Italy in 2010, the Member states of the WHO European Region made a commitment '*...to provide each child by 2020 with access to healthy and safe environments and settings of daily life in which they can walk and cycle to kindergartens and schools and to green spaces in which to play and undertake physical activity.*'

The United Nations Sustainable Development Goal 11.7 aims to achieve the following: '*By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.*'

The report concludes there is existing evidence that there are many public health benefits through the provision of urban green spaces. These include:

- psychological relaxation and stress reduction
- enhanced physical activity
- mitigation of exposure to air pollution, excessive heat and noise.

The report evaluated and compared previously developed indicators of green space availability and key ones include:

- Measuring the proportion of city population living within 300 metres of a green open space with a defined minimum size.
- Accessibility of green spaces of defined minimum sizes suitable for physical activity as well as mental relaxation.
- There is a need for small, local green spaces to be very close to where people live as well as large green spaces offering formal provisions such as playing fields, and opportunities to experience nature and relative solitude.

The report's final summary conclusion is:

'A city of well-connected, attractive green spaces that offer safe opportunities for urban residents for active mobility and sports as well as for stress recovery, recreation and social contact is likely to be more resilient to extreme environmental events, such as heat waves and extreme rainfall. Such a city is also likely to have healthier citizens, reducing demands on health services and contributing to a stronger economy.'

Implications for the Strategy

This report's findings support the importance of an accessible and well connected green open space network for community health and wellbeing. The report emphasises the importance of providing accessible green open space for everyone including the young, elderly, those with limited mobility to undertake a range of activities and to relax and unwind along with environmental benefits including mitigating urban heat. As such the Strategy has identified the need for additional open space to be added to the network which is summarised in Section 5.2 and described in detail in Section 7.

2.4.4 Social Cities Grattan Institute Report No. 2012-4

This report identifies the importance of designing our cities so they help connect us with other people. The study identifies the importance of different types of social connections that humans form including intimate personal and family relationships, links with a broader network of friends, relatives and colleagues and the broader connection to our local community which involves incidental interactions with people. Providing spaces where people can socialise in our cities is important to encouraging this and leading to a sense of belonging and connection and a socially well-adjusted community. Open space plays an important role in the sense of belonging to the broader community and also in many instances to the wider group of friends, as we often like to meet in the park where it is large enough to accommodate a larger group of people. The sense of belonging and connection leads to more positive social interaction and to health and wellbeing of our community.

Implications for the Strategy

This study supports the role that public open space plays in the social connectedness of the community, and this is not replaced by providing on-site private open space within developments. The Strategy recommends the expansion of social facilities in selected areas of open space throughout the Precinct Recommendation in Section 7.

2.4.5 Beyond Blue to Green: The benefits of contact with nature for mental health and well-being

Deakin University Australia, Townsend, M and Weerasuriya, R prepared for Beyond Blue Limited, 2010

This report was commissioned by Beyondblue: the national depression initiative and provides a review of existing Australian and International literature on the links between mental health and well-being and contact with nature, especially through green spaces. The specific focus of this report was on the links between parks and other green open spaces and mental health and in particular depression and anxiety.

A link between closeness to urban green spaces, frequency of visits and duration of stay regardless of sex, age and socio-economic status has been demonstrated (Grahn and Stigsdotter, 2003). The study showed the persistent obstacles to accessing and using green open spaces was time and distance, therefore the people are more likely to visit and green open space if it is nearby and easy to get to. Similarly, a Danish survey was conducted to examine the impact green areas have on human health and wellbeing (Nielsen and Hansen 2007) demonstrated there was less stress in people who visited green areas more frequently. The final analysis revealed being overweight and higher levels of stress are connected with greater distance from publicly accessible green space, as well as less access to private or shared gardens.

Implications for the Strategy

This study supports the positive effects of public green open space on people's mental health and wellbeing and that being in close proximity to it means people will use it more and are healthier and less stressed as a result. The Design and Management Guidelines in Section 6 of the Strategy highlight the importance of natural features and green infrastructure in open space.

2.4.6 Summary of implications from the research on the Strategy

This research has informed the analysis and recommendations for this Strategy including:

- Provision of public open space within an easy and safe walk of everyone living and working in the City of Yarra is a core principle that this Strategy aims to achieve to address the under provision of open space in some of the most populated neighbourhoods including Fitzroy, Collingwood and Richmond. This means that everyone including those with reduced mobility, the young and elderly will have the opportunity to visit open space.
- Maximise greening of public open space given the important link between people's mental health and wellbeing and access to and contact with nature. The research identifies that contact with nature is important for everyone including those living in the City of Yarra. Additionally, the green spaces will provide cool spaces for people to use during the summer, particularly the more vulnerable who do not have access to air conditioning in their homes or workplaces.

2.5 Policy framework for the provision of open space

2.5.1 Plan Melbourne

Plan Melbourne has brief overall policy directions for open space that have some relevance to public open space in established areas, including:

- Urban redevelopment projects provide the opportunity to plan new local open space in some areas (Policy 5.4.1)
- Support community gardens (Policy 5.4.2)
- Establish and maintain canopy trees and greening in public open space utilising sustainable water sources (Policy 6.4.1)
- Better planning, design and use of new and existing public open space (Policy 6.4.2).
- Access and make use of other types of public land including schools, waterways and utility easements (Policy 6.4.2)
- Fair and equitable access for all members of the community regardless of age, gender, ability or location (Policy 5.4.1 and 6.4.2)
- Create a network of green spaces that support biodiversity conservation (Policy 6.5.1)
- Protect and enhance the health of urban waterways (Policy 6.5.2).

2.5.2 Yarra planning scheme

All planning schemes specify open space provision. The focus of these standards are on neighbourhood level open space as follows:

Table 2-1 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 percent of dwellings
Local parks and open spaces	1 hectare plus included active open space	Within 400 metres safe walking distance of 95 percent 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 percent of dwellings

2.5.3 International examples of open space frameworks

The following examples have been included as examples of the cities with established higher density urban neighbourhoods.

2.5.3a Open Space Strategies Best Practice Guidance

CABE Space, Mayor of London, 2009, which is also referred to in the 2015 City of London Open Space Strategy

Table 2-2 *London public open space hierarchy*

Open space type	Size	Distance from home/work
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

2.5.3b Urban green spaces and health – A review of evidence

World Health Organization Europe, 2016

The World Health Organisation reviewed the evidence behind the importance of green space in supporting healthy living in urban areas. The report concludes that 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. Open space has a positive effect on our physical health and wellbeing if it is a minimum of 1.0 hectares. There is also available evidence to support that there is also 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 2-3 *WHO 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)

2.5.3c City Environmental Quality Review Technical Manual

New York City Mayor's office of Environmental Coordination, March 2014

The following goals for open space provision are based on the Recreation, Park and Open Space Standards and Guidelines, which have been converted into hectares and meters for comparative purposes.

Table 2-4 New York City goals for open space provision

Open Space type	Size	Distance from home/work
Passive open space	0.6 hectares per 1,000 workers	400 metres (work)
Neighbourhood Parks (min 0.75 hectare for 1,000 people or 7.5 sqm per person)	0.5 to 1.0 hectares	800 metres (home)
Community Parks (2.2 to 3.2 hectares for 1,000 people or 26 sqm per person)	2.2 to 3.2 hectares	1,600 to 3,200 metres
Regional Parks (2.2 to 4.4 hectares for 1,000 people or 30 sqm per person)	2.2 to 4.4 hectares	One hours drive

Interestingly, Chapter 7 of this document concludes that it is a combination of the qualitative and quantitative values of open space that needs to be considered in assessing the future open space needs associated with high density precincts. The Manual classifies areas as underserved or well-served with open space. The definition of underserved vs well-served is:

- Underserved areas are those with high population density in the City that are generally the greatest distance from parkland where the amount of open space per 1,000 residents is less than 1.01 hectares - or less than 10.1 sqm per person.
- Well-served areas have:
 - an open space ratio of 1.01 hectares per 1,000 residents
 - located within a 400 metre (approx 10 minute walk) of open space.

The threshold as to whether an open space assessment is required for a proposed development are:

- If a project is located in an underserved area and the development would generate more than 50 residents or 125 workers.
- If a project is located in a well-served area and the development would generate more than 350 residents or 750 workers.
- If a project is new and is not located in either an underserved or well-served area, an assessment should be conducted if the project would generate more than 200 residents and 500 employees.

By default, this threshold recognises that an additional 350 residents or 750 workers in a precinct creates the demand for additional open space and/or significant improvements to existing open space. The proportion of 10.1 sqm of open space per person is considered to be a reasonable planning goal for the provision of open space in New York City. Ideally this would comprise 80 per cent as sporting use and 20 per cent as unstructured recreation and informal use.

2.5.4 Summary of implications of the policy framework on the Strategy

This research has informed the analysis and recommendations for this Strategy including:

- Where more than an additional 350 residents are forecast to be living in the future, recommendations to undertake expansion of existing facilities or provide additional open space are made.
- Retain the existing walking catchments for different types of open space as per the 2006 Open Space Strategy, given this is supported by the international research.

3. Existing open space network

3.1 Existing open space values in Yarra

3.1.1 Overview

The City of Yarra acknowledges the Wurundjeri people as the cultural custodians of the land now known as the City of Yarra. They cared for the land for many thousands of years before being displaced by European settlers from the 1830s. Council acknowledges the profound impacts of these changes and today celebrates the rich and enduring culture of Yarra's Traditional Owners.

The City of Yarra covers an area of approximately 20 square kilometres and has a diverse 260 hectare open space system is made up of just over 110 individual spaces. Open space comprises approximately 13.5 per cent of the total area of the City of Yarra.

Central to the City's character and open space system is the Yarra River which is significant to greater Melbourne and the Yarra community. While there have been extensive changes to the River post colonisation some of the original river morphology and naturalness remains providing a direct connection to its history. Similarly, Merri Creek also contains some of its original natural features in the downstream section where it flows through Yarra Bend Park to the confluence with the Yarra River at Dights Falls. Yarra Bend Park forms the largest natural bushland closest to Melbourne, being less than 5 kilometres from the Central Business District. It spans both sides of the Yarra River and includes significant natural flora and fauna values along with sport and recreation facilities. Managed by Parks Victoria, Yarra Bend Park presents some significant opportunities for improvement including the potential to better meet the future structured sporting needs of the City of Yarra community.

Edinburgh Gardens, originally set aside in the early 1860s as a cricket ground with a creek running through it when North Fitzroy was first established, is nominated as Yarra's most popular open space in the community survey. Major plantings from the late 1800s including the avenues of the Oaks and Elms contribute to its character and garden setting providing excellent summer shade and sun access in the winter. This contributes to its popularity and high levels of visitation. Other key public gardens in the City of Yarra include Darling Gardens in Clifton Hill, Alington Park, Barkly Gardens in Richmond

South and Curtain Square in the Carlton North. These complement the native bushland and natural qualities of Yarra Bend Park, Hall Reserve and the linear open space corridors along Yarra River, Merri Creek and to a lesser extent along Darebin Creek.

Complementing these major areas of open space is a network of Neighbourhood, Local and Small Local open spaces. Given the historical lack of provision of open space in Fitzroy, Collingwood and parts of Richmond, the smaller network of spaces is highly valued and well used in the high density areas. As urban densities continue to increase in these areas these smaller spaces will become increasingly important to the resident and worker community living and working in these areas, and the Strategy has identified opportunities to increase this network to better meet the existing and particularly the forecast community open space needs.

3.1.2 Topography and geology

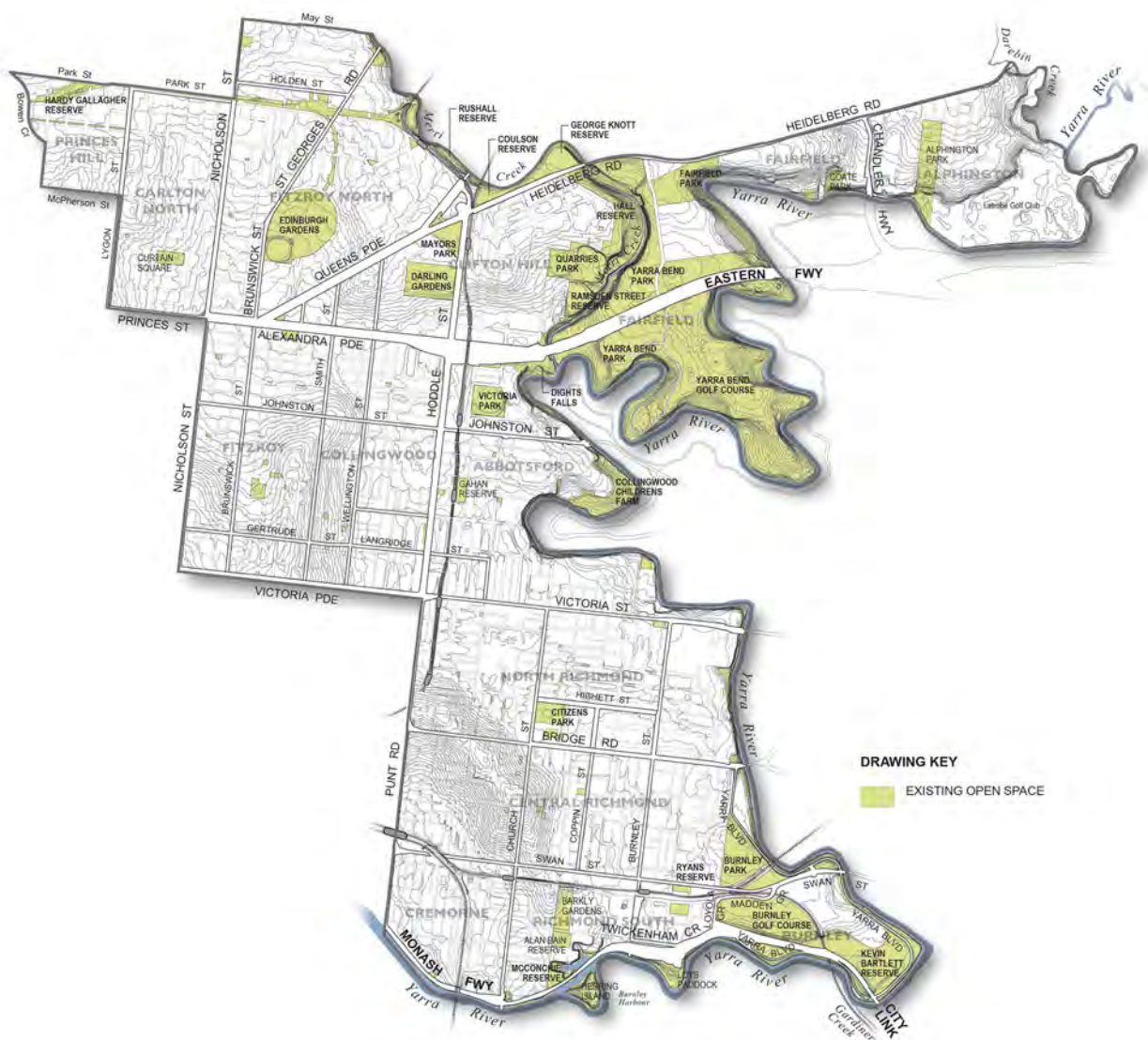


Figure 3A Topography and waterways
Extract from Drawing YOSS-2b in Appendix A

The City of Yarra is located at the junction of two Bioregions, being the Victorian Volcanic Plain and the Gippsland Plain. The majority of Yarra is located within the Victorian Volcanic Plain which characterises the undulating basalt plains and the heavy basalt-derived soils that extend further into western Victoria. The Gippsland Plain Bioregion is a

more extensive system extending to the south-east of the City. There are outcrops of this Silurian based geology in the north-west and south-eastern parts of Yarra. (Biosis, 2001).

There are sites of geological and geomorphological significance along Merri Creek and the Yarra River through the City of Yarra including one site of State significance and four sites of regional significance. These are further described in Section 3.1.3c.

The waterway corridors provide the most significant change in topography in Yarra. The deeply incised nature of the Yarra River, Merri Creek and Darebin Creek emphasises the elevated views from the surrounding area. Development along the waterway corridors has in many locations blocked the views into it, however crossing points including footbridges and road bridges over the waterways offer spectacular views along the waterway corridors.

Other subtle changes to the City's topography include Richmond Hill, where the elevation affords good views to the Dandenongs and the City. The landform in Princes Hill and Carlton North is slightly elevated with views towards the City down the key north south streets. The central area of Fitzroy near Gore Street and George Street is also slightly elevated with views in an easterly direction over Collingwood to the Dandenongs. Fairfield and Alphington afford views over the Yarra River valley. The majority of Yarra's topography is gently undulating, characteristic of the western basaltic plains.

Topography has influenced the provision of existing open space in the City of Yarra. The low lying floodplain areas of the Yarra River contain the largest areas of public and private open space within the City boundaries including La Trobe Golf Club, Yarra Bend Public Golf Course, parts of Yarra Bend Park and Kevin Bartlett Reserve. These areas of open space are subject to flooding and with the forecast increase in the severity and intensity of storm events in the future, will increasingly play an important role in flood protection. This may, however, further encumber these areas of open space in the future.

3.1.3 Natural landscape character

Yarra Bend Park is the largest area of natural bushland near the heart of Melbourne and is home to the famous bat colony. While the park includes sport and recreation facilities it also has extensive natural features including steep escarpments and open woodlands. The other main remnant natural features are along the waterway corridors including the Yarra River, Merri Creek and the Darebin Creek. Historically, much of the City of Yarra would have been covered with Plains Grassy Woodland which is typical of the western basalt plains including Red Gum, Yellow Box and Yellow gum. There are small remnants of this vegetation community remaining at Coate Park in Alphington, along the railway line between Burnley Park and the Circus Site in Richmond.

Along the waterways riparian vegetation would have been dominated by River Red Gum and Silver Wattle. The large floodplains would have included seasonal wetlands and floodplain woodland with a scattered overstorey of River Red Gums. On the steep escarpments on both the Merri Creek and Yarra River, the Escarpment shrubland included native shrubs and grasses. While the majority of the City is developed and urban, the waterway corridors provide links to the previous natural landscape character of the City with remnant areas.

3.1.3a Flora

The largest area of indigenous vegetation is in the Yarra Bend Park adjacent to the golf course in the City of Yarra Natural Heritage Study (Biosis, 2002). The more recent City of Yarra Biodiversity Health Survey (Practical Ecology, 2018) notes that six Ecological Vegetation Classes (EVC) were recorded across the open space reserves managed by the City of Yarra, so excluding Yarra Bend Park. Hall Reserve in Clifton Hill on the Merri Creek supported the largest extent of indigenous vegetation that is managed by the City of Yarra, followed by Alphington Park Wetlands and Lloyds Paddock. Lloyds Paddock supports the most diverse vegetation communities with four different EVCs. This is followed by Kevin Bartlett Reserve, Burnley Park and McConchie Reserve, each of which supports three different EVCs. Other reserves supporting remnant indigenous vegetation include Burnley Park, Rushall Recreation Reserve, Park Street Linear Reserve, Coulson Reserve and Knott Reserve.

Prior to European colonisation, Plains Grassy Woodland would have been the most wide-ranging EVC across the much of the municipality with the Floodplain Riparian Woodland and Riparian Woodland along the Yarra River, Merri Creek and Darebin Creeks, with Escarpment Shrubland on the steep escarpments along the waterway corridors. Additionally, small areas of Aquatic Herbland and Tall Marsh are located in Alphington Wetland and McConchie Reserve.

In the City of Yarra there are some excellent examples of restoration of ecosystems through revegetation with some notable ones being Alphington Park, Rudder Grange, Rushall Recreation Reserve, Hall Reserve, Dights Falls Park, Burnley Park, Kevin Bartlett Reserve, Lloyds Paddock and the restored wetland at McConchie Reserve. (Practical Ecology, 2018).

3.1.3b Fauna

The recent survey of fauna undertaken in the City of Yarra managed open spaces (Practical Ecology, 2018) notes the majority of records were bird and mammal species with smaller numbers of reptiles, amphibians, invertebrates and fish. 92 per cent of the fauna sightings were birds. There is a diverse bird community in the City of Yarra although the majority is frequented by common bird species including Australian Magpie, Noisy Miner, Red Wattlebird, Rainbow Lorikeet, Silver Gull, Magpie-lark and Galah. There are more specialised species, for example waterbirds restricted to the riparian corridors and wetlands.

The greatest diversity of birds was observed at Dights Falls Park, Bundara Street Reserve, Hall Reserve, McConchie Reserve and Kevin Bartlett Reserve. While not observed, the Practical Ecology report notes that there are other significant fauna species that are likely to make use of the habitat within the City of Yarra, particularly along the waterways and adjoining bushland. This includes the Vulnerable Grey-headed Flying Fox colony, which is located in Yarra Bend Park, the Critically Endangered Swift Parrot which is likely to forage on the stands of Yellow Gum, Yellow Box and Ironbark within the City of Yarra and Yarra Bend Parklands. The Nankeen Nigh Heron is resident at a number of locations along the Yarra River such as McConchie Reserve and Lloyds Paddock.

3.1.3c Sites of geological and geomorphological significance

There are sites of geological and geomorphological significance along the Merri Creek and Yarra River including one site of State significance and four sites of Regional significance.

The site of State significance is an exposed cliff on the southern bank of the Yarra River of clearly exposed sandstones interbedded with mudstones of the Melbourne Formation at Dights Falls.

The other four sites of Regional significance are:

- A basalt escarpment that shows a complex fracture system at Yarra Bend Park on Merri Creek, opposite Quarries Park.
- A natural cliff that displays lava flows with contrasting orientations and vertical jointing on Merri Creek, upstream of Heidelberg Road on the north western bank.
- A vertical cliff face with elongated gas bubble holes, which represents the cooling process on the southern bank, along with a small lava cave to the east opposite Ross Street.
- Vertical overhanging cliffs 8 to 10 metres high on the southern bank of Merri Creek at Rushall Station.

These features are visible from the Merri Creek trail and require ongoing protection.

3.1.4 Waterways

3.1.4a Yarra River

The Yarra River is central to the identity and character of the City of Yarra. Its natural character and bushland provides an important contrast from the unique and highly valued urban character of Yarra. The community survey outcomes identified that the Yarra River corridor is popular and well visited along with the large parks and reserves.

The presence of large natural bushland reserves adjoining the River significantly contribute to its character. This includes Yarra Bend Park, Studley Park and Willsmere Park. Further downstream through Collingwood, Richmond and Burnley the linear open space along the Main Yarra Trail has extensive stands of large remnant trees and bushland that forms an important habitat corridor.

At the confluence with the Darebin Creek, the Yarra River has some established remnant and regenerating stands of River Red Gums and other riparian vegetation along the edge of the Latrobe Golf Club and on the opposite bank through Willsmere Park (in the City of Boroondara). The regenerating and remnant riparian values are strengthened downstream where the River flows through the extensive Yarra Bend Park to the confluence with Merri Creek at Dights Falls. The presence of some remnant vegetation including large remnant River Red Gums, Yellow Box and Yellow Gum provide a framework for habitat enhancement. The connectivity of the Yarra River to both its upstream and downstream catchments supports the native wildlife and habitat values and significantly contributes to the biodiversity values of the City of Yarra.

Upstream of Dights Falls, at the confluence with Merri Creek, the Yarra River is a freshwater stream, and downstream of Dights Falls the River is subject to tidal influence. Historically, the river channel downstream of Dights Falls has been highly modified to suit

urban development in the catchment. Upstream of Dights Falls the channel has been modified, however the extensive system of parkland associated with the Yarra River Floodplain on both sides of the River has minimised the extent of modification and contributes to the natural and environmental character of the River. In a broader context there is extensive work to improve water quality of the Yarra River throughout its catchment, which in the longer term will aim to improve the water quality in the lower reaches of the Yarra River.

Management responsibilities

The City of Yarra and Parks Victoria are predominantly responsible for the linear open space reserves along the Yarra River, with the exception of the Collingwood Childrens Farm which is Crown land managed by the Committee of Management.

Melbourne Water is responsible for:

- flooding and regional drainage management
- stream form, system and stability
- facilitation of water quality improvement
- facilitation of stream vegetation and natural resource management to the bed and banks of the waterway.

Melbourne Water is currently preparing the 50 Year Yarra Community Vision for the Yarra Strategic Plan that will provide the basis for future planning and management of the Yarra River corridor.

Parks Victoria is responsible for recreational boating and use of the waterway of the Yarra River from Port Phillip Bay to Dights Falls. They are also responsible for the ongoing management of Herring Island including visitor access to the island.

3.1.4b Merri Creek

Merri Creek has an extensive rural and urban catchment and is on the main tributaries to the lower reaches of the Yarra River. Through the City of Yarra the Merri Creek is a deeply incised stream flowing through a steeply sided valley. Upstream of Heidelberg Road the open space corridor is relatively narrow and broadens to a wider corridor downstream of Heidelberg Road including through Hall Reserve, Quarries Park and Yarra Bend Park. With this more extensive parkland system adjoining the waterway, the natural landscape values of the corridor are higher downstream of Heidelberg Road.

The incised nature of the Merri Creek is its natural form and the bed and banks of the creek are in relatively natural condition. The incised banks are steep basalt escarpments, a number of which are noted as being of geological and geomorphological significance. Much of the original indigenous vegetation has been modified along the Merri Creek corridor, with some small remnants occurring on the escarpments near Rushall Station. There has been ongoing revegetation and improvement of the riparian corridor values of Merri Creek along with improvements to the shared trail connectivity as well.

Given Merri Creek has a highly urbanised catchment it has relatively poor water quality. The stream form is relatively natural downstream of Rushall Station with natural rock riffles and no identified barriers to fish migration. With the ongoing improvement to water quality across the catchment it is anticipated that water quality and instream values may improve in the longer term.

Management responsibilities

The public land along the stream is owned and managed by a combination of the City of Yarra and Melbourne Water. Works in the open space reserves is the responsibility of the City of Yarra and are coordinated with the Merri Creek Management Committee (MCMC). This Committee is an incorporated association that is primarily funded by the Councils along the Merri Creek. MCMC act as an advisory body to the its member organisations and the *Merri Creek and Environs Strategy 2009–2014* is the key planning document that guides the MCMC priorities and direction for the Merri Creek.

Melbourne Water is responsible for the bed and banks of Merri Creek including revegetation, weed control, water quality monitoring along with the broader floodplain management responsibilities.

3.1.4c Darebin Creek

Darebin Creek flows along the eastern boundary of the City of Yarra for a relatively short section which includes the confluence of the Darebin Creek with the Yarra River in Alphington. The creek flows through a modified environment associated with Alphington Grammar School and Latrobe Golf Club. Revegetation along the creek including the revegetation in the adjoining Napier Waller Reserve contributes to the natural values of the waterway corridor. At the confluence with the Yarra River there are some remnant stands of River Red Gums and indigenous mid-storey vegetation.

The construction of a fish ladder at the end of Farm Road by Melbourne Water has improved access for migratory instream fauna between Darebin Creek and the Yarra River. While the Darebin Creek catchment is highly urbanised, ongoing improvements to the quality of urban stormwater runoff aims to progressively improve the quality in the creek.

Management responsibilities

Melbourne Water is responsible for flooding and regional drainage management; stream form, system and stability; facilitation of water quality improvement; and facilitation of stream vegetation and natural resource management of the bed and banks of the waterway.

The Darebin Creek Management Committee Inc (DCMC) is an incorporated association which is funded by the Councils including the City of Yarra. They work towards improving the Darebin Creek and the adjoining open space corridor.

The majority of land is freehold and there is a Public Acquisition Overlay over the corridor in favour of The Minister responsible for administering Part 2 of the Crown Land (Reserves) Act 1978 for the purposes of the creation of a continuous linear park / trail system adjacent to the waterways.

3.1.5 Community use of open space

3.1.5a Community open space survey outcomes

The community consultation outcomes about open space have identified that trees are at the top of list of what the community value about open space. This is followed by open space being a place to relax and unwind and the feeling of space. When comparing this to the outcomes of what people most valued in 2006, trees were fifth, so their level of importance is now higher than it was then. The *Yarra Urban Forest Strategy* provides a clear direction for the future care and management of trees in the City. Since the 2006 Strategy, the relationship between the importance of trees in mitigating the effects of climate change has become more prominent and may explain the increased awareness and value of trees by the community. The open space network provides opportunities to plant and retain large canopy trees that are more difficult to manage in the local street network due to space constraints. The *Yarra Urban Forest Strategy* also confirms that the canopy cover of trees in open space is an important component of the total canopy cover in the city.

Small local parks are the most visited type of open space in the current survey, which has increased since 2006, where small local parks were ranked as being the fourth most visited. Since the preparation of the Strategy, an additional six Small Local open spaces have been added to the network, which may also have influenced the levels of use of these small spaces. In Collingwood, the most visited open space is now Peel Street Park compared with Fitzroy Gardens when the survey was completed in 2006. This supports valuable contribution that Small Local open spaces make to the open space network, and people will use these small spaces regularly if they are provided.

As part of the research for the Strategy, the worker community was surveyed regarding their use patterns of open space. The surveys have confirmed that more than 80 per cent of workers use open space during the time they spend at work, and that it is important to them. This is different from the 2006 Strategy, where less than 50 per cent of workers surveyed visited open space during their time at work. In Collingwood, additional Small Local open space has been added to the network that is noted as being well used by the worker community, however they are requesting additional open space is required.

In relation to the reasons residents visit open space, there is a greater diversity of reasons they visit, with socialising, relaxing and dog walking more frequently mentioned than the previous survey in 2006.

The resident survey results have been summarised at a detailed precinct level, which has informed the precinct recommendations and 15-year Action Plan in Section 7 of the Strategy. The worker survey results have been summarised at a more detailed level by each of the four employment precincts and these have informed the Precinct Recommendations in Section 7 of the Strategy.

3.1.5b Recreational values along the waterway corridors

Shared trails

Council and other management agencies and their delegates have continued to improve the indigenous riparian vegetation values along the three waterways in the City of Yarra.

The shared trail links and connections have been improved since the 2006 Strategy, with key changes including:

- The Darebin Creek Shared Trail link has been constructed between Sparks Reserve (Heidelberg Road) in Alphington and the Main Yarra Trail in East Kew.
- The Main Yarra Trail has been upgraded to improve accessibility with graded ramp access into the trail, improved surfacing and widening in selected locations.
- The Main Yarra Trail has been upgraded and constructed along the north bank of the River between Punt Road and Lloyds Paddock.
- Improvements to the Merri Creek Shared Trail.

There are other key links and connections that are to be addressed in the future including:

- The Main Yarra Trail and linear open space corridor link between Gipps Street Steps (Collins Bridge) and Walmer Street footbridge in Abbotsford.
- Shared trail access from Alphington onto the Lower Darebin Creek Shared Trail in Alphington.
- Improvements to the Merri Creek Shared Trail upstream of St Georges Road.

Water-based recreational use

There is a range of water-based recreational uses including rowing, kayaking and recreational boating on the Yarra River. Parks Victoria regulates the water-based recreational use with the key guide being the *Lower Yarra River Future Directions Plan and Recreational Guidelines* (Parks Victoria, 2001). The plan assigns different zones to the Lower Yarra River and for the City of Yarra, the River downstream of Herring Island is within the Active Recreation Tourism Zone and between Herring Island and Dights Falls the Yarra River is zoned as a Passive Recreation Zone.

The Active Recreation Tourism Zone extends from Princes Bridge to Herring Island. It is noted as the main venue for sport and entertainment events attracting many spectators along its banks. It is also a rowing activity centre providing training and competition areas, storage and club facilities. Many of its buildings have heritage and cultural value. Herring Island is listed as one of the major destinations in this zone. The guidelines within this zone are to:

- *Retain its use as a training and competition venue for rowing and other sporting activities.*
- *Provide appropriate infrastructure for commercial ferry operations at key destinations.*
- *Maintain appropriate infrastructure for rowing at key destinations.*
- *Limit access for commercial craft by time-zoning to provide priority use by rowers and other non-powered sporting activities at peak training and programmed competition times.*
- *Provide access for a limited number of events and regattas.*
- *Develop or improve pick-up and drop-off points for commercial ferry vessels to provide access at key destinations, such as Herring Island and Como Park.*
- *Maintain access to berthing facilities for private recreational craft at Herring Island.*
- *Assess the feasibility (impact and risk assessment) of the use of Burnley ramp to provide launching facilities for low numbers of private craft for access upstream.*

- *Maintain adequate channel depth and width to ensure safe and navigable waterway.*
- *Provide berthing for recreational craft upstream of Swan Street.*

For the Passive Recreation Zone that extends from Herring Island to Dights Falls, the guidelines include:

- *Encourage its use as a recreational waterway for private powered and non-powered boating activity.*
- *Retain existing permanent mooring and berthing facilities for powered craft, however, access downstream of Swan Street will be limited to transit purposes only.*
- *Retain limited commercial boat operations.*
- *Maintain adequate channel depth and width to Clarke Street, Abbotsford to ensure a safe and navigable waterway.*

As part of the ongoing management, implementation of future landings and facilities for rowing will be supported upstream of Herring Island. Canoe and kayaks will continue to gain access to the river at Dights Falls, Clarke Street and Riverside Walk.

3.1.5c Structured sport and recreation use

Structured sport and recreational use of open space is important to community health and wellbeing. It is provided for in the large Regional and City-wide open spaces across Yarra including Victoria Park, George Knott Reserve, Kevin Bartlett Reserve, Coulson Reserve, Quarries Park, Ramsden Street Reserve, Alphington Park, Fairfield Park, Yarra Bend Park, Edinburgh Gardens, Citizens Park, Burnley Park, Alan Bain Reserve, Ryans Reserve, Yarra Bend Golf Course and Burnley Golf Course. There are also some key sporting reserves that adjoin the City of Yarra including Princes Park, Northcote Park, Gosch's Paddock and Como Park.

Council has participated in the preparation of the Inner Melbourne Action Plan (IMAP) *Regional sport and recreation strategy* (SGS Economics and Planning, 2019). The Vision statement in the strategy informs the current and future regional sport and recreation planning is:

Sustainable and innovative regional planning for sport and recreation facilities that breaks from traditional approaches and shares the challenge to equitably balance everyone's needs.

The key principles that are intended to be applied to all decision making regarding sport and recreation now and in the future are:

- *Sharing the challenge: regional solutions to sports planning.*
- *Pro-active Council led management of facilities.*
- *Equitable use of facilities.*
- *Opportunities for the local community to participate.*
- *Sharing of assets.*
- *Well located facilities.*
- *Resilient facilities.*

The Strategy includes a series of recommendations for each of the participating councils including the City of Yarra for individual reserves. The City of Yarra intends to use the

IMAP Strategy as the key guide for future provision of structured sport and recreation facilities in the municipality.

3.1.6 Cultural heritage values

3.1.6a Aboriginal cultural heritage values

Prior to the colonisation of Melbourne, the area known as Yarra held significant and cultural importance to the Wurundjeri people, and this connection still exists today. The spiritual connection to places within Yarra's municipal boundaries, like the Yarra River, and the confluence of the Yarra and Merri Creek, extend back thousands of years to the Dreamtime. (Yarra Aboriginal Partnerships Plan 2015-18)

Prior to European settlement the waterway corridors, wetlands and open plains and forests in Yarra were the natural features of the landscape, which have now largely been destroyed or modified by urbanisation. The Yarra River offered a permanent water source along with the streams of the Merri and Darebin Creeks and made the surrounding land desirable. Despite the enormous change and devastating effects of European occupation including diseases, forced removal from traditional lands, family and lifestyle, Wurundjeri traditions and culture continues in Yarra today. Wurundjeri people have continued to live in the suburbs of Collingwood and Fitzroy. (Yarra Aboriginal Partnership Plan, 2004).

Remaining notable indigenous cultural features in the City identified to date include the Burnley Park Corroboree Tree, Scar trees (Coate Park/Rudder Grange and Studley Park), Dights Falls Mission School and Native Police Corps, the potential Merri Creek Treaty Site opposite Rushall Station (just outside the City boundaries), the confluence of the Yarra River and Merri Creek and the Fig Tree in Carlton Gardens where many legendary Aboriginal speakers addressed gatherings from the 1920s to the 1940s (Aboriginal Partnerships Plan 2015-18).

Some of these are described in more detail below.

- *Burnley Park Corroboree Tree* - In 1926 a young boy found a boomerang wedged in the branch of the giant Burnley Park Corroboree tree when he climbed it. In 1991 his brother returned the boomerang to a Wurundjeri elder, Marth Nicholson, in a ceremony at the tree site. The tree is now dead, but it is believed it was a meeting and corroboree place for many Aboriginal clans until well after European settlement. (Eidelson, 1997)
- *Dights Falls Mission School*, which wattle-and-daub school hut, opened on January 1, 1846 by the Collins Street Baptist Church. Nearby was the Dights Mill which provided flour for the colony. The location was already a popular meeting and trading place for Aboriginal clans in and around Melbourne. The school closed in 1851 after devastating floods in 1850 washed away the cultivated gardens and footbridge over the river. (Eidelson, 1997)
- *Dights Falls Native Police Corps* was set up in 1837 as a regional base from their main base in Dandenong Creek flats. Elders of the clans around Melbourne participated as it offered prestige. It was set up as a military encampment with rows of up to 50 tents/shelters and their role was to act as official escorts, tracking lost people and guard duty at the Pentridge Stockade. The camp was disbanded three times, the last in 1853. (Eidelson, 1997)

For Aboriginal people the suburbs of Fitzroy and Collingwood, particularly Gertrude Street, hold special historical meaning as a place to find that sense of community that is the strength of Aboriginal people. During the 1940s and 1950s Aboriginal families lives in Collingwood and Fitzroy when they moved from country Victoria to Melbourne. These areas were one of the central points from which the Aboriginal Political movement started.

The *Yarra Aboriginal Partnerships Plan 2015-18* is the third Aboriginal Partnerships Plan, and some of the information above was sourced from the original 2004 plan that was published in the 2006 Yarra Open Space Strategy.

3.1.6b Non-indigenous cultural heritage values

The Yarra River was a major source of fresh water and is the key reasons that Melbourne was settled. As noted above, the Wurundjeri people have strong spiritual connections Yarra including to the Yarra River and the confluence of the Yarra River and Merri Creek which extends back thousands of years to the Dreamtime.

The Yarra River significantly influenced settlement patterns and use from the early 1800s. European settlement patterns influenced the amount and style of open space across the City. Large parts of Richmond, Cremorne, Collinwood and Fitzroy were settled as working-class suburbs located nearby to industrial uses and places of employment. The dominant housing style was row terraces, varying between brick and timber construction depending on affordability. Within the working class neighbourhoods were the traders and merchants place of residence particularly in Fitzroy where larger double story row terraces were constructed. Open space reserves were not integral to the layout of some suburbs and is provided in areas that were constrained at the time for other reasons including flooding, quarries and former tips and have since been developed as open spaces. (Ian Wright et al, 2003)

In contrast Princes Hill, North Carlton, Fitzroy North, Clifton Hill, Fairfield and Alphington were settled primarily as residential suburbs. The layout of these suburbs incorporated open space as part of their planning. Of note, the original reservation of Darling Gardens was in response to the working community of Collingwood's "Slopes" lobbying for access to open space (Ian Wright et al, 2003). Edinburgh Gardens, Darling Gardens, Curtain Square and Alphington Park were all established at the same time as the housing, and their planting, layout and character is complementary to the urban character of the neighbourhood.

Clifton Hill has some industrial pockets, some of which have been converted to residential use, and the former quarries along Merri Creek have now been converted to open space. The heritage character of the open space along the Merri Creek relates to its natural and industrial history.

Some of the key reserves included in the *City of Yarra Heritage Review Landscape Citations* (Patrick, 1997) include:

- **Yarra Bend Park**

Regionally significant for both its Aboriginal and non-indigenous cultural heritage including the natural and cultural elements that reflect toe sites ongoing post-European contact. The park demonstrates the relationship between the natural environment and the sequential history of its use. This includes the remnant indigenous vegetation; the public boating and swimming; the remnant exotic trees through the golf course from its early use as an ornamental garden; the golf course

which was constructed during the 1930s with sustenance workers; and the history associated with the Asylum on the site. This park is managed by Parks Victoria and is the only public park nominated as being of regionally significant in the City of Yarra. (Burnley Gardens in the Burnley Horticultural College is also nominated as regionally significant but is not a public park).

- **Edinburgh Gardens**

Locally significant as a major early recreational facility within the Fitzroy area. The site is intrinsically linked to a number of sporting groups and the Fitzroy community. Originally reserved in 1862, the reserve was initially used for cricket followed by the bowling club which established in 1877. A creek running through the park was converted to an underground drain and paths laid out along the pedestrian wear lines. Major plantings of avenues of Elms and Oaks occurred in the late 1800s and the park is fringed with an unusual row of Kurrajong trees. The North Fitzroy rail line was constructed through the park in 1886 which bisected the park and significantly influenced its use. The railway was removed in 1981.

- **Darling Gardens**

Locally significant as an important recreational facility for the Collingwood and Clifton Hill areas with strong associations with the local community. The reserve was set aside in the 1860s and in the *City of Yarra Review of Heritage Precincts 2001*, (Wright, 2003), it is noted that the residents in Collingwood lobbied for an open space to be set aside for them given the poor conditions in Collingwood at the time. The gardens were formally laid out and planted in the 1890s with seeds and plants from von Mueller, Director of the Royal Botanic Gardens. The gardens had some sporting use early on, however, the community planting day in 1907 saw an end to the active sporting use.

- **Fairfield Park**

Locally significant as representative of early diverse recreational facilities and uses along the Yarra River, with extensive plantings and landscaping typical of the Edwardian period.

Other reserves noted as of being of local interest include:

- **Curtain Square** - for its formal layout and remaining early plantings and features including the Elms, Oaks, Moreton Bay Figs and monument.
- **Citizens Park** - reclaimed tip, the park was a major meeting place for people during the Great Depression. The Elms are remnant early plantings.
- **Coate Park** - layout and plantings typical of the 1930s era including the formal avenue of English Oak and garden bed plantings.

Reserves not listed in the Heritage Review Landscape Citations but potentially having some historical value include:

- **Alphington Park** - including the monument and early large trees including Bunya Bunya Pine and what appears to be a remnant Red Gum.
- **Gahan Reserve** - including formal layout and early plantings of Canary Island Date Palms and Planes.
- **Barkley Gardens** - including its formal layout and setting in the neighbourhood and mature exotic plantings.
- **Victoria Park** - cultural significance as the base of the Collingwood Football Club,

In summary there are Aboriginal and non-indigenous cultural values present in many open space reserves in the Yarra that require ongoing consideration and protection in the future use and management of these reserves.

3.2 Key changes to the open space network since 2006

3.2.1 Waterways

The waterways provide natural environmental corridors and linear of open space which is highly valued by the community. The undulating topography associated with the waterway corridors affords elevated long views which are restful and provide a sense of space which the community has nominated as one of the top three values of open space in the recent community survey. The natural character of the waterway corridors in the City of Yarra have been further protected since the 2006 Open Space Strategy with a combination of additional planning controls and securing additional open space along the waterway corridors.

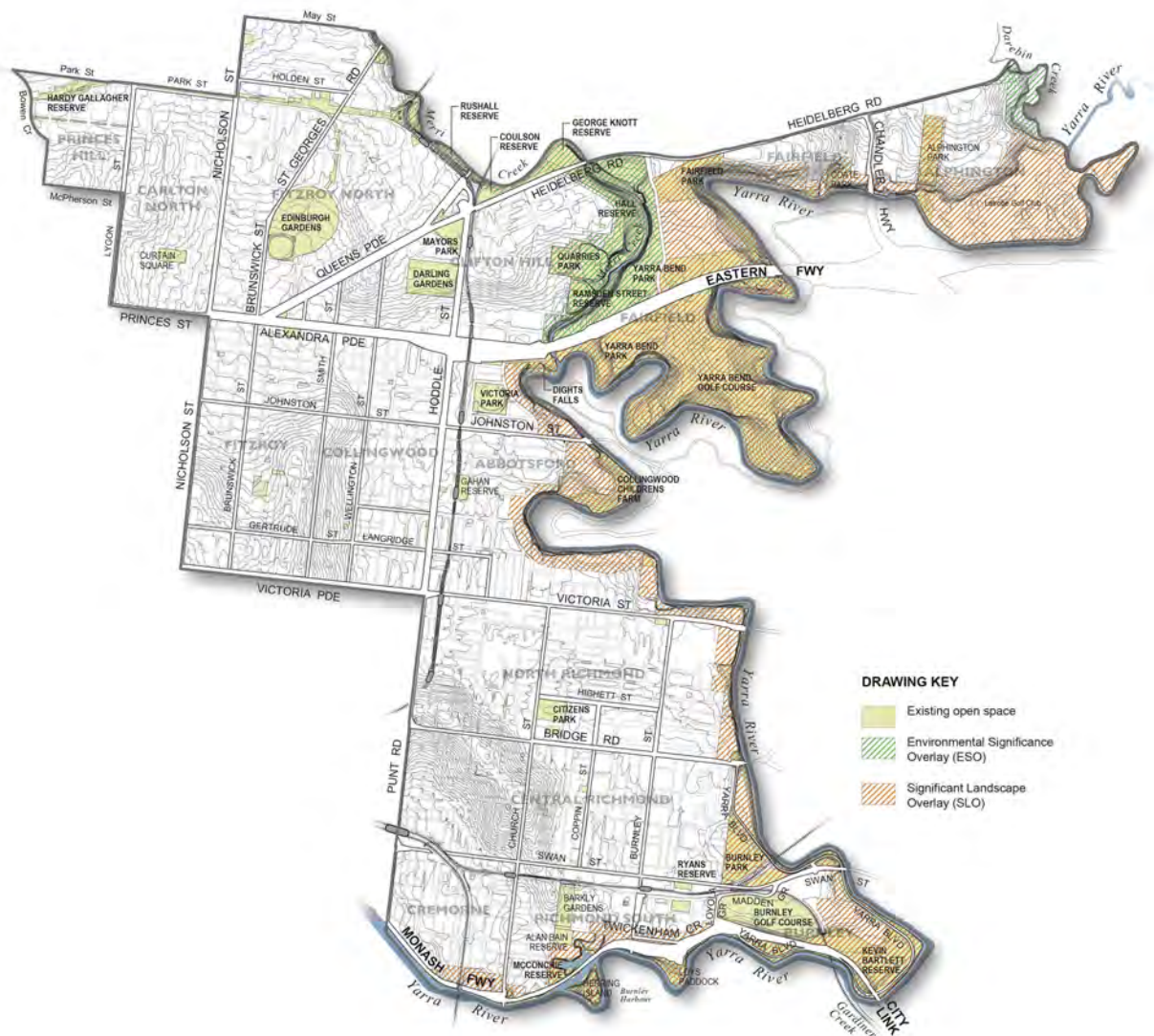


Figure 3B Environmental Significance and Significant Landscape Overlays along the waterways
Extract from Drawing YOSS-02c in Appendix A

Since 2006, a new shared trail has been constructed along the Darebin Creek. While not yet included in the Planning Scheme as public open space, there will be a future public open space corridor associated with the shared trail. At this stage there is no access

point into the new Darebin Creek Shared Trail from within the City of Yarra, however it can be accessed via Sparks Reserve in the City of Banyule.

Since the preparation of the 2006 Strategy there has been a review of the planning controls along the Yarra River corridor to address setbacks and development interface between the open space corridor and the river. This was in response to the increasing number of multi-level developments occurring along the Yarra River Corridor impacting on the community amenity and recreation use of the corridor. The Minister for Planning introduced consistent planning controls to protect the Yarra River Corridor including the Schedule 1 to the Significant Landscape Overlay and Schedule 1 to the Design and Development Overlay for properties adjoining the Yarra River corridor (extent shown in Figures 3B and 3C).

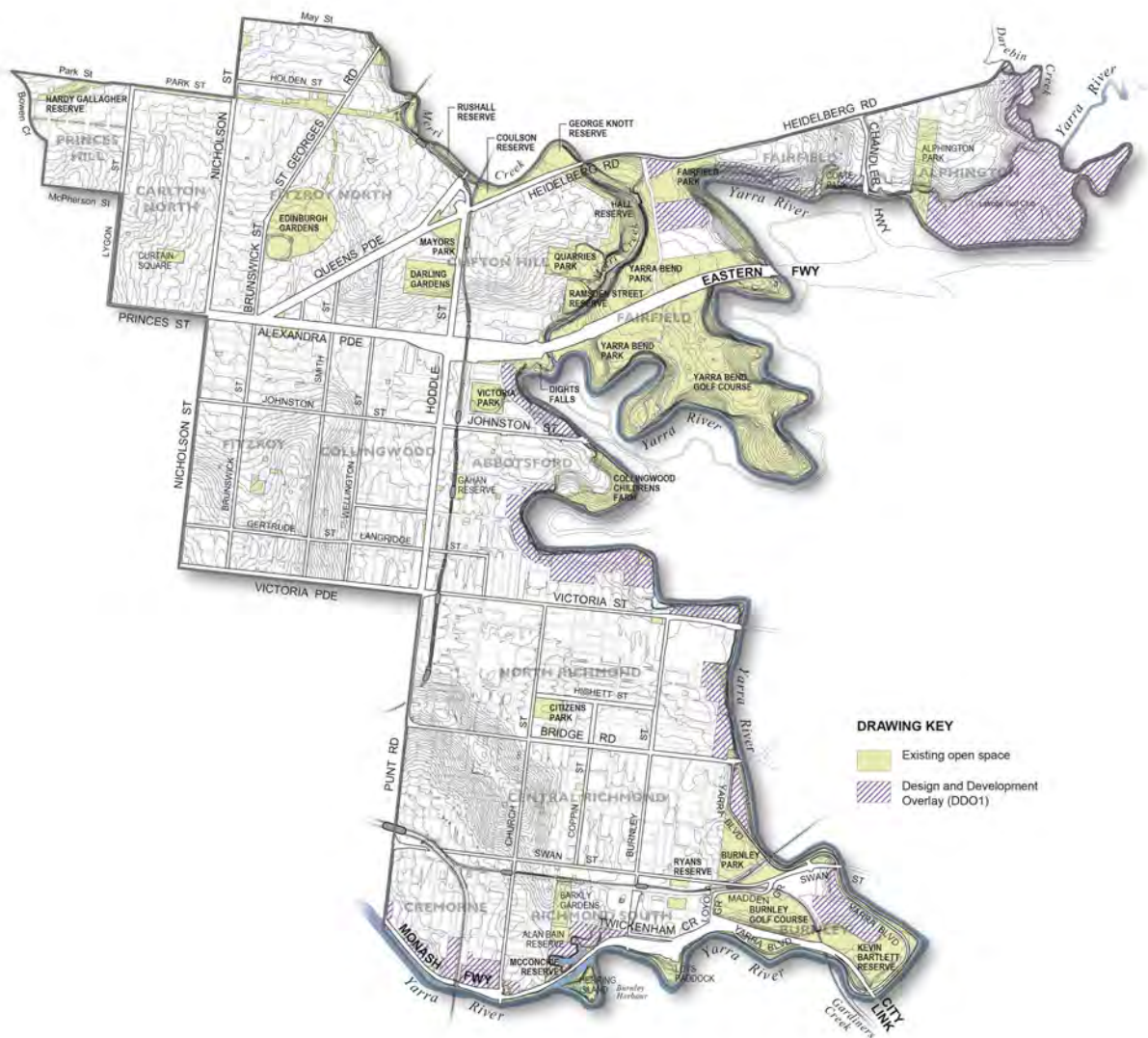


Figure 3C Design and Development Overlays along the waterways
Extract from Drawing YOSS-02d in Appendix A

3.2.2 Additional open space

Since the previous strategy was prepared, five new Small Local open spaces have been added to the network, and two more additional Small Local open space are in currently in the process of being designed. Two out of the five are located in Collingwood, which has the least amount of open space when compared to other parts of the city. In addition, two open space reserves have been increased in size through road/car park closures.



Figure 3D Existing open space, highlighting the new open space added to the network since the 2006 Open Space Strategy

3.3 Hierarchy and classification of open space including walkability

3.3.1 Overview

The 2006 Yarra Open Space Strategy used the following hierarchy:

- Regional
- City-wide
- Neighbourhood
- Local
- Small Local

This hierarchy is well established in the organisation and has been used effectively during its implementation. As part of the 2019 Strategy, a review of the open space hierarchy identified that the size of Local open space size (1,000 sqm to 9,999 sqm) was found to be too broad in its implementation going forward and has now been separated into two types, with the smaller being Local and the larger being Small Neighbourhood.

Local open space has been scaled back to 1,000 sqm to 4,999 sqm in size and can comfortably accommodate two different uses within it. Small Neighbourhood open space has been created as a new hierarchy type and is 5,000 sqm to 9,999 sqm in size which is adequate to comfortably accommodate three different uses within it. The walking catchment has been calibrated according to the size with a 200 metre catchment for Local open space and a 300 metre catchment for Small Neighbourhood open space. This is consistent with the principle that people will travel further to a destination open space that has a wider variety of activities they can participate in.

3.3.2 Hierarchy and walking/travel catchments

The hierarchy for the Yarra Open Space Strategy 2019 is shown in **Table 3-1** and is based on the existing framework and refined to also meet current best practice. This hierarchy is based on both the intended catchment of users and the relative size of the reserve to adequately cater to its catchment. It is a guide for analysing the spatial distribution of open space and is a useful management tool to direct appropriate facility development and maintenance levels in different types of open space reserves.

Please refer to Section 3.4 for a description of the Gap Analysis based on applying the open space hierarchy and walking catchments shown in Table 3-1 on the following page.

Table 3-1 Open space hierarchy, size and walking/travel catchments for the City of Yarra

Size	Walking/travel catchment	Purpose of the open space
Regional		
Unlimited	No specific distance is included as this open space is provided for the Melbourne-wide population. For the Yarra population, a distance of 500 metres has been applied where the open space is accessible for local community use.	Primarily caters to a regional population, including residents of Yarra, and/or protection and enhancement of environmental values in a regional context. For example linear open space along the waterways with habitat connectivity in the riparian zone, and/or regional trails that extend beyond Council boundaries are classified as Regional open space. Examples include Merri Creek Shared Trail, Yarra River Shared Trail and Yarra Bend Park.
City-wide		
Generally a preferred size of 7 hectares with a minimum of 3 hectares*	<p>Located within 1 kilometre of up to 95% of dwellings and workplaces.</p> <p>As these areas of open space have existing or the potential to offer facilities for nearby residents in addition to their City-wide function, a 500 metre walking catchment has been applied to those reserves with the ability to cater to neighbourhood needs as well as City-wide needs.</p>	<p>Primarily caters to residents and workers of the City of Yarra and will also provide facilities that are used by residents and workers from other municipalities. Generally these areas of open space provide facilities that appeal to residents 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. City-wide open space may also have a nature conservation role including protecting biodiversity values. Examples include Edinburgh Gardens in North Fitzroy, Darling Gardens in Clifton Hill and Burnley Park.</p> <p>* There is some City-wide open space that is smaller than the min 3 hectares where the reserve contains a specialised facility on a smaller area of land and fulfils a City-wide function, for example Ryans Reserve in Burnley.</p>
Neighbourhood		
Minimum 1 hectare	Located within 400 metres safe and easy walking catchment of dwellings and workplaces.	Provides for Neighbourhood use within walking distance of home or workplace with a multiple range of facilities. Examples include Gahan Reserve in Abbotsford, Hardy Gallagher Reserve in Princes Hill and Coate Park in Fairfield.

Size	Walking/travel catchment	Purpose of the open space
Small Neighbourhood		
0.50 to 0.99 hectares in size	Located within 300 metres safe and easy walking catchment of dwellings and workplaces.	Located within easy safe walking distance of home or workplace and large enough to provide at least three activities in the open space - for example, a multi-use half court, medium to large play area and a picnic facility. Examples include Smith Reserve in Fitzroy, Golden Square Park in Burnley, Rudder Grange in Fairfield .
Local		
0.10 to 0.49 hectares in size	Located within 200 metres safe and easy walking catchment of dwellings and workplaces.	Located within easy safe walking distance of home or workplace and large enough to provide for two activities in the open space - for example, a medium play area and open grassed area with seats. Examples include Dame Nelly Melba Park in Central Richmond, Holden Byrne Reserve in North Fitzroy, Condell Street Reserve in Fitzroy.
Small Local		
From 0.10 to 0.03 hectares, generally a minimum width of 20 metres	Located within 150 metres safe and easy walking catchment of dwellings and workplaces	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 an open grassed area for informal use. Examples include Shakespeare Reserve in Carlton North, Browns Reserve in Abbotsford, Urban Art Square in North Richmond.

The hierarchy has been applied to open space across the City of Yarra as shown in Figure 3E, on the following page. This is an extract from Drawing YOSS 3a in Appendix A



Figure 3E Open Space Hierarchy in the City of Yarra
Extract from Drawing YOSS-03a in Appendix A

Regional open space is located along the waterways, with the majority along the Yarra River and some along Merri Creek. A future Regional open space is proposed along the Darebin Creek to facilitate the construction of a shared trail link between the Darebin Creek and the Main Yarra Trail. The extent of the reserve is defined in the PAO2 in the Yarra Planning Scheme and is shown in Figure 3E.

Yarra Bend Park is the largest of the Regional open spaces in the City of Yarra, and is noted as being the largest area of natural bushland close to the Melbourne CBD. While this open space is located within the City of Yarra it is Crown Land that is managed by Parks Victoria for the Melbourne-wide population. The Regional open space provides important biodiversity and habitat corridor values as well as a range of unstructured and structured recreational uses, including fields sports and fly fishing.

The majority of the 14 City-wide open space reserves have structured sporting uses with the exception of Barkly Gardens in Richmond South and Darling Gardens in Clifton Hill. Those open spaces are defined as Public gardens and are well used for a range of unstructured and informal uses.

The Neighbourhood open space caters primarily to unstructured recreation and informal needs and are mainly located north of Victoria Street, while south the only Neighbourhood open space is Anettes Place adjacent to the Yarra River near Victorian Gardens development.

Numerically, the majority of open space is the Local and Small Local open spaces that are distributed across all the precincts. For further discussion on the distribution analysis of open space, please refer to Section 3.4, Gap Analysis.

3.3.3 Character classification of open space

3.3.3a Overview

Within the open space hierarchy, 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 and the design and layout of the open space. Open space character in Yarra is diverse, ranging from natural bushland along the waterway corridors, formal gardens, large sporting reserves and small urban parks. These different characters appeal to different parts of the community including young and old. Diversity in character generally assists in meeting diverse needs that maximises the accessibility of the open space network to the community. They are also important in identifying, protecting and improving biodiversity and environmental values of open space.

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 'Nature conservation' as its primary classification, future decisions regarding the expansion of recreational use and facilities will be guided by whether that is consistent with its primary purpose of nature conservation.

3.3.3b Character Classification

The following character classification has been proposed to assess the provision and distribution of different types of reserves within the municipality. These are listed in alphabetical order and will be subject to some change as site visits to open space progress to better reflect the existing open space system in the City of Yarra.

Table 3-2 Character classification for open space in the City of Yarra

Character classification	Description
Botanical	Where there are significant trees with botanical interest or are of a significant size and age, including both indigenous and non-indigenous vegetation.
Community garden (refer to Restricted recreation)	Where members of the community participate in horticultural activities such as growing vegetables, flowers, and/or fruit, where they are assigned 'garden' plots on public open space to grow their own plants. These areas are fenced and available for use by those who have been assigned garden plots, and in these instances form a restricted open space use.
Cultural	Where monuments, public art, cultural activities, events and festivals influence the use and character of the open space.
Events	Where events are regularly scheduled and held contributing to the character, design and function of the space.
Formal	Where the facilities and overall open space layout are set out in a formal style.
Heritage	Where the Indigenous or non-Indigenous history makes a significant contribution to the open space character and use. This classification includes open space that has been identified as having some heritage value 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	Where the open space is part of a linear network of open spaces or continuous reserve that is used primarily for travelling through or along. These typically include shared paths, seating, resting points and vegetation. These are mainly located along waterways.
Linking space	Where open space provides a local link or connection between streets, individual open spaces or to a key destination like a railway station and is not part of a broader linear network.
Nature conservation	Where the 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.
Passive	Primarily designed for a range of non-active uses such as strolling, seating, picnic, social gatherings and play.
Play	Where the character of the open space is dominated by a play facility and is the primary purpose for the reserve.
Public garden	A planned open space set aside for the display, cultivation and enjoyment of plants and used for recreation.

Character classification	Description
Railway easement/siding	Open space (other than linear) where the railway use significantly influences the open space's ongoing use and design.
Restricted sporting/recreation	Available on a club membership or fee paying basis only and is not available for general public use at any time. This includes public golf course, tennis courts, bowling clubs and community gardens (refer Community Garden classification).
Seating	Where the character and major use of the open space is seating so people can relax and enjoy the outdoors and natural character or ambience.
Viewing	Where the character and major use of the open space is for enjoying the views and may include seating or viewing points.
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.
Urban heat mitigation	The location and design of the open space plays a role in mitigating urban heat island effect within medium and high density precincts.
Undeveloped	Open space which has not been developed and contains few or no facilities.
Urban plaza	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. They are of a size that can provide for recreational use including social gatherings and events and are freely available for the public to use. A range of other urban design strategies and planning frameworks can also influence these spaces.
Waterway	The presence of a waterway makes a significant contribution to the character, value and use of the open space including the riparian zone.
Wetland/WSUD	The presence of a wetland or other WSUD feature contributes and influences the character and use of the open space.

A primary character classification has been assigned to all open space along with one or more secondary character classifications where they apply. The character classification will assist with both the ongoing management of the open space, particularly where there are competing uses and also identify where there are gaps in the provision of different character types of open space. This analysis identifies opportunities to change or improve existing open space character types to better meet the community needs.

3.4 Quantity and provision of open space

An assessment and analysis of existing open space has been undertaken using the Council supplied data base and updating this including the names and whether they are currently zoned as public open space or not. The public open space for the Strategy includes open space that is owned and managed by other public agencies. The main example is Yarra Bend Park which is Crown Land managed by Parks Victoria.

Based on the research, there are a total of 107 open space reserves, with a total area of 263.40 hectares of open space, which equates to 13.5 per cent of the total land area of the municipality, excluding the restricted open space.

If the restricted open space is included, there are a total of 113 open space reserves, with a total of 348.66 hectares of open space, which equates to 17.8 per cent of the land area of the municipality.

For the purposes of the Strategy, restricted open space is defined as public open space that is only available to the public on a fee paying/club membership basis. The 7 restricted open spaces noted above are entire reserves, and include:

- Burnley Golf Course, Burnley
- Collingwood Childrens Farm, Abbotsford
- George Knott Reserve, Clifton Hill
- Richmond Union Bowling Club, North Richmond
- Ryans Reserve, Burnley
- Yarra Bend Golf Course, Fairfield.

Where there is a restricted use within an open space reserve, the fenced/restricted area is included in the total area of open space. For example the Fitzroy Tennis Club in the Edinburgh Gardens is included in the total quantity of open space.

3.4.1 Quantity of open space by precinct

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 city at both a city-wide level and a precinct level.
- Quantity of open space area per resident, both at the city-wide level and the precinct level.

The rationale for assessing the quantity in these two ways is to measure how changes in the number of residents can impact on the quantity of people using the open space. In addition to the considering the quantity of open space, the design and distribution of open space is also assessed to determine whether there is an adequate provision of open space. For the purposes of this comparison, we have removed the restricted public open space from the calculation.

3.4.2 Quantity of open space as a proportion of land area

Table 3-3 highlights the variation in quantity of open space across the different precincts.

Table 3-3 Quantity of open space as a proportion of land area in the City of Yarra

PRECINCT NAME	No. of open spaces	Total open space 2016 Ha	Total suburb area Ha	Proportion of o/space of total precinct area
Abbotsford	19	13.39	179	7.5%
Carlton North - Princes Hill	6	6.23	141	4.4%
Central Richmond	9	23.46	196	12.0%
Clifton Hill	9	41.18	168	24.6%
Collingwood	5	0.34	129	0.3%
Cremorne / Burnley / Richmond South	21	44.32	233	19.0%
Fairfield / Alphington	7	96.92	346	28.0%
Fitzroy	9	2.27	140	1.6%
Fitzroy North	19	29.56	231	12.8%
North Richmond	9	5.81	192	3.0%
TOTALS	113	263.46	1,955	13.5%

Collingwood has the least amount of open space as a proportion of precinct area with 0.3 per cent of the total precinct as open space. Three other precincts have less than 5 per cent open space being Fitzroy with 1.6 per cent, North Richmond with 3 per cent and Carlton North - Princes Hill with 4.4 per cent. Fairfield/Alphington has the highest proportion of open space relative to land area with 28 per cent, mainly due the presence of Yarra Bend Park. Similarly, Clifton Hill as 24.6 per cent of the total precinct as open space mainly due to the extensive open space system along Merri Creek including Quarries Park, Ramsden Street Reserve and Hall Reserve.

Accessibility to open space is a key influence on its use and benefit to the community that surround it, so this measure of open space needs to be set in the context of other assessments as well including the gap analysis, availability of open space relative to population density.

3.4.3 Quantity of open space relative to population density

The following table illustrates the provision of open space relative to residential population density. Total population numbers shown in Table 3-4 are sourced from the .id Community Profile using the Usual Resident Population. This allows us to show the comparison between 2006 (the year of the existing YOSS) and 2016. Please note that Usual Resident Population figures have been used for this table as the comparative data is available for 2006 and 2016. These figures differ slightly from the Estimated Resident Population figures that are used in other parts of the Strategy.

Table 3-4 Quantity of open space relative to 2006 and 2016 residential population in the City of Yarra

PRECINCT NAME	No. of open spaces	Total open space 2016 Ha	Total population (URP) 2006 (YOSS 2006)	Sqm of open space per person 2006 (YOSS 2006)	Total population (URP) 2016	Sqm of open space per person 2016
Abbotsford	19	13.39	4,323	31	8,184	16
Carlton North - Princes Hill	6	6.23	8,184	8	8,433	7
Central Richmond	9	23.46	10,764	22	12,965	18
Clifton Hill	9	41.18	5,382	77	6,342	65
Collingwood	5	0.34	5,499	0.6	8,511	0.4
Cremorne / Burnley / Richmond South	21	44.32	3,590	123	4,747	93
Fairfield / Alphington	7	96.92	2,275	426	2,701	359
Fitzroy	9	2.27	8,825	3	10,445	2.2
Fitzroy North	19	29.56	10,266	29	11,535	26
North Richmond	9	5.81	10,243	6	13,299	4.4
TOTALS	113	263.46	69,351	38	87,162	30

The accepted standards in the United Kingdom and Australia for the provision of open space relative to the new population in greenfield sites is between 20 and 24 square metres per person. On a municipal-wide basis, the City of Yarra has approximately 30 square metres per person, which has reduced from 38 square metres per person in 2006. There are significant variations across the different precincts, with highest proportion being in the Fairfield / Alphington precinct with 359 sqm per person compared with 0.4 sqm in Collingwood.

Looking at the change between 2006 and 2016, the most significant change has been in Abbotsford, where the population has almost doubled and correspondingly the quantity of open space per person has also nearly halved. One additional Small Local open space has been added to the network in this precinct over the corresponding period. For Collingwood, the quantity of open space has more than doubled with two new open spaces, increasing the open space from 0.12 hectares to 0.34 hectares.

In Carlton North - Princes Hill there has also been a reduction in the open space. This is due to previous designation of the central median strips in Canning and Drummond Streets as public open space. In this Strategy they are not included as they are less than 10 metres in width. Pigdon Street Median remains given it is greater than 10 metres in width.

It is noted that there was no information for the worker population in 2006, and therefore it is not possible to provide the same comparison for employees relative to open space. Employees are sharing open space with residents, so a separate comparison would not in any case provide a true picture of how much open space is available for each group of users.

Refer to Section 4 for the forecast population growth and impacts on open space.

3.5 Gap analysis

3.5.1 Gaps in the open space network



Figure 3F *Open Space Gap Analysis* Extract from Drawing YOSS-03b in Appendix A
Refer to Table 3-1 and Table 3-5 for an explanation of the walking catchments

The gap analysis is an assessment of the spatial distribution of existing open space across the City of Yarra. It identifies if there are any locations where open space is not within safe and easy walking distance of the population living and working in the city. Figure 3F above illustrates the walking catchments that are applicable to the open space. In addition to walking catchments, there are travel catchments to the Regional and City-wide open space given the facilities provided in them are for a catchment of users beyond walking distance. The travel catchments for City-wide open space are up to 1 kilometre. When these are applied to the City-wide open space, it confirms there are gaps in the provision of City-wide open space in the Fitzroy/Collingwood areas. Given the established nature of the city, there is no opportunity to provide additional City-wide open space.

In the majority of the Regional and City-wide space, they are used for unstructured and informal uses such as walking dogs, playing informal games on the ovals, visiting the playground and meeting friends in the open space. Therefore, a 500 metre walking catchment has been applied to all Regional and City-wide open space in recognition of the local levels of use these open spaces receive. The walking catchment extends over arterial roads where there are signalised intersections or pedestrian crossings, however railways and freeways are considered to be barriers to safe walking access. Where the catchment extends over arterial roads, the catchment is shown in a paler colour in recognition that some of the community cannot easily cross arterial roads to reach open space, for example young children, the elderly and people with limited mobility. This means that for these people, the arterial road may still present a physical barrier to safe and easy access to open space.

A 400 metre walking catchment has been applied to all the Neighbourhood open space, which represents an approximate 10 to 15 minute walk for the relatively fit, and an approximate 20 minute walk for the elderly and young children. This catchment extends over major roads in addition to the arterial roads and railways where a signalised intersection is provided directly adjacent to the open space.

A 300 metre safe walking catchment is applied to the Small Neighbourhood open space which represents an approximate 10 minute walk. For Local open space the catchment reduces to 200 metres and for Small Local open space it is 150 metres. This change in catchments is calibrated in size to reflect the different expectations in terms of length of stay at the different types of open space. These catchments do not extend over collector roads in addition to the major roads, arterials and railways. This is in response to the need for people with limited mobility including the elderly and the young to easily reach some green open space within walking distance, even if the open space is relatively small in size. This is consistent with the latest research into the importance of open space to community health and well-being as summarised in Section 2.4 of the Strategy.

The areas without any colour shown in them are locations in the City of Yarra where the existing population do not have any open space within a safe and easy walk from their home or workplace. These are referred to as 'gap areas' in the Strategy. Given that one of the project key objectives is to provide at least some open space within safe and easy walking distance of everyone living and working the city, then the gap areas are a priority to address in relation to the location of future open space. Gap areas can be addressed by a range of options including providing additional open space, improving pedestrian access to open space adjoining the gap areas and seeking short term solutions in the interim such as arranging for access to school land or publicly accessible private open space.

There are some areas of the City where there are gaps in the distribution of any open space. In other precincts, such as Collingwood, Cremorne and parts of Richmond that lack larger areas of open space with only Small Local or Local open space being provided. Areas without any open space are referred to as Gap Areas.

The precinct based analysis in the Strategy has taken the gap areas into consideration in the recommendations. The opportunities to address gap areas include the provision of additional open space, improved access to ancillary open space or other streetscape improvements to increase safety of access to existing open space. Given the forecast increase in population density, new open space will be sought in many of these gap areas to meet best practice approach of providing green open space within an easy and safe walk of everyone who lives and works in the City of Yarra.

The travel and walking catchments to the different types of open space are summarised in the Table 3-5 below.

Table 3-5 Open space hierarchy and travel and walking catchments used in the gap analysis

Hierarchy	Travel and walking catchments to open space
Regional	No specific travel catchment is included as this is provided for the Melbourne-wide population. This open space has a 500 metre walking catchment applied in recognition of the local informal incidental of these reserves by the local community. Where there is an at-grade signalised crossing directly opposite the open space, then the walking catchment will extend across the arterial road to reach it. This extended catchment will be illustrated with a paler hatch to indicate that it requires crossing a major or arterial road to reach it.
City-wide	City-wide open space located within 1 kilometre travel catchment of dwellings and workplaces. Additionally, a 500 metre safe walking catchment applied to all City-wide open space in recognition they also provide for local and neighbourhood open space needs without crossing railways and arterial roads. Where there is an at-grade signalised crossing directly opposite the open space, then the walking catchment will extend across the arterial road to reach it. This extended catchment will be illustrated with a paler hatch to indicate that it requires crossing a major or arterial road to reach it.
Neighbourhood	Neighbourhood open space within 400 metre safe walking catchment of dwellings and workplaces without crossing railways, major and arterial roads. Where there is an at-grade signalised crossing directly opposite the open space, then the walking catchment will extend across the arterial or major road to reach it. This extended catchment will be illustrated with a paler hatch to indicate that it requires crossing a major or arterial road to reach it.
Small Neighbourhood	Small Neighbourhood open space within 300 metre safe walking catchment of dwellings and workplaces without crossing railways, major and arterial roads. Where there is an at-grade signalised crossing directly opposite the open space, then the walking catchment will extend across the arterial or major road to reach it. This extended catchment will be illustrated with a paler hatch to illustrate that it requires crossing a major or arterial road to reach it.
Local	Local open space located within 200 metres safe walking distance from dwellings and workplaces, without crossing railways, collector roads, major roads and arterial roads.
Small Local	Small Local open space located within 150 metres safe walking distance from dwellings and workplaces, without crossing railways, collector roads, major roads and arterial roads.

3.5.2 Gaps in linear links/trails

The Main Yarra Trail has been expanded and upgraded since the 2006 Yarra Open Space Strategy. The main gap in the linear trail is:

- Between Gipps Street and the Walmer Street Footbridge, where there is a Public Acquisition Overlay (PAO2) in favour of The Minister responsible for administering Part 2 of the Crown Land (Reserves) Act 1978 for the creation of a continuous linear park / trail system adjacent waterways.
- All ability access onto the Main Yarra Trail on the City of Yarra side of the Yarra River at the Gipps Street entry point.

The Darebin Creek Trail link has recently been completed between Heidelberg Road and the Main Yarra Trail. There is no access point into the shared trail directly from Alphington, with the only access point into it being via Sparks Reserve in City of Banyule.

The land however appears to have not yet been acquired as the Public Acquisition Overlay (PAO2) is still in place over the land along Darebin Creek in the Yarra Planning Scheme. This reserve has been shown as Future Open Space on the diagrams in this Strategy.

3.6 Quality of open space

3.8.1 Overview

The quality of open space is important as it influences whether the open space is well used and is sustainable including its role in the mitigation of urban heat island effect and contribution to biodiversity. Each open space is influenced and formed by a range of factors including its size, form, use, position, design and history. These factors are measured against whether the reserve is meeting the community's needs.

The two main methods used to gather data on the quality of open space are the site assessments and the consultation along with research. If the quality of the open space is assessed as being adequate, there will be no specific actions or upgrade works required. Where it is assessed as being inadequate then recommendations for its upgrade are included.

4. Forecast change and implications on open space planning

4.1 Residential growth and change

4.1.1 Existing residential population

4.1.1a Quantity

The estimated resident population in 2016 is 92,894, which is just over 20,000 more residents living in the City since the 2006 Strategy was adopted. This represents an approximately 28 per cent increase in population since then (Source: .id Community Profile, accessed 16/10/18).

The rate of population growth between 2011 and 2016 increased at more than twice the rate of the previous five years, with an increase of 6,095 residents between 2006 and 2011, compared with an increase of 13,991 residents between 2011 and 2016.

The rate of residential population growth has been substantially higher than the rate of growth forecast at the time the 2006 Yarra Open Space Strategy was prepared. At that time the total forecast growth to 2016 was estimated to result in a resident population of 78,100, which is approximately 15,300 less than actual growth.

4.1.1b Demographics

Compared to Greater Melbourne, there are significantly fewer children of school age in the City of Yarra, more than double the number of 25 to 34 year olds (young workforce) and a lower proportion of people in the 60+ age range. In relation to household types, there are a higher number of lone person and group households, reflecting the lower proportion of school age children and therefore a lower proportion of the couple with children families. The lower level of school age children in the Yarra is reflected in the resident survey results where the values and reasons for visiting open space are more varied than other municipalities where there is a higher proportion of younger children, however it is still in the top 10 list of values of open space.

Occupations of residents are changing with a decline in the manufacturing and wholesale industries and an increase in the professional, scientific and technical services and health and education sectors when compared to the 2006 data. This means that people are typically working indoors and potentially more likely to need and use open space during breaks from work and also before and after work. Nearly half the population in Yarra has a Bachelor or higher degree in education, which is up by 10 per cent compared to the 2006 census data, and the nearly double that of the Greater Melbourne average. Interestingly, there has been a decline in the proportion of tertiary students living in Yarra.

50 per cent of the population rent their accommodation, with 9.5 per cent in social housing which is significantly higher than the Greater Melbourne average of 29 per cent 2.6 per cent respectively. By comparison when the previous Open Space Strategy was prepared in 2006, 48 per cent of the population rented their accommodation with 11.5 per cent in social housing.

Approximately 60 per cent of residents in Yarra were born in Australia with nearly 30 per cent born overseas. 19 per cent of those born overseas were born in a non-English speaking country, which is similar to the Greater Melbourne average. There are more people born in Vietnam when compared with the Greater Melbourne average. This is reinforced with the most common language spoken at home apart from English being Vietnamese followed by Greek and Mandarin.

A key difference between the Greater Melbourne and Yarra is the dwelling type. In Yarra, 85 per cent of people live in medium and high-density dwellings compared to 33 per cent in Greater Melbourne. This means that residents typically have much less private open space available to them which increases their reliance on public open space.

4.1.1c Summary of key demographic changes between 2006 and 2016

Age range:

There has been a slight decline in the proportion of children and tertiary students, an increase in the young workforce population and a slight increase in the 60+ age range.

Dwelling type:

A more than 12 per cent increase in people living in high density dwellings with a decline in both separate houses and medium density dwellings reinforcing this. This trend results in less private open space and an increased reliance on public open space.

Household type:

There is a slight increase in the number of couples without children and other family types, with a slight decline in one parent families and group households. This reinforces the need for open space design to be diverse and adaptable to appeal to a range of users, with a reduced emphasis on dedicated play facilities for young children.

4.1.2 Overview of forecast change

Yarra continues to experience significant redevelopment resulting in increased urban densities and population growth that places pressure on the open space network. This includes intensification of use, reduced ability to find land for new open space and the increased building heights overshadowing open space.

The Strategy responds to the changing population and built form based on the *Yarra Housing Strategy 2018* and the .id Consulting population forecasts that have been provided for each of open space precincts. This, combined with a review of structure plans and urban design frameworks along with the *Yarra Spatial Economic and Employment Strategy (SGS, 2018)* has informed the forecast change for this Strategy and underpins the open space analysis and recommendations.

4.1.3 Residential population forecasts

Council relies on .id population and forecasting for data on its residential population. The forecasts updated in August 2018 are in Table 4-1, below, for each small area and the municipal total. The table shows 2016 as the starting point for population forecasting as this is the last ABS Census year and includes both 2031 and 2041 data to provide the medium to longer term view of population growth and its distribution. The Strategy has a planning horizon of 2016 to 2031 and also considers the forecast growth through to 2041 for context.

Table 4-1 Forecast residential population change 2016 - 2041

Location	2016 resident pop'n	2031 resident pop'n	Change resident pop'n 2016-2031	2041 resident pop'n	Change resident pop'n 2016-2041
Abbotsford	8,848	12,671	+3,823	16,426	+7,578
Carlton North - Princes Hill	9,010	8,843	-167	9,030	+20
Central Richmond	13,888	17,269	+3,381	19,941	+6,053
Clifton Hill	6,792	7,432	+640	7,734	+942
Collingwood	9,141	14,347	+5,206	18,653	+9,512
Cremorne and Burnley - Richmond South	4,622	9,539	+4,917	12,088	+7,466
Fairfield - Alphington	2,894	9,099	+6,205	9,843	+6,949
Fitzroy	11,464	15,798	+4,334	20,782	+9,318
Fitzroy North	12,358	15,112	+2,754	18,307	+5,949
North Richmond	14,335	21,754	+7,419	24,802	+10,467
City of Yarra	93,353	131,864	+38,511	157,607	+64,254

Source: Population and household forecasts, 2016 to 2041, prepared by .id the population experts, August 2018. Accessed 10 September 2018 (Council version)

Highlights of the residential population forecasts include:

- Overall, Yarra's residential population will grow by about 40 per cent between 2016 and 2031 and by about 70 per cent between 2016 and 2041.
- Abbotsford is forecast to experience 43 per cent residential population growth between 2016 and 2031 and will also be experiencing employment growth. Suburb residential growth to 2041 is forecast at 86 per cent. Between 2006 and 2016 the residential population in Abbotsford doubled and this growth is forecast to continue.
- Collingwood will experience 57 per cent residential growth with 35 per cent growth in the Collingwood Structure Plan area along with additional employees. Suburb residential growth to 2041 is forecast at 104 per cent. This precinct currently has the lowest amount of open space as a proportion of land area and relative to population density. Given this, opportunities for the provision of new open space as part of redevelopment will be a priority. This precinct will also have significant employment population growth, refer to Section 4.2.3. There are exiting gaps in open space provision in this precinct as shown in Figure 3F.
- Central Richmond is forecast to grow its residential population by 24 per cent with a 29 per cent increase in the Central Richmond Structure Plan area, and the area will also have employment gains. Suburb residential growth to 2041 is forecast at 44 per cent.
- Other high percentage residential growth forecasts for the period 2016 to 2036 are in the suburbs of Cremorne and Burnley - Richmond South at 106 percent and Fairfield - Alphington at 214 per cent. The impacts for open space are not as significant in this precinct given its proximity to the Yarra River and significant areas of existing open space. The majority of this forecast population will live in the Alphington Paper Mills Development Site, and Council has already negotiated the new local open space network within that site for the forecast population.
- In contrast, the suburb of Carlton North - Princes Hill will lose a small amount of residential population by 2031 and stabilise by 2041. Clifton Hill will grow by 9 per cent between 2016 and 2031, which would normally be considered a substantial amount of growth.

The Victorian government residential population forecasts (VIF) are based on LGA boundaries. The VIF 2016 forecast growth for Yarra between 2016 and 2036 is 29,412 additional people, which is significantly less than the .id forecast for the same period. It is noted that the .id forecasts are more recent, having been published in August 2018.

4.1.4 Where the forecast population will live

The Adopted *Yarra Housing Strategy 2018* and the Strategic Housing Framework Plan have informed the development of the open space sub-precincts that have been used for the sub-precinct open space analysis in the Strategy. This is shown in Figure 4A.

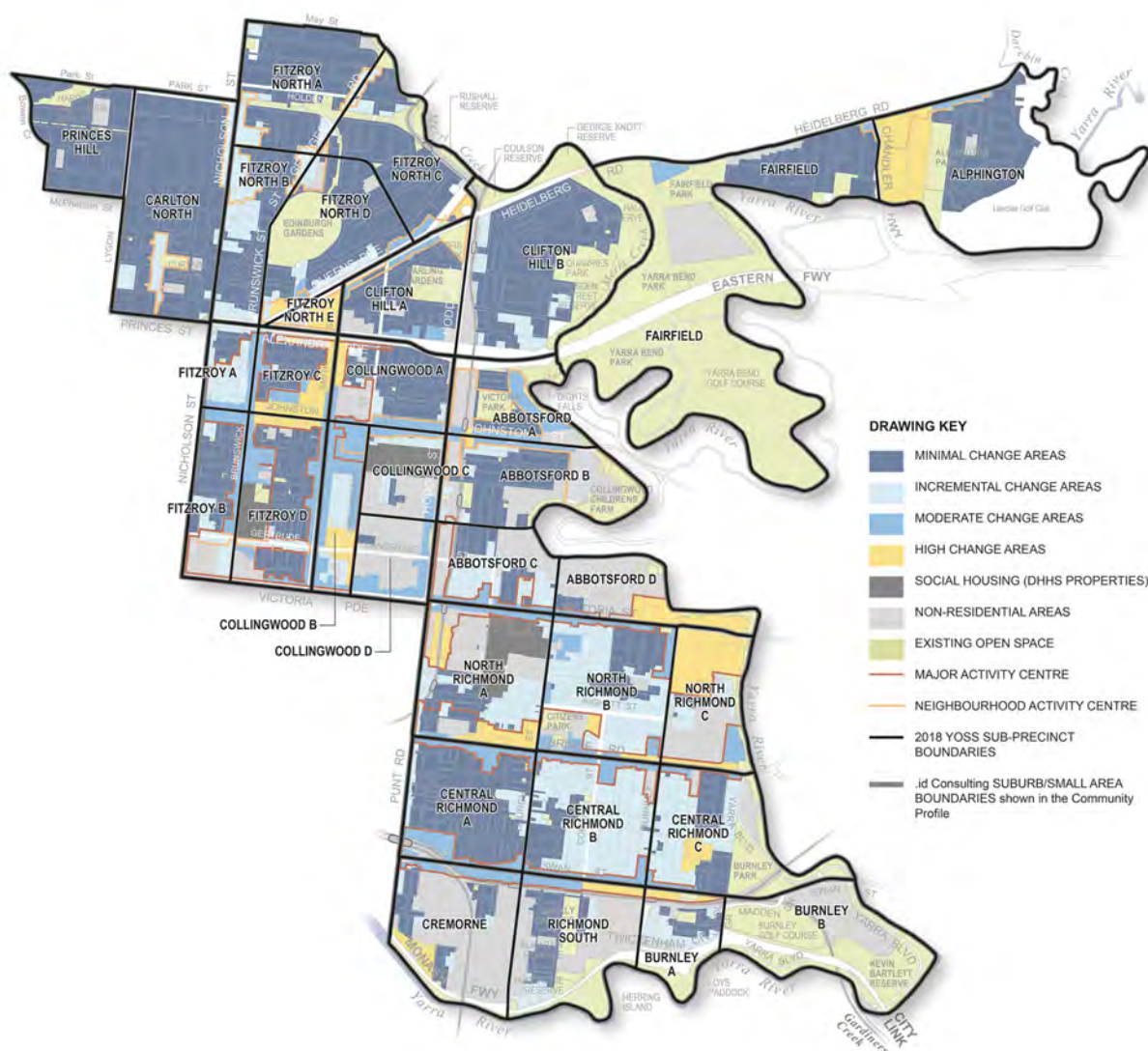


Figure 4A Adopted Strategic Housing Framework and Open Space Sub-precincts

Source: Yarra Housing Strategy, 2018
Extract from Drawing YOSS-05 in Appendix A

The dark blue colour represents minimal change areas across the City contrasting with the yellow areas which represent high change areas. The high change areas fall mainly within the activity centres, with the exception being the high change area in Alphington on the former Alphington Paper Mills Site. From an open space perspective, Council has already negotiated the provision of new open space as part of that development, so the Strategy does not make any recommendations regarding that site.

The grey non-residential areas define the employment precincts and correlate with the existing land that excludes residential use. Council's *Spatial Economic and Employment Strategy (SEES)* supports retaining employment precincts to maintain this important aspect of Yarra's identity and economy. Increasing pressure for residential use will mean this is an ongoing issue that Council will need to proactively manage.

4.2 Employment growth and change

4.2.1 Existing employment population

The retail and employment precincts in Yarra supported a total of 83,000 employees in 2016 (*Yarra Spatial Economic and Employment Strategy, SGS 2018*). A summary of this report is included in Section 2.1. The retail precincts covered by SGS include five major activity centres comprising non-residential land uses and emerging housing opportunities. These are Brunswick Street, Smith Street, Bridge Road, Swan Street and Victoria Street. Additionally, Johnston Street East was also included as an activity centre in the report. This accounted for just under 45 per cent of employee numbers in their report. The remaining employees numbers are based in the seven employment precincts including Victoria Parade, Gipps Street, Cremorne, Abbotsford, Church Street South, Burnley Office Precinct and Hoddle Street.

Given Council's support of the mixed use and employment precincts in the Yarra, part of the research for this Strategy included determining whether workers use open space during the time they are at work. Surveys were conducted of the worker population in four of the employment precincts and the results have confirmed that the majority of workers visit open space near their workplace, with only 12 per cent stating they never visit it, while 60 per cent nominated they visit open space near their workplace at least once a week.

77 per cent of worker respondents noted they visited open space to be outdoors as a break from work, while 46 per cent noted they visit open space to socialise / meet colleagues / friends. A much lower number, being only 16 per cent use, open space for fitness/exercise. 34 per cent of respondents requested more open space and green spaces when asked to make any suggestions or comments on open space in general - i.e. this was not a prompted comment (*2018 Open Space Worker Survey, Metropolis*).

The workshop outcomes from consultation with the business community in Cremorne and Collingwood undertaken for the Yarra SEES in January 2018 identified that the top idea in both workshops was for more green space and small parks. This was combined with other comments including additional trees and mitigating impacts of urban heat island effect.

The SEES estimates of the employment population growth to 2031 combined with the worker open space survey results have informed the open space needs analysis and the Strategy recommendations for new and upgraded open space for the employment population.

4.2.2 Overview of forecast change

The SEES provides information about non-residential investment and employment growth in Yarra. The SEES notes that the City of Yarra plays a vital role in the economy of Metropolitan Melbourne and sustains a diverse range of businesses. Yarra has a mix of retail and entertainment precincts, mixed employment precincts, health and education facilities that are vital to Melbourne's growth as a creative urban economy. In recent years, Yarra has become increasingly a knowledge and services oriented economy changing from a manufacturing and industrial economy.

The SEES defines future retail precincts which are defined as activity centres in Plan Melbourne and employment precincts. The employment precincts are defined by the existing land use zone for industrial and commercial purposes whereas the retail precincts in the activity centres are mixed use and will include employment and residential uses.

4.2.3 Employment population forecasts

Floor space data is contained in Tables 5 and 6 of the SEES for the years 2016, 2021, 2026 and 2031. Job to floor space ratios are provided in Table 4 of the SEES. These tables have been used to produce Table 4-2.

Table 4-2 Forecast employment population change 2016 – 2031

Location	2016 employment population	2031 employment population	Change employment population 2016-2031	% change
Retail precincts				
Smith Street	9,660	14,150	4,490	46%
Victoria Street	8,170	11,560	3,390	42%
Bridge Road	13,680	17,245	3,565	26%
Brunswick Street	6,650	9,720	3,070	46%
Swan Street	4,560	6,520	1,960	43%
Johnston Street East	3,740	5,060	1,320	35%
Employment precincts				
Victoria Parade	11,730	17,690	5,960	51%
Gipps Street	4,170	9,390	5,220	124%
Cremorne	4,860	8,160	3,300	68%
Abbotsford	3,200	3,910	710	22%
Church Street South	6,540	9,740	3,200	49%
Burnley Office Precinct	3,070	4,770	1,700	55%
Hoddle Street	2,970	3,890	920	31%
City of Yarra total	83,000	121,805	38,805	47%

Source: SEES 2018, Tables 4, 5 and 6

Highlights of the employment population forecasts include:

- Overall, Yarra's employment population will grow by about 47 per cent between 2016 and 2031.
- In the retail precincts, the highest percentage of employment growth is forecast to occur in Smith Street and Brunswick Street at 46 per cent, each. Similar employment increases are forecast for the Swan Street (43 per cent) and Victoria Street (41 per cent) precincts. The Johnston Street East precinct forecast is 35 per cent growth and it is 24 per cent for the Bridge Road precinct.
- In the employment precincts, the highest percentage of employment growth is forecast to occur in the Gipps Street precinct at 124 per cent followed by the Cremorne precinct at 68 per cent. The Abbotsford precinct is forecast to grow its employment numbers by 22 per cent, and the rest of the precincts are forecast to increase by between 31 and 51 per cent.

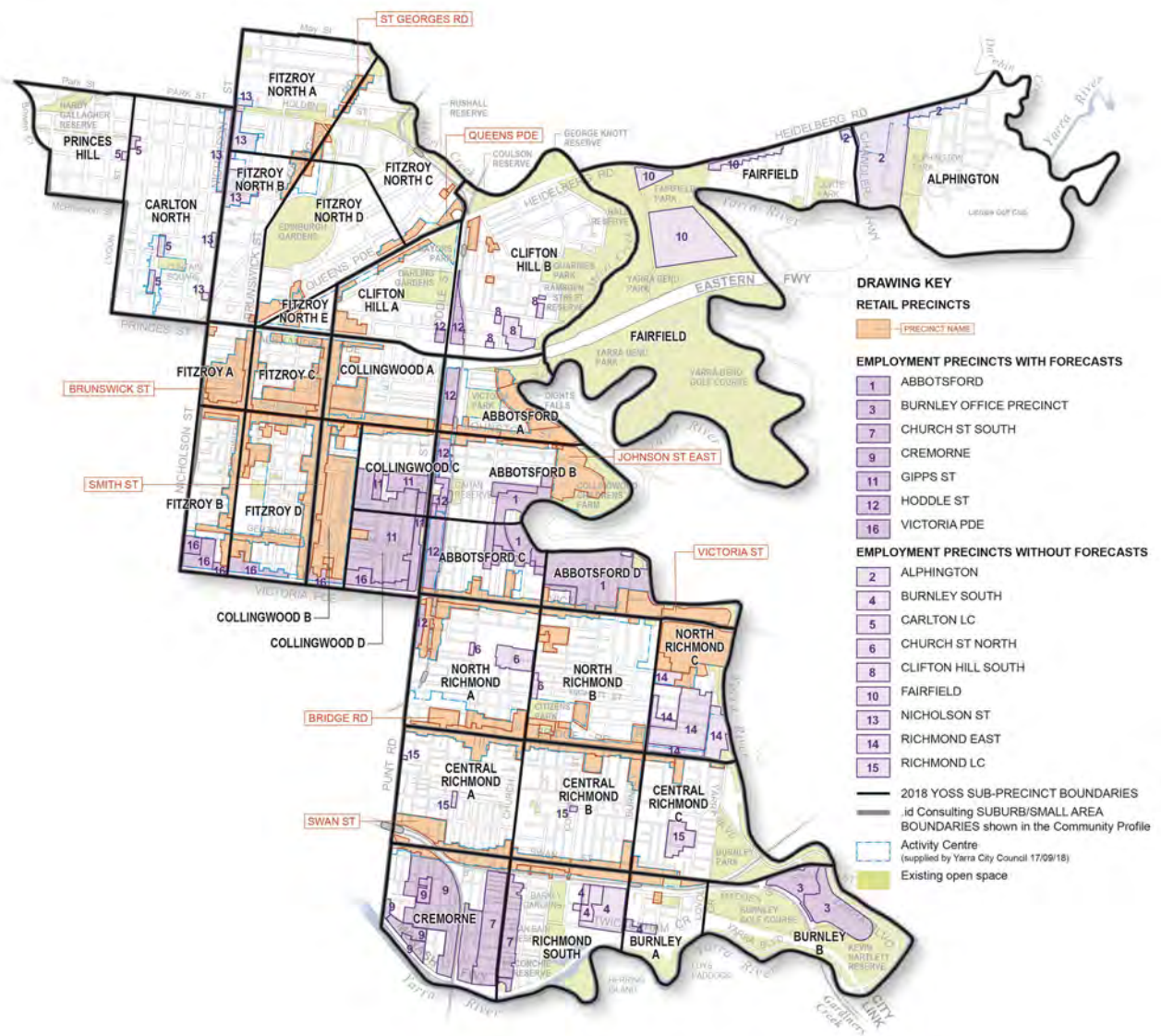


Figure 4B Employment and Retail Precincts

Source: Final Spatial Economic and Employment Strategy, 2018 and Adopted Yarra Housing Strategy, 2018 Extract from Drawing YOSS-06 in Appendix A

Figure 4B has been prepared based on the SEES to illustrate the extent of the Retail and Employment Precincts in the context of the open space sub-precincts and the Activity Centre Boundaries as shown in the *Yarra Housing Strategy*. The Retail precincts are shown in an orange colour in Figure 4B while the Employment precincts are shown in the purple colour. Forecasts for the estimated employment population in the Retail precincts have been prepared based on SEES data and included in Table 4-2. A further breakdown of the forecasts has been undertaken for each open space sub-precinct. This has been done by apportioning the employment population spatially across the different sub-precincts based on the proportion of the total land area in each.

The employment precincts are shown in two different shades of purple in Figure 4B. The darker shade of purple indicates the employment precincts for which employment forecasts have been prepared in the SEES and shown in Table 4-2 above. The lighter shade of purple indicates employment precincts without worker population forecasts. As for the Retail precincts, the total forecast employment population in each has been apportioned into each open space sub-precinct.

The precinct open space analysis and recommendations in this Strategy has taken into account the estimated employment population in each sub-precinct, which is described in Section 6 of this Strategy.

4.2.5 Structure Plans for Activity Centres

As part of the sub-precinct open space analysis existing Structure Plans will be reviewed and inform the analysis where appropriate, along with other relevant documents relating to these.

The boundaries of the existing Activity Centres are shown with a blue outline on Figure 4B.

4.3 Urban densities and open space

4.3.1 Overview

As discussed in Section 2.4, best practice research into open space provision for high density precincts has identified that there is not accepted international standard. What is common amongst the different research studies and reports is that everyone should be within safe and easy walking distance of it so that people of all abilities, ages and gender can visit and use open space. The studies also recognise the link between people's health and well-being and access to public open space, particularly green open space.

Therefore, a key criteria for determining where and what type of new public open space is required is meeting the minimum requirement of at least some public open space within an safe and easy walk of everyone. The definition of safe and easy walk is the travel catchment to open space described in Table 3-1.

4.3.2 Forecast population growth and open space

Further to Section 3.3 regarding the quantity and provision of open space, the tables below illustrate the impact of the forecast population increase relative to the amount of existing open space in the City of Yarra.

Table 4-3 *Quantity of open space relative to 2016 and 2031 forecast residential population density in Yarra*

The following table illustrates the provision of open space relative to residential population density showing the comparison between 2016 and 2031.

PRECINCT NAME	Total open space 2016 Ha	Total population (URP) 2016	Sqm of open space per person 2016	Forecast population 2031	Sqm of open space per person 2031
Abbotsford	13.39	8,184	16	12,671	11
Carlton North - Princes Hill	6.23	8,433	7	8,843	7
Central Richmond	23.46	12,965	18	17,269	14
Clifton Hill	41.18	6,342	65	7,432	55
Collingwood	0.34	8,511	0.4	14,347	0.24
Cremorne / Burnley / Richmond South	44.32	4,747	93	9,539	46
Fairfield / Alphington	96.92	2,701	359	9,099	107
Fitzroy	2.27	10,445	2.2	15,798	1.4
Fitzroy North	29.56	11,535	26	15,112	20
North Richmond	5.81	13,299	4.4	21,754	2.7
TOTALS	263.46	87,162	30	131,864	20

At a municipality-wide scale the total open space relative to population will reduce from 30 to 20 sqm per person if no open space was added to the network during that same period. While the Strategy timeframe extends to 2031, population forecasts are also available to 2041, and these have been shown in Table 4-4.

The 2041 forecasts are useful in the context of understanding longer term direction for the different precincts. For example, Carlton North - Princes Hill is forecast to remain relatively stable through to 2041 in contrast to the Fairfield - Alphington precinct. The Fairfield - Alphington precinct is forecast to quadruple in size between 2016 and 2031 and then then slow down to a much slower rate between 2031 and 2041. This means that new open space will need to be established for the forecast population during the 2031 to 2041 period.

In Abbotsford, the population is forecast to continue to grow beyond 2031, meaning there is a need to also plan ahead for the larger population. Given there are only a limited number of large redevelopment sites where an open space land contribution of a reasonable size can be provided, provision of new open space beyond 2031 in these precincts has been identified where applicable.

Table 4-4 Quantity of open space relative to the 2031 and 2041 forecast residential population density in Yarra

PRECINCT NAME	Total open space 2016 Ha	Forecast population 2031	Sqm of open space per person 2031	Forecast population 2041	Sqm of open space per person 2041
Abbotsford	13.39	12,671	11	16,426	8
Carlton North - Princes Hill	6.23	8,843	7	9,030	7
Central Richmond	23.46	17,269	14	19,941	12
Clifton Hill	41.18	7,432	55	7,734	53
Collingwood	0.34	14,347	0.24	18,653	0.18
Cremorne / Burnley / Richmond South	44.32	9,539	46	12,088	37
Fairfield / Alphington	96.92	9,099	107	9,843	98
Fitzroy	2.27	15,798	1.4	20,782	1.1
Fitzroy North	29.56	15,112	20	18,307	16
North Richmond	5.81	21,754	2.7	24,802	2.3
TOTALS	263.46	131,864	20	157,606	17

4.3.3 High density and overshadowing open space

The forecast increase in the number of people who will live and work in high density environments with little or no private open space will place greater demand on public open space to meet the majority of their open space needs. The increased densities and taller buildings will also increase the potential for these buildings to overshadow existing and proposed new open space.

Sunlight access to open space contributes to its attractiveness, health and useability. Natural sunlight is essential for the healthy growth of trees, shrubs and grass. Over the past 10 years results from research has linked the importance of sunlight to maintaining healthy Vitamin D levels and also other factors such as mental alertness and having a role in preventing depression. The results of this research recommend that people need between 25 minutes and up to 1.5 hours of sunlight on their skin during winter to maintain healthy levels of Vitamin D. People with light coloured skin need less time in direct sunlight (i.e. 25 mins) compared to people with darker coloured skin (i.e. up to 1.5 hours).

Direct sunlight to open space contributes to its attractiveness, particularly during winter, when spending time outdoors is more comfortable if it is warmer and there is an opportunity to exercise or sit in the sun. If the open space is more appealing to use in the winter, it encourages people outdoors to be in the fresh air, the natural sunlight and to exercise and keep fit which supports a healthier community.

With the change towards higher density living, Council will need to introduce more specific controls to prevent undue overshadowing of public open space particularly during winter to support and promote sustainable high density living.

Refer to Section 5.4.2 for more detailed information regarding the health and wellbeing benefits of sunlight.

4.4 Climate change

4.4.1 Overview

Open space is influenced by the changing climate and has a role in mitigating and adapting to its effects. It has become increasingly important to focus on sustainability in all aspects of open space design, management and maintenance. Recent extended droughts have seen greater emphasis placed on sustainable water sources to adequately maintain open space in the future. At the same time, the role of open space in mitigating urban heat island effect in the higher density precincts has been measured and is better understood.

4.4.2 Mitigating urban heat island effect

Apart from the amenity benefits, with increased urban densities there is an important role that a network of open space has in assisting to mitigate urban heat island effect. Dr Nigel Tapper of Monash University provided advice as part of the City of Melbourne Open Space Strategy in relation to optimising opportunities to mitigate urban heat build-up in the future. This included the provision of regularly distributed green open spaces across built up areas that are designed with appropriate green infrastructure and permeable surfaces that hold moisture and allow effective evapotranspiration to cool the local microclimate. This is particularly important during extended periods of heat.

Designing greener and cooler open space with sustainable water sources has the added benefit of providing the public places for the community to use during hot weather. This is particularly important for the vulnerable in our community including the frail, the elderly, the homeless and those without cooling in their homes.

In higher density urban areas, open space provides a visual and physical break in the built form to allow some radiant passive cooling at night. Designing these open spaces with a combination of large canopy shade trees, garden beds and surfaces that retain moisture (such as grass rather than large paved surfaces) is essential for passive cooling. For open space to effectively contribute to mitigating urban heat in higher density urban areas it needs to be regularly spaced across the compact urban form to counteract the heat trapping characteristics of sealed built surfaces.

Sustainable water sources will need to be integrated into the future design of open space in higher density precincts. This is to sustain broad canopy shade trees, garden beds and grassing and will increase the capital costs of providing the open space.

Additional features that contribute to passive cooling in open space include water features and green walls on adjoining built form. For green walls, the ongoing maintenance costs and technology required to ensure longevity requires further research to identify if these are feasible and cost effective in open space.

4.4.3 Sustainable water use and management of open space in the context of climate change

The forecast increase in severe weather events including extended droughts and storms impacts on open space. Extended droughts means that that open space may be impacted by water restrictions again in the future. Severe storm events may result in a greater number of flood events, winds, damage to mature vegetation and impact on the viability of new plantings to establish.

Severe weather events impact on the viability and use of open space. The impact of extended droughts can include a significant reduction in capacity of open space to accommodate high levels of use, particularly the sports fields. While it is important that Council investigates options to better drought proof the reserves, it is important to maximise opportunities to retain moisture in open space to be effective in mitigating urban heat and proactively plan for this in the future.

It is a priority to investigate sustainable water reuse of all aspects of the urban water cycle and achieve multiple benefits in open space design. Some of these projects have the potential to deliver improvements to biodiversity, urban heat island effect mitigation, landscape character diversity and visual interest in open space, along with delivering sustainable water reuse for irrigating and maintaining open space. These opportunities will potentially increase the capital works costs of providing open space in the future, and has been considered in the preparation of the Strategy Costings that form the basis for calculating the open space contribution rate.

4.4.4 Sustainable material use

The Strategy recognises that in recommending improvements and upgrades to open space, the Strategy should maximise opportunities to utilise appropriate materials. This includes recycled materials, those from sustainable sources and materials with longevity and durability to minimise ongoing maintenance and replacement costs as well as material use.

Future building and infrastructure design in open space is to minimise energy use, including consideration of appropriate siting and orientation to maximise passive cooling and heating.

Refer to Section 6 of the Strategy for the Design and Management Guidelines.

5. Open space framework recommendations

5.1 Role and purpose of different types of open space

5.1.1 Open space hierarchy

The open space hierarchy is shown in Section 3.2, Table 3-1. This hierarchy is based on both the existing or intended catchment of users and the relative size of the open space to adequately cater to its intended use. The purpose of the hierarchy is to provide the following:

- Guide the analysis of the spatial distribution of open space in the City of Yarra. The Hierarchy has been applied to all open space in the municipality to allow this assessment to occur as part of the analysis for this Strategy, and is illustrated in Figure 3E and Drawing YOSS-03a.
- Directs appropriate facility development and maintenance levels in different types of open space. For example if a new tennis club and courts are being considered, by preference they will be located in City-wide open space as the level of other facilities will usually support this type of facility including adequate car parking, lighting and the surrounding residential neighbourhood is already use to the higher levels of activity associated with structured recreation facilities. The hierarchy provides a transparent and clear process for the community and Council regarding appropriate levels of development in the different types of open space.
- Provides guidance for appropriate levels of funding to open space, including external funding. For example, Regional open space is defined as being for a broader catchment than the City of Yarra, both in relation to biodiversity values and catchment of users. It is therefore reasonable that upgrades and improvements to areas of Regional open space are funded at least in part from regional funding sources.

5.1.2 Facility provision

The following Table 5-1 provides a guide for the typical facilities and features that are appropriate for the different types of open space as set out in the open space hierarchy, Table 3-1. It is to guide design decisions by Council and developers when undertaking future upgrades for existing open space and the establishment of new open space.

The facilities and features are listed in alphabetical order. The table is to be used as a guide only for what is appropriate for different types of open space. The actual facilities and features in existing and new open space will vary depending on its location, design, character, recreation needs, community input, environmental values and urban context. Not every facility listed as appropriate will necessarily be provided in each open space of that type.

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

- ✓ = Appropriate facility/feature for the hierarchy of open space
- = Appropriate facility/feature in high density precincts

Facility and feature	Regional	City-wide	N'Hood	Local	Small Local
Barbecue	✓	✓	✓	✓	•
Car parking	✓	✓			
Drinking fountains	✓	✓	✓	✓	•
Exercise/fitness facility (eg. small scale fitness equipment, half court, outdoor table tennis facility etc)	✓	✓	✓	✓	•
Festivals and events - major	✓	✓			
Festivals and events - minor	✓	✓	✓		
Garden bed - feature/decorative	✓	✓	✓	✓	•
Garden bed - to mitigate urban heat	✓	✓	✓	•	•
Large open grassed areas for unstructured recreational use	✓	✓	✓	✓	
Lighting (key linking paths, picnic shelters and sports facilities only)	✓	✓	✓	•	•
Path - shared	✓	✓	✓	✓	✓
Path - pedestrian	✓	✓	✓	✓	✓
Playground - major	✓	✓			
Playground - large	✓	✓	✓	✓	
Playground - medium		✓	✓	✓	
Playground - minor				✓	✓
Public Toilets	✓	✓	✓		
Rubbish bins	✓	✓	✓	✓	•
Seating	✓	✓	✓	✓	✓

Facility and feature	Regional	City-wide	N'Hood	Local	Small Local
Shelter - picnic/shade/rain	✓	✓	✓	✓	•
Skate/BMX facilities	✓	✓			
Structured indoor sport and recreation facilities	✓	✓			
Structured outdoor sport and recreation facilities	✓	✓	✓		
Trees - large canopy shade	✓	✓	✓	✓	✓
Unstructured sport and recreation facility (eg. multi-use courts, cricket nets etc)	✓	✓	✓		
Water feature	✓	✓			
WSUD feature and infrastructure, including sustainable water supply	✓	✓	✓	•	•

5.1.3 Character classification

Different types of open space are influenced by the inherent natural and physical character of the open space, the facilities in it, the urban context in which it is located and the design and layout of the open space. Open space character in the City of Yarra ranges from structured sporting reserves to heritage parks and gardens, urban squares, nature conservation reserves along the waterway corridors and informal spaces. These different characters appeal to different parts of the community and a diversity in character generally assists in meeting diverse needs by maximising the accessibility of open space to the community and places for habitat protection or improvement.

The character classification system for open space is shown in Table 3-2. Character classification assists with the following:

- Assessing the diversity of open space character types across the City and within each precinct. This will identify if there are gaps in the open space character types or an oversupply of the same type. The Strategy identifies if there is a need to increase the diversity in the precinct recommendations.
- Assisting with the future design and management direction for each open space. For example, if the open space has 'Heritage' as its primary classification, future decisions regarding the planting style will be guided by whether that is consistent with the heritage character and style

The character classification has been used to assess the provision and distribution of different types of open space across the City of Yarra. Each open space is assigned a 'primary' classification and many also have 'secondary' classifications as well to assist defining the diverse character of open space.

5.2 Criteria to assess suitability of land as open space

All sites being considered as new open space will first be assessed against a list of criteria as shown in Table 5-2 to confirm if it is suitable. This will assist Council in assessing and prioritising sites that may be suitable for open space, particularly where Council is considering conversion of public land to open space or acquisition of sites for open space. It is also intended to guide Council's assessment of future land contributions that are proposed on large development sites or other public land that may be suitable as future open space.

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 in the Strategy. The City of Yarra will apply these criteria to any future land that they convert or acquire for open space.

The assessment criteria in this table can also be used to assess existing open spaces where review of their status and condition is required.

Table 5-2 *Criteria to assess suitability of land as open space*

Note, the criteria in this table is listed in alphabetical and not priority order.

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 for people of all abilities (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, community facilities, urban context, personal safety (passive surveillance), built form and height.
Amenity	Visual and passive amenity values relates to the influence open space has on the liveability of the neighbourhood by providing: <ul style="list-style-type: none"> • Visual relief from built form • A break from noise levels associated with traffic and other urban land use activities • At least some long distance views and vistas from within the open space so it is not entirely built out or overwhelmed by built form • Adequate levels of winter sunlight to meet the health and wellbeing needs of the community. Refer to Sunlight access for details.

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 for the trees to fully establish 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. • Located within existing or future medium to high density precincts where it will be effective in mitigating urban heat island effect. • Ability for the site to remain as useable and functional open space in the context of major storm events and sea level rise.
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 Council if the land becomes public open space. This includes the land being open to the sky.
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 local community including residents and workers should have reasonable access to public open space. This includes physical access, visual access and economic equity of access.
Financial	The costs to the Council in obtaining and improving the land as open space, along with the costs associated with the ongoing maintenance and management of it.
Heritage values	Indigenous and non-Indigenous cultural heritage and historical values to be enhanced, protected and interpreted in the open space. These values will influence the future use and design and management of the open space.
Hierarchy	That the site is capable of meeting the intended hierarchy as described in Table 3-1 of this Strategy.
Landscape character	Its positive contribution to the urban context, character and attractiveness of the precinct.
Location/linkages	The site's contribution to the connectivity and accessibility of the open space network. This includes consideration of the other strategic planning projects including linear open space corridors, and local links to improve accessibility within the local street network and links and connections to improve accessibility into existing or proposed future open space.
Ongoing maintenance and management	The ability for the City of Yarra to rezone the land for open space purposes, and to effectively maintain and manage the land as public open space.

Criteria	Description
Ownership	<ul style="list-style-type: none"> 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 existing Council assets or land owned by other authorities. Where the 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.
Recreation	The potential for the site to accommodate a range of structured sport, unstructured recreation and informal uses consistent with the intended hierarchy. This needs to include adequate space to meet best practice standards for the proposed uses to be undertaken safely in relation to risk management. These can include field sports, play, walking, jogging, cycling, exercising, informal ball games, socialising, picnicking, sitting and dog walking.
Safety	Urban context and layout is to maximise passive surveillance and access to open space in order to minimise risk to users of the open space.
Services/easements/encumbrances	Extent of other services and easements that affects the development and use of the land as open space. This includes roadways, overhead structures, underground structures (e.g. underground car parking), 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"> Regional, unlimited. Municipal open space, generally a minimum of 3 ha is preferred, subject to the proposed municipal recreation facility located in it. Neighbourhood open space, minimum of 1 ha. Local open space, minimum 0.1 ha (up to 0.99 ha). Small Local open space, minimum 0.03 ha (up to 0.1 ha), with a minimum width of 20 m in at least one direction.
State and local government policies	The land is not subject to other planning processes and policies that may be consistent or inconsistent with all or part of the site becoming public open space.
Sunlight access	<ul style="list-style-type: none"> The site must have excellent sunlight access in winter for community health and wellbeing. The site will have no additional overshadowing beyond the 9 metre built form height between 10am and 3pm on 21 June.

Criteria	Description
Transport	There are a range of transport options for residents and workers to easily access the site. This includes 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.
Visibility	The site's visual prominence is to maximise its use, safety and contribution to the broader community. Land is preferred which has at least two access points, local access streets to at least two sides and is provided on natural ground (not elevated or roofed structures).

5.3 Provision of new open space

5.3.1 Overview

This Strategy has identified where additional open space is required to 2031 for both the existing and forecast community. Some of the additional open space is to be provided primarily for the forecast 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, the purchase of undeveloped land, the purchase of developed sites and conversion of public land to open space.

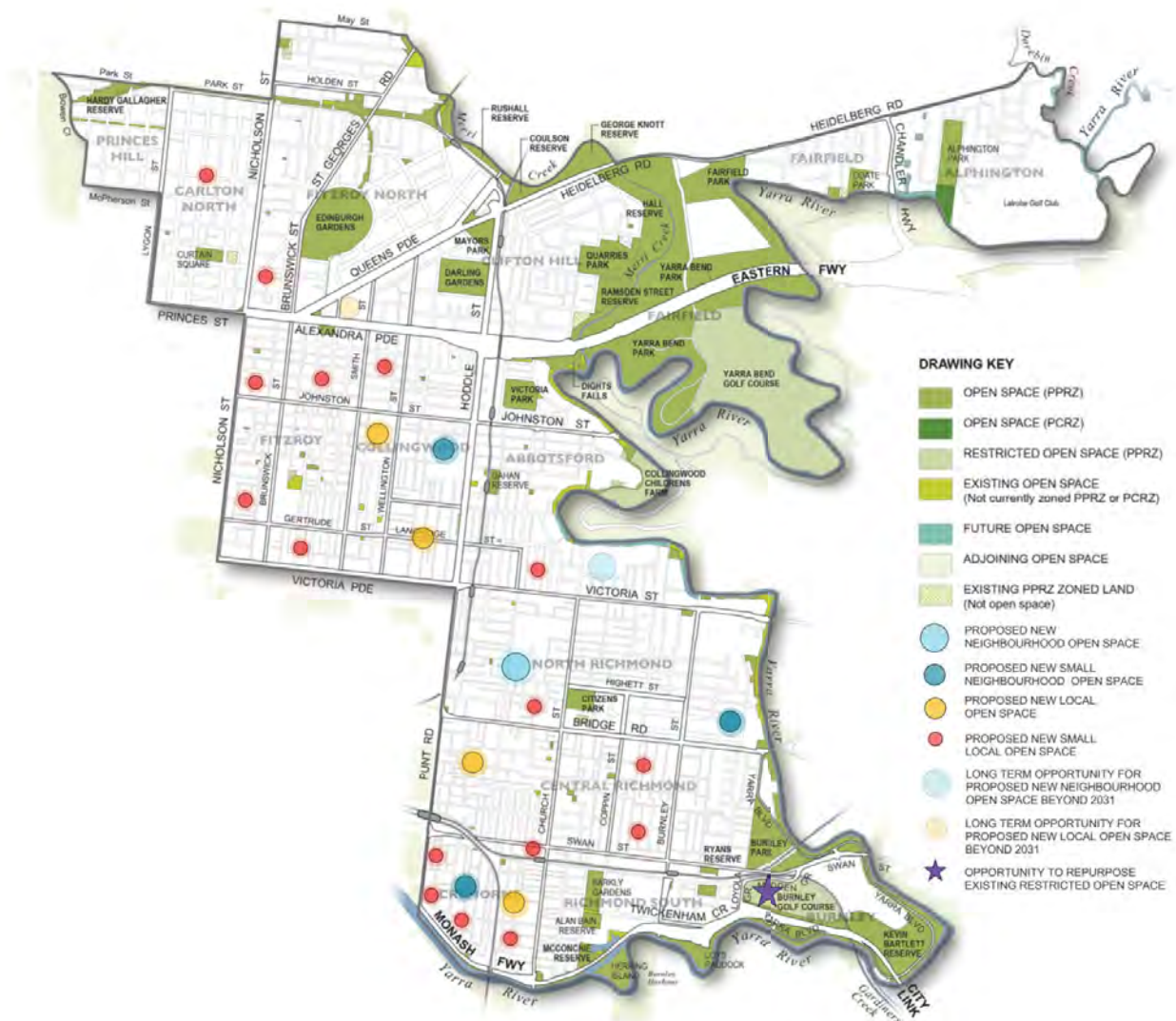


Figure 5A Schematic plan illustrating the type and location of proposed new open space

5.3.2 Step 1 – open space sub-precinct assessments

The Strategy has identified the need for 31 new open spaces to be provided within the Strategy timeframe to 2031 and an additional 3 open spaces that will be required in the longer term. The precinct recommendations diagrams for each of the 10 precincts defines 31 sub-precincts and type of new open space required in each in Section 7 of the Strategy. Figure 5A indicatively illustrates the approximate locations at a city-wide level.

As part of implementing the Strategy, Council will identify a range of suitable sites for future open space in each of the sub-precincts based on applying the criteria in Table 5-2 and the design guidelines included in the Strategy. Council will assess a range of sites including Council owned land, public land owned by other agencies, future development sites and individual privately owned sites that could potentially be suitable as future open space.

For future development sites, Council is to assess and identify what part of the site would be most appropriate as open space, assessing the land parcels against the criteria included in Table 5-2 of the Strategy.

No.	Recommendation	Responsibility	Priority
5.3-1	Council to undertake a sub-precinct open space analysis for all 31 sub-precincts in priority order identified in Section 7 of the Strategy. This will identify potential opportunities to secure additional land that meets the criteria outlined in Table 5-2 and allow Council to negotiate appropriately with landholders and other agencies where required to acquire/secure the new open spaces.	YCC	Very High

5.3.3 Step 2 – Methods to acquire/secure additional open space

It is anticipated that the additional open space in the City of Yarra will be acquired via a range of methods including:

- As a land contribution as part of future subdivision of land for large development sites. It is acknowledged that the number of these sites are limited, however it is important that this is considered, particularly coupled with the opportunity to purchase or convert land directly adjoining it to create a viable and useable open space.
- Conversion of land owned by the City of Yarra from its existing use to open space (for example a road, car park or community facility).
- 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.
- Purchase of developed sites where no other opportunities are available.

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, as described in the open space hierarchy Table 3-1 and Criteria Table 5-2.

5.3.4 Step 3 – Design and delivery of new open space

The design of the new open space is to address any specific issues noted in the Strategy Precinct Recommendations and refer to the Design Guidelines in Section 6 of the Strategy.

New open space may be designed and delivered directly by the City of Yarra as a capital works project. Alternatively, the developer may be responsible for design and delivery in accordance with the recommendations in the Strategy, relevant design and management guidelines and approved plans through the subdivision permit approval process.

5.3.5 Repurposing existing restricted open space

While the scope of the Strategy does not assess the forecast future trends and needs for organised structured sport and recreation, it does consider the open space land area required to accommodate these facilities. In response to the potential future need for additional structured sport and recreation facilities to meet the needs of the forecast population, the Strategy has identified the opportunity for Council to review the future use of the restricted open space reserves in the city, with the key focus being the change of sporting use of Burnley Golf Course. Continuing to maintain this large area of public open space for a single purpose sporting use on a fee paying basis does not align well with the objectives and principles of the Strategy.

The benefits of changing Burnley Golf Course from a restricted sporting use to a reserve that provides a range of structured sporting uses includes:

- It is located in the southern part of the city in proximity to where the forecast population growth is greatest.
- The site is easily accessed by a range of sustainable transport options and the major road network.
- It is located outside of a residential precinct, meaning that the potential increased level of activity and noise associated with structured sporting use including evening training and match play would not impact on a residential community.
- Located next to Kevin Bartlett Reserve which is an established and well used sporting reserve.
- There is potential to relocate existing structured sport and recreation facilities out of precincts which are forecast to receive substantial growth, including Bridge Road and Swan Street Major Activity Centres, and allow the conversion of existing restricted open space to unstructured open space.

No.	Recommendation	Responsibility	Priority
5.3-2	Council to undertake a review of the structured sport and recreation needs of the forecast population to 2031 and consider the repurposing of Burnley Golf Course to provide additional structured sport and recreation facilities primarily for the forecast new population.	YCC	Very High

5.3.6 Changes to the forecast population growth over the Strategy timeframe

The Strategy recommendations and priorities for new open space and upgrades to existing open space are based on the existing growth framework for the City of Yarra shown in the *Yarra Housing Strategy 2018* and the *Yarra Spatial Economic and Employment Strategy 2018*.

If there is a substantive increase in the intensity of new development over the 15 year implementation timeframe of the Strategy, then projects in proximity to those locations can be implemented as a higher priority taking into consideration 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 additional change and development occurs in a location where it was not anticipated at the time this Strategy was prepared, or at an increased density, then additional open space may be required beyond that outlined and included in this Strategy. If this occurs, an analysis of the impacts of the forecast population change and development in that location will need to be assessed and confirmation of whether additional open space or upgrades to open space is required as a result of the change.

No.	Recommendation	Responsibility	Priority
5.3-3	<p>Additional change and development that was not forecast in the Strategy timeframe</p> <p>Where additional development is either proposed outside of the areas that are forecast to change and develop in this Strategy or at an increased density, an open space needs analysis will be required. This will determine whether additional open space or upgrades to existing open space is required as a result of the proposed new development. This analysis is to be undertaken consistent with the method used in the open space needs assessments for each precinct in Section 7 of the Strategy.</p>	YCC Developer	Ongoing

5.3.7 Potential disposal of open space in established areas

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

Although not identified as being required in any locations in the City of Yarra, some individual open spaces may change their purpose and role in the network based on future major infrastructure projects. If in the future the City of Yarra 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 precinct 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 proposed 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 walking and travel catchments nominated in Table 3-1
- d) If after steps (a), (b) and (c) the open space is still considered excess to requirements and the City of Yarra intends to dispose of open space, land is to be *'sold only if the Council has provided for replacement public open space'*. Refer to Section 20 of the *Subdivision Act 1988* for details.

5.4 Overall recommendations

5.4.1 Guidelines for development adjoining 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. Guidelines included in this section describe the preferred interface treatments for existing open space and siting new open space. These criteria are relevant for development proposals on sites adjoining open space 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. Adjoining 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, loss of natural light and loss of open viewsheds to and from within the open space and of the open sky.

No.	Recommendation	Responsibility	Priority
5.4-1	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 in Section 5.4.1.	YCC	Ongoing

5.4.1.1 Guidelines for development adjoining or nearby public open space

The following guidelines are prepared to assist Council when reviewing applications for development that directly adjoins open space.

(a) Accessibility to open space

- Design and layout of the site development should foster good public access to open space, and particularly improve passive surveillance of the open space from adjoining development. Direct private access gates and paths from private development into open space should be avoided unless they clearly demonstrate they improve the broader public cycle and pedestrian circulation network. Refer also to (f).

(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, overshadowing, creating a sense of enclosure, noise, light spill, traffic movements, car parking demand or wind effects. 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 may be required to supply studies demonstrating whether there will be positive or adverse effects on open space.
- The open space must receive excellent sunlight access including during the winter to maximise community health and wellbeing. Refer to Section 5.4.2 regarding sunlight access.

(c) 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. This is to include consideration of light and noise impacts from adjoining development on habitat corridor values.
- 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.
- Built form is to demonstrate it will be sufficiently set back so as not to cause the need for lopping or removal of vegetation in public open space.
- 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 preferred landscape character and amenity of the precinct.
- Where sites adjoin waterway corridors or sites of identified biodiversity values, plant selection on development is to complement and improve these values including avoiding the use of any species that will lead to ongoing management issues on public land.

(d) Climate change mitigation in open space in medium to high density precincts and activity centres

- 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.
- Consider the 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.

(e) State or Local government policies about open space

- The development must meet State and local planning policies pertaining to amenity and open space.

(f) 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 preclude appropriation of, and encroachment on public space. This includes balconies from adjoining buildings not overhanging / encroaching into the open space reserve.

(g) Ongoing maintenance and management of open space

- Development will not increase the ongoing cost and responsibility for the management or maintenance of open space, including offsite costs such as on adjacent roads

(h) Open space contribution from development

- A 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. This will be at the discretion of the Council.

(i) 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 encumber the use or management of the existing or proposed open space.

(j) Setback from site boundary

- Larger sites should allow for a setback from the boundary, relative to the height of the built form and/or topography so they do not adversely affect the amenity, function and use of the open space.

(k) 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.

(l) Visibility of and views from open space

- Public view lines are to be maintained and enhanced to and from the open space.

5.4.2 Sunlight access to open space

Sunlight access to public open space in winter is important for community health and wellbeing. It is also a key factor in the health and longevity of the soft landscape works including trees, grassing and garden beds. Over the past 10 years more research has emerged linking the importance of sunlight access in public open space to community health and wellbeing. This has combined with increasing population growth across the City of Yarra meaning that more people are living in higher density housing with less access to private open space and greening. A key aspect of health and wellbeing is access to sunlight particularly during Winter when research has shown that people can suffer from Vitamin D deficiency. During Winter people need to spend longer in sunlight to absorb adequate levels of Vitamin D. This means that the open space needs be warm enough to encourage people to stay outdoors during Winter and absorb adequate levels of Vitamin D. Open space that has good sunlight access during Winter and in Autumn and Spring makes it more attractive to visit.

More recent research finds that sunlight elevates our moods and mental alertness. In recent times more people spend the majority of their working hours indoors and away from bright light including sunlight and this is now thought to be contributing to the rise in depression. So the benefits of people visiting open space in the daylight, including sunlight and exercising, contributes to both their mental and physical health and wellbeing

It is also important to design open space to have shade during the summer months when open space needs to provide a cool space so that people can comfortably exercise and relax in it. Deciduous trees in open space allow Winter sunlight access and provide the much needed shade during the Summer.

Sunlight is also essential to plant health and growth, and while they adapt to lower levels of light during Winter, the loss of any direct sunlight is likely to make the open space more vulnerable to damage - for example grassed areas may not be as easily sustained and will be slower to start growing again as the days get longer without direct sunlight.

Public open space is free and accessible to everyone and therefore makes it an equitable space in which to guarantee acceptable levels of sunlight access, particularly in higher density urban environments.

No.	Recommendation	Responsibility	Priority
5.4-2	Sunlight access to existing and future open space Council to protect existing and new open space from additional overshadowing between 10am and 3pm on 21 June beyond that generated by the standard 9 metre built form height. Council is to implement effective controls for sunlight protection through the planning scheme .	YCC	Very High and Ongoing

5.4.3 Linear open space

5.4.3.1 Yarra River

Recognise and continue to strengthen the environmental, cultural and recreational values of the open space corridor adjoining the Yarra River.

No.	Recommendation	Responsibility	Priority
5.4-3	Gap in the open space corridor between Gipps Street Steps and Walmer Street Bridge Council to continue to advocate to the Victorian Government regarding acquisition of land in the existing PAO2, design and construction of the Main Yarra Trail between Gipps Street Steps and Walmer Street Bridge in Abbotsford.	YCC Vic Govt (PV) (MW)	Ongoing
5.4-4	All-ability access to the Main Yarra Trail at the Gipps Street entry point Council to continue to advocate to Parks Victoria to provide all-ability access to the Main Yarra Trail from the Gipps Street entry point to improve access for everyone to the trail.	YCC PV	Very High
5.4-5	Biodiversity values Continue to support the ongoing revegetation of the Yarra River corridor in consultation with Parks Victoria and Melbourne Water to improve the biodiversity values and qualities of the linear open space corridor along the Yarra River. The future revegetation works and vegetation management to allow adequate sightlines on trails and at entry points to meet the relevant standards for off-road shared trails.	YCC PV MW	Ongoing
5.4-6	Education Support ongoing consultation with the Wurrundjeri community about creative ways to acknowledge the Wurrundjeri as the Traditional Owners, which may take the form of public art, interpretive signage or landscape treatment focussing on the river, as described in the Yarra Aboriginal Partnerships Plan 2015-18.	YCC	Ongoing

5.4.3.2 Merri Creek

Recognise and continue to strengthen the environmental, cultural and recreational values of the open space corridor adjoining the Merri Creek.

No.	Recommendation	Responsibility	Priority
5.4-7	Upgrade the Merri Creek Trail upstream of St Georges Road Council to liaise with Parks Victoria and Melbourne Water regarding improvements to the Merri Creek Trail consistent with current off-road shared trail standards.	YCC PV (MW)	Medium
5.4-8	Biodiversity values Continue to support the ongoing revegetation of the Merri Creek corridor in consultation with Melbourne Water to improve the biodiversity values and qualities of the linear open space corridor along Merri Creek. The future revegetation works and vegetation management to allow adequate sightlines on trails and at entry points to meet the relevant standards for off-road shared trails.	YCC PV MW	Ongoing

5.4.3.3 Darebin Creek

Recognise and continue to strengthen the environmental, cultural and recreational values of the open space corridor adjoining the Merri Creek.

No.	Recommendation	Responsibility	Priority
5.4-9	Link into the Darebin Creek Shared Trail from Alphington Council to continue to advocate to the Victorian Government to provide an access point onto the Lower Darebin Creek Shared Trail from Alphington.	YCC Vic Govt (PV) (MW)	High
5.4-10	Biodiversity values Continue to support the ongoing revegetation of the Darebin Creek corridor in consultation with Melbourne Water to improve the biodiversity values and qualities of the linear open space corridor along Darebin Creek. The future revegetation works and vegetation management to allow adequate sightlines on trails and at entry points to meet the relevant standards for off-road shared trails	Vic Govt MW	Ongoing

5.4.3.4 Inner Circle Railway Linear Parklands

The Inner Circle Linear Parklands is a well-used linear open space reserve that forms an important east west link between Merri Creek in Fitzroy North and Princes Park in Princes Hill. At a broader regional context level, this reserve also contributes to an overall habitat link between Royal Park and the Merri Creek corridor. In addition to the linear connectivity, the individual reserves that form the parklands are important neighbourhood and local open spaces with facilities appropriate to community use including play, seating, picnic facilities, open grassed areas and future community gardens.

No.	Recommendation	Responsibility	Priority
5.4-11	<p>Updated Inner Circle Railway Linear Parklands Masterplan</p> <p>Prepare an updated Inner Circle Railway Linear Parklands Masterplan that includes guidelines for the appropriate levels of use and facilities in each of the open spaces along with vegetation management. The vegetation management will need to address and improve the biodiversity values while retaining and strengthening the historical values, the shared trail design requirements and community values.</p>	YCC	High

6. Open space design and management guidelines

6.1 Overview

These guidelines aim to support the core guiding principles and directions for open space as set out in this Strategy. Existing Council policies and best practice inform these guidelines. Many of the topics dealt with in the guidelines apply more broadly across Council, for example, the guidelines and policies around festivals and events. The guidelines contained in this Strategy provide guidance for festivals and events in relation to open space design and management only. In some instances the existing Council policies may have a different emphasis from the guidelines given these are focussed on open space. Council policies are frequently updated, and some policy updates may be informed by these guidelines.

The guidelines are to be referred to in relation to the future design and management for all open space in the City of Yarra. This includes:

- Open space that is owned and managed by other agencies located in the municipality.
- Open space that is owned and managed by the City of Yarra.
- Works that other agencies may undertake in open space owned by the City of Yarra.
- Future open space that is to be transferred to the City of Yarra.

For proposed new open space, Council will first assess the suitability of proposed land areas against the criteria included in Table 5-2. Once the suitability of the site as open space has been determined, designs for the new open space will be consistent with the guidelines outlined in these guidelines. Council officers will refer to the guidelines when preparing design plans and undertaking proposed upgrades to existing open space. They will also assess proposed designs for new open space by other agencies and developers with reference these guidelines where appropriate.

The Section include the following:

- 6.1 Overview
- 6.2 Climate change/urban greening
- 6.3 Biodiversity values and natural character in open space
- 6.4 Sustainable design and management

- 6.5 Accessibility to open space
- 6.6 Unstructured recreation and informal use and infrastructure
- 6.7 Structured sport and recreation use and infrastructure
- 6.8 Cultural heritage values and public art
- 6.9 Festivals and events
- 6.10 Design and management plans for open space
- 6.11 Open space maintenance
- 6.12 Other agency open space ownership and management

6.2 Climate change and urban greening

As described in Section 4.4 of this Strategy, open space is influenced by the changing climate and also has an important role to play in mitigating and adapting to its effects. This includes supporting a significant tree canopy cover which provides multiple benefits to the character and liveability of Yarra. The *City of Yarra Urban Forest Strategy 2017* provides a clear charter for the future custodianship of Yarra's street and park tree population. The Urban Forest Strategy highlights the multiple benefits of trees including the health and wellbeing benefits, environmental benefits and the economic benefits.

Additional to the importance of canopy trees is the positive effects that open space can have on urban cooling in this time of climate change, particularly during periods of extended extreme heat. For open space to assist with mitigating urban heat, ideally it is well distributed across the urban areas, retains moisture through the inclusion of moisture absorbing surfaces such as grass and garden beds and includes large broad spreading canopy trees that will transpire overnight and effectively cool the higher density urban areas. This is one of the key reasons that the Strategy recommends additional small, distributed areas of open space across the higher density precincts, particularly in the areas where growth is forecast. The other key reason is that they will provide open space that is within easy and safe walking distance of residents and workers.

In order for these open spaces to be effective in mitigating urban heat they need to have retained moisture and large mature canopy trees.

6.2.1 Protecting mature canopy trees

Guidelines for protecting mature canopy trees in future open space designs

- a) In future masterplans, concept plans or proposed upgrades to open space, maximise the retention of existing mature large long-lived trees.
- b) As part of future design plans for open space incorporate measures to improve the health and appreciation of the existing large mature trees. This includes demonstrating that the proposed works do not negatively impact on the trees and allow sufficient space for them to grow and mature.
- c) Consideration to be given to the soil profile, available root space, water retention measures and treatment under the tree canopy including alternatives to lawn where appropriate which may include mulch and/or planting.
- d) In the assessment of new land area for open space include land that incorporates existing large mature canopy trees as one of the key selection criteria.

6.2.2 Open space design in medium to high density precincts

Guidelines for incorporating natural elements into the design of open space in medium to high density precincts :

- a) Maximise the use of moisture retaining surfaces/features/green infrastructure including shade trees, garden beds, grassing and permeable paving to effectively passively cool the open space via evapotranspiration. This is to offset the build-up of urban heat in higher density precincts.
- b) Demonstrate that adequate space is provided outside existing and proposed large canopy trees for ongoing tree health. This includes demonstrating that paths and other facilities which require natural shade can be located in the open space without damaging the health of the tree in the longer term or public safety.
- c) Incorporate sustainable water use principles as an integral part of the open space siting, size and design, to effectively retain moisture and have a positive role in passive cooling as per guidelines in 6.4.1.
- d) Designs are to demonstrate the open space will be easily accessible and comfortable for everyone to use.
- e) Include drinking fountains and a variety of seating opportunities that are in both the shade and the sun to encourage people into open space.
- f) In play area designs, include natural elements and materials into the design, for example trees for shade, natural mulch and planting to provide children with easy access to natural materials.
- g) Consider sustainable design principles including the use of recycled materials and products that store carbon - refer to Section 6.4.2 for further detail.

6.2.3 Vegetation selection

Currently open space reserves have a range of different vegetation types, some of which are dominated by mature exotic trees and others with indigenous and native vegetation. The most extensive areas of indigenous vegetation including remnant vegetation occurs along the Yarra River, Merri Creek and Darebin Creek. The large mature native, indigenous and exotic trees contribute significantly to the character and liveability of Yarra. As the city redevelops and intensifies over the next 15 years, the large mature canopy trees will become even more important, particularly in the higher density precincts associated with the activity centres.

Future open space designs need to prioritise the retention of mature canopy trees and planting additional large long-lived canopy trees to increase species diversity and the age range of the canopy trees in Yarra. This is consistent with the *City of Yarra Urban Forest Strategy 2017* which aims to increase the canopy cover in the Yarra.

Selection of trees and vegetation for open space needs to consider a range of factors including:

- Improvement to the microclimate of the open space in all seasons including winter
- Contributes to habitat and biodiversity values
- Increases species diversity and sustainability of the urban forest

- Contribution to the scale and landscape character
- The surrounding urban context
- Cultural heritage values
- Provide the community the opportunity to connect with nature.

In selecting plants for use in public open space consider the following:

- a) For open space in higher density precincts, planting selection to support passive cooling characteristics. This includes the use of large broad spreading canopy shade trees, turfing where feasible and garden beds that maximise retention of moisture in the landscape in conjunction with hardscape surfaces. The species selection, location and planting method needs to consider the proximity to existing infrastructure assets and likely protection and preparation measures that may be required to maximise the opportunities for planting.
- b) In reserves with identified nature conservation values and along the waterway corridors, any future planting is to be locally indigenous and of local provenance to strengthen the identified Ecological Vegetation Class (EVC). This includes mid-storey and ground layer vegetation with consideration of suitable sight lines at entry points and along shared trails for safety.
- c) Protect and appropriately manage both existing established mature trees and younger trees that provide shade and character to open space. This may include dead and dying trees to protect habitat values along with arboricultural works to increase their habitat value for example cabling and other stability works. Non-indigenous vegetation may also be appropriate to retain in the absence of other mature vegetation.
- d) Increase the presence of canopy shade trees in open space, which retain open sightlines into open space while providing shade. Trees are preferably to be long-lived species, complement the established or desired open space character, and consider winter shade and summer sunlight access. This is to achieve an overall increase in tree canopy in the municipality while improving accessibility into open space.
- e) Plants at the entries to open space are to be selected to retain clear sightlines from the entry paths and other public areas such as adjoining roads at maturity. This is applicable in all open space that does not have Nature conservation as its primary character classification.
- f) In open space with identified environmental or native landscape character, future planting is to complement these values, and also meet the principles of open sightlines.
- g) In open space with recognised Aboriginal cultural heritage values and historical values, plants are to be consistent with and complement the cultural heritage and historical character and values.
- h) Garden beds and detailed horticultural plantings are to demonstrate they support the desired function, character and use of the open space. Species selection and garden bed area/size are to demonstrate ease of maintenance consistent with Council's ongoing operational budgets.
- i) Continue to support warm-season grasses to reduce irrigation needs in open space except near areas with indigenous vegetation.

6.3 Biodiversity values

Refer to Section 3.1 for an overview of the biodiversity values in the existing open space in the municipality. In summary the City of Yarra contains significant habitat and biodiversity along the waterway corridors and is aiming to improve the biodiversity values throughout the municipality. This includes the extensive Yarra Bend Park, when combined with its extent of the east side of the Yarra in the City of Boroondara and Studley Park creates significant large areas of remnant indigenous vegetation within 5 kilometres of the Melbourne CBD.

There are also broader strategic habitat corridor links along the Inner Circle Railway Linear Parklands to Princes Park and the Royal Park. Open space is recognised as a key opportunity for improving biodiversity values including expanding the presence of indigenous vegetation.

6.3.1 Open space with nature conservation values

As noted in Section 3.2, all existing open space has been assigned a primary along with secondary character classifications. Nature conservation is one of the character classifications and the following guidelines apply to all open space with this as either a primary or secondary character classification.

Design guidelines to improve habitat and nature conservation values in open space:

- a) Siting of future recreation facilities or upgrade of existing facilities in open space that directly adjoins the waterways is to allow adequate space for a sustainable width of riparian vegetation and any other consideration of natural process such as erosion and high flow events. Council will seek advice from Melbourne Water to assist with achieving suitable and sustainable setbacks where required.
- b) Protect and improve biodiversity and fauna habitat values including retaining and protecting remnant vegetation by ensuring that future paths and other facilities are located appropriately to avoid the need to remove or regularly modify and trim remnant vegetation.
- c) Where significant and mature remnant trees are present in open space, recreational facilities including paths, seats etc are to be located well outside the mature tree canopy and the tree protection zone.
- d) Where sports lighting and other open space illumination is required, the proposed light is to minimise upward glare so that it has the least impact on native fauna and adjoining residential amenity. Additionally, proposed lighting is to demonstrate energy efficiency and may include smart lighting technology where appropriate. Measures like planting large evergreen trees to minimise light pollution will also be considered.
- e) Future fencing design within open space including vehicle exclusions fences, are to allow for fauna movement where feasible.
- f) Retain, where possible, mature dead trees for habitat purposes considering risk management issues associated with falling limbs.

Design guidelines to improve habitat and nature conservation values in open space:

- g) Dog off-lead areas in open space adjacent to waterways and wetlands are to be designed and managed so that dogs do not impact on the nature conservation and fauna habitat values of the waterway corridor.
- h) In reserves with identified nature conservation values and along the waterway corridors, any future planting is to be locally indigenous and of local provenance to strengthen the identified Ecological Vegetation Class (EVC). This includes mid-storey and ground layer vegetation with consideration of suitable sight lines at entry points and along shared trails for safety.

6.3.2 Biodiversity values in other areas of open space

There is a range of other open spaces in the City of Yarra where biodiversity values have not yet been identified. The Biodiversity Heath Survey (Practical Ecology, 2018) identified a variety of habitat niches across the City. Beyond the waterway corridors and native bushland areas several other sites contribute to improving the native flora and fauna in the City of Yarra. The following guidelines describe the process for improving biodiversity values in the context of the open space also retaining other identified values and character classifications identified in the Strategy.

Design guidelines to change and improve the habitat and nature conservation values in open space:

- a) Maximise retention of the mature canopy trees in the open space.
- b) Integrate additional native and indigenous vegetation including canopy trees into the open space, demonstrating that it is consistent or complements the character and values of the open space.
- c) The design and location of additional planting areas is to retain excellent passive surveillance of the open space.
- d) Existing lighting to be reviewed to reduce its impact on the native fauna values.

6.4 Sustainable design and management

6.4.1 Sustainable water use in open space

Key issues include:

- The City of Yarra supports a water sensitive city approach to water use and needs to be reflected in future open space design and upgrades.
- In order to assist with urban greening and cooling there is a need to investigate options to increase sustainable water use in open space. The scope and need for these projects will deliver multiple benefits and requires a partnership across the different disciplines and teams at Council. Refer also to Section 6.2, Climate change and urban greening.
- High levels of informal use of open grassed areas in the municipality which is forecast to continue to increase over time. There is a need to consider irrigating these in high use areas so they remain viable and useable in the summer.
- Conversion of sports fields to warm seasons grasses, however this has been difficult to manage during the winter sports season.
- The high cost of stormwater re-use projects limits their implementation to all sites, however appropriate external funding will be sourced to assist and maximise implementation where feasible. As an alternative, in situations where stormwater re-use is not viable or where funding is not available in the short term, investigate passive irrigation without necessarily meeting water quality improvement objectives as an alternative and in some locations a short-term method of improving urban greening in open space.
- Council has a *Water Sensitive Urban Design (WSUD) Policy for Council Infrastructure Assets* that may be of assistance for open new open space projects.

Guidelines regarding sustainable water use in open space:

- a) Incorporate best practice principles for stormwater reuse in open space using passive irrigation principles. This includes redirecting stormwater and rainwater runoff from buildings and paved surfaces within the open space and the surrounding local catchment to the open space.
- b) For new open space and upgrades to existing open space in medium and high density areas, consider the multiple benefits of mitigating urban heat as part of the evaluation of appropriate stormwater reuse and treatment systems proposed for open space.
- c) Maximise the use of porous paving and permeable surface treatments to reduce concentrations of stormwater runoff and improve the moisture retaining (and passive cooling) qualities of open space.
- d) Where car parking is provided the stormwater runoff is to be reused within the open space.
- e) Water features in open space will need to demonstrate they meet the principles of sustainable water use/re-use and that they contributes to the landscape character, amenity and urban cooling qualities of the open space.
- f) Water tanks/storage devices, where required, are to be preferably located underground. If this is not feasible, the second preference is to co-locate them

Guidelines regarding sustainable water use in open space:

with other built form and infrastructure in the open space. If they are the only built feature in the reserve, then their siting, size, material selection, colour and design is to complement the character of the open space. Tanks are to minimise impact on major view sheds of the open space from the surrounding area and viewlines into the open space from entries and paths/trails.

- g) Consider synthetic surfaces at selected locations to reduce pressure and irrigation requirements for natural turf sports fields.

6.4.2 Sustainable material use in open space infrastructure design

In selecting materials for use in future open space construction adhere where appropriate to the following guidelines:

- a) Encourage sustainable or ecologically preferable materials, which include materials that are durable, sourced locally, recyclable (including recycled plastics, rubber, glass and concrete), made from post-consumer materials, refurbished or renewable including consideration of whole-of-life costing.
- b) Promote re-use of on-site materials and features where appropriate.
- c) Timber used in open space is preferably to be from sustainable sources, including plantation, recycled and/or harvested efficiently. Species selection and quality is to demonstrate it is appropriate for external use.
- d) Appropriate dimensioning of material to suit the particular use demonstrating the bulk and quantity of material proposed does not result in unnecessary wastage.
- e) Minimise unnecessary material use in infrastructure design for example, the use of suitable kerb barrier or low post and rail/cable fencing to prevent vehicle access into open space in place of bollards.
- f) Alternative power sources for lighting (refer to lighting Guidelines in 6.6.5).
- g) Siting and design of buildings in open space to consider passive solar orientation and minimise the need for and use of heating and cooling systems.
- h) Appropriate siting and design of facilities to minimise additional structures, particularly regarding shade.
- i) Integrate stormwater runoff from sealed surfaces, roofs etc into the open space design where feasible to improve passive cooling and sustainable water use.
- j) Select and specify materials that are durable and demonstrate minimal ongoing management and maintenance requirements.

6.4.3 Reduce reliance on vehicle use to access open space

Recommendations in this Strategy encourage walking, cycling and use of public transport to reach open space. Similarly the principles of providing open space within a safe and easy walk of residents and workers is to encourage people outdoors to visit open space. It is acknowledged that people will need to travel further than an easy walk to reach different types of open space particularly to those with more specialised facilities for longer stays.

Yarra has some key existing linear open spaces and path links that provide good connectivity between open space. Additionally, there is a focus on improving the attractiveness of the streets in Yarra for walking and cycling. Adherence to the design guidelines in this Strategy aims to reduce reliance on vehicles and encourage fitness through walking and cycling. Refer to the guidelines in Section 6.5.

6.4.4 Smart technology

The City of Yarra has a new City Lab team that is trialling technology systems that provide more efficient service delivery. Currently sensors are being trialled to monitor when waste infrastructure needs to be emptied. While this is a new area of Council it has identified that technology may assist in a variety of areas. This Strategy supports the trial and use of this where it can achieve improved sustainability and design objectives in open space.

6.5 Accessibility to open space

The community survey identified that 22 per cent of the respondents have difficulty accessing open space. The main reasons being that it is too far to travel to the reach open space, the busy traffic, too many dogs, lack of time and that they are uninviting.

The main issue of the open space being too far to travel is addressed in by the recommendations for the provision of new open space and upgrades to existing open space to make them more inviting to use.

6.5.1 Universal access

Guidelines to improve universal access to open space:

- a) Demonstrate an inclusive approach in the design and management of open space that maximises access and use by everyone. This is to promote inclusive design that encourages everyone to use open space. For example, providing a path to an existing seat in open space will make the seat more accessible and useable by people who may have limited mobility and are unable to walk on uneven surfaces to reach the seat.
- b) When designing or upgrading existing facilities investigate opportunities to improve their adaptability to a range of uses. For example, when replacing an existing basketball half court and ring, review whether with a different design solution it may also be feasible to include a netball ring or expand and change the court surface so it is also available for use for other activities such as futsal and/or hand ball.
- c) Aim to meet current standards for universal access on grades and widths for paths from at least one entry point into the open space in accordance with the current Australian Standards. Refer to 6.5.3 for paths and connectivity.
- 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 and footpath networks and car parking.
- f) Aim to meet current best practice standards for universal access to the major structured sporting, unstructured recreation and informal use facilities in open space.
- g) Demonstrate that clear lines of sight into the open space from all entry points and within it are achieved to maintain safe access.
- h) Provide a diversity of seating that meet the principles of universal access including seats with back rests, some seats with armrests and bench seats.
- i) Consider homeless access to open space for sleeping including seats without armrests and placement of them in difficult situations.
- j) Future designs for play areas to include some universal access as an integrated approach to them. Refer to guidelines in 6.6.2 for more about play areas.
- k) Raised planter beds for improved accessibility for food growing/community gardens in open space.

6.5.2 Personal safety

Guidelines for consideration of personal safety in future open space design and management:

- a) Incorporate Crime Prevention Through Environmental Design (CPTED) Principles in all future open space design and management guidelines.
- b) Demonstrate that passive surveillance of open space from adjoining areas is achieved by appropriate design of the surrounding urban context and development interface, maximising visual and physical accessibility to open space.
- c) Demonstrate that clear lines of sight into the open space from all entry points and within it are achieved to provide safe access.
- d) New open space designs and upgrades are to demonstrate ease of cleaning and maintenance, including access for litter collection, for cleaning picnic and barbecue facilities and cleaning public toilets. Demonstrate the materials and surfaces used for the proposed infrastructure are easily cleaned/replaced when damaged or as part of the future renewal program.
- e) Lighting of major pedestrian links where they provide convenient access to and from key facilities such as between a train station and residential area. Lighting is to meet guidelines in 6.6.5.
- f) In selected Regional and City-wide open spaces, provide energy efficient lighting that allows unstructured recreational use of the key facilities in the early morning and evening during the winter for example, sporting fields and linked circuit paths. This does not include areas where lighting in the evening may disturb habitat. Lighting is to meet the guidelines in 6.6.6.
- g) Educate and enforce appropriate behaviour by dog owners regarding adherence to the on and off-lead areas. Refer to 6.6.1.
- h) Continue regular maintenance inspections and independent audits of all playgrounds to ensure they meet the safety requirements consistent with the current playground standards.

6.5.3 Diversity, type and condition of facilities

This Strategy aims to promote a healthier community both socially and physically by encouraging increased levels of use in open space. If the design and facilities appeal to and are accessible to the community, they are much more likely to visit open space. Increasing the diversity and improving the quality of facilities is one aspect of increasing the level of use of open space. Refer also to guidelines in 6.5.

Guidelines for diversity of facilities in open space:

- a) Aim for a diversity of unstructured recreation facilities including those that encourage physical fitness in people of all ages, abilities and cultural backgrounds - refer also to guidelines in 6.6. Designs are to demonstrate that they include complementary facilities that encourage use such as seats and drinking fountains so people can rest during exercise.

Guidelines for diversity of facilities in open space:

- b) Demonstrate that designs for proposed upgrades to existing open space and new open space respond to local community needs, reflecting the diversity of the community (including cultures, age, gender and abilities) and changes in demographics across the municipality in the open space designs.
- c) Minimise the duplication of facilities within a walkable neighbourhood catchment to provide a variety of recreational activities so that combined the network offers diversity.
- d) Demonstrate that future recreation facility design incorporates principles of its adaptability and multiple-use so that the facility can respond to changing needs over time without needing to be replaced.
- e) Incorporate gender equity principles in the design and function of open space.

6.6 Unstructured recreation and informal use and infrastructure

One of the key aims of this Strategy is to encourage people outdoors and into open space. This is based on extensive research that links improved community health and wellbeing and access to open space for people living in the urban centres. This includes the more tangible physical benefits of being outdoors and participating in exercise on an informal basis, combined with the more intangible benefits from being in fresh air, in contact with the natural environment, social contact and connectedness of meeting neighbours, friends and work colleagues in open space. In some parts of the municipality, open space is already very well used and there are identified conflicts between different users of open space.

Inherent principles that guide the future design and management of open space is the shared use of the open space and the adaptability of the spaces to accommodate different uses.

6.6.1 Management of dogs in open space

The consultation undertaken for this Strategy identified walking/exercising dogs is one of the main reasons people visit open space. This Strategy recognises that dogs provide the reason for getting their owners out into open space and offer important companionship for people, particularly those who live alone. With more people living in Yarra the quantity of people exercising and walking their dogs in open space is likely to continue to increase over time. While dog walking and exercise is one of the most popular activities, it also raises concerns for other park users, particularly when they are exercised off-lead. The concerns include personal safety particularly for young children and the elderly; dogs digging holes in the sports ovals and open grassed areas; impacts on native fauna; and dog excrement in the park. People who own dogs express concern about the lack of spaces for them to exercise their dogs off-lead, particularly the lack of fenced dog off-lead areas and the lack of dog agility parks.

The Domestic Animal Management Plan (DAMP) is the appropriate document to guide the management of dogs in all public areas including in open space. The current DAMP does not provide much direction about dog off-lead and on-lead areas in open space and refers to the controls listed on Council's website which are summarised in Table 6-1.

Given the high and increasing levels of dog ownership and dog walking and exercising occurring in open space, this Strategy recommends that a major review of the DAMP is undertaken to provide more guidance on this issue.

Table 6-1 Dog friendly open spaces in the City of Yarra

The information in this table is summarised from the City of Yarra website. The 31 open spaces are listed in alphabetical order.

Open space	Dog on-leash and off-leash controls
Alphington Park	Dog off-leash before 9am and after 5pm and on-leash at other times of the day.
Alphington Park Wetland	Dogs are prohibited from the wetland (officer comment, not currently listed on the City of Yarra website)
Annettes Place	Dog off-leash
Atherton Reserve	Dog off-lead on the unfenced sports field only when it is not in use for approved sporting events including training. Dogs must be on a leash within 10 metres of sports fields when they are in use
Barkly Gardens	Dog off-leash area in the north and dog on-leash in the south
Browns Reserve	Dog on-leash
Burnley Park	Dog off-leash area
Cambridge Street Reserve	Dog on-leash
Citizens Park	Allows dogs off-leash in the unfenced sports ground only when the grounds are not in use for approved sporting events including training
Coate Park	Includes a dog off-leash area in the northern section of the park
Coulson Park	Allows dogs off-leash in unfenced sports grounds only when they are not in use for approved sporting events including training
Curtain Square	Includes a fenced dog off-leash run
Dame Nellie Melba Memorial Park	Includes dog off-leash times before 9am and after 5pm
Darling Gardens	Includes a dog off-leash zone in the north east area of the gardens
Edinburgh Gardens	Allows dogs off-leash in the unfenced sports ground only when the grounds are not in use for approved sporting events including training.
Fairfield Park	Allows dogs off-leash in the unfenced sports ground only when the grounds are not in use for approved sporting events including training
Flockhart Reserve	A dog off-leash park
Gahan Reserve	Includes a dog off-leash zone in the south of the gardens
Golden Square	Allows dogs off-leash except they must be on a leash within 10 metres of the playground, barbecue and picnic areas.
Hall Reserve	Allows dogs off-leash except they must be on a leash within 10 metres of the playground
Hardy Gallagher Reserve	Allows dogs off-leash except they must be on a leash within 10 metres of the playground and Council officer comment is that this also applies to the community growing space, which is not currently on the Council website.
Inner Circle Railway Linear Parklands	Is dog on-leash on the shared trail and within 5 metres either side of the trail
Janet Millman Reserve	Allows dogs off-leash except they must be on a leash on the shared path and within 5 metres either side of the path

Open space	Dog on-leash and off-leash controls
Kevin Bartlett Reserve	Allows dogs off-leash in the unfenced sports ground only when the grounds are not in use for approved sporting events including training. It also has designated dog off-leash zones outside the sporting fields
Langdon Reserve	Is a dog off-leash park except dogs are prohibited in the playground
Quarries Park	Allows dogs off-leash in the unfenced sports ground only when the grounds are not in use for approved sporting events including training
Ramsden Street Reserve	Allows dogs off-lead in the unfenced sports ground only when the grounds are not in use for approved sporting events including training.
Rushall Reserve	Allows dogs off-leash
Smith Reserve	Is dog off-leash except they are not allowed in the fenced playgrounds and must be on a leash within 10 metres of the barbecue picnic area.
Victoria Park	Is dog off-leash and are only allowed on the oval when it is not used for an organised sporting event including training
Yarra Bend Park	Includes designated dog off-leash areas

Spatially, there is a reasonable distribution of dog friendly open spaces across the municipality with the main gaps being in Cremorne, Central Richmond (west of Church Street) and Collingwood (north of Johnson Street). In relation to dog off-leash areas, the main gaps are Cremorne and Collingwood. It is also worth noting that many of the dog off-leash areas are time limited.

In the future update to the DAMP, consideration of additional dog off-leash areas is recommended to be reviewed in the context of reviewing the times of the day they are available and also whether it may be feasible to include fenced ovals as part of the dog off-leash areas in order to more clearly define the dog on-leash and off-leash areas.

No.	Recommendation	Responsibility	Priority
6.6-1	Update the Domestic Animal Management Plan Council to undertake a major review of the DAMP with the required officers involved in all aspects of the domestic animal management. The aim of this recommendation is to develop consistent guidelines for the appropriate management of dogs in open space in the context of management of dogs and other domestic animals in all public spaces.	YCC	Very High

6.6.2 Play areas

Play areas can be categorised both as unstructured recreation and informal facilities. Play areas encourage physical activity in children and are important to their physical development. They also assist the development of cognitive and social skills. Taking children to a play area was a common reason people visit open space. Play areas encourage the social connectedness of parents, carers and the children. Taking children to the park to play encourages adults into open space, to meet their neighbours in the park and build social networks. It is also important for children to independently go to the park to play when they are old enough, and key to this is ensuring open space is within

safe walking distance of the majority of the community so children can safely access open space for play without the need to cross major roads.

The guidelines included in this Strategy provide an overview of the integration between the play area and the open space design. They do not replace the need for a Play Strategy which is recommended to be prepared by Council in the future.

No.	Recommendation	Responsibility	Priority
6.5-1	Play Strategy Prepare a Play Strategy to guide the future provision, upgrade, design and management play in open space across the City of Yarra. The Play Strategy is to reference the open space hierarchy in this Strategy.	YCC	High

Guidelines for upgrade and integration of existing play areas to open space

- a) Demonstrate the play areas provide a diverse range of activities to meet different age groups and skill development including physical, social and cognitive play, scaled to meet the intended size and use level applicable to the open space catchment in which it is proposed.
- b) Integrate the proposed play facility into the open space design to complement and expand the diversity of play opportunities. This could include open grassed areas for informal ball games and other unstructured recreation facilities.
- c) Integrate comfortable seating and picnic areas nearby the play facility to encourage social interaction and comfort for adults supervising play. This is important so that the parents will stay outdoors with their children in the park for longer lengths of time.
- d) Include access for all principles in play facility design demonstrating that universal access is cohesively integrated into at least part of all play areas.
- e) Design for use of the play area by everyone including young people who will informally use the area to meet and socialise as well.
- f) Minimise the use of fencing to play areas when it can be demonstrated there is no safety or accessibility requirement for it. Alternative treatments to fencing are to be investigated such as grade separation, seating walls, steps and planting, and only where they cannot demonstrate they adequately meet the identified safety concerns is fencing then considered appropriate. This is to meet the accessibility, adaptability, sustainability and safety principles of open space design by encouraging everyone to share, access and use the open space and the play area.
- g) Where possible, locate play areas so they receive some natural shade during the middle of the day to avoid the need for shade structures. The final proximity of the play area to existing and planted trees will need to demonstrate it allows ongoing health and mature size of the trees and is not in total shade (i.e. receives some sunlight during the day).
- h) Where feasible, major play areas are to reflect the natural, urban, landscape, cultural, heritage and social character of the open space. The play area is to have

associated support facilities including seating, drinking fountains, picnic areas and open grassed areas, trees and shade.

- i) Provide consistent signage regarding no dogs off-lead within 10 metres of all play areas.

6.6.3 Provision of unstructured recreation facilities

The open space survey undertaken for this project identified that people visit open space for a diversity of reasons with the most popular reasons including walking, dog walking, relaxing, playgrounds and social reasons. In answer to the question about why people don't visit open space a number of reasons were given including that the open space was unappealing. Therefore, the guidelines in this Strategy encourage the inclusion of a range of different facilities that encourage people to use them and improve their physical fitness and health.

Guidelines to promote and increase unstructured recreational use of open space:

- a) Refer to guidelines in 6.5.3 regarding encourage a diversity of facilities in open space.
- b) Location and type of active unstructured recreation facilities to complement other identified structured, unstructured and informal uses in the open space and the overall character.
- c) Include associated facilities that support and encourage participation in exercise including seats of different types, drinking fountains and shade. This is so that people of all levels of ability and fitness are encouraged to exercise and improve their fitness by making it easier for people to rest while exercising.
- d) Placement and design of these facilities is to demonstrate they minimise visual and noise impacts on adjoining land, particularly in relation to noise and activity in proximity to adjoining residents and nature conservation areas.

6.6.3.1 Shared trails in open space

Shared trails are supported in open space where feasible particularly in encouraging people outdoors to exercise including walking, running, cycling and pram pushing. 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. The *City of Yarra Bicycle Strategy* provides guidelines for on-road and off-road bicycle paths.

Guidelines for review and design of shared trails in open space:

- a) The shared trail network is to be safe, legible, accessible, direct, linked and attractive.
- b) Where possible, 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, *Cycling Aspects of Austroad Guides (2011)* and *Guide to Road Design Part 6A: Pedestrian and Cycle Paths (2009)*

Guidelines for review and design of shared trails in open space:

- c) Surface of the trail to be appropriate to the character, location and usage levels of the path and the open space.
- d) Sightlines to allow clear visibility along paths, particularly near changes in direction without low overhanging vegetation.
- e) 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. Refer to the current best management practice guidelines for trails regarding the widths once the use level and activity on path has been determined.
- f) Adhere to current best management practice guidelines for trails in relation to waterways and flood management including safety in waterway environments and bridge crossings. Currently these include the Melbourne Water *Shared Pathway Guidelines (2009)*.
- g) 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.
- h) 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.
- i) Minimise lighting of shared trails along waterway corridors. Where lighting is identified to be required investigate the use of smart lighting, including those that minimise upward glare and impacts on native fauna and adjoining residential properties.

6.6.3.2 Paths in open space**Guidelines for review and design of paths in open space:**

- a) Aim to provide path access into all open space so they are accessible for everyone. This includes path connections through open space to facilities including seats and play areas, along with links into existing linear trails.
- b) Alignment and surface design to complement and be consistent with the open space location, usage levels and inherent landscape character.
- c) Paths to be a width that accommodates the intended levels of use. This includes consideration of walking for different purposes such as strolling and exercise.
- d) Where possible, meet the current standards or best management practice for access and mobility including paths between facilities and destination points. Promote and facilitate their use by offering seats at regular points along the trail to assist.
- e) Minimise points where paths cross vehicle entries and access roads within the open space.
- f) The path network within the open space is to clearly connect to the footpath network in the adjoining streets to promote and encourage people to walk to open space rather than drive.

Guidelines for review and design of paths in open space:

- g) Demonstrate that surface runoff from paths is effectively drained either into adjacent garden beds/grass areas or discharged into underground drainage systems.
- h) In locations where significant conflicts between pedestrians and cyclists are identified on paths (not shared trails), investigate design, management and education options that reduce the conflicts while remaining inclusive of both cyclists and pedestrians in open space.

6.6.3.3 End of trip bicycle parking

Safe and secure bicycle parking in open space is to encourage the community to cycle to open space. Bicycle Victoria has prepared *The bicycle parking handbook* that is a useful guideline for appropriate design of secure bicycle parking facilities, that would be appropriate only in some Regional and City-wide open space where participation in activities such as sports training means there is a need for secure storage. The Strategy recognises that end of trip cycling facilities are appropriate outside open space such as at train stations. These guidelines are not intended for other spaces and refer to Council's existing policies, guidelines and strategies, as noted above in terms of provision of bicycle parking for open space specifically.

Guidelines for end of trip bicycle parking in open space:

- a) To be provided in Regional, City-wide and Neighbourhood open space where there are end of trip facilities/destination point for visitors, or sports training facilities.
- b) Siting and design to meet the current relevant standards for location, access, quantity and safety.
- c) Number and location to meet the anticipated use levels of the proposed facility.
- d) Integrated into the existing built form in the open space where possible.
- e) 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.
- f) Future upgrades and provision of new structured sport and recreation facilities are to include provision for secure bicycle parking.

6.6.3.4 Multi-purpose courts and other minor recreation infrastructure**Guidelines for provision of multi-purpose courts, exercise equipment and other minor unstructured recreation infrastructure in open space:**

- a) Generally applicable in Regional, City-wide, Neighbourhood and selected Local open space, refer Table 5-1.
- b) Siting and design of multi-purpose courts to minimise impacts on adjoining residential properties, and where possible locate away from roadways, or have adequate design features to prevent the risk of balls entering the road.

Guidelines for provision of multi-purpose courts, exercise equipment and other minor unstructured recreation infrastructure in open space:

- c) Siting of facilities including exercise equipment is to demonstrate they are easily accessible by all and inclusive.
- d) Designed to maximise use their appeal to everyone including all genders, age ranges, physical abilities and cultural backgrounds.
- e) Include other complementary facilities such as seating, shelters, shade, drinking fountains and picnic facilities/barbecues where appropriate.
- f) Where feasible, locate facilities including exercise equipment where they receive some natural shade during the middle of the day. The final proximity to trees will need to ensure ongoing health of the tree, and access to some sunlight and in accordance with AS4970, Protection of trees on development sites. This can be either shade from existing trees, or planting suitable tree species to provide shade in the longer term.
- g) Where possible orientate multi-use courts in north south direction in accordance with current sport facility design standards.
- h) Meet best practice design for fencing, surface drainage and surface treatment, etc for multi-use courts.
- i) Ensure the facility location and design retains clear views and access into the open space.
- j) Meet the current best practice guidelines for installation of appropriate undersurfacing and siting of exercise equipment.

6.6.3.5 Skate and BMX facilities

Guidelines for location of skate and BMX facilities in open space:

- a) Demonstrate the location of these facilities achieve a well-integrated design with other facilities and uses in the open space. This is preferably undertaken as part of an open space masterplan or concept design process.
- b) Demonstrate the facility location and design meets best practice management in skate and BMX facility design. This includes the consideration of supporting facilities, public transport access, shared trail links, visibility, passive surveillance from adjoining streets and buildings and the surrounding urban context.
- c) Demonstrate the needs of all young people have been addressed in the open space design in recognition that skate and BMX facilities do not meet the needs of all young people.
- d) Demonstrate the facility design adequately caters to other age groups including spectators and carers and includes associated facilities such as shade, seating and drinking fountains.
- e) Demonstrate the design meets the CPTED principles.
- f) Installation of no smoking signage in proximity to all outdoor skate parks and BMX facilities.

6.6.4 Buildings in open space

6.6.4.1 Upgrades to existing buildings

Guidelines to assess proposals to upgrade existing buildings with open space related uses:

- a) Demonstrate the proposed upgrade to the existing building is appropriate in the context of the existing master plan or concept plan in place for the site. If no existing plans are prepared, demonstrate the upgrade is compatible with existing established uses and improves the use and access to the open space.
- b) Demonstrate the proposed upgrade to the building improves or at least retains all prominent public views to the reserve, improves access to and around the building and improves the function and useability of the surrounding open space. The proposed upgrade will need to demonstrate that it does not result in a loss or reduction in publicly accessible areas of open space, for example by expanding the building footprint then a reduction in another paved or built facility will be required.
- c) Complements and improves the character of the open space.
- d) Demonstrate best practice sustainability principles in the siting and design, particularly in relation to water harvesting and reuse and energy efficiency.
- e) Demonstrate waste management is adequately provided for including appropriate bin enclosures and recycling initiatives.
- f) Retain and preferably improve access and circulation to the facility with a focus on achieving universal access in accordance with current Australian Standards.

Guidelines to assess proposals to upgrade existing buildings for non-open space related uses:

- g) 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.
- h) If determined to be required, ensure the future upgrade to the building is compatible with and as a minimum, improves the use of and access to open space.
- i) Must also meet the guidelines (b) to (f) in 6.6.4.1 above.

6.6.4.2 Proposals for new buildings in existing open space

With the forecast increase in urban densities across many parts of the City of Yarra, existing areas of open space will increasingly be valued for their natural, open parkland and unbuilt qualities. At the same time there will be requests to expand and build additional facilities in open space to cater to the increased demand for use. The following guidelines have been prepared to assess the provision of new buildings in open space for open space related uses.

Guidelines for new buildings in existing open space for open space related uses:

- a) The proposed facility accommodates open space related uses only. The facility is to promote and complement the open space and be compatible with the existing open space related uses for which the open space is recognised and valued.
- b) The proposed facility increases use, enjoyment and appreciation of outdoor open space.
- c) The proposed facility does not result in any further loss of natural outdoor open space in the reserve.
- d) The construction of the proposed facility will complement any existing environmental and heritage values of the open space and allows continued or new preferred patterns of recreational use (where applicable) of the existing open space.
- e) Demonstrate that all sustainability principles are met in the 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 supporting facilities for the building such as car parking will be met with no net loss of outdoor public open space.
- i) Refer to guidelines (b) to (f) in 6.8.3 above.

6.6.4.3 Public toilets

The *City of Yarra Public Toilet Strategy 2017-2027* provides the vision, strategic basis and a 10 year forward program to meet the needs of the growing businesses and pedestrian activities in the municipality. The City of Yarra is committed to the provision of local amenities and protecting, improving and developing the city's infrastructure and assets to enhance social activities within the municipality. This Strategy recognises that the *Public Toilet Strategy 2017-2027* addresses the provision of public toilets across the whole municipality and will guide the future provision and upgrade program to public toilets in public open space. The following diagrams are issues specifically regarding the provision of public toilets in public open space.

Guidelines for review and design of public toilets in open space:

- a) Appropriate to Regional, City-wide, Neighbourhood and Local open space where other facilities encourage longer stays in open space such as barbecue, picnic facilities and major play areas.
- 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, i.e. built as part of a cafe or sports pavilion. Where the open space is in a commercial precinct, investigate options to provide public access to private toilet facilities consistent with the *City of Yarra Public Toilet Strategy 2017-2027*, prior to confirming they are required in the public open space.
- c) Designs to meet CPTED principles in public toilet design.
- d) Located near existing services where available.

Guidelines for review and design of public toilets in open space:

- e) Located to avoid the need for park visitors to cross roads and car parks to reach them where feasible.
- f) Locate within clear sight and walking distance of high use facilities such as barbecues and play areas.
- g) Locate in a position to service the whole reserve thereby minimising need for more than one public toilet in an open space.
- h) Use best practice environmentally sustainable principles in siting and design, particularly in relation to water and energy use.
- i) Demonstrate waste management is adequately provided for.
- j) Location should not block prominent public views to the reserve and not create hidden or unusable areas around them.
- k) Located with passive surveillance from surrounding area.
- l) Provide universal access in accordance with current Australian Standards.
- m) Adequate lighting including maximising daylight where possible.
- n) Appropriately sized to meet demands and size of the open space.
- o) Complement the character of the open space, including the heritage values of the open space where appropriate.
- p) A design that is suitable for cleaning and maintenance.

6.6.5 Lighting in open space

Illumination in open space is generally from sports field lighting in many of the City-wide open spaces, and from lights in the streets adjoining open space. Lighting can also facilitate and expand the hours in which an open space can be used during winter to encourage people outdoors. Lighting in open space can also present issues including:

- Impact on native fauna
- Impact on adjoining resident amenity including light spill and where after hours park use is encouraged
- Energy use
- Encouraging people to use open space at night when it is not inherently safe, leading to personal safety issues.

Guidelines for provision of lighting in open space:

- a) Lighting is only applicable in high use open space and larger reserves including Regional, City-wide and Neighbourhood open space.
- b) In these locations lighting is only applicable for specific use or facilities. These are for:
 - structured sport and recreation use
 - circuit paths for access and use before and after work/school during the winter
 - along key connecting paths to train stations, shops or community hubs where no safe and accessible street network exists for walking/cycling.
- c) Where new lighting is required, it is to be consistent with best practice principles regarding sustainability.

Guidelines for provision of lighting in open space:

- d) As a minimum select lighting that:
 - minimises upward glare (to reduce impact on adjoining residential amenity and native fauna, where applicable)
 - is energy efficient and scaled to meet the specific need identified
 - is easily maintained
 - the design complements the character of the reserve, including consideration of heritage values where applicable.
- e) To minimise impact on native flora and fauna:
 - Protect dark areas in the open space for nocturnal fauna activity
 - Investigate use of LED red spectrum that attracts less invertebrates
 - Consider the use of reflective 'cat eye' lighting for shared trails as an alternative to overhead lighting.
- f) To minimise energy use:
 - Apply Yarra's smart lighting technology to park lighting projects.
 - Use timers on lights.
 - Reduce the lux levels between 10pm and 6am.
 - Use solar technology and light emitting diodes.

6.6.6 Minor park infrastructure

6.6.6.1 Seats

Guidelines for review and design of seats in open space:

- a) Include a variety of seat types such as bench seats, seats with back rests and some seats with armrests to improve universal access.
- b) Consider inclusion of informal seating arrangements in open space where it can be well integrated with other elements such as retaining walls.
- c) Demonstrate proposed seating faces activity and paths, takes advantage of views or features within the reserve and is provided in a variety of settings including some in groups and some alone.
- d) Demonstrate proposed seating will be provided in a variety of locations with some in the shade and others in the sun.
- e) Provide at regular intervals along shared trails as resting points to promote universal access.
- f) Avoid locating seats in permanent shade.
- g) Provide some seating in quiet areas of the open space that are potentially suitable for contemplation and the homeless for sleeping.

6.6.6.2 Picnic shelters and barbecue facilities

Guidelines for design of picnic and barbecue facilities in open space:

- a) Potentially appropriate in Regional, City-wide, Neighbourhood, Local and selected Small Local open spaces as per Table 5-1.
- b) Positioned within reasonable access from main entry points and with consideration of the views from the shelter/picnic facilities. For example, longer vistas and views, views of adjoining facilities such as play areas for features such as water features or areas of activities. This is intended to encourage more people to use open space as a social meeting place promoting a sense of community.
- c) Demonstrate the facilities complement the open space character and are sized to meet the anticipated regular use levels.
- d) Demonstrate sustainability principles are met including material use, water collection/runoff/reuse, energy efficiency and waste management.
- e) Barbecue design to minimise fire risk or public nuisance.
- f) Designed to allow universal access and use of the facility.
- g) Adequate waste management facilities to meet the size and needs of the proposed facility consistent with the hierarchy of open space as described in Table 3-1 in this Strategy. Position the waste infrastructure so they are easily accessible for park users and maintenance, but are not located within the shelters so as not to dominate the character and ambience of the facility. Where feasible consider integrating recycling.

6.6.6.3 Drinking fountains

Guidelines for provision of drinking fountains in open space:

- h) Appropriate in all hierarchy types of open space.
- i) Drinking fountains to include bottle refill taps to encourage the community to re-use their drink water bottles. In dog on-lead and off-lead areas, drinking fountains to include a dog water bowl/tap.
- j) Locate drinking fountains at regular intervals on the linear trail network.
- k) Where feasible, standardise the types to improve effective ongoing maintenance.

6.6.6.4 Waste infrastructure

Guidelines for provision of waste infrastructure in open space:

- a) Refer to Table 5-2. In relation to Small Local open space these have waste infrastructure where higher levels of use are anticipated, however in locations with lower densities, they may not be required.
- b) Waste infrastructure is to be located so it is both accessible for maintenance purposes and convenient for park users, close to picnic and barbecue facilities and the entry and exit points.

- c) Where located near picnic facilities and/or seats, they need to be positioned at a reasonable distance from these facilities to avoid unpleasant odours, unsightly rubbish and health issues of rubbish in proximity to where people are preparing and eating food.
- d) Waste infrastructure is to be secured on site and where possible, located within a bin enclosure/surround to reduce the incidents of waste infrastructure being moved and damaged.
- e) Waste infrastructure to meet best design management practice and sustainability principles including recycling, in accordance with Council policies.

Guidelines for provision of waste infrastructure at sports pavilions:

- f) The number and type of waste infrastructure at sports pavilions is to be consistent with Councils Waste and Resource Recovery Strategy or other relevant Council policies and guidelines.
- g) Aim to provide bin enclosures at all sports pavilions that are of a size to adequately accommodate the number of waste infrastructure items appropriate to the existing and proposed use. The enclosures are to be well integrated with existing usage patterns, preferably with the built form and easily accessed by maintenance vehicles.

6.6.6.5 Fencing and vehicle barriers in open space

Guidelines for fencing and vehicle barriers in infrastructure:

- a) As a principle, fencing to public open space facilities within open space is discouraged. Fencing is only to be accepted where it facilitates and improves the function and diversity of uses that can be undertaken in the open space and/or for the function and design of the recreation facility.
- b) Where low fencing to the perimeter of sports fields is provided, include frequent gate openings to ensure they do not form barriers to unstructured and informal access outside of scheduled structured sports training or match play.
- c) Sports field fencing style is to minimise visual intrusion and complement the open space character including historical character where appropriate.
- d) In locations where mesh fencing is required, for example around public tennis courts, baseball diamonds etc, black coated mesh fencing or similar is to be used to minimise visual impact of this on the open space and adjoining properties.
- e) Where open space contains sports fields and facilities that are available for the public to use outside of sports training and match play, cyclone mesh fencing to the perimeter of the public open space is not permitted. Restricted uses within open space, including where the restricted use applies to the whole open space will be permitted to have cyclone mesh fencing where it is demonstrated it is required - consistent with point (d) above.
- f) Suitable barriers to prevent unplanned vehicle access into open space is required. Designs are to demonstrate they prevent vehicle access, minimise visual intrusion on the open space and allow excellent pedestrian and cycle access into the reserve.

Guidelines for fencing and vehicle barriers in infrastructure:

- g) Minor infrastructure such as bollards, fencing, vehicle control barriers etc are to reflect diversity in the landscape, environmental, cultural and heritage character and values of the open space.
- h) All fencing and minor infrastructure is to meet best practice guidelines for universal access, safety, quality and sustainability.
- i) Adhere to sustainability principles in the selection of materials, design and placement in the reserve including investigation into the use of recycled materials where appropriate.
- j) Discourage fencing (as differentiated from vehicle exclusion barriers) to facilities and spaces within open space, for example play spaces, skate facilities and multi-use courts and surfaces. Exceptions may occur where the proposal demonstrates that alternative measures such as grade separation, planting, seating, vehicle barriers or any combination of these cannot suitably manage safety concerns.
- k) Encourage the use of planting as an alternative to fencing where this is appropriate. Planting is to ensure clear and open sightlines into open space and the facility is retained, for example if it is to provide some physical separation between a play area and the rest of the open space. The planting will need to meet the CPTED principles.

6.6.7 Urban agriculture/community gardens

The Urban Agriculture Policy guides the provision of community gardens and urban agriculture in the City of Yarra. It notes that community interest has grown over the past 30 years in urban agriculture from the establishment of the Collingwood Childrens Farm in 1979 to the creation of community gardens in North Fitzroy, Collingwood and Richmond as well as community gardens in the public housing estates which are now managed by Cultivating Community in Richmond, Fitzroy and Collingwood. In 2011, the City of Yarra employed an Urban Agriculture facilitator to work with the community providing advice on urban agriculture. This includes the promotion of growing food in the private and public realm including schools, nature-strips, community facilities and open space and supporting the farmers markets that are held across the municipality.

Urban agriculture has many benefits and while Council supports their establishment, they are able to be also be established on public land that is unsuitable for recreational use.

There are three types of urban agriculture that is proposed, including:

- Community gardens
- Small communal growing areas
- Fruit trees

This Strategy supports the principle that Council first considers establishing urban agriculture on other areas of public land prior to proposing it in public open space. Currently, some of the most successful community gardens are located on the public housing estate land, in schools and on disused railway land and streetscapes. Public open space in the City of Yarra is in high demand, the urban agriculture can occur in spaces such as streetscapes that recreational activities cannot.

The following guidelines are applicable for assessing either the expansion of existing community gardens or proposals for new community gardens in public open space. These will only be considered where it is demonstrated that other public land in the catchment of the open space have already been investigated and are unsuitable.

Guidelines for existing and future proposals for community gardens in public open space:

- a) Demonstrate the use of land for a community garden benefits and is supported by local residents in the local catchment of the proposed garden.
- 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, for example is co-located with an existing built facility to share facilities and resources such as rainwater harvesting, water supply and secure storage.
- d) Preferably co-located with other facilities.
- e) 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 recreation use.
- f) The site is suitable for growing food produce such as vegetables, fruit and herbs that typically require adequate sunlight access and water.
- g) The community gardens are run by an incorporated organisation that meets regularly or have a formal auspice agreement with a relevant organisation.
- h) The proposed location does not negatively impact on heritage or identified environmental values of the open space or immediate surrounds.
- i) The assessment criteria for allocation of plots to give priority to applicants without private open space.
- j) Demonstrate adherence 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) Support communal gardening and organic gardening principles.

Guidelines for the inclusion of small communal growing areas and fruit trees in existing open space

- a) Demonstrate there is support from local residents in the catchment of the open space that is proposed to be used for the communal growing area and/or fruit trees.
- b) The size of the growing area or location of the fruit trees does not reduce the opportunity for informal and unstructured recreation to occur in the public open space.
- c) The site is suitable for growing food produce such as vegetables, fruit and herbs that typically require adequate sunlight access and water. The site should be visible and complement and potentially improve the open space character.

Guidelines for the inclusion of small communal growing areas and fruit trees in existing open space

- d) The small communal growing areas and fruit trees are well maintained and managed. Demonstrate adherence to agreed land management practices and access arrangements as stipulated by Council
- e) The proposed location does not negatively impact on heritage or identified environmental values of the open space or immediate surrounds.

6.7 Structured sport and recreation use and infrastructure

6.7.1 Overview of issues

- Competing uses between structured sport, passive recreation and also between community and elite sporting uses. This specifically relates to the informal use of sports fields and damage to turf from the informal use.
- Service authority assets located under sports fields leading to uncertainty of the asset upgrade with the threat of service authorities undertaking major upgrades to their assets.
- As an overall approach, the City of Yarra minimise the fencing of sports fields.
- Damage to sports fields from unstructured recreational use - particularly dog off leads including holes and dog excrement.
- Female participation in sport is growing and the existing sports pavilions are inadequate.
- Increased levels of participation in sport overall means there is a need to increase the capacity of change rooms to accommodate the increased volume of players.
- Pavilion upgrade program needs to consider the broader issues beyond the physical condition including forecast population growth and broader community benefit.
- Waste management infrastructure is consistent with the *Waste Minimisation Strategy*.
- Electronic scoreboards – increased numbers of applications for these and currently Council have no guidelines in place regarding their location, who pays to maintain them and guidelines around content.
- Advertising signage associated with sporting use requires guidelines.
- Car parking is an issue including all-ability access and the issue of taking up open space with off-street car parking.

The process of preparing Masterplans for City-wide open space is the recommended so there is an opportunity to address the site specific design response to address issues and guidelines for the site. The Masterplans clarify 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, for example maternal child and health and child care facilities. Due to increasing demands on open space it is considered appropriate that when an existing facility needs to be replaced or is subject to a major upgrade, it is assessed as to whether it is appropriate to continue to retain this facility in open space.

6.7.2 Upgrade and replacement of existing structured sport and recreation facilities

Council is currently in the process of determining the future program of upgrade works for the structured sports facilities including a program to progressively upgrade existing facilities. 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.

This Strategy recommends that proposals for future upgrades and replacements be evaluated with the following guidelines to maximise the best use of these facilities in open space. These guidelines focus on the scale and location of the facilities and their integration with the open space character and other facilities and are not technical guidelines for the design of the facility itself.

Guidelines to upgrade existing structured sport and recreation facilities, or for their replacement:

- a) Demonstrate the need and resultant community benefit associated with the proposed upgrade/replacement of the facility.
- b) Demonstrate the proposed upgrade/replacement of the facility is best located within open space for its function and viability.
- c) Demonstrate the proposed facility will increase the range of uses or user groups that will be catered for as a result of the upgrade/replacement.
- d) Facilitates a diversity of uses including unstructured recreation and informal access and use.
- e) Meets universal design principles including universal access and promotes inclusion for all irrespective of age, gender, cultural background and ability.
- f) Flexible in design to provide for multiple uses and future adaptability to other uses as needs change over the lifespan of the proposed facility.
- g) 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.
- h) Demonstrate how waste collection and management is catered for including meeting relevant ESD principles regarding re-use and recycling.
- i) Consistent with the CPTED principles or similar to promote safety in facility and open space design.
- j) Integrate appropriate signage so that the sports clubs can list the dates and times the facility is available for unstructured and informal use. For example, the dates and times the sports field is available for informal access outside of match play and training times.

6.7.3 New structured sport and recreation facilities in existing open space

Proposals for new structured sporting facilities (including buildings) in existing public open space will need to demonstrate how the new facility will integrate with the open space and be accessible for a diverse range of users.

Guidelines for new structured sport and recreation facilities in existing open space:

- a) Demonstrate the need for the proposed new 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 to upgrade and replacement structured sport and recreation facilities* (c) to (g).
- d) The orientation and design of the facility minimises impacts on other structured and unstructured recreational uses, and expands the range or time periods in which unstructured recreation use can be undertaken. As a minimum, the proposal will need to demonstrate that it integrates well.
- 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 the open space.
- h) Public transport access is preferably available to support the new facility.
- i) Adequate bicycle parking facilities integrated into the facility design to encourage cycling access in preference to vehicle access and use.
- j) Demonstrate how the car parking demands for the proposed facility will be addressed with minimal impact on the open space and the surrounding neighbourhood.
- k) Car park design to meet the criteria listed specifically for car parking in this Strategy, see Section 6.7.1.
- l) Demonstrate waste management is adequately provided for consistent with the *Waste Minimisation Strategy* and the waste receptacles are appropriately designed for to integrate with other built form in the site.
- m) Construction activity to minimise environmental impact and disruption to open space.

6.7.4 Car parking

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) Minimise the amount of car parking provided in open space. These guidelines will support the provision of sustainable transport options and encouraging fitness and health by improving cycle and pedestrian access to and within open space.
- b) In proposed new open space, any proposals for car parking are to clearly demonstrate initially that the car park is required. If it is required, the car park is to:
 - be sized to meet the minimum requirements
 - minimise impacts on the amenity of the neighbourhood
 - minimise the length of road required to access the car park
 - demonstrate that cycle and pedestrian access and circulation has priority
 - that it meets the design criteria listed in (d) to (m).
- c) In proposals to upgrade existing open space, any proposals to change existing car parks will need to demonstrate they meet the criteria listed in (b).
- d) Future car parks are to be of a size that adequately caters to the normal (not event) level of use. Demonstrate how other forms of sustainable transport and access to open space is to be improved including walking and cycling along with public transport for Regional and City-wide open space.
- e) 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 during events where applicable.
- f) Demonstrate integration of safe pedestrian access and circulation to, around and through the car park.
- g) Demonstrate the car park design and construction adhere to best management practice and promote sustainability and safety.
- h) Stormwater runoff is to be captured and re-used or treated where feasible.
- i) Incorporate trees into car parks to improve aesthetics, provide shade, manage vehicle speeds and mitigate urban heat build-up with consideration of adequate sight lines for safety.
- j) Demonstrate the proposed size, material use (including surface finish, vehicle control barriers etc) and the overall design of car parking complements the desired landscape character of the open space.
- k) Demonstrate that proposed lighting to car parks is provided 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.
- l) Encourage, where appropriate, multiple use of car parking in open space, for example that the surface area is also line marked with basketball/netball towers installed, or available for futsal/handball/tennis hit up wall use.
- m) Include priority areas for bicycle parking within car parks or adjacent leisure amenities where applicable.

6.7.5 Natural turf sports fields

The community survey outcomes, site visits and consultation with stakeholders has identified that natural turf sports fields are highly valued and used by the community for structured sport, unstructured recreation and informal use. Some of the natural turf sports fields in Yarra are also designated dog off-leash areas when they are not being used by the sports clubs for match play or training.

The majority are unfenced and are used informally for exercise including jogging, running and walking along with informal ball games and informal uses such sitting on the grass reading. With forecast population growth the demand for both structured sport and unstructured recreation use of these spaces is going to increase.

Guidelines to guide the future upgrade and use of natural turf sports fields in open space:

- a) The sports fields are primarily for structured sporting use and secondarily for the unstructured and informal use.
- b) Optimise the turf species mix to minimise water use and maintain a suitable standard of turf cover for winter and summer season use.
- c) Investigate options to utilise water from sustainable sources (e.g. recycled water, stormwater) for irrigation of the sports turf
- d) Investigate options to include some fencing of the sports fields, particularly where this can demonstrate the ability to optimise unstructured recreation and informal use of the sports fields. For example, fencing to part or all of the sports field, with frequent gate openings to ensure accessibility, may improve the ability to utilising the open space more efficiently. Specifically, this may improve management of dog off-leash use with open spaces.

6.7.6 Synthetic surfaces for sport and recreation use

Council currently has no confirmed position regarding the installation of synthetic surfaces for sport and recreation use.

In conjunction with Council's ongoing program of upgrading sportsgrounds with warm season grasses, the establishment of synthetic surfaces is identified as a potential way to increase the capacity of the existing sports facilities. This Strategy has not assessed the need for synthetic surfaces. If in the future they were confirmed to be required, then the following guidelines would apply to the assessment of their suitability in existing open space.

Guidelines to assess proposals for synthetic surfaces in open space:

- e) Demonstrate the synthetic surface is required including a full analysis of the benefits and negative impacts of the proposal.
- f) Demonstrate the effects of replacing natural soil and turf surfaces with constructed synthetic surfaces can be adequately compensated for in relation to the passive cooling role of the open space.

Guidelines to assess proposals for synthetic surfaces in open space:

- g) Demonstrate the multiple use and adaptability of the proposed facility, particularly in the context that synthetic sports field surfaces are unsuitable for dog walking/dog off-leash.
- h) Demonstrate that the increased intensity of use and programming of the facility will be appropriate to the scale of the open space.

6.7.7 Advertising signage in open space

The following guidelines are to assist in providing consistent direction for the provision of advertising signs by the sports clubs, which 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 in open space:

- i) Any proposed signs are to be temporary only and are to be removed at the conclusion of the event or season for which they are being proposed.
- j) Signs need to be consistent with the scale and the size of the structure on which it is proposed.
- k) Signs are not to obstruct main view lines into the open space reserve from all pedestrian and vehicle entry points.
- l) Minimise the visual prominence of the signage when viewed from the areas outside of the event for which the advertising signage associated with the club-based use is proposed. This includes no visibility of the signage from adjoining and nearby properties.

6.7.8 Electronic scoreboards

The following guidelines are to assist in providing consistent direction for the provision of electronic scoreboards that do not require a planning permit in open space, but do require Council permission to install on Council land.

Guidelines for review of electronic scoreboards in open space:

- a) Demonstrate the scoreboard matches the scale of the facility and events.
- b) Demonstrate the scoreboard is consistent with the scale and the size of the structure, facility and level use for which it is proposed.
- c) The scoreboard is not to obstruct main view lines into the open space reserve from all pedestrian and vehicle entry points.
- d) Minimise the visual prominence of the electronic scoreboard when viewed from the areas outside of the sports event/field/facility for which the scoreboard is provided. This includes minimising visibility of it from the adjoining and nearby properties.
- e) Demonstrate the scoreboard will only be used during the course of scheduled match play/events.

6.7.9 Minor sports related infrastructure

Guidelines for provision of minor sports related infrastructure in open space:

- a) Minor infrastructure including player boxes and equipment storage facilities are to be temporary items only.
- b) Storage for minor infrastructure is to be within other existing approved built form on the site, or stored off site.

6.8 Cultural heritage values and public art

6.8.1 Aboriginal cultural heritage values

Whether a place is of Aboriginal cultural heritage significance is determined by Aboriginal Victoria. The following information is summarised from the websites of Aboriginal Victoria and Aboriginal Heritage Council.

Aboriginal Victoria broadly works on:

- Aboriginal policy reform, with a focus on self-determination and treaty
- Community strengthening and engagement
- Cultural heritage management and protection.

In relation to Aboriginal Cultural Heritage, Aboriginal Victoria administer the *Aboriginal Heritage Act 2006*, which establishes programs and initiatives to ensure the protection and management of Victoria's Aboriginal cultural heritage. Main responsibilities include:

- Maintaining Victoria's Aboriginal cultural heritage management system
- Evaluating cultural heritage management plans and cultural heritage permits
- Keeping a register of Aboriginal places and objects in Victoria
- Supporting Traditional Owners in community led agreement-making through the 'Right People for Country Program'
- Supporting Registered Aboriginal Parties through funding and Cultural Heritage training programs.
- Compliance and enforcement investigations.

Aboriginal Victoria provides secretariat support for the Victorian Aboriginal Heritage Council to achieve its functions under the *Aboriginal Heritage Act 2006*. The Victorian Aboriginal Heritage Council works with key partners to shape policy and to build a better understanding and appreciation of Victoria's rich Aboriginal Heritage.

For the City of Yarra, the Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation is the appointed Registered Aboriginal Party (RAP) for the northern part of the municipality. There is currently no appointed RAP for the southern parts of the municipality.

The *Aboriginal Partnerships Plan 2015-2018* acknowledges the Wurundjeri people as the traditional custodians of the land within the City of Yarra. Council deeply values the Indigenous cultural heritage of the municipality; a heritage that reaches far back to ancient times and continues to this day. The spiritual connections to places within Yarra's municipal boundaries like the Yarra River and the confluence of the Yarra River and Merri Creek extend back thousands of years to the dreamtime. Since the early 1900s, Victoria's Aboriginal community has flocked to Yarra, in particular to Gertrude Street Fitzroy, to find that sense of community that is the strength of Aboriginal people. The Aboriginal Partnerships Plan includes a range of actions that strengthen the partnerships between Indigenous and non-Indigenous communities. With the waterways having important spiritual connections and open spaces across the city, particularly around Fitzroy and Collingwood, this plan supports continued strengthening of partnerships with the Wurundjeri to provide input the future management and interpretation of these important spaces in the city.

6.8.2 Non-Aboriginal Cultural heritage values

Whether a place is of non-Aboriginal cultural heritage significance is determined by Heritage Victoria. The following information is summarised from the websites of Heritage Victoria and the Heritage Council of Victoria.

Heritage Victoria is the Victorian State Government's principal cultural (non-Aboriginal) heritage Agency. Heritage Victoria identify, protect and interpret Victoria's most significant cultural heritage resources and give advice about heritage matters to private owners, local and state government, industry and the general community. Heritage Victoria administer the *Heritage Act 2017*, maintain the Victorian Heritage Register, recommend places and objects to be included on the Victorian Heritage Register and issue permits to make changes to heritage places and objects, protect Victoria's archaeological heritage and help conserve significant objects and collections.

The Heritage Council of Victoria is an independent statutory authority and Victoria's main decision-making authority on non-Indigenous cultural heritage issues. The provide advice to Heritage Victoria. The Heritage Council Victoria notes that 'Respect for our cultural heritage involves protecting places and objects that have importance to us as a community. Identifying and registering places and objects of cultural significance helps us to protect and conserve them. Heritage places and objects in Victoria are considered to be either of:

- State significance; or
- Local significance

Heritage places or objects of State significance are listed on the Victorian Heritage Register and must meet the Heritage Council of Victoria's assessment criteria. Places that are of State-level cultural heritage significance are managed in accordance with the Heritage Act 2017. Anyone can nominate heritage places and objects for addition to the Victorian Heritage Register. Registered heritage places are legally protected and cannot be altered without a permit or permit exception from Heritage Victoria.

Places of Local significance are recorded by local councils and are listed on a schedule to the Heritage Overlay in the local Council's planning scheme. Local government manages the identification and protection of places under the planning scheme. Councils are responsible for issuing planning permits for use and development of heritage places under the *Planning and Environment Act 1987*.

The National Trust is a community organisation that works towards preserving and protecting heritage places. Classification by the National Trust does not entail legal recognition.

In the City of Yarra the following open spaces have been identified to have local heritage significance and have existing Heritage Overlays acknowledging this in the Yarra Planning Scheme.

Table 6-2 Open spaces with existing heritage significance or included in an existing heritage overlay in the Yarra Planning Scheme

Open space	Heritage controls
Alexander Street Reserve	Included in the Gold Street Precinct Heritage Overlay HO321
Atherton Reserve	Included in the South Fitzroy Precinct Heritage Overlay HO334
Barkly Gardens	Included in the Barkly Gardens Precinct Heritage Overlay HO308
Bath Street Reserve	Included in Victoria Park Precinct Heritage Overlay HO337
Batman Street Reserve	Included in the North Fitzroy Precinct Heritage Overlay HO327
Batson Reserve	Included in the North Fitzroy Precinct Heritage Overlay HO327
Ben Alexander Reserve	Included in Richmond Hill Precinct Heritage Overlay HO332
Browns Reserve	Included in the Charles Street Precinct Heritage Overlay HO313
Bundara Street Reserve	Included in the North Fitzroy Precinct Heritage Overlay HO327
Burnley Park	Included in Heritage Overlay HO299 and HO298 Corroboree Tree
Cairns Reserve	Included in Elm Grove Precinct Heritage Overlay HO319
Circus Site Burnley	Included in Heritage Overlay HO299
Collingwood Childrens Farm	Included in the Abbotsford Convent Precinct and Heritage Overlay HO9
Condell Street Reserve	Included in the South Fitzroy Precinct Heritage Overlay HO334
Curtain Square	Included in the North Carlton Precinct Heritage Overlay HO326. - but no specific overlay - but has a Statement of Significance.
Darling Gardens	Heritage Overlay HO94
Dights Falls	Part is included in Heritage Overlay HO48
Edinburgh Gardens	Heritage Overlay HO213 and HO215
Edwards Place	Included in the North Fitzroy Precinct Heritage Overlay HO327
Fairfield Park	Heritage Overlay HO147 and HO146 on the Fairfield Park Boathouse
Frank King Park	Included in the South Fitzroy Precinct Heritage Overlay HO334
Gahan Reserve	Included in the Charles Street Precinct Heritage Overlay HO313
Garryowen Park	Included in the South Fitzroy Precinct Heritage Overlay HO334
George Street Reserve	Included in the South Fitzroy Precinct Heritage Overlay HO334
Golden Square	Included in the Golden Square Precinct Heritage Overlay HO322
Greeves Street Reserve	Included in the South Fitzroy Precinct Heritage Overlay HO334
Hardy Gallagher Reserve	Included in the Princes Hill Precinct Heritage Overlay HO329 - but no specific overlay - but has a Statement of Significance.
Holden Byrne Reserve	Included in the North Fitzroy Precinct Heritage Overlay HO327
Inner Circle Railway Reserve Parklands	Included in the North Carlton Precinct Heritage Overlay HO326 and North Fitzroy Precinct HO327.
Kevin Bartlett Reserve	Included in Heritage Overlay HO299

Open space	Heritage controls
King William Reserve	Included in the South Fitzroy Precinct Heritage Overlay HO334
Langdon Reserve	Included in the North Fitzroy Precinct Heritage Overlay HO327
Mark Street Linear Park	Included in the North Fitzroy Precinct Heritage Overlay HO327
McNamara Reserve	Included in the Gold Street Precinct Heritage Overlay HO321
Merri Creek Shared Trail (Upstream St Georges Rd)	Included in the North Fitzroy Precinct Heritage Overlay HO327
O'Connell Reserve	Included in Heritage Overlay HO228
Ottery Reserve	Included in the North Fitzroy Precinct Heritage Overlay HO327
Peel Street Park	Included in Collingwood Slope Precinct Heritage Overlay HO318
Peppercorn Park	Included in Richmond Hill Precinct Heritage Overlay HO332
Piedmontes Corner	Included in the North Fitzroy Precinct Heritage Overlay HO327
Porter Street Reserve	Included in the North Fitzroy Precinct Heritage Overlay HO327
Raines Reserve	Included in the Queens Parade Precinct Heritage Overlay HO330
Richmond Terrace Park	Included in Richmond Hill Precinct Heritage Overlay HO332
Smith Reserve	Included in the South Fitzroy Precinct Heritage Overlay HO334
Studley Street Reserve	Included in the Charles Street Precinct Heritage Overlay HO313
Thomas Kidney Reserve	Included in the North Fitzroy Precinct Heritage Overlay HO327
Victoria Park	Heritage Overlay HO352
Wangaratta Street Park	Included in Richmond Hill Precinct Heritage Overlay HO332
White Street Reserve	Included in the Green Street Precinct Heritage Overlay HO323
Whitlam Place	Included in the South Fitzroy Precinct Heritage Overlay HO334
Yarra Bend Park	Heritage Overlay HO300, HO301, HO302, HO307, HO305 (Kanes Bridge) and HO304
Yarra River Linear Trail (Swan St to Loyala Gv)	Included in HO299
Yarra River Trail (Abbot St to Turner St)	Part is included in Victoria Park Precinct Heritage Overlay HO337
Yarra River Trail (Bridge Rd to Swan St)	Part is included in Heritage Overlay HO299
Yarra River Trail (Johnston St to Clarke St)	Included in Heritage Overlay HO9

From the above list of 55 open spaces that either have Heritage Overlays that specifically apply to them, or are located within a Heritage Overlay Precinct, 4 open spaces have features that are listed on the Victorian Heritage Register and are therefore of State Significance. Heritage Places which are included on the Victorian Heritage Register are subject to the requirements of the *Heritage Act 2017*. These are listed in Table 6-3.

Table 6-3 Open spaces identified as Heritage Places on the Victorian Heritage Register

Open space	VHR Number	Heritage place
Dights Falls	H1522	Dights Mill Site is one of the earliest industrial archaeological sites in the state. HO48 in the Yarra Planning Scheme
Victoria Park	H75	Victoria Park is the former Collingwood Football Ground and the social focus of Collingwood and Abbotsford since the late 1800s and is a national sporting landmark. HO352 in the Yarra Planning Scheme
Yarra Bend Park	H1552	Fairlea Womens Prison, Yarra Bend Asylum (includes gate pillar and remnant trees) HO301 in the Yarra Planning Scheme
Edinburgh Gardens	H751	Fitzroy Cricket Club complex: Grandstand, Timber Gatehouse, Entrance Gateway, Brick Gatehouse HO215 in the Yarra Planning Scheme

6.8.3 Public art

The Strategy supports the role public art has in strengthening and reflecting the local community, cultural heritage, contemporary culture and the inherent landscape character in open space. Public art and cultural activities contribute to the sense of place and community ownership of open space. The guidelines included in this Strategy refer only to the context of public art in open space. The Strategy relies on other council guidelines and policies regarding the appropriate method for commissioning public art. This includes the *City of Yarra Public Art Policy 2015-2020* and the *City of Yarra Graffiti Management Framework 2015-2020*.

Guidelines for locating public art in open space:

- Appropriate in Regional, City-wide and Neighbourhood open space. It may also be appropriate in Local and Small Local where the open space is highly visible (such as public squares and gateways) and/or located within urban centres and high density precincts.
- Proposals for specific installations are to demonstrate they complement and reflect the intrinsic natural, cultural and community values of the existing or future open space and contribute to the intended use and role of the open space in which it is proposed.
- Future Masterplans for Regional, City-wide and Neighbourhood open space or highly visible open space such as public squares and gateways are to consider the integration of public art as a component of design. The Masterplan does not need to include the design of the artwork, but identify the potential site and design parameters of a future commission.
- Permanent installations need to demonstrate they meet relevant standards in relation to design in an outdoor public environment. This includes public safety and risk; longevity; acceptable levels of maintenance and vandalism.

Guidelines for locating public art in open space:

- e) Propose an acceptable process for undertaking any future modifications to the artwork if any significant changes are required to meet updated regulatory design standards.
- f) Appropriate levels and methods for stakeholder and community consultation are to be conducted for any new public art proposal where it is proposed outside a design planning process.

6.8.4 Memorials in open space

Memorials and monuments can contribute to the cultural value of the community and the desire and expectations to commemorate people, events and places of significance. A balance needs to be achieved when considering installation of new or upgrade of existing memorials, with all uses and values of existing open space.

The following guidelines are to assist Council in developing a policy regarding memorials in open space and in the interim for reviewing requests for memorials in open space on a case-by-case basis.

Guidelines for assessing the appropriateness for proposals for new or retention of existing memorials in open space:

- a) The request for a memorial is to be reviewed for consistency with the use and character classification for the open space.
- b) The level of contribution the memorial will have on the cultural and community values of the open space in the municipality. This includes assessment of the artistic merit of the proposal consistent with the directions outlined in the *City of Yarra Public Art Policy*.
- c) The management and maintenance requirements of the proposed memorial.
- d) Small memorials would need to demonstrate the positive relationship between the community, the person, the organisation or the event to be commemorated and the open space in which it is proposed.
- e) If Council accepts a proposal for a memorial, it becomes the property of the City of Yarra and ongoing maintenance and issues regarding its relocation, removal or decommissioning will be at Council's discretion.
- f) For existing minor memorials in open space that need to be removed or relocated due to upgrade works, the following protocols will be applied:
 - Council will undertake reasonable steps to contact the donor to return the memorial to them.
 - If the donor requests to retain the memorial in open space, it will be assessed as to the suitability of it in the context of contemporary guidelines and policies.

6.9 Festivals and events

The City of Yarra Arts and Culture Strategy 2016-2020 recognises that the community is made up of people from all walks of life, from many different cultures with a diversity of needs and experiences. Council takes the role of leader and custodian of Yarra's creative community seriously and recognises the value of the creative identity as a key feature of what defines the City of Yarra.

The Arts and Culture Strategy encourages and supports community festivals and events in the public realm including streetscape and public open space. It notes that more 20 cultural festivals and events are held every year along with many local, grassroots and community celebrations.

Existing public open spaces that are available on Council's website for booking facilities in to hold events include:

- **Circus Site**, Burnley with Expressions of Interest required for events of more than 100 people
- **Barkley Gardens** including four defined areas within the Gardens, two of which are suitable for small to medium sized events and two are suitable for large events.
- **Darling Gardens** including seven defined areas within the Gardens including the rotunda which is bookable.
- **Edinburgh Gardens** including four defined areas, two of which are the rotundas and two are open grassed areas defined by paths and trees.
- **Fairfield Park** including two defined area, one of which is the Fairfield Park Amphitheatre which accommodates up to 350 people.

All prospective event organisers need to complete and submit an application through the Yarra City Arts website.

The guidelines included in this Strategy address open space issues only. It is assumed that Council will continue to implement broader policies for festivals and events taking into consideration open space related criteria included in this Strategy.

6.9.1 Community festivals and events open space

Selecting the most appropriate open space for community festivals and events and family gatherings (i.e. 20 people or more) requires consideration in the future. While Council supports and encourages these in open space, Council officers did raise issues associated with the impacts of events and festivals in open space. This is mainly on the health and quality of vegetation with concerns regarding impact on mature trees, particularly compaction of their root zones and also damage to the trees with inappropriate use during events.

The following guidelines are specific only to the selection of appropriate open spaces and locations within them for holding festivals and events. They also provide guidance regarding management of the events in relation to the ongoing community use and enjoyment of outdoor public open space.

Guidelines for assessing appropriateness of community festivals in open space:

- a) Regional and City-wide open space are generally the most appropriate hierarchy of open space for major community festivals and events.
- b) Neighbourhood open space may be suitable for smaller community events subject to demonstrating the anticipated size and impact on traffic access, noise levels and neighbourhood amenity can be reasonably managed.
- c) Proposals for community festivals and events are assessed and where necessary, prioritised based on the following:
 - Enhances sense of community and neighbourhood spirit.
 - Increases community appreciation of the recreational, cultural or natural character and values of the municipality.
 - Has relevance to the community and encourages their attendance, participation, and where appropriate, fitness.
 - Compatible with community expectations regarding appropriate use of public open space.
 - Demonstrates how community access and use of public open space will be achieved and managed for the duration of the festival/event.
- d) Applicants are to prepare event management plans appropriate to the scale of the event including measures to proactively prevent damage to the open space for the duration of the festival/event.
- e) The on-line applications and guidelines are to be updated to define more specific requirements for the protection of existing trees in open space, particularly the older established trees to prevent damage.
- f) All festivals/events to demonstrate best practice management including promoting community health and wellbeing and sustainability.
- g) Provision of waste management plan outlining sufficient waste infrastructure arrangements in accordance with waste minimisation principles and the *Waste Minimisation Strategy*.

6.9.2 Commercial or private events and functions in open space

Guidelines for assessing appropriateness of commercial or private events and functions in open space:

- a) Appropriate in Regional and City-wide open space or selected smaller scale open space where they are located in activity centres.
- b) Demonstrate the event will have a positive contribution to the community and cultural diversity of Yarra.
- c) Demonstrate how local community access and use of open space will be achieved for the duration of the event.
- d) Whether the applicant is based in the City of Yarra.
- e) Demonstrate the event and associated infrastructure will not unduly restrict or impact on the use and enjoyment of the open space by nearby/adjoining residents and workers.

Guidelines for assessing appropriateness of commercial or private events and functions in open space:

- f) Demonstrate that the event and associated infrastructure will not permanently damage mature trees, open grassed areas, plants, natural or built features. Any remediation works will be required to be undertaken either by the event organisers or at their cost at Council's discretion.
- g) Demonstrates the impact of noise, anticipated participants, temporary facilities/infrastructure, site set up and clean up etc are effectively addressed as part of the application process.
- h) Provision of waste management plan outlining sufficient waste infrastructure arrangements in accordance with waste minimisation principles and the *Waste Minimisation Strategy*.

6.9.3 Commercial use of facilities in open space

A diverse range of commercial use of facilities in open space can occur ranging from personal trainers, product launches and photo shoots. Applications for commercial use of open space are to be submitted for Council assessment and fees are to be payable prior to conducting these activities in open space. The key ongoing issue for open space is to achieve a balance between commercial use of facilities and accessibility and use of these facilities by the general public. Applications to conduct commercial 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 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 unduly impacted or reduced.
- c) There is a demonstrated community benefit from the proposal.
- d) All proposed activities and use to have a minimal impact on the environment and 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.

6.10 Design and management plans for open space

6.10.1 Overview

Council has a range of existing plans that guide design and management of existing open space. The Strategy identifies the need for Council to prepare additional plans for selected open spaces to guide future upgrades. Preparation of the plans allows for comment and input to the design from relevant Council officers and the community.

The design process for open space reserves is scaled to match the size and function of the open space. Regional, City-wide and Neighbourhood open space have a broader catchment of users and frequently a range of community stakeholder groups such as community organisations and sporting clubs. Masterplans are recommended to be prepared when major works are required for these open space reserves. The consultation process is designed to consult with the broader catchment of users and stakeholders. Additional to the Masterplan, there can be a need to prepare management plans for some of these types of open space, particularly where they have environmental and/or cultural heritage values.

Local and Small Local open space have a smaller catchment of users, and these are mainly the local resident and worker community within walking distance of them. Major upgrades or new open space typically requires a Landscape Concept Plan, with a consultation process focussed on the local community within the walking catchment. Where the upgrades are minor, then preparation of a formal plan is not generally required.

6.10.2 Masterplans

Masterplans will guide the future design of Regional and City-wide open space across the municipality. Where open space has heritage values, investigate if a conservation management plan is required. If required, prepare the conservation management plan prior to the Masterplan. The following framework guides the future preparation of the Masterplan:

Framework for preparing Masterplans

- a) Provide an overall design and management direction for the open space for approximately 10 years.
- b) Consultation is typically undertaken with 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. The Open Space Strategy Survey outcomes (Appendix A to this Strategy) can be referred to during the research phase. This may replace the need to undertake consultation with the local community during the research phase, pending the quantity of surveys received in the relevant precinct. .

Framework for preparing Masterplans

- c) Outputs of a Masterplan typically include:
 - scaled drawing of existing conditions and site analysis
 - scaled drawing of design with explanatory notes, photos, sketches etc.
 - management descriptions where appropriate
 - preliminary estimate of probable cost for all the works
 - staged implementation plan
 - summary masterplan report incorporating all the above.

6.10.3 Landscape Concept Plans

Landscape Concept Plans will guide the future design of Neighbourhood, Local and some Small Local open space reserves. These plans are prepared primarily to ensure a coordinated approach to facility provision is achieved and to obtain community input to the future open space design. The process to prepare these will vary depending on the level of complexity. All new open space will require concept plans to be prepared.

Framework for preparing Landscape Concept Plans:

- a) Provide an overall design direction for the open space for approximately five years, as works are generally implemented within this timeframe.
- b) The Landscape Concept Plan is to be guided by a working group made up of relevant Council officers as required.
- c) Consultation at the research phase can either rely on the Open Space Survey outcomes in Appendix A of this Strategy, or be undertaken with the community living within the walking catchment of the open space. Consultation at the research phase will vary depending on the individual reserve. Consultation on the Draft Design will normally include at least the display of the plan on site with a description of how to comment.
- d) Outputs of a Landscape Concept Plan for upgrades to **existing** open space is 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.
- e) Outputs of a Landscape Concept Plan for new open space is to include:
 - scaled drawing of existing conditions and site analysis including scaled tree protection zones for all existing mature trees
 - scaled design with explanatory notes regarding design features and management recommendations
 - preliminary opinion of probable cost for all the works.
- f) Review of relevant Council strategies and demonstrate compatibility and where feasible multiple benefits to assist implementation of other strategies.
- g) Consideration of existing drainage requirements on site to ensure the new design allows for existing overland flows. As constructed drawings to be supplied once the new infrastructure is built.

6.10.4 Heritage and nature conservation values

6.10.4.1 Conservation Management Plans

Conservation Management Plans (CMP) are prepared for open space identified to be of heritage significance in the existing heritage studies or included on the Victorian Heritage Register and Database. The following table identifies the status of the existing CMPs or similar. The open space is listed in alphabetical order.

Open space	Existing guidelines and plans	Additional plans
Alphington Park	Heritage Assessment completed, 2007	Update the Masterplan
Barkly Gardens	Landscape Masterplan, 2006 prepared by John Patrick with consideration of the heritage values	Update the Masterplan
Burnley Park	Conservation Management Plan 2007 and Landscape Masterplan prepared 2003 before the CMP	Review the Landscape Masterplan in the context of the CMP.
Curtain Square	Conservation Analysis, 2001 and Curtain Square Site Management Plan 2011 to address tree health and possum grazing	None
Darling Gardens	Darling Gardens Cultural Significance and Conservation Policies, 1993 and Darling Gardens: A timeline 1852-1922 and the Darling Gardens Masterplan, 2015	None
Edinburgh Gardens	Conservation Management Plan, 2004 and Landscape Masterplan	None
Fairfield Park Masterplan	Draft Conservation Management Plan 2009 and Landscape Masterplan, 2010	None
Inner Circle Railway Linear Parkland	Conservation Management Plan 2005 and Landscape Masterplan, 2006	Update the Masterplan

The Strategy recommends that prior to major works being undertaken in open space listed in Table 6-2 in this Strategy that a preliminary assessment of heritage values and character is prepared. The preliminary assessment will be undertaken by referring to the existing heritage studies and on site assessment. If an open space is identified as requiring a more detailed heritage assessment, then this is to be prepared for the open space prior to the preparation of any design plans or major works.

6.10.4.2 Nature conservation values

If the open space has any identified nature conservation values, then the appropriate investigation into these values and appropriate protection measures for them is to be undertaken prior to the preparation of any design plans or major works. This includes reference to the Biodiversity Health Survey (Practical Ecology 2018) and any subsequent strategies and plans that provide further direction and guidance regarding these values.

6.10.5 Detailed design and construction

For all types of open space, once the Masterplans and Landscape Concept Plans are completed and approved by Council, they will be implemented subject to available funding and priorities.

Where the plans include major upgrades for the entire reserve, or significant changes to existing facilities and infrastructure, detailed design would be undertaken to produce a set of detailed documentation drawings to guide the construction. Feedback from internal stakeholders will be sought during the detailed design phase as required for the specific project and may include urban design, streetscapes, natural values, drainage, maintenance etc.

For all new open space being constructed by parties other than Council, detailed documentation drawings are to be prepared and submitted to Council for approval prior to tender and commencement of works.

Where the works to existing open space are minor and straightforward, Council may select to implement the works directly from the Landscape Concept Plan or Masterplan in a staged program pending funding.

6.11 Open space maintenance

The open space surveys indicate that the community is generally satisfied with the maintenance of open space. Public toilets and drinking fountains are the facilities that received greater the highest level of dissatisfaction. In the same survey the community identified that more are required and they are the sixth and fourth most used facility in open space. *The City of Yarra Public Toilet Strategy 2017-2027* provides direction for their provision, design and maintenance.

From the site assessment work, consultation with Council officers and research, the key issues associated with maintenance is vegetation and the diversity of new infrastructure in open space and the longer term ongoing maintenance costs associated with the increased amount of infrastructure.

6.11.1 Vegetation maintenance and management

Trees

Trees are the most valued features within open space and they make a significant contribution to the character and liveability of Yarra. *The City of Yarra Urban Forest Strategy 2017* provides a clear charter for the future custodianship of Yarra's street and park tree population. The Urban Forest Strategy highlights the multiple benefits of trees including the health and wellbeing benefits, environmental benefits and the economic benefits.

Council to consider the following guidelines in future management of trees in open space:

- a) Maximise retention of mature indigenous, native and exotic canopy trees in open space, including measures to allow adequate watering from sustainable water sources during dry periods.
- b) In future open space design maximise opportunities for planting large, long-lived broad spreading canopy trees and locate recreational infrastructure to benefit from the trees but demonstrate they will not compromise their health.
- c) Increase the diversity of tree species in future plantings to build resilience in the tree population.
- d) In higher density precincts ensure that future open spaces are large enough to allow planting of large canopy trees in addition to providing adequate space for recreational use.
- e) When recreational infrastructure that is located under large remnant trees requires upgrade or replacement, relocate them away from under the canopy of large trees in preference to pruning and modifying the tree.

Remnant native vegetation

Council to continue to protect and maintain the remnant indigenous vegetation and buffer zones around them in open space in accordance with site specific management plans and best practice.

Change to maintenance levels in open space in activity centres

Current research into the 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. Research also indicates that green open space with moisture absorbing surfaces including large trees, garden beds and grassed areas assist with urban cooling in high density precinct. With the forecast increased urban densities in Yarra, there will be an increase in the number of open spaces with natural features that require ongoing maintenance. Council will need to plan ahead to consider how this will be resourced in the future.

Open grassed areas

Open space survey respondents indicated that open grassed areas were the second most well used facility in open space in the City of Yarra following walking paths. Grassed areas are valued by the community for structured sport, unstructured recreational activities and for sitting/relaxing on. Open grassed areas are also moisture absorbing surfaces that assist in urban cooling and mitigating urban heat island effect.

Council officers identified there is a potential need to consider irrigating selected open grassed areas in open space so they can be more intensively used by the community for a range of activities including dog walking and informal ball sports. If this occurs then adequate resourcing of ongoing maintenance of these areas will need to be addressed.

Management of compaction and poor soil health

Natural open space areas are suffering from heavy compaction, depleted nutrients, minerals and biological activity due to age and heavy use. Maintenance needs to consider soil health and suitable de-compaction measures as part of the ongoing works.

6.11.2 Public toilets

The open space survey respondents were least satisfied with the maintenance of existing public toilet facilities in open space. Respondents also requested additional public toilets be provided in open space. The provision, design and maintenance of public toilets is provided in the *City of Yarra Public Toilet Strategy 2017-2027*.

6.11.3 Paths

There is a high level of satisfaction with the maintenance of paths in the open space survey. As walking, dog walking and cycling are the most popular activities in open space, continued maintenance of existing walking paths and provision of additional paths where appropriate is required.

6.12 Other agency open space ownership and management

A number of other agencies own and manage some of the open space in the City of Yarra. This mainly occurs along the linear open space corridors and waterways.

The City of Yarra adjoins six other municipalities as follows:

- Cities of Darebin and Moreland to the north
- City of Melbourne to the west
- Cities of Boroondara and Banyule to the east
- City of Stonnington to the south

Use of linear open space reserves along waterways is the main reason visitors are using open space in adjoining municipalities. Future planning of facilities along these linear reserves is recommenced to continue to be coordinated between the various councils. Residents and workers in the City of Yarra also visit other open spaces in adjoining or nearby municipalities with some of the key open spaces being Princes Park, Royal Botanic Gardens Melbourne, Fitzroy Gardens and Carlton Gardens.

6.12.1 Adjoining councils

No.	Recommendation	Responsibility	Priority
6.12-1	Liaise with the City of Melbourne Regularly liaise with the City of Melbourne regarding the design and connectivity between open space in adjoining the boundary, including Princes Park, Gosch's Paddock, Yarra Park, Carlton Gardens and the Fitzroy Gardens	YCC City of Melbourne	Ongoing
6.12-2	Liaise with the City of Darebin Regularly liaise with the City of Darebin regarding the design and connectivity between the linear open space system along the Merri Creek and Darebin Creek.	YCC City of Darebin	Ongoing
6.12-3	Liaise with the City of Moreland Regularly liaise with the City of Moreland regarding the design and connectivity of open space along the Inner Circle Railway Linear Parklands. This includes consideration of overshadowing of the open space from private land to the north of the reserve.	YCC City of Moreland	Ongoing
6.12-4	Liaise with the City of Stonnington Regularly liaise with the City of Stonnington regarding the design and connectivity of open space along the Yarra River corridor.	YCC City of Stonnington	Ongoing

No.	Recommendation	Responsibility	Priority
6.12-5	Liaise with the City of Boroondara Regularly liaise with the City of Boroondara regarding the design and connectivity of open space along the Yarra River corridor. This includes pedestrian and cycle bridge crossings over the Yarra River given the lack of a continuous open space system on the City of Yarra side of the River. This includes fauna protection programs such as recent research with sugar gliders, pedestrian and cycle bridge crossings.	YCC City of Boroondara	Ongoing
6.12-6	City of Banyule Regularly liaise with the City of Banyule regarding the design and connectivity of the shared trail along the Darebin Creek. Refer also to Action 6.12-9.	YCC City of Banyule	Ongoing

6.12.2 Victorian government agencies and committees

6.12.2a Parks Victoria

No.	Recommendation	Responsibility	Priority
6.12-7	Liaise with the Parks Victoria regarding future structured sporting facilities at Yarra Bend Park Liaise with Parks Victoria regarding the potential increased role that City of Yarra can have in the ongoing design, management and maintenance of the structured sporting facilities at Yarra Bend Park. This is to better meet the existing and forecast structured sporting needs of the City of Yarra population in the future.	YCC PV	Very High
6.12-8	Liaise with Parks Victoria regarding the future provision of the Main Yarra Trail in Abbotsford Continue to liaise with Parks Victoria to identify opportunities to achieve a continuous off-road Main Yarra Trail link along the western side of the Yarra River. This includes advocating for the purchase of the linear open space corridor for the land included in the Public Acquisition Overlay 2 (PAO2) along the Yarra River corridor through Abbotsford between Gipps Street and the Walmer Street Footbridge. The PAO2 is in favour of the Minister responsible for administering Part 2 of the Crown Land (Reserves) Act 1978 for the creation of a continuous linear park/trail system adjacent to the waterway.	YCC PV	Very High

No.	Recommendation	Responsibility	Priority
6.12-9	<p>Liaise with Parks Victoria regarding the future management of the Darebin Creek Trail in Alphington</p> <p>Liaise with Parks Victoria to confirm ongoing responsibility and status of land purchase for the Darebin Creek Trail between Sparks Reserve (in the City of Banyule) and the Main Yarra Trail (in City of Boroondara).</p>	<p>YCC</p> <p>PV</p> <p>City of Banyule</p> <p>City of Boroondara</p>	Very High

6.12.2b Melbourne Water

No.	Recommendation	Responsibility	Priority
6.12-10	<p>Liaise with Melbourne Water regarding the Main Yarra Trail located on their land</p> <p>Liaise with Melbourne Water to confirm the current status of all facilities located on their land to confirm that agreements are in place to retain and maintain these facilities on their land.</p>	<p>YCC</p> <p>MW</p>	Medium
6.12-11	<p>Funding applications</p> <p>Continue to apply for future grants to Melbourne Water for future revegetation and water quality improvement projects along the Yarra River, Merri Creek and Darebin Creek.</p>	<p>YCC</p> <p>(MW)</p>	Ongoing
6.12-12	<p>Regular liaison regarding future works</p> <p>Regularly liaise with Melbourne Water regarding future works along the waterways to build on opportunities for complementary works to be undertaken by both agencies to improve water quality, instream habitat and riparian habitat values.</p>	<p>YCC</p> <p>MW</p>	Ongoing

6.12.2c VicTrack

No.	Recommendation	Responsibility	Priority
6.12-13	<p>Liaise with VicTrack regarding open space on their land</p> <p>Council to liaise with VicTrack as required regarding for future opportunities to expand the open space and or linear path network on VicTrack owned land.</p>	<p>YCC</p> <p>VicTrack</p>	Ongoing

6.12.2d Department of Health and Human Services (DHHS)

No.	Recommendation	Responsibility	Priority
6.12-14	Liaise regarding potential conversion of selected public housing land to open space Council to liaise with DHHS regarding the potential for conversion of part of the public housing land in North Richmond to public open space, as identified in Action 7.10A-1.	YCC VicTrack	Ongoing

6.12.2e Department of Education and Training (DET)

No.	Recommendation	Responsibility	Priority
6.12-15	Liaise regarding shared use of school grounds Council to regularly liaise with DET regarding the potential for shared access to school sport and recreation facilities including access to school grounds after school hours.	YCC DET	Ongoing

6.12.2f Merri Creek Management Committee (MCMC)

No.	Recommendation	Responsibility	Priority
6.12-16	Liaise regarding ongoing works and funding Council to regularly liaise with MCMC regarding plans and projects along the Merri Creek. Additionally, explore opportunities to seek funding for projects on Merri Creek with MCMC.	YCC MCMC	Ongoing

6.12.2g Darebin Creek Management Committee (DCMC)

No.	Recommendation	Responsibility	Priority
6.12-16	Liaise regarding ongoing works and funding Council to regularly liaise with DCMC regarding plans and projects along the Darebin Creek.	YCC DCMC	Ongoing

7. Precinct analysis and recommendations

The City of Yarra comprises the ten different precincts and the analysis and planning for open space has been undertaken at the precinct level. These precincts are defined by the City of Yarra in the Community Profile, and shown in Figure 7A below.

For the purposes of the Strategy the ten precincts have a series of open space precincts within them which are defined by barriers to safe and easy walking access to open space being major roads, railways and waterways. These are illustrated in Figure 7B on the following page.



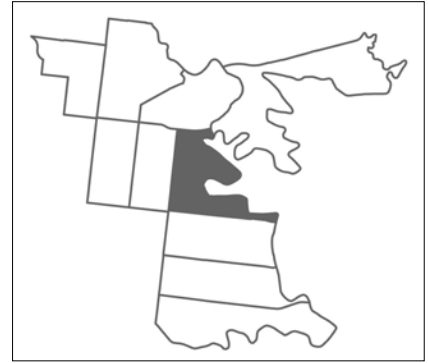
Figure 7A City of Yarra Precincts

Source: .Yarra Community Profile, .id Consulting <https://profile.id.com.au/yarra>



Figure 7B City of Yarra Open Space Precincts

The precincts are assembled in alphabetical order in the chapter and the recommendations are based on applying the open space framework described in Sections 1 to 5 of this Strategy. Each precinct includes a diagram that illustrates the Precinct Recommendations including the sub-precincts in which proposed new open space is located.



7.1 Abbotsford

7.1.1 Introduction

With the Yarra River along the boundary of this precinct, residents in Abbotsford value the diversity of spaces, the natural bushland qualities, and identify the need for additional space as urban density increases. Other key character open spaces in Abbotsford include Victoria Park which is the former home of the Collingwood Football Club, Gahan Reserve, Dights Falls and Collingwood Children's Farm on the Yarra River.

The land use of Abbotsford is mixed with a combination of residential areas ranging from predominantly single and double storey worker cottages and terraces to medium and high density residential apartments along the Yarra River. The higher density residential along with business and commercial land use, is located in Trenerry Crescent north of Johnston Street and Victoria Crescent south of Gipps Street.

Abbotsford also has some core industrial precincts with the largest being the Carlton and United Brewery along with a range of smaller industrial uses north of Gipps Street, which also directly adjoin the Yarra River corridor.

Victoria Street is a key retail precinct in the City and the *Victoria Street Structure Plan*, adopted by Council in April 2010, provides the key direction for the future expansion and change within it. Hoddle Street is also a key employment precinct in Abbotsford which extends to the railway corridor and includes the Collingwood Town Hall.

The *Yarra Housing Strategy* (2018) provides direction on the future level of change for residential use within the precinct.

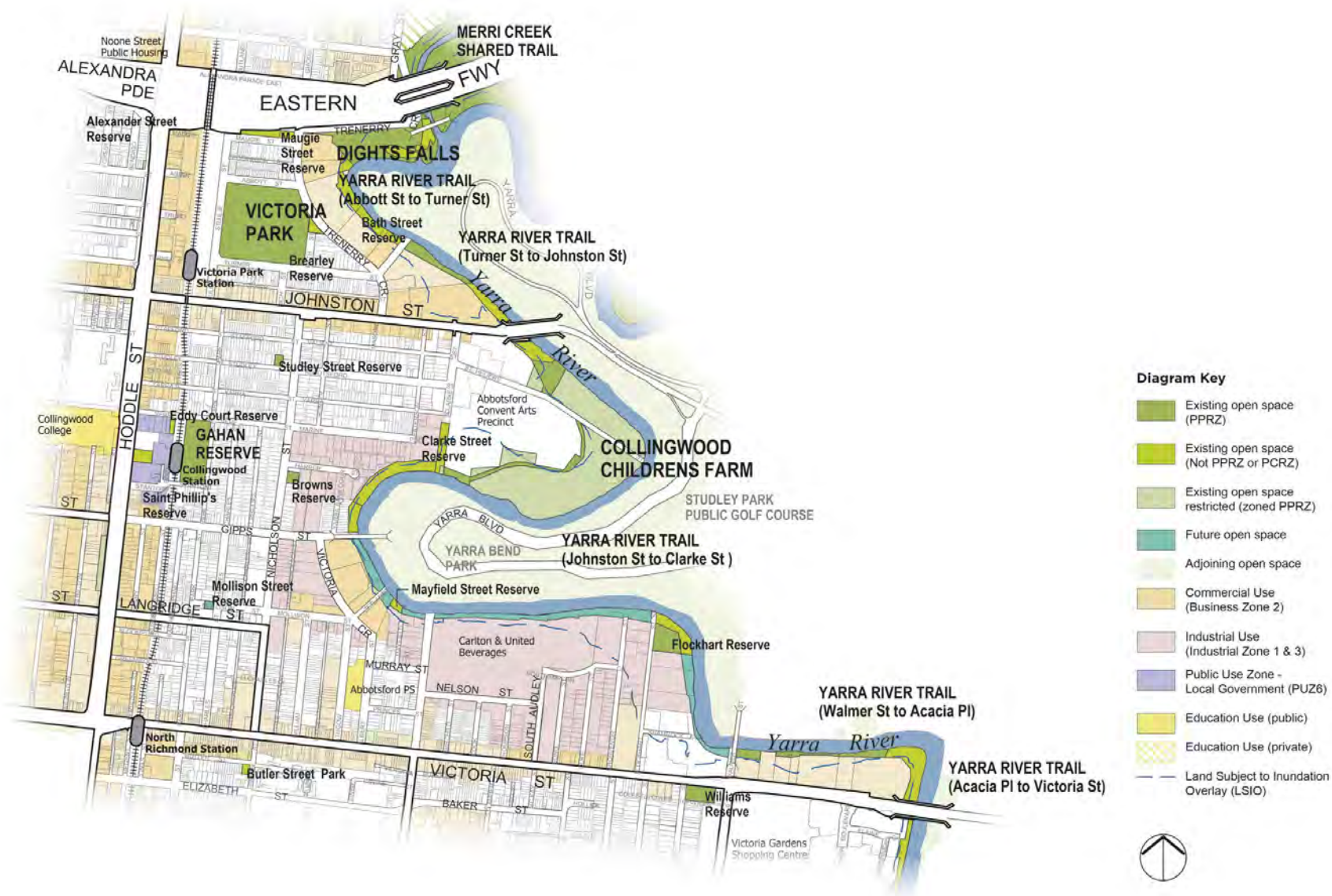


Figure 7.1A Existing open space in Abbotsford

7.1.2 Existing open space

7.1.2a Description

Johnston and Gipps Streets are major east-west roads and along with the Church Street define the four open space sub-precincts, Abbotsford A, B, C and D.



Figure 7.1B Open space sub-precincts for Abbotsford

Abbotsford A

- Open space sub-precinct Abbotsford A is located between the Eastern Freeway and Johnston Street and from Hoddle Street in the west across to the Yarra River to the east.
- Open space located in this sub-precinct includes
 - Bath Street Reserve
 - Brearley Reserve
 - Dights Falls
 - Maugie Street Reserve
 - Victoria Park
 - Yarra River Trail (Abbot St to Turner St)
 - Yarra River Trail (Turner St to Johnston St)
- Open space in this sub-precinct is well provided for. Dights Falls and the two sections of the Yarra River Trail are the key areas of Regional open space along the Yarra River. Victoria Park provides City-wide open space, with Brearley Reserve designated as a Local open space separate from Victoria Park so that it is primarily designed for the local community and can be available for community use when Victoria Park is being used for structured sport. Bath Street Reserve is a linking space with seating that caters to casual use whereas Maugie Street Reserve provides

greening and a buffer between the Eastern Freeway and residential dwellings to the south.

- The land use is predominantly residential and open space east of the railway and non-residential west of the railway.
- The *Yarra Housing Strategy* (2018) identifies a high change area near the corner of Hoddle Street and Johnston Street and a moderate change area along Johnston Street and around Trenerry Crescent. The balance areas directly adjoining Victoria Park are designated as minimal change areas.
- The *Yarra Spatial Economic and Employment Strategy* (2018) identifies that non-residential use is supported in the Hoddle Street Employment Precinct on the north side of Johnston Street, east of Walmer Street footbridge. This is to support the diversity of businesses and employment opportunities in the precinct.

Abbotsford B

- Open space sub-precinct Abbotsford B is located between Johnston and Gipps Streets and bounded by Hoddle Street to the west and the Yarra River to the east.
- Open space located in this sub-precinct includes
 - Browns Reserve
 - Clarke Street Reserve
 - Collingwood Children's Farm
 - Eddy Court Reserve
 - Gahan Reserve
 - Saint Philip's Reserve
 - Yarra River Trail (Johnston St to Clarke St)
- The Yarra River Trail is well used Regional open space and while the Collingwood Children's Farm is restricted open space and available on a fee paying basis only, views across the farm are enjoyed from the Main Yarra Trail directly adjoining it.
- Gahan Reserve is the key Neighbourhood open space for this sub-precinct and is located near the Collingwood Railway Station.
- Browns Reserve is a well-developed Small Local open space and Studley Street Reserve provides a play facility located in the heart of the local residential area.
- Accessed via the Main Yarra Trail, Clarke Street Reserve has the potential to be improved providing seating/viewing/picnic areas with excellent views over the Yarra River corridor and the Abbotsford Convent Arts Precinct. For this reason, this reserve is nominated as a Local open space.
- The land use includes the Collingwood Town Hall, the non-residential use along Hoddle Street and large areas of residential use comprising mainly original single storey terraces. Adjacent to the Yarra River there is a non-residential area between Clarke and Gipps Streets.
- The *Yarra Housing Strategy* (2018) includes a high change area on Johnston Street near the railway, with moderate change along Johnston Street and minimal change in the majority of the precinct and smaller incremental change areas.
- The *Yarra Spatial Economic and Employment Strategy* (2018) identifies that non-residential use is supported in the Hoddle Street Employment Precinct and adjacent to the Yarra River between Clarke Street and Gipps Street. This is to support the diversity of businesses and employment opportunities in the precinct.

Abbotsford C

- Open space sub-precinct Abbotsford C is located between Gipps Street and Victoria Street, and bounded by Hoddle Street on the west and Church Street to the east.
- Open space located in this sub-precinct includes:
 - Mollison Street Reserve
 - Mayfield Street Reserve
- Mollison Street Reserve is a recently established new Small Local open space providing seating and a small open grassed area.
- Mayfield Street Reserve is an area of open space along the Yarra River but is currently not accessible due to private land on either side of it.
- The *Yarra Housing Strategy* (2018) includes a high change area on Johnston Street near the railway, with moderate change along Johnston Street and minimal change in the majority of the precinct and smaller incremental change areas.
- The *Yarra Spatial Economic and Employment Strategy* (2018) identifies that non-residential use is supported in the Hoddle Street Employment Precinct and adjacent to the Yarra River between Clarke Street and Gipps Street. This is to support the diversity of businesses and employment opportunities in the precinct.

Abbotsford D

- Open space sub-precinct Abbotsford D is located east of Church Street and bounded to the north and east by the Yarra River and to the south by Victoria Street.
- Open space located in this sub-precinct includes:
 - Flockhart Reserve
 - Yarra River Trail (Acacia Pl to Victoria St)
 - Yarra River Trail (Walmer St to Acacia Pl)
- Flockhart Reserve directly adjoins the Yarra River and provides a bushland setting and open grassed area with picnic facilities in the adjoining Drainage Reserve.
- The Yarra River Trail is linear open space.
- Mayfield Street Reserve is an area of open space along the Yarra River but is currently not accessible due to private land on either side of it.

7.1.2b Quantity of open space in Abbotsford

The 18 existing open spaces in Abbotsford have a combined total area of 13.39 hectares. This represents approximately 7.5 per cent of the total land area of the precinct. Additionally there is one existing restricted open space, Collingwood Children's Farm, that is 8.73 hectares in size. Adding the restricted open space to the other 18 open spaces results in a total of 22.12 hectares and represents 12.4 per cent of the total land area of the precinct.

Table 7.1-1 Number, size and type of open space

No	Hierarchy	Area (ha)	%
7	Regional	7.19	54%
1	City wide	3.79	28%
1	Neighbourhood	1.03	8%
4	Local	1.04	8%
5	Small Local	0.34	3%
18	TOTAL	13.39	100%

7.1.2c Open space hierarchy, character and quality

The linear open space along the Yarra River is an important habitat and recreational corridor for wider Melbourne. It is therefore designated as a Regional open space and is managed to protect and improve the habitat and recreational values. Access to the Yarra River itself, the bushland and natural qualities of this linear corridor are key reasons people visit this open space. Dights Falls and Collingwood Children's Farm are key destinations on the Yarra River in this precinct. Notably, from Clarke Street Reserve to Walmer Street Footbridge there is no linear public open space along the City of Yarra side of the Yarra River. This is a key gap in the linear open space system identified in Section 3.4.2 of the Strategy

The sporting facilities at Victoria Park provide the context for the City-wide hierarchy and its sporting character classification. While the main oval is used for elite level structured sport, it also receives high levels of unstructured recreation and informal uses, including exercising dogs, informal ball sports and jogging around the oval. Victoria Park is the former home of the Collingwood Football Club and the oval is used by the Collingwood Football Club for VFL matches, training and also by the AFLW. The reserve is listed as being of state significance on the Victorian Heritage Database as the former the home for the Collingwood Football Club from 1892 until 2005. There is potential to upgrade Victoria Park to a Regional classification given the heritage values and the standard of the facilities.

Gahan Reserve is the only Neighbourhood open space in the precinct, and the community surveys identified this as the most visited open space in Abbotsford. There is potential for improvement to the design and facilities in the open space to better meet the diverse community who live and work nearby.

The network of Local and Small Local open spaces have different characters and south of Gipps Street form the only open space reserves other than the Regional open space on the Yarra River. With the increased urban densities in this precinct, the Local and Small Local open spaces have the potential to have a greater role in urban greening and cooling.

Table 7.1-2 Existing open space, hierarchy and character classification

Name	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Bath Street Reserve	0.08	Small Local	Informal	
Brearley Reserve	0.34	Local	Informal	Nature conservation
Browns Reserve	0.09	Small Local	Informal	
Clarke Street Reserve	0.28	Local	Linking space	Seating/viewing, Waterway
Dights Falls	2.37	Regional	Waterway	Nature conservation, Heritage
Eddy Court Reserve	0.05	Small Local	Linking space	
Flockhart Reserve	0.75	Regional	Waterway	Nature conservation, Informal, Linking space
Gahan Reserve	1.04	Neighbourhood	Public garden	Heritage, Linking space
Maugie Street Reserve	0.26	Local	Significant road reservation	Urban heat mitigation
Mollison Street Reserve	0.05	Small Local	Formal	Urban heat mitigation
Saint Phillip's Reserve	0.16	Local	Formal	
Studley Street Reserve	0.06	Small Local	Informal	Play
Victoria Park	3.79	City-wide	Sporting	Heritage, Formal, Urban plaza
Yarra River Trail – Acacia Pl to Victoria St	0.69	Regional	Waterway	Linear, Nature conservation
Yarra River Trail – Johnston St to Clarke St	1.13	Regional	Linear	Waterway, Heritage
Yarra River Trail – Turner St to Johnston St	0.54	Regional	Waterway	Linear, Nature conservation
Yarra River Trail – Walmer St to Acacia Pl	1.10	Regional	Waterway	Linear, Nature conservation
Yarra River Trail– Abbot St to Turner St (Trail but land is not zoned PPRZ)	0.61	Regional	Waterway	Linear, Nature conservation
Total	13.39			
Restricted open space				
Collingwood Childrens Farm	8.73	Regional		
Total Restricted open space	8.73			

7.1.2d Distribution of open space in Abbotsford

The existing open space has been allocated an appropriate open space hierarchy as shown in Table 7.1-2 above and a corresponding walking catchment appropriate to it, as described in Table 3-1 and 3-5 of this report. The areas of the precinct that are located outside the walking catchments of the different open space reserves are referred to as 'gap areas' and are shown in white in Figure 7.1C on the next page. The assessment of the adequacy of the existing open space network in Abbotsford is informed by the analysis of the spatial distribution of open space. As one of the key aims of this Strategy is for everyone to live and work within a safe and easy walk of open space, the recommendations will focus on addressing the gaps in the existing open space network.

For Abbotsford, the major gaps in the existing open space network occur south of Gipps Street along with the gap in the Regional linear open space along the Yarra River between Clarke Street Reserve and Walmer Street footbridge. These are shown in Figure 7.1C.

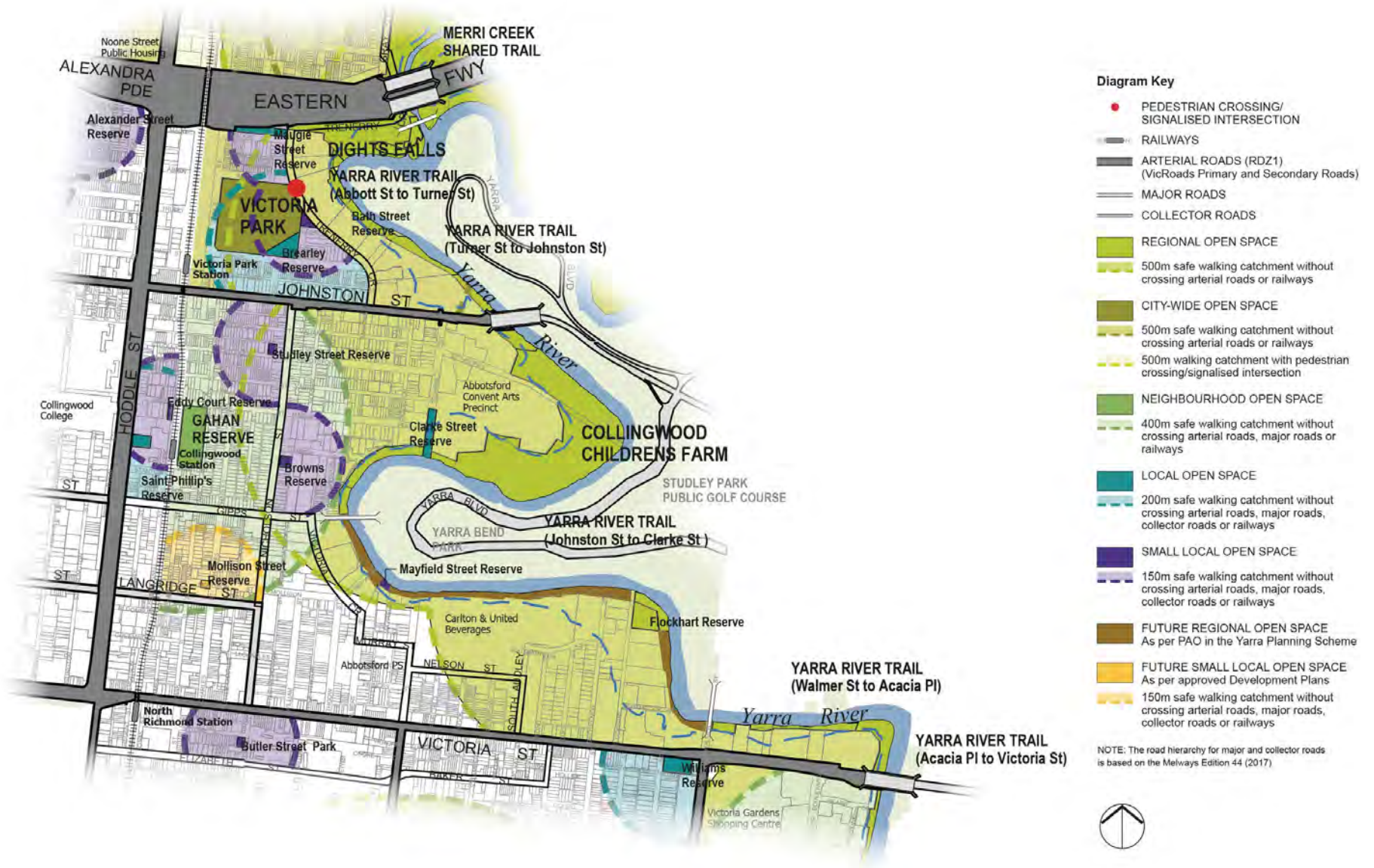


Figure 7.1C Gap analysis for Abbotsford

7.1.3 How residents use open space

A total of 104 resident surveys were received from Abbotsford. A summary of the results of the worker survey is included in the next section 7.1.4. The .id Community Profile identifies that 9 per cent of the City of Yarra's population lives in Abbotsford.

Table 7.1-3 Most frequently visited open space

No.	Name	Reasons to visit	Suggested improvements
Open space within walking distance			
45	Gahan Reserve	<ul style="list-style-type: none"> • Playing with children (11) • Playground (7) • Relaxing (6) • Walking (6) • Dog walking (5) • Close to home (4) • Informal ball games / sport (4) • Socialising with friends / family (4) 	<ul style="list-style-type: none"> • No improvements required (8) • Additional toilets (6) • Upgrade the playgrounds (3) • Additional car parking required (2) • Prohibit dogs off leash (2) • Additional exercise equipment required (2)
30	Yarra Bend Park	<ul style="list-style-type: none"> • Walking (12) • Jogging / running (6) • Exercising (5) • Playing with children (4) • Playground (4) • Relaxing (4) 	<ul style="list-style-type: none"> • No improvements required (6) • Upgrade the playgrounds (2) • Add access ramp at Collins Bridge (2) • Additional bins required (2)
29	Victoria Park	<ul style="list-style-type: none"> • Dog walking (7) • Playing with children (6) • Close to home (5) • Exercising (4) 	<ul style="list-style-type: none"> • Additional playgrounds required (7) • No improvements required (5) • Shared space – scheduling information required (4)
22	Yarra River Precinct	<ul style="list-style-type: none"> • Walking (7) • Exercising (5) • Cycling (3) 	<ul style="list-style-type: none"> • No improvements required (5) • Add link between market and open space (1)
Open space beyond walking distance			
10	Edinburgh Gardens	<ul style="list-style-type: none"> • Socialising with family / friends (4) • Picnics (3) • Cycling (2) 	<ul style="list-style-type: none"> • Additional toilets required (2)
6	Citizens Park	<ul style="list-style-type: none"> • Markets (5) • Dog friendly (1) 	<ul style="list-style-type: none"> • No improvements required (2) • Additional picnic facilities required (2)
5	Royal Botanical Gardens Melbourne	<ul style="list-style-type: none"> • Beautiful open space (2) 	<ul style="list-style-type: none"> • No improvements required (1)
5	Yarra Bend Park	<ul style="list-style-type: none"> • Walking (2) • Walking with a pram (2) 	<ul style="list-style-type: none"> • Boat launch required (1) • Add access ramp at Collins Bridge (1)

Values of open space (top five)

- 63% The feeling of space
- 62% Trees
- 61% A place to relax and unwind
- 56% An escape from the built environment
- 56% Health and well being

Types of open space used (top five)

- 89% Open space along Yarra River
- 83% Large parks and gardens
- 81% Medium sized parks
- 80% Local streets for exercise
- 79% Large sporting reserves

Activities and facilities in open space (top five)

- 90% Walking paths
- 77% Seats
- 71% Open grassed areas for informal use
- 69% Cycle paths
- 59% Drinking fountains

General comments

This was an open ended section of the survey where respondents could write any additional comments. The following list are comments made by four or more people:

- Additional open space is required (8)
- Open space is valued (5)
- Additional public toilets are required (5)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix B.

7.1.4 How existing workers use open space

While there were no specific surveys undertaken in the employment precincts in Abbotsford, the combined results of the surveys from the other employment precincts in Richmond, Cremorne, Fitzroy and Collingwood confirms that workers do visit open space near their workplace, as summarised below:

Frequency of use of open space near the workplace

- 88% of those surveyed visit open space near their workplace with 60% of them visiting open space at least once a week and 18% at least every few months.

Reasons to visit open space near the workplace

The five top reasons workers visit open space near their place are:

- 77% to be outdoors as a break from work
- 46% to socialise / meet colleagues / friends
- 32% to eat lunch
- 16% to exercise for fitness
- 14% to meet family.

Suggestions for improvements to the open space network

The following list is are suggested improvements by more than 10% of the respondents:

- 33% More open space / green spaces / retain spaces
- 12% More seating and tables
- 11% Cleaning and maintenance
- 11% More greenery and trees

7.1.5 Analysis of future change and open space needs

7.1.5a Forecast future population

Quantity

The table below shows the forecast population growth for the residential and employment populations in Abbotsford. A further breakdown of the forecasts for the four open space sub-precincts within Abbotsford have been prepared by .id Consulting to assist with analysis of where forecast change will occur.

Residential population forecasts are sourced from .id Consulting (2018) and the worker population estimates are calculated from the floor area growth forecasts in the *Spatial Economic and Employment Strategy, SGS, 2018* (SEES, 2018).

The resident population growth forecast is significant with an overall change in residential population of 43 per cent or an additional 3,822 residents between 2016 and 2031. The worker population is forecast to increase by approximately 32 per cent, with an additional 3,916 additional workers between 2016 and 2031.

The resident population forecasts through to 2041 illustrate that there is still additional capacity for growth beyond 2031 in Abbotsford. While this Strategy is primarily addressing the open space needs of the existing and forecast population through to

2031, it is useful to understand the context of the magnitude of change beyond the Strategy timeframe.

Table 7.1-4 Resident population forecasts for Abbotsford open space sub-precincts

SUB-PRECINCT	2016	2031	Difference 2016-2031
Abbotsford A	1,518	2,352	834
% change Abbotsford A			55%
Abbotsford B	2,063	2,634	571
% change Abbotsford B			28%
Abbotsford C	1,986	2,571	585
% change Abbotsford C			29%
Abbotsford D	3,282	5,114	1,832
% change Abbotsford D			56%
Total Abbotsford	8,849	12,671	3,822
Total % Change			43%

Table 7.1-5 Worker population estimates for Abbotsford open space sub-precincts

EMPLOYMENT/ RETAIL PRECINCT	2016	2031	DIFFERENCE	% CHANGE
Abbotsford A				
Johnston Street East Retail Precinct	1,907	2,581	673	35%
Hoddle Street Employment Precinct	594	778	184	31%
<i>Total estimated working population Abbotsford A</i>	<i>2,501</i>	<i>3,359</i>	<i>857</i>	<i>34%</i>
Abbotsford B				
Johnston Street East Retail Precinct	1,833	2,479	647	35%
Hoddle Street Employment Precinct	802	1,050	248	31%
Abbotsford Employment Precinct	576	704	128	22%
<i>Total estimated working population Abbotsford B</i>	<i>3,211</i>	<i>4,234</i>	<i>1,023</i>	<i>32%</i>
Abbotsford C				
Hoddle Street Employment Precinct	861	1,128	267	31%
Victoria Street Retail Precinct	980	1,387	407	41%
Abbotsford Employment Precinct	832	1,017	185	22%
<i>Total estimated working population Abbotsford C</i>	<i>2,674</i>	<i>3,532</i>	<i>858</i>	<i>32%</i>
Abbotsford D				
Victoria Street Retail Precinct	1,879	2,659	780	41%
Abbotsford Employment Precinct	1,792	2,190	398	22%
<i>Total estimated working population Abbotsford D</i>	<i>3,671</i>	<i>4,848</i>	<i>1,177</i>	<i>32%</i>
Retail and employment precinct totals				
Johnston Street East Retail Precinct	3,740	5,060	1,320	35%
Hoddle Street Employment Precinct	2,257	2,956	699	31%
Victoria Street Retail Precinct	2,860	4,046	1,187	41%
Abbotsford Employment Precinct	3,200	3,910	710	22%
<i>Total estimated working population Abbotsford</i>	<i>12,057</i>	<i>15,972</i>	<i>3,916</i>	<i>32%</i>

7.1.5b Population change impacts on open space

The additional quantity of people living and working in Abbotsford will place increased pressure and demand on the existing open space. The pressures will include increased volumes of people in the open space utilising the facilities, leading to overcrowding in

open space, lack of access to existing facilities and deterioration in the quality of natural features such as grass areas due to compaction from increased use.

The forecast change in demographics with a slight decrease in the number of families and young children and an increase in young adults and older people living on their own means that there will be a likely increase in the demand for facilities that encourage socialising in open space including seating areas and picnic facilities. There will also be a need to promote fitness and exercise by increasing the diversity of facilities that encourage this.

7.1.5c Where change will occur

The forecast resident population increase in Abbotsford will be concentrated in the precincts with the high and moderate change areas in Abbotsford A and D open space sub-precincts. The employment population growth is around 32 per cent across all the sub-precincts, however the greater number of additional works is estimated for Abbotsford B and D. Refer to Figures 7.1D and 7.1E below.

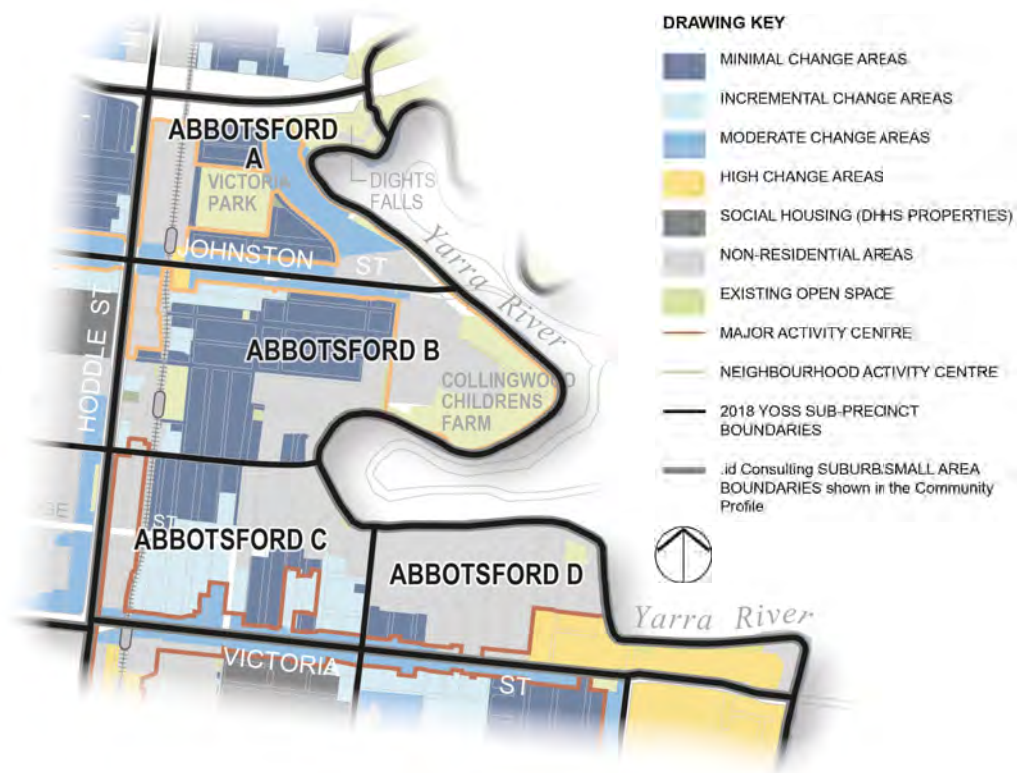


Figure 7.1D Open space sub-precincts and the Strategic Housing Framework (YHS, 2018)

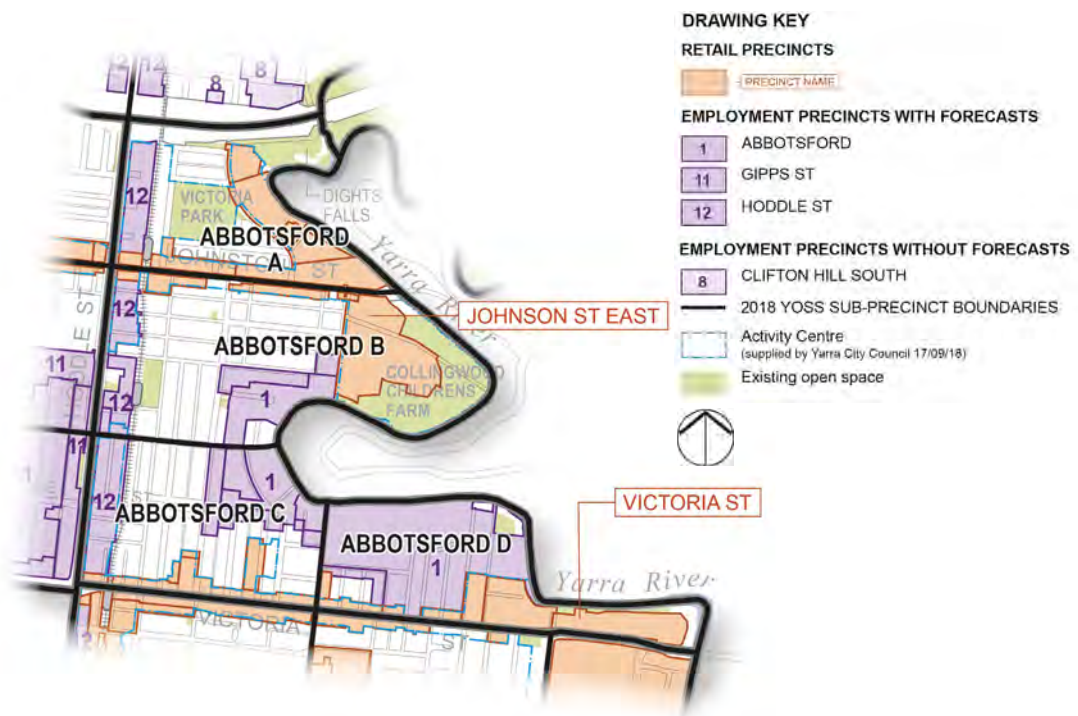


Figure 7.1E Open space sub-precincts and the Employment and Retail Precincts (SEES, 2018)

7.1.5d Open space distribution and future need in Abbotsford

Within Abbotsford the major roads form barriers to safe and easy access to open space. These sub-precincts are based on the ability of people working or living in Abbotsford to easily reach open space. The open space survey results confirm that residents travel outside Abbotsford to visit open space, primarily for the beauty and diversity of character in the large public gardens including the Royal Botanic Gardens, Fitzroy Gardens and Edinburgh Gardens. The high value placed on the need to relax and unwind in the open space surveys supports the need to ensure that adequate areas of green open space with natural features are provided in Abbotsford.

Sub-precinct	Conclusions
Abbotsford A Open space sub-precinct Abbotsford A is located north of Johnston Street. Refer to Section 7.1.2a for the description of existing open space and character.	<ul style="list-style-type: none"> A 55 per cent increase in the resident population is forecast with an additional 834 residents by 2031. Notably however, the forecasts to 2041 indicate a substantial increase post 2031 with an additional 3,087 additional residents forecast by 2041. A 34 per cent increase in the worker population is estimated with an additional 860 workers by 2031. The existing open space network provides diversity of character and facilities and offers a range of recreational uses. Recommend that Brearsley Reserve remains separate from Victoria Park and is upgraded in the longer term to focus on providing a separate Local open space that appeals to the

Sub-precinct	Conclusions
	<p>nearby community and is useable when Victoria Park is unavailable due to organised sporting events.</p> <ul style="list-style-type: none"> • Continue to maintain the existing open space reserves.
<p>Abbotsford B</p> <p>Open space sub-precinct Abbotsford B is located between Johnston and Gipps Streets. Refer to Section 7.1.2a for the description of existing open space and character.</p>	<ul style="list-style-type: none"> • A 28 per cent increase in the resident population is forecast with an additional 571 residents by 2031. • A 32% increase in the worker population is estimated with an additional 1,000 workers by 2031. • Continue to advocate for the provision of additional Regional open space along the Yarra River between Gipps Street Steps and Walmer Street Footbridge. It is noted that there is an existing Public Acquisition Overlay (PAO2) over the future linear open space in the Yarra Planning Scheme. Additionally Council to continue to advocate to provide graded ramp access at the Gipps Street Steps. • While there are no gaps in the provision of open space (other than the identified gap in the linear open space corridor along of the Yarra River), there is a need to upgrade the facilities in existing open space to cater to the increased levels of use of open space. • Undertake a major upgrade to Gahan Reserve including a review of the non-open space dependent community facilities in the reserve to identify options for relocation where required. • Undertake a minor upgrade to Clarke Street Reserve to create a destination Local open space that celebrates the views, proximity to the Abbotsford Convent and its access and use by the existing and forecast population. • Upgrade Eddy Court Reserve to improve its role in the network including consideration of unstructured recreation facilities. • Continue to maintain Browns Reserve and Studley Street Reserve.
<p>Abbotsford C</p> <p>This sub-precinct is bounded by Gipps Street to the north, Victoria Street to south, Hoddle Street to the west and Church Street to the east. Refer to Section 7.1.2a for the description of existing open space and character</p>	<ul style="list-style-type: none"> • A 29 per cent increase in the resident population is forecast with an additional 585 residents by 2031. • A 32% increase in the worker population is estimated with an additional 890 workers by 2031. • Continue to advocate for the provision of additional Regional open space along the Yarra River between the Gipps Street and Walmer Street. It is noted that there is an existing Public Acquisition Overlay (PAO2) over the future linear open space in the Yarra Planning Scheme. • With gaps in the provision of existing open space in this sub-precinct, it is recommended that an additional Small Local open space is proposed in the south east part of the sub-precinct for both the existing and forecast population. This will provide new open space within a safe and easy walk of residents and workers including those in the forecast moderate and incremental change areas. • Please refer to Figure 7.1F.

Sub-precinct	Conclusions
<p>Abbotsford D</p> <p>This sub-precinct is bounded to the north and east by the Yarra River, the south by Victoria Street and the west by Church Street. Refer to Section 7.1.2a for the description of existing open space and character</p>	<ul style="list-style-type: none"> • A significant 56% increase in the resident population is forecast with an additional 1,832 residents by 2031. • A 32% increase in the worker population is estimated with an additional 1,200 workers by 2031. • Continue to advocate for the provision of additional Regional open space along the Yarra River between the Gipps Street and Walmer Street. It is noted that there is an existing Public Acquisition Overlay (PAO2) over the future linear open space in the Yarra Planning Scheme. • With the scale of forecast change and approximately 3,000 additional people living and working in the sub-precinct by 2031, there is a need for more open space. Therefore, recommend the provision of a new Neighbourhood open space if the Carlton and United Brewery site is redeveloped in the future. This will allow for a diverse range of recreational uses and a key community park established as part of the future change. • Please refer to Figure 7.1F

7.1.6 Abbotsford Recommendations

7.1.6a Summary of overall intent

Provision and distribution

Victoria Park, Gahan Reserve and the system of open space along the Yarra River including Collingwood Children's Farm and Dights Falls significantly contribute to the open space character of Abbotsford. North of Gipps Street, open space is well distributed in the precinct, however south of Gipps Street there is a lack of open space combined with a forecast substantial increase in the resident and worker population. Key recommendations include to continue to investigate securing a linear open space reserve along the Yarra River between Clarke Street Reserve and Walmer Street Bridge, the provision of a new Neighbourhood Park in the southern part of the precinct where larger land parcels provide the potential for future provision of open space. Combined with this is the recommendation to provide two new Small Local open spaces for the existing and forecast community in the south west part of Abbotsford.

Quality and design

There is potential to improve the diversity of facilities and character in selected Local and Small Local open spaces in Abbotsford north Gipps Street. The new Neighbourhood Park will be designed to include a range of unstructured recreation facilities to encourage the community in the southern part of the precinct to be outdoors. The open space design will also focus on improved greening, particularly in the higher density areas to contribute positively to mitigating urban heat island effect.

Refer to Figure 7.1F for the spatial location of recommendations for Abbotsford.

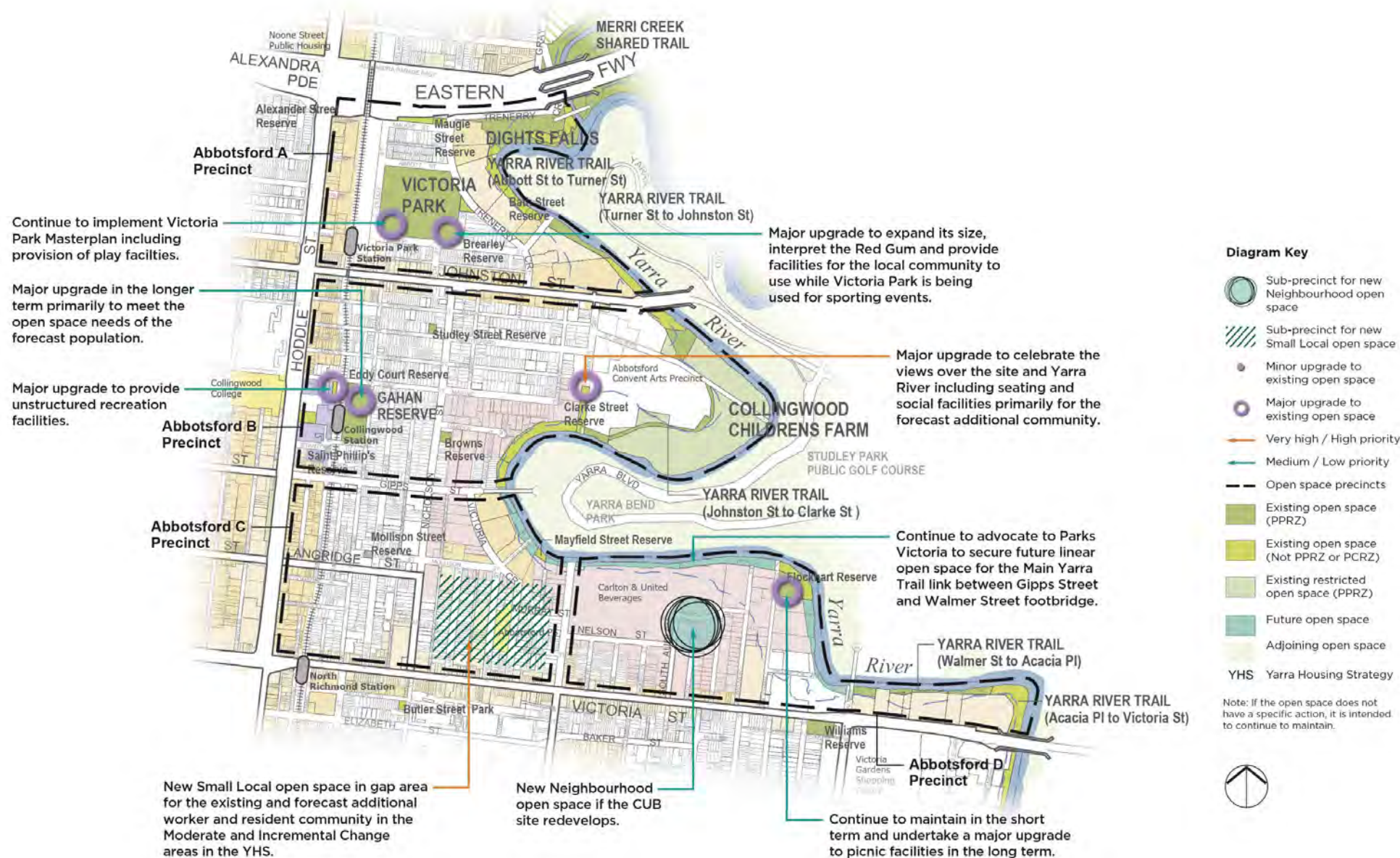


Figure 7.1F Recommendations for Abbotsford

7.1.6b Precinct Actions for Abbotsford

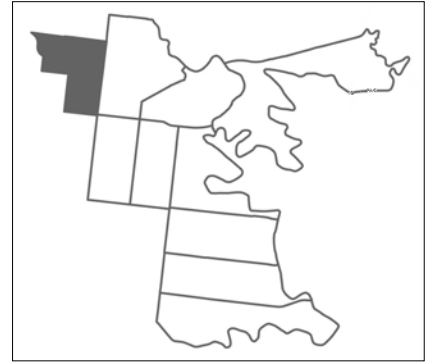
A Additional open space

No.	Action	Responsibility	Priority
7.1A-1	Provide an additional Small Local open space in the south west part of open space sub-precinct Abbotsford C for both the existing and forecast population. The new open space is to be located south of Langridge Street between the railway and Nicholson Street.	YCC	High
7.1A-2	Provide an additional Neighbourhood open space if the large scale industrial uses are redeveloped. This would primarily be for the forecast population.	YCC	High and Ongoing

B Existing open space

No.	Action	Responsibility	Priority
7.1B-1	Bath Street Reserve Continue to maintain.	YCC	Ongoing
7.1B-2	Brearley Reserve Undertake a major upgrade to protect and interpret the existing Red Gum including expanding the size of the reserve utilising part of the road reserve to create more space around the Red Gum. Future design to provide facilities for the local community to use this reserve when major sporting events are held at Victoria Park. This is for both the existing and forecast population.	YCC	Low
7.1B-3	Browns Reserve Continue to maintain.	YCC	Ongoing
7.1B-4	Clarke Street Reserve Undertake a major upgrade to this open space to provide seating and picnic area with views over the Yarra River and the Abbotsford Convent site and indigenous revegetation to improve the biodiversity values and potentially include interpretive signage regarding the natural and cultural values of the site.	YCC	High
7.1B-5	Dights Falls Continue to maintain.	YCC PV MW	Ongoing
7.1B-6	Eddy Court Reserve Undertake a major upgrade to this linking space including investigating providing addition active unstructured recreation facilities to encourage greater use of this open space adjacent to the railway reserve.	YCC PTV	Medium
7.1B-7	Flockhart Reserve Continue to maintain in the short term. In the medium term when there is additional residential use and improved passive surveillance, then undertake major a major upgrade to improve the visitor and picnic facilities at Flockhart Reserve.	YCC MW	Medium

No.	Action	Respons- ibility	Priority
7.1B-8	Gahan Reserve Undertake major upgrades to this open space in the longer term primarily to meet the needs of the forecast population. This is to include investigating appropriate uses for the Maternal Child and Health facility that will complement the open space.	YCC	Low
7.1B-9	Maugie Street Reserve Continue to maintain.	YCC	Ongoing
7.1B-10	Saint Phillip's Reserve Continue to maintain.	YCC	Ongoing
7.1B11	Studley Street Reserve Continue to maintain.	YCC	Ongoing
7.1B-12	Victoria Park Continue to implement the Masterplan including provision of play facilities and expansion of the open space when the existing caretakers cottage is removed as part of the approved plan.	YCC	Medium
7.1B-13	Yarra River Trail– Abbot St to Turner St (Land is not zoned PPRZ) Continue to maintain.	YCC	Ongoing
7.1B-14	Yarra River Trail – Acacia PI to Victoria St Continue to maintain.	YCC, PV MW	Ongoing
7.1B-15	Yarra River Trail – Johnston St to Clarke St Continue to maintain.	YCC, PV, MW	Ongoing
7.1B-16	Yarra River Trail – Turner St to Johnston St Continue to maintain.	YCC, PV, MW	Ongoing
7.1B-17	Yarra River Trail – Walmer St to Acacia PI Continue to maintain.	YCC, PV, MW	Ongoing



7.2 Carlton North - Princes Hill

7.2.1 Introduction

Princes Park adjoins the western boundary and Nicholson Street defines the eastern boundary, with Park Street Reserve to the north and Princes Street to the south. Located in the City of Melbourne, Princes Park and the Melbourne General Cemetery are both accessible from this precinct and the mature overstorey trees and non-residential nature of these areas assist to define this precinct's character.

The urban layout and consistent Victorian row terraces assist to define the area's unique character including the strong grid layout with wide streetscapes and central medians combined with the large mature street trees and the historic terrace single and double storey dwellings. The majority of the precinct is residential with some distinct pockets of commercial and retail precincts along Nicholson, Rathdowne and Lygon Streets. Other non-residential land use includes the Princes Hill Primary and Secondary Schools and the Carlton North Primary School. Curtain Square is located in Carlton North and is a Victorian era garden that complements the Victorian style architecture of the neighbourhood around it.

By comparison, Hardy Gallagher Reserve is the key open space in Princes Hill with an informal character that combines some original plantings from the former Inner Circle Railway reserve with native trees. While not located in the City of Yarra, Princes Park directly adjoins Princes Hill and significantly contributes to the open space and landscape character.

- Existing residential population 2016: 9,010 (*Source: .id Consulting population forecasts, 2018*)
- Existing estimated worker population 2016: No data is available (*Source: SEES, SGS 2018*)



Figure 7.2A Existing open space in Carlton North - Princes Hill

7.2.2 Existing open space

7.2.2a Description

The major roads define the boundaries of the two suburbs of Carlton North and Princes Hill and these have been used as the open space sub-precincts, as shown in Figure 7.2B below.



Figure 7.2B Open space sub-precincts for Carlton North and Princes Hill

Carlton North

- Open space sub-precinct Carlton North is located between Lygon and Nicholson Streets, from Park Street Reserve/Municipal boundary in the north to Princes Street in the South.
- Open space located in this sub-precinct includes
 - Curtin Square
 - Nicholson Street Reserve
 - Park Street Reserve
 - Shakespeare Reserve
- Curtin Square is the largest and most visited open space in the precinct. The mature established trees significantly contribute to its character and its size means people visit it for a variety of reasons including the playground, the open grassed areas and the fenced dog off-leash area.
- Park Street Reserve forms part of the Inner Circle Railway Linear Parklands and provides off-road east west connectivity to Merri Creek Corridor and Hardy Gallagher Reserve and on to Princes Park in the City of Melbourne.
- Shakespeare Reserve is a Small Local open space with some mature native trees, grassed and seats.
- Nicholson Street Reserve is located on the corner of Alexandra Parade and Nicholson Street and is significantly encumbered by the arterial road noise and movement. The

Canary Island Date Palm is the key feature of the reserve and it appears to be regularly used as a pedestrian cut through.

- While Canning Street is a popular north/south cycle link and the central median has mature existing trees, the median is less than 10 metres wide and is the reason it is not included as public open space in the Strategy.
- The land use is predominantly residential with the retail and business/commercial use along Rathdowne Street in the vicinity of Curtain Square and along Nicholson Street.
- The *Yarra Housing Strategy* (2018) identifies two incremental change areas. One is located around Curtain Square on Rathdowne Street and the other is along Nicholson Street.

Princes Hill

- Open space sub-precinct Princes Hill is located between Princes Park (Bowen Crescent) and Lygon Street, with Park Street to the north and McPherson Street to the south.
- Open space located in this sub-precinct includes
 - Hardy Gallagher Reserve
 - Pigdon Street Central Median
- Hardy Gallagher Reserve forms part of the Inner Circle Railway Linear Parkland and includes the former Carlton North Railway Station which is protected on the site today. The reserve includes the shared trail, open grassed area with scattered trees, playground and the Princes Hill Bocce Club.
- Pigdon Street Central Median is included as part of the open space system given the median is greater than 10 metres wide, contains mature established trees and has the potential to be used as public open space with seating.
- The land use is predominantly residential combined with education use with Princes Hill Primary School and Secondary College.
- The *Yarra Housing Strategy* (2018) identifies the entire area of Princes Hill as Minimal Change.

7.2.2b Quantity of open space in Carlton North - Princes Hill

The 6 existing open spaces in Carlton North - Princes Hill have a combined total of 6.23 hectares. This represents approximately 4.4 per cent of the total land area of the precinct.

Table 7.2-1 Number, size and type of open space

No	Hierarchy	Area (ha)	%
0	Regional	0.00	0%
0	City wide	0.00	0%
3	Neighbourhood	5.64	91%
1	Local	0.46	7%
2	Small Local	0.12	2%
6	TOTAL	6.23	100%

7.2.2c Open space hierarchy, character and quality

The Inner Circle Railway Linear Parklands define the northern extent of this precinct and are classified as Municipal open space given the linear connectivity they provide between the Merri Creek open space corridor and Princes Park in the City of Melbourne. Hardy Gallagher Reserve is a Neighbourhood open space as it is large enough to provide a range of facilities for unstructured recreation and informal uses. The only structured sporting facility is the Princes Hill Petanque Club located in Hardy Gallagher Reserve, however given it is a small facility, the reserve has been classified as Linear in recognition of its primary use. The North Carlton Neighbourhood House is located in the historic station building.

Curtain Square the other Neighbourhood open space and provides for a diversity of needs as is classified as a Public garden in recognition of this. Pigdon Street Central Median is a Local open space due to its size, however its use is limited by the width and it can only be used primarily for seating. It is classified as Significant Road Reservation in recognition of its role in the network. Shakespeare Reserve is the only Small Local open space and is classified as Seating/viewing.

Table 7.2-2 Existing open space, hierarchy and character classification

Name	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Curtain Square	1.46	Neighbourhood	Heritage	Public garden, Botanical, Play
Hardy Gallagher Reserve	3.28	City-wide	Linear	Heritage, Linking space, Service easement
Nicholson Street Reserve	0.08	Small Local	Significant Road Reserve	
Park Street Reserve	0.90	City-wide	Linear	Linking Space, Service easement
Pigdon Street Median	0.46	Local	Significant road reservation	Heritage
Shakespeare Reserve	0.05	Small Local	Informal	Native bushland, Urban heat mitigation
Total	6.23			

7.2.2d Distribution of open space in Carlton North - Princes Hill

The existing open space has been allocated an appropriate hierarchy as shown in Table 7.2-2 above and a corresponding walking catchment appropriate to it, as described in Table 3.4.2 of this report. The areas of the precinct that are located outside the walking catchments of the different open space reserves are referred to as 'gap areas' and are shown in white in Figure 7.2C on the next page. The assessment of the adequacy of the existing open space network in Carlton North - Princes Hill is informed by the analysis of the spatial distribution of open space. As one of the key aims of this Strategy is for everyone to live and work within a safe and easy walk of open space, the recommendations will focus on addressing the gaps in the existing open space network.

There are no gaps in the provision of open space in Princes Hill, with excellent access to the Princes Park in the City of Melbourne and also to Hardy Gallagher Reserve.

In Carlton North the existing open spaces are located in the north and south of the precinct meaning that people living centrally in the precinct do not have an existing open space within a safe and easy walk as shown in Figure 7.2C.

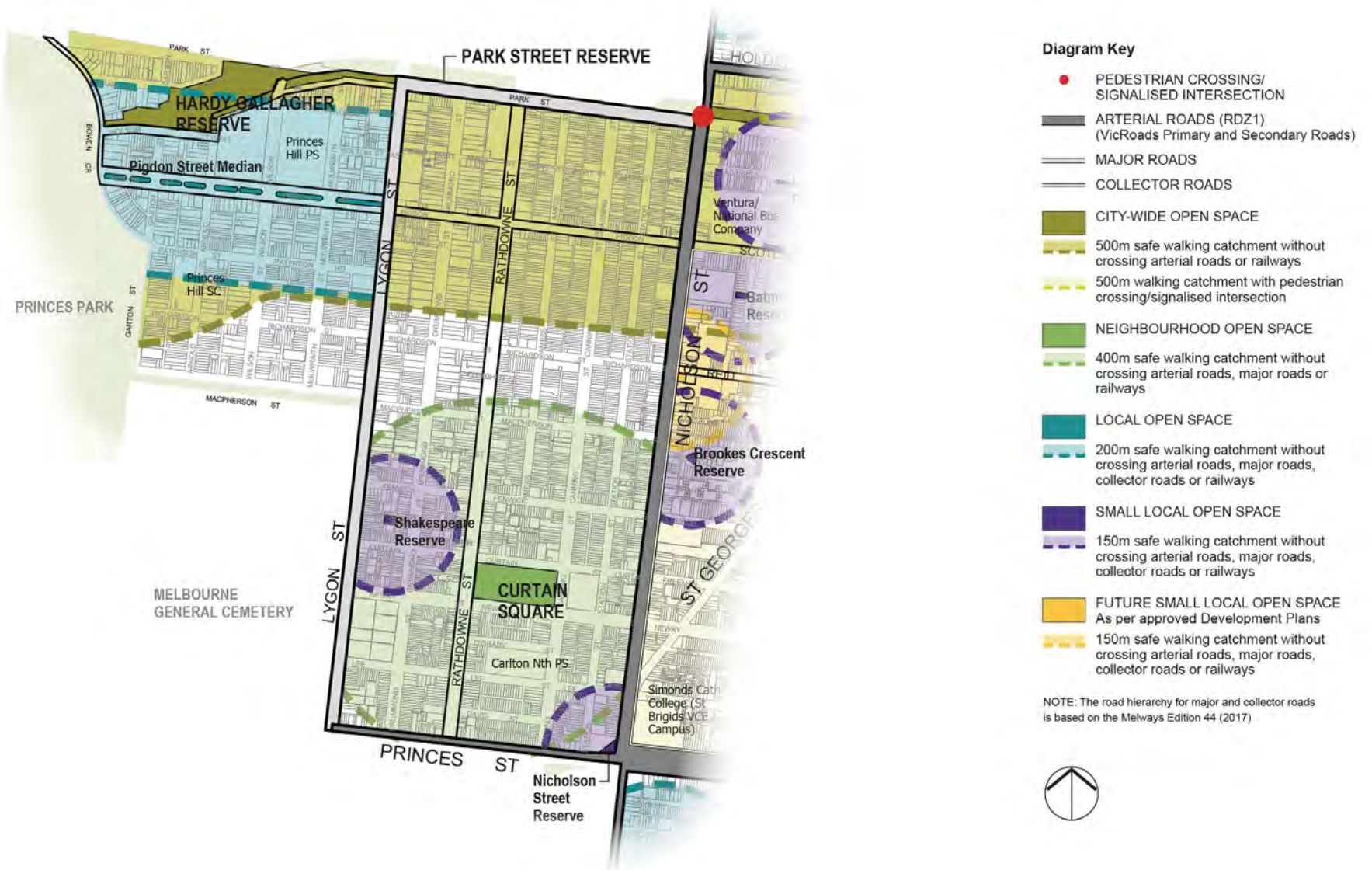


Figure 7.2C Gap analysis for Carlton North - Princes Hill

7.2.3 How residents use open space

A total of 81 resident surveys were received from the Carlton North – Princes Hill, which represents 6 per cent of the total surveys received. The .id Community Profile identifies that 10 per cent of the City of Yarra's population lives in this precinct.

Table 7.2-3 Most frequently visited open space

No.	Name	Reasons to visit	Suggested improvements
Open space within walking distance			
44	Edinburgh Gardens	<ul style="list-style-type: none"> Relaxing (8) Walking (7) Socialising with friends / family (6) Dog walking (5) Exercising dogs (4) Dog friendly (4) Exercising dogs (4) Playing with children (4) Playground (4) 	<ul style="list-style-type: none"> No improvements required (5) Additional toilets required (5) Upgrade required (3) More bins required (2)
35	Curtain Square	<ul style="list-style-type: none"> Playground (8) Playing with children (7) Relaxing (5) Close to home (4) Socialising with friends / family (4) Walking (4) 	<ul style="list-style-type: none"> More grass required in dog of leash areas (3) No improvements required (3) Upgrade toilets (3)
24	Princes Park	<ul style="list-style-type: none"> Dog walking (7) Walking (6) Exercising (5) Playground (4) 	<ul style="list-style-type: none"> Additional exercise equipment required (3) No improvements required (2) Additional trees required (2)
13	Hardy Gallagher Reserve	<ul style="list-style-type: none"> Close to school (3) Playground (3) 	<ul style="list-style-type: none"> Upgrade playground (4) Change bocce court into community gardens (3) Redevelop bocce court (3)
Open space beyond walking distance			
6	Carlton Gardens	<ul style="list-style-type: none"> Relaxing (2) Socialising with friends / family (2) 	<ul style="list-style-type: none"> No improvements required (3)
6	Royal Botanical Gardens Melbourne	<ul style="list-style-type: none"> Beautiful open space (3) Walking (2) 	<ul style="list-style-type: none"> No improvements required (3)
6	Yarra Bend Park	<ul style="list-style-type: none"> Dog walking (2) 	<ul style="list-style-type: none"> Dog agility park required (1) Dog drinking facilities required (1)
4	Edinburgh Gardens	<ul style="list-style-type: none"> Dog friendly (1) Health and well-being (1) 	<ul style="list-style-type: none"> More basketball courts required (1) Shade needed over playground equipment (1)

Values of open space (top five)

- 88% Trees
- 74% Place to relax and unwind
- 73% The feeling of space
- 73% An escape from the built environment
- 61% just being outside

Types of open space used (top five)

- 96% Large parks and gardens
- 88% Medium sized parks
- 83% Open space along the Yarra River
- 83% Small local parks
- 78% Urban Squares

Activities and facilities in open space (top five)

- 86% Walking paths
- 81% Open grassed areas
- 77% Cycle paths
- 72% Drinking fountains
- 72% Seats

General comments

This was an open ended section of the survey where respondents could write any additional comments. The following list are comments made by four or more people:

- Additional open space is required (5)
- No improvements required (4)
- Additional open space is required as a density increases (4)
- Open space is valued (4)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix B.

7.2.4 Analysis of future change and open space needs

7.2.4a Forecast future population

Quantity

The table below shows the forecast residential population in Carlton North - Princes Hill. A further breakdown of the forecasts for the two open space sub-precincts of Carlton North and Princes Hill have been prepared by .id Consulting to assist with analysis of where forecast change will occur.

Residential population forecasts are sourced from .id Consulting (2018). There is no worker population estimate available for this precinct.

The resident population is forecast to decline by 2 per cent with 167 less residents between 2016 and 2031. While this Strategy is primarily addressing the open space needs of the existing and forecast population through to 2031, it is useful to understand the context of the magnitude of change beyond the Strategy timeframe. The forecasts to 2041 show a 2 per cent increase.

Table 7.2-4 Resident population forecasts for Carlton North - Princes Hill open space sub-precincts

SUBPRECINCT	2016	2031	Difference 2016-2031
Princes Hill	2,250	2,177	-73
% change Princes Hill			-3%
Carlton North	6,760	6,666	-94
% change Carlton North			-1%
Total Carlton North and Princes Hill	9,010	8,843	-167
Total % Change			-2%

7.2.4b Population change impacts on open space

The minor reduction in the quantity of people living and working in Carlton North - Princes Hill is not anticipated to have a noticeable impact on open space.

The forecast change in demographics is proportionally a slight increase in the percentage of lone person households and a slight decline in the proportion of couple families with dependents.

7.2.4c Where change will occur

The majority of Carlton North - Princes Hill is defined as Minimal Change in the *Yarra Housing Strategy, 2018* (YHS, 2018), with small areas of incremental change along Nicholson Street and Rathdowne Street. Refer to Figures 7.2D and 7.2E below.

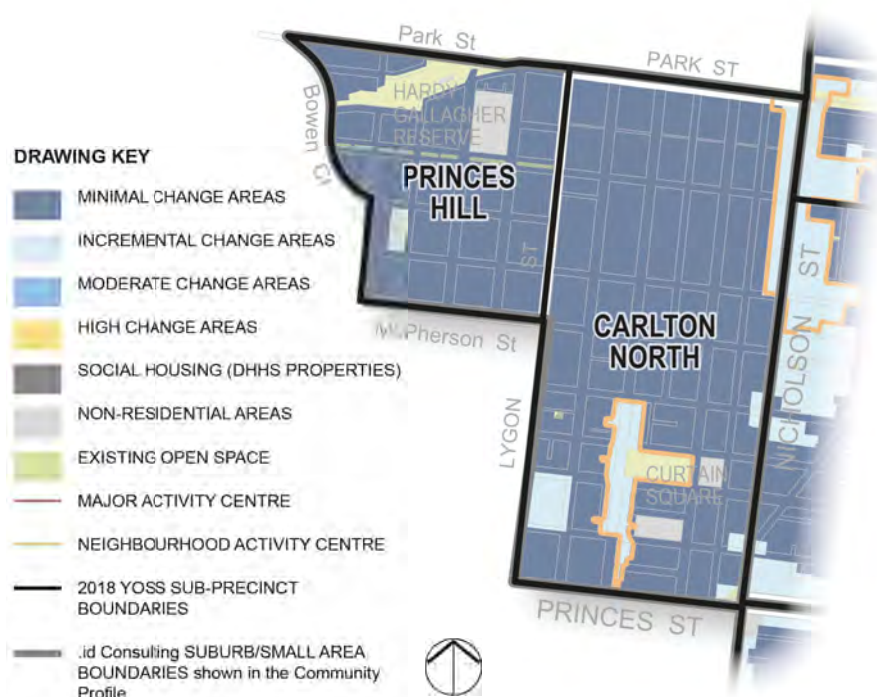


Figure 7.2D Open space sub-precincts and the Strategic Housing Framework (YHS, 2018)

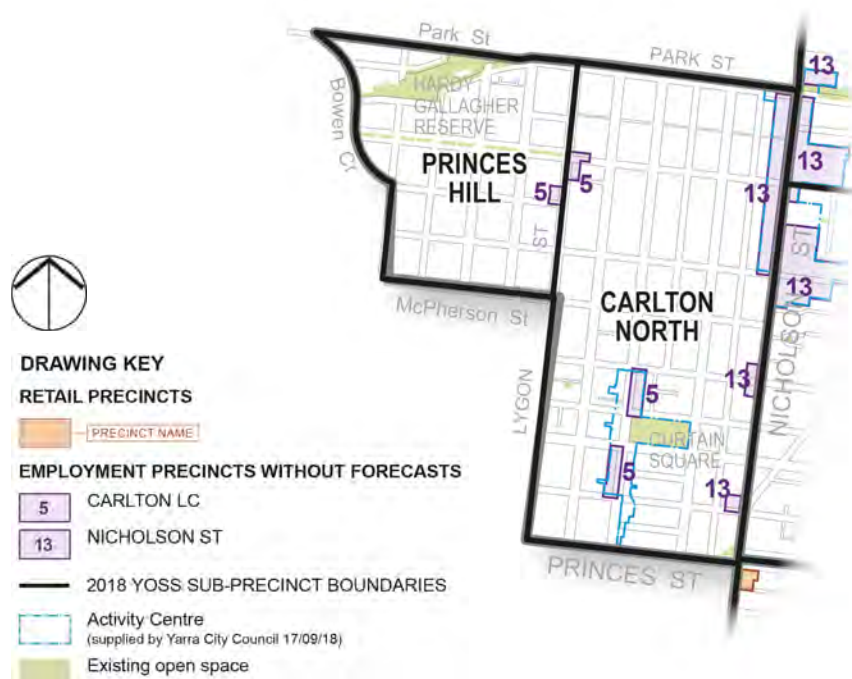


Figure 7.2E Open space sub-precincts and the Employment and Retail Precincts (SEES, 2018)

7.2.4d Open space distribution and future need in Carlton North - Princes Hill

Within Carlton North - Princes Hill the major roads form barriers to safe and easy access to open space. The sub-precincts are based on the ability of people working or living in Carlton North - Princes Hill to easily reach open space. The open space survey results confirm that residents travel outside Carlton North - Princes Hill to visit open space, primarily to Edinburgh Gardens and Princes Park, mainly for walking, dog walking, exercise and relaxing. While this is the case, people are also visiting Curtain Square and to a lesser extent Hardy Gallagher Reserve, both of which are used for play and enjoying the space and because it is close to home. The high value placed on trees and the need to relax and unwind in the open space surveys supports the need to ensure that adequate areas of green open space with natural features are provided in Carlton North - Princes Hill.

Sub-precinct	Conclusions
Carlton North Refer to Section 7.2.2 for the description of existing open space and character.	<ul style="list-style-type: none"> A 1 per cent decline in the resident population is forecast with a loss of 94 residents by 2031. The existing open space network is diverse with potential for minor improvements and provision of an additional Small Local open space to address the existing gap area shown in Figure 7.2C. Recommend a new Small Local open space central to the sub-precinct, as shown in Figure 7.2G. This is to provide an accessible and visible green open space, most likely achieved as part of a future road closure.

Sub-precinct	Conclusions
	<ul style="list-style-type: none"> • Undertake minor upgrades to Curtain Square to review the resolve the dog off-lead area. • Minor upgrades to Shakespeare Reserve to improve seating.
Princes Hill Refer to Section 7.2.2 for the description of existing open space and character.	<ul style="list-style-type: none"> • A 3 per cent decline of 73 residents by 2031. • There are no gaps in the provision of open space in Princes Hill. • Upgrade Hardy Gallagher Reserve including the playground and picnic/social facilities.

7.2.5 Carlton North - Princes Hill Recommendations

7.2.5a Summary of overall intent

Provision and distribution

The east-west linear open space provides excellent off-road shared trail connectivity to open space outside the precinct. Curtain Square and Hardy Gallagher Reserve provide Neighbourhood open space for each sub-precinct and are supplemented by some Local and Small Local open spaces. The one gap in the open space network is proposed to be addressed with the provision of an additional Small Local open space.

Quality and design

There is potential to undertake some minor improvements to the quality of facilities in the existing open space network.

Refer to Figure 7.2F for the spatial location of recommendations for Carlton North - Princes Hill on the following page.

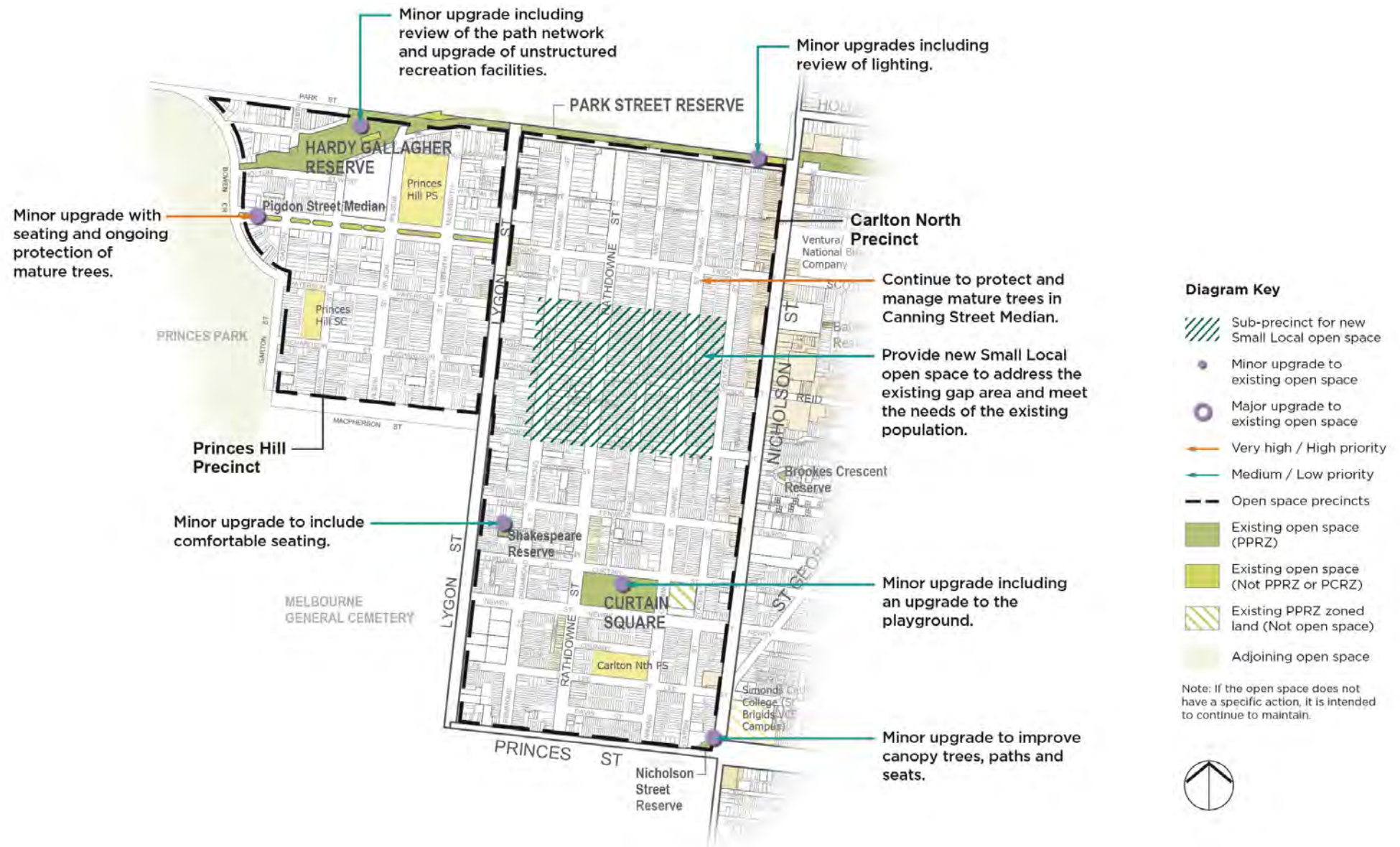


Figure 7.2F Recommendations for Carlton North - Princes Hill

7.2.5b Precinct Actions for Carlton North - Princes Hill

A Additional open space

No.	Action	Respons- ibility	Priority
7.2A-1	Provide a new Small Local open space in Carlton North to address the gap area for the existing population.	YCC	High

B Existing open space

No.	Action	Respons- ibility	Priority
7.2B-1	Canning Street Median Continue to protect and manage the mature trees	YCC	Ongoing
7.2B-2	Curtain Square Minor upgrade to Curtain Square including an upgrade to the existing playground.	YCC	High
7.2B-3	Hardy Gallagher Reserve Undertake a minor upgrade to the reserve including review of the existing path network, upgrade of unstructured recreation facilities and signage regarding the proposed new urban agricultural facility at the neighbourhood house.	YCC	Medium
7.2B-4	Nicholson Street Reserve Minor upgrade to improve the overstorey canopy trees, path and seats.	YCC DHHS	Medium
7.2B-5	Park Street Reserve (Inner Circle Railway Parklands) Review the Linear Park Masterplan and function of this site within the network and undertake minor upgrades including review of lighting.	YCC	Low
7.2B-6	Pigdon Street Median Continue to protect and manage the mature trees and upgrade to include seating and associated park infrastructure including drinking fountain.	YCC	High and Ongoing
7.2B-7	Shakespeare Reserve Undertake a minor upgrade to improve the seating opportunities in this reserve.	YCC	Medium



7.3 Central Richmond

7.3.1 Introduction

Central Richmond is bounded to the north by Bridge Road, to the south by Swan Street, the west by Punt Road and the east by the Yarra River (Birrarung). The ridgeline of Richmond Hill runs to the west of Church Street with the land falling away from the ridgeline to the south west and to the east towards the Yarra River.

The land use of Central Richmond is mixed with a combination of residential, business, commercial, retail, industrial use and open space. Bridge Road and Swan Street are major retail, commercial and business precincts in Central Richmond. The *Swan Street Structure Plan*, prepared in 2014, provides the direction for the future built form, building heights and public realm improvements. The study area includes the properties directly adjoining north side and south side of Swan Street and the Tanner Street Precinct as well. The *Yarra Housing Strategy* (2018) provides direction on the future level of change for residential use within the precinct. The *Bridge Road Streetscape Masterplan*, adopted by Council in 2017 identifies streetscape improvement projects including identifying potential future public spaces along its spine. The Swan Street Structure plan (2014) guides the future land use change and development within the study area which included Cremorne, South Richmond and Burnley as well.

The mixed land use means there is a significant worker population in Central Richmond which is about 20 per cent less than the resident population, as follows:

- Existing residential population 2016: 13,888 (*Source: .id Consulting population forecasts, 2018*)
- Existing estimated worker population 2016: 9,820 (*Source: SEES, SGS 2018*)

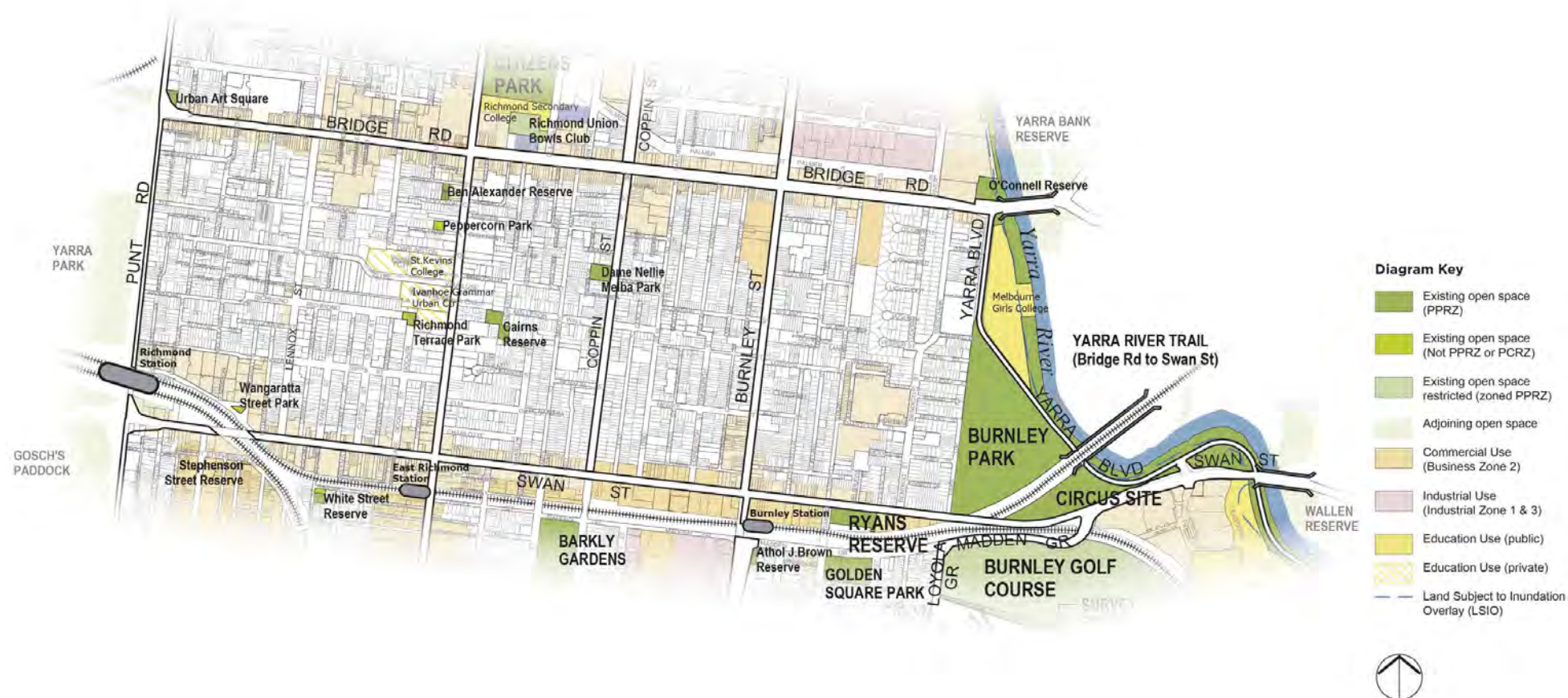


Figure 7.3A Existing open space in Central Richmond

7.3.2 Existing open space

7.3.2a Description

Church and Burnley Streets are major north south roads in Central Richmond and define three open space sub-precincts, Central Richmond A, B and C.



Figure 7.3B Open space sub-precincts for Central Richmond

Central Richmond A

- Open space sub-precinct Central Richmond A is located between Punt Road and Church Street, from Bridge Road in the north to Swan Street in the south.
- Open space located in this sub-precinct includes:
 - Ben Alexander Reserve
 - Peppercorn Park
 - Richmond Terrace Park
 - Wangaratta Street Park
- Three of the four Small Local open spaces are located towards Church Street in the east, with Wangaratta Street Park located in the south west as part of the Tanner Street area. Therefore there are gaps in open space provision in this sub-precinct.
- Richmond Terrace Park is characterised as a public square with views, seating, barbecue and picnic facilities, Ben Alexander Reserve is predominantly for play, Peppercorn Park is botanical and seating and Wangaratta Street Park is characterised as a public square.
- The land use includes the major employment precinct associated with Swan Street near Richmond Station in the south west, business and retail in the north along Bridge Road and with the church and catholic school on the hill adjoining Church Street. The remainder is predominantly residential.
- The *Yarra Housing Strategy* (2018) identifies two moderate change areas associated with the Bridge Road, Swan Street and Tanner Street precincts. Incremental change is identified along Punt Road and the Church Street, and the remainder is minimal change.

Central Richmond B

- Open space sub-precinct North Richmond B is located between Church and Burnley Streets, north of Swan Street.
- Open space located in this sub-precinct includes

- Cairns Reserve
- Dame Nellie Melba Park
- Cairns Reserve is located on the eastern slope of Richmond Hill and affords great views to the north east and the Dandenong Ranges. The park has large open grassed terraces with space for informal ball games, seating and a medium sized playground. People use it as a local park for relaxing and enjoying the green space and ambience and to walk dogs.
- Dame Nelly Melba Park is characterised as Public garden and is used mainly for dog walking and enjoying the open space and garden character.
- The land use is predominantly residential with a combination of original Victorian and Edwardian dwellings combined with contemporary apartments of three levels and more. The commercial and business uses along Bridge Road, Swan Street and Burnley Streets means there is also an employment population in the precinct.
- The *Yarra Housing Strategy* (2018) identifies the majority of the sub-precinct as Incremental Change with Moderate Change areas along Bridge Road, Swan Street and Burnley Street. The area on Richmond Hill in the south west part of the precinct is identified as a Minimal Change area, which is characterised by the larger original period dwellings.

Central Richmond C

- Open space sub-precinct Central Richmond C is located between Burnley Street and the Yarra River, north of Swan Street .
- Open space located in this sub-precinct includes
 - Burnley Park
 - Circus Site
 - Yarra River Trail (Bridge Rd to Swan St)
- Burnley Park is a Municipal open space and is characterised as heritage and sporting reserve with a range of unstructured recreational and informal uses. This includes a multi-purpose court, playground, picnic area and walking paths. The park was set aside as part of the larger Richmond Park and has Local Heritage Significance for both the Indigenous cultural heritage and non-Indigenous historical values of the park. heritage character, along with the significant trees the park contribute to its character and value.
- Located between the railway and the Swan Street, the Circus Site was part of the original larger Richmond Park land parcel set aside in the early 1800s by Hoddle. The site today is a Regional open space and classified and recognised for its cultural and natural heritage values including as an event space for the circus.
- The Yarra River Trail Place is a Regional open space that is characterised as linear and provides both the shared trail access, water based recreational access including rowing and kayaking and an important riparian biodiversity link along the Yarra River.
- Land use is in the process of changing to predominantly residential use with the conversion of some key non-residential sites including the former Channel 9 Studios. A combination of business and commercial use extends into the precinct from Swan and Bridge Roads.
- The Yarra Housing Strategy (2018) includes a high change area associated with the development of the former Channel 9 Studios site, moderate change areas along Bridge Road and Swan Street, two minimal change areas and the remainder being incremental change.

7.3.2b Quantity of open space in Central Richmond

The nine existing open spaces in Central Richmond have a combined total of 23.46 hectares. This represents approximately 12 per cent of the total land area of the precinct.

Table 7.3-1 Number, size and type of open space

No	Hierarchy	Area (ha)	%
2	Regional	6.87	29%
1	City wide	15.70	67%
0	Neighbourhood	0	0%
2	Local	0.62	3%
4	Small Local	0.26	1%
9	TOTAL	23.46	100%

7.3.2c Open space hierarchy, character and quality

The linear open space along the Yarra River is an important habitat and recreational corridor for wider Melbourne. This includes non-motorised water based recreation, cycling, walking, dog walking, exercising and relaxing. It is therefore designated as a Regional open space and is managed to protect and improve the habitat and recreational values. Access to the Yarra River itself, the bushland and natural qualities of this linear corridor are key reasons people visit this open space.

The heritage values, sporting facilities and unstructured recreation facilities at Burnley Park provide the context for the City-wide hierarchy and its heritage and sporting character classification. The reasons people visit this open space are diverse and this is reflected in the reasons people visit it. The Circus site, which is separated from Burnley Park by the railway, has multiple values including cultural heritage values, nature conservation and public parkland as a space that hosts the circus when it is in town. Without a Neighbourhood open space, Burnley Park and Citizens Park currently meet this need. The higher levels of use of the two Local open spaces within the precinct being Dame Nelly Melba Park and Cairns Reserve, combined with the forecast change supports the reasons these two Local open spaces have the potential to be upgraded to include a more diverse range of facilities in them given their larger size when compared to the Small Local open space.

The four Small Local open spaces have different characters and form a highly valued part of the open space system of Central Richmond, particularly in sub-precinct A. The incremental change in urban densities in this precinct means these local open spaces also have the potential to play a greater role in urban greening and cooling.

Table 7.3-2 Existing open space, hierarchy and character classification

Name	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Ben Alexander Reserve	0.08	Small Local	Play	Linking space, Seating/viewing
Burnley Park	15.70	City wide	Heritage	Sporting, Botanical, Public Garden
Cairns Reserve	0.40	Local	Seating/viewing	Play
Circus Site	3.00	Regional	Heritage	Nature conservation, Public parkland
Dame Nellie Melba Memorial Park	0.22	Local	Public garden	Formal, Urban heat mitigation, Botanical
Peppercom Park	0.06	Small Local	Botanical	Seating/viewing
Richmond Terrace Park	0.07	Small Local	Public square	Seating/viewing, Linking space
Wangaratta Street Park	0.05	Small Local	Public square	
Yarra River Trail – Bridge Rd to Swan St	3.87	Regional	Linear	Waterway, Nature conservation
Total	23.46			

7.3.2d Distribution of open space in Central Richmond

The existing open space has been allocated an appropriate open space hierarchy as shown in Table 7.3-2 above and a corresponding walking catchment appropriate to it, as described in Table 3-1 and 3-5 of this report. The areas of the precinct that are located outside the walking catchments of the different open space reserves are referred to as 'gap areas' and are shown in white in Figure 7.3C on the next page. The assessment of the adequacy of the existing open space network in Central Richmond is informed by the analysis of the spatial distribution of open space. As one of the key aims of this Strategy is for everyone to live and work within a safe and easy walk of open space, the recommendations will focus on addressing the gaps in the existing open space network.

For Central Richmond, the major gaps in the existing open space network occur between Punt Road and Lennox Street and between Coppin and Burnley Streets. To assist with the open space analysis, Central Richmond has been divided into three open space sub-precincts. These are shown in Figure 7.3B.

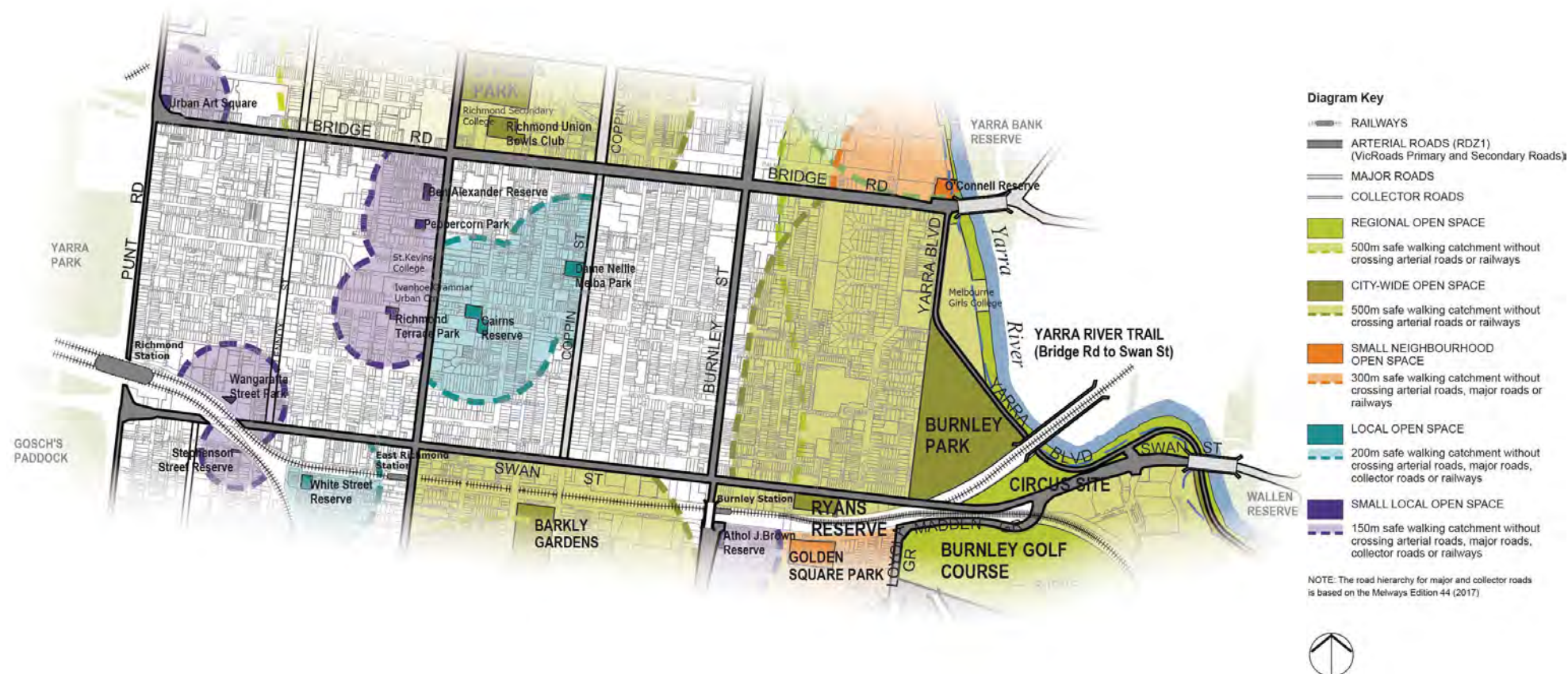


Figure 7.3C Gap analysis for Central Richmond

7.3.3 How residents use open space

A total of 172 resident surveys were received from the Central Richmond. Please note that in addition to these, 113 surveys were also completed by workers in Richmond, near the Epworth Hospital and Bridge Road. A summary of the results of the worker survey is included in the next section 7.3.4.

The 172 resident surveys completed for Central Richmond represents 14 per cent of the total surveys received. The .id Community Profile indicates that 15 per cent of the City of Yarra's population lives in Central Richmond.

Table 7.3-3 Most frequently visited open space

No.	Name	Reasons to visit	Suggested improvements
Open space within walking distance			
110	Citizens Park	<ul style="list-style-type: none"> • Dog walking (17) • Playgrounds (16) • Play (15) • Sport – organised junior football incl. Auskick (12) • Exercising (11) • Walking (11) • Gleadell Street Market (10) • Social - meeting friends (8) • Close to home (7) • Relaxing (7) • Sport - structured/organised (7) • Sport - spectating (6) • Sport - football (6) 	<ul style="list-style-type: none"> • Clubrooms require upgrade (15) • Sports facilities for girls required (12) • Regular cleaning of dog off-leash areas required (10) • No improvements required (10) • Upgrade the playground (10)
42	Barkly Gardens	<ul style="list-style-type: none"> • Playgrounds (9) • Dog walking (8) • Social - meetings friends (6) • Close to home (4) • Exercising (4) • Play - children (4) 	<ul style="list-style-type: none"> • Public toilets require upgrade(4) • Public toilets require cleaning (4) • Additional public toilets required (3) • No improvements (3)
28	Burnley Park	<ul style="list-style-type: none"> • Dog walking (9) • Playground (4) • Walking (4) • Basketball court (3) • Picnics including BBQs (3) • Relaxing (3) • Social – meeting friends (3) 	<ul style="list-style-type: none"> • Improve the caretakers cottage (3) • More exercise equipment (2) • More seating (2) • More basketball courts (2)
22	Yarra River Corridor	<ul style="list-style-type: none"> • Walking (9) • Exercising (6) • Cycling (3) • Dog walking (3) • Natural character (3) 	<ul style="list-style-type: none"> • More drinking fountains (3) • Widen the paths (2) • More seating (2) • Access ramp required at Collins Bridge (2)
Open space beyond walking distance			
23	Royal Botanical Gardens	<ul style="list-style-type: none"> • Gardens (6) • Picnics (4) • Relaxing (3) 	<ul style="list-style-type: none"> • No improvements required (4)
15	Barkly Gardens	<ul style="list-style-type: none"> • Playground (7) • Social – meeting friends (3) • Walking (c) 	<ul style="list-style-type: none"> • No improvements required (3) • Shade for picnic facilities (3)

No.	Name	Reasons to visit	Suggested improvements
			<ul style="list-style-type: none"> • Upgrade public toilets (3)
14	Burnley Park	<ul style="list-style-type: none"> • Dog walking (5) • Exercising (3) • Social - meeting friends (3) 	<ul style="list-style-type: none"> • No improvements required (4)
14	Citizens Park	<ul style="list-style-type: none"> • Social - meeting friends (2) • Sport - girls organised sport (2) 	<ul style="list-style-type: none"> • Improve sporting facilities for girls (2)
13	Kevin Bartlett Reserve	<ul style="list-style-type: none"> • Sport - football (3) • Exercising (2) 	<ul style="list-style-type: none"> • Clubrooms require upgrade (2) • Sporting facilities require upgrade (2)

Values of open space (top five)

- 67% Trees
- 63% A place to relax and unwind
- 57% The feeling of space
- 56% Just being outside
- 53% An escape from the built environment

Types of open space used (top five)

- 92% Open space along Yarra River
- 85% Small local parks
- 83% Large parks and gardens and 83% Local streets for exercise
- 81% Large sporting reserves
- 54% Urban squares

Activities and facilities in open space (top five)

- 83% Open grassed areas
- 82% Walking paths
- 76% Drinking fountains
- 73% Seats
- 64% Cycle paths

General comments

This was an open ended section of the survey where respondents could write any additional comments. The following list are comments made by four or more people:

- Additional open space is required particularly as densities increase and the less private open space (17)
- Prioritise sport for children's health (8)
- Additional open space is required for junior sport (5)
- Open space – retain what we have (4)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix B.

7.3.4 How existing workers use open space

113 workers were surveyed in the Epworth Hospital and Bridge Road area about open space.

Frequency of use of open space near the workplace

- 88 per cent of those surveyed visit open space near their workplace with 53 per cent of them nominated they visit open space frequently.

Reasons to visit open space near the workplace

The three top reasons workers visit open space near their place are:

- 66% to be outdoors as a break from work
- 42% to socialise / meet colleagues / friends
- 19% to eat lunch

Most frequently visited open space

No.	Name
15	Fitzroy Gardens
13	Royal Botanic Gardens
11	Parks
10	Citizens Park
8	Barkly Gardens
8	Yarra Park

Suggestions for improvements to the open space network

The following list is the comments made by 4 or more people:

- Additional open space required (15)
- No improvements required to open space (9)
- Additional car parking required (5)
- Public toilets - additional required (4)

7.3.5 Analysis of future change and open space needs

7.3.5a Forecast future population

Quantity

The table below shows the forecast population growth for the residential and worker populations in Central Richmond. A further breakdown of the forecasts for the three open space sub-precincts within Central Richmond have been prepared by .id Consulting to assist with analysis of where forecast change will occur.

Residential population forecasts are sourced from .id Consulting (2018) and the worker population estimates are calculated from the floor area growth forecasts in the *Spatial Economic and Employment Strategy, SGS, 2018* (SEES, 2018).

The resident population growth is moderate with an overall change in residential population of 24 per cent or an additional 3,381 residents between 2016 and 2031. The

worker population is estimated to increase by approximately 30 per cent, with an additional 3,036 additional workers between 2016 and 2031.

The resident population forecasts through to 2041 illustrate that there is still additional capacity for growth beyond 2031 in Central Richmond. While this Strategy is primarily addressing the open space needs of the existing and forecast population through to 2031, it is useful to understand the context of the magnitude of change beyond the Strategy timeframe.

Table 7.3-4 Resident population forecasts for Central Richmond open space sub-precincts

SUB-PRECINCT	2016	2031	Difference 2016-2031
Central Richmond A	4,722	5,935	1,213
% change Central Richmond A			26%
Central Richmond B	5,581	6,561	980
% change Central Richmond B			18%
Central Richmond C	3,585	4,773	1,188
% change Central Richmond C			33%
Total Central Richmond	13,888	17,269	3,381
Total % Change			24%

Table 7.3-5 Worker population estimates for Central Richmond open space sub-precincts

The worker population growth is moderate with an overall change in worker population of 30 per cent or an additional 3,036 workers between 2016 and 2031. The change is greatest in sub-precincts Central Richmond A and B.

EMPLOYMENT/ RETAIL PRECINCT	2016	2031	DIFFERENCE	% CHANGE
Central Richmond A				
Bridge Road Retail Precinct	3,907	4,925	1,018	26%
Swan Street Retail Precinct	1,302	1,862	560	43%
<i>Total estimated working population Central Richmond A</i>	<i>5,209</i>	<i>6,787</i>	<i>1,578</i>	<i>30%</i>
Central Richmond B				
Bridge Road Retail Precinct	3,907	4,925	1,018	26%
Swan Street Retail Precinct	767	1,097	330	43%
<i>Total estimated working population Central Richmond B</i>	<i>4,674</i>	<i>6,022</i>	<i>1,348</i>	<i>29%</i>
Central Richmond C				
Bridge Road Retail Precinct	0	0	0	0%
Swan Street Retail Precinct	256	366	110	43%
<i>Total estimated working population Central Richmond C</i>	<i>256</i>	<i>366</i>	<i>110</i>	<i>43%</i>
Retail and employment precinct totals				
Bridge Road Retail Precinct	7,814	9,850	2,036	26%
Swan Street Retail Precinct	2,326	3,325	1,000	43%
<i>Total estimated working population Central Richmond</i>	<i>10,140</i>	<i>13,176</i>	<i>3,036</i>	<i>30%</i>

7.3.5b Population change impacts on open space

The additional quantity of people living and working in Central Richmond will place increased pressures and demands on the existing open space. The pressures will include increased volumes of people in the open space utilising the facilities, leading to

overcrowding, lack of access to the facilities due to increased numbers of people using them and deterioration in the quality of natural features such as grass areas due to compaction from increased use.

7.3.5c Where change will occur

The forecast resident and worker population increase in Central Richmond will be concentrated in the Bridge Road and Victoria Street Retail Precincts in Central Richmond A and B, and the former Channel 9 Studios in Central Richmond C. Refer to Figures 7.3D and 7.3E below.

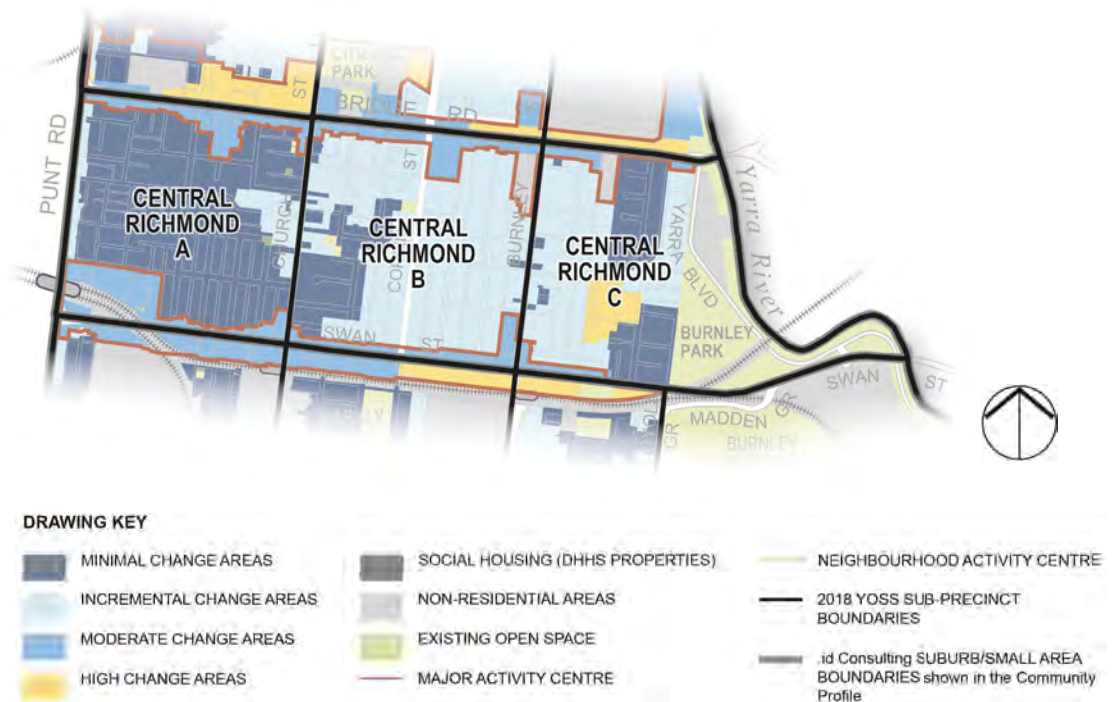


Figure 7.3D Open space sub-precincts and the Strategic Housing Framework (YHS, 2018)

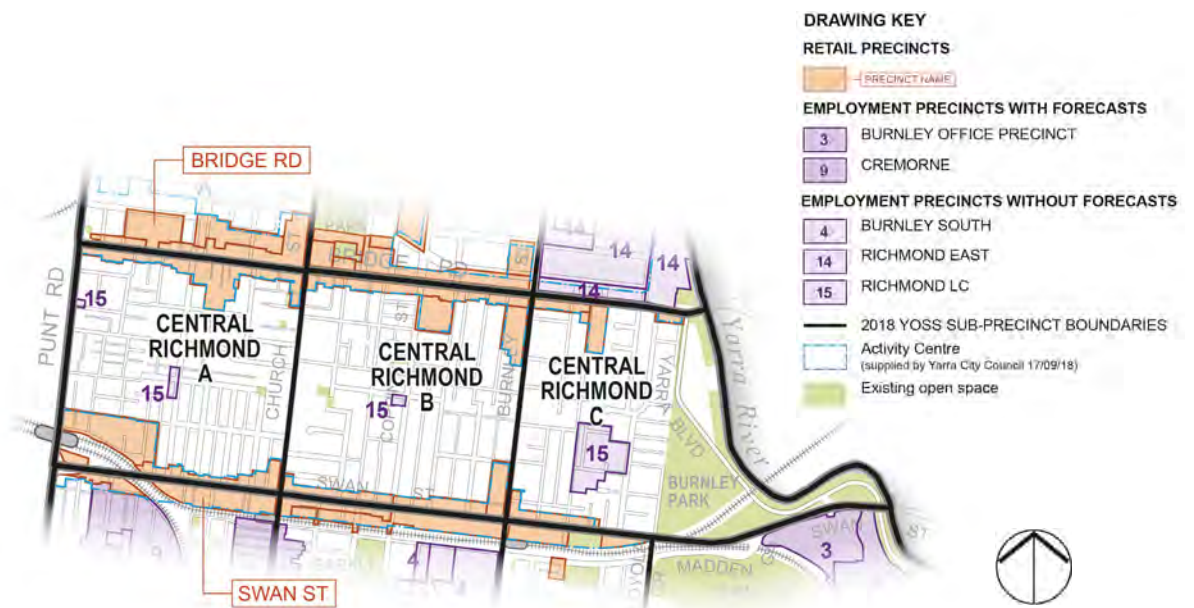


Figure 7.3E Open space sub-precincts and the Employment and Retail Precincts (SEES, 2018)

7.3.5d Open space distribution and future need in Central Richmond

Within Central Richmond the major roads form barriers to safe and easy access to open space. These sub-precincts are based on the ability of people working or living in Central Richmond to easily reach open space. The open space survey results confirm that residents travel outside Central Richmond to visit open space, primarily for sport and the beauty and diversity of character in the large public gardens. The key open spaces include Citizens Park, the Royal Botanic Gardens and Kevin Bartlett Reserve. The high value placed on the need to relax and unwind in the open space surveys supports the need to ensure that adequate areas of green open space with natural features are provided in Central Richmond.

Sub-precinct	Conclusions
Central Richmond A Located between Punt Road and Church Street, from Bridge Road in the north to Swan Street in the South. Refer to Section 7.3.2 for the description of existing open space and character.	<ul style="list-style-type: none"> • A 26 per cent increase in the resident population is forecast with an additional 1,213 residents by 2031. • A 30 per cent increase in the worker population is estimated with an additional 1,578 workers by 2031. • Combined, this represents an additional 2,791 people living and working in the precinct by 2031, compared to a combined estimated existing population of 9,752 in 2016, representing a 29 per cent increase. • The existing open space network includes a series of Small Local open spaces with a diversity of character and facilities. Given they are all small spaces, none currently provide facilities for unstructured recreation. • There is potential to improve and expand Wangaratta Street Park. • There is a gap in open space provision in the western part of Central Richmond A and a gap in the provision of a larger open space that offers an opportunity for active unstructured recreational facilities. • Recommend a new Local open space located in the north-west of the sub-precinct, as shown in Figure 7.3F to address the existing gap area. The new open space will be large enough to provide some unstructured active recreational activities, for example fitness stations and/or multi-use courts/spaces that encourage physical activity for a diverse range of ages. • Upgrade and expand the size of Wangaratta Street Park and redesign to include significant urban greening and moisture absorbing surfaces to contribute to urban cooling and assist mitigate urban heat island effect.
Central Richmond B Located between Church and Burnley Streets, between Bridge Road and Swan Street. Refer to Section 7.3.2 for the description of existing open space and character.	<ul style="list-style-type: none"> • A 18 per cent increase in the resident population is forecast with an additional 980 residents by 2031. • A 29 per cent increase in the worker population is estimated with an additional 1,348 workers by 2031. • Combined this represents an additional 2,328 people living and working in the precinct by 2031, compared to a combined estimated existing population of 10,150 in 2016, representing a 23 per cent increase.

Sub-precinct	Conclusions
	<ul style="list-style-type: none"> • There are gaps in the provision of open space east of Burnley Street. Therefore it is recommended that two additional Small Local open spaces or one larger Local open space is provided in the north and south of this sub-precinct. This will provide new open space for the existing and estimated future worker and resident population in close proximity to the Bridge Road Activity Centre and the Swan Street retail strip. • Continue to undertake minor upgrades to Cairns Reserve and Dame Nellie Melba Park. to adapt and cater to the increase in forecast increased population.
<p>Central Richmond C</p> <p>Located between Burnley Street and the Yarra River and Bridge Road and Swan Street. Refer to Section 7.3.2 for the description of existing open space and character</p>	<ul style="list-style-type: none"> • A 33 per cent increase in the resident population is forecast with an additional 1,188 residents by 2031. • A 43 per cent increase in the worker population is estimated with an additional 110 workers by 2031. • Combined, this represents an additional 1,298 people living and working in the precinct by 2031, compared to a combined estimated existing population of 3,806 in 2016, representing a 34 per cent increase. • While there are no gaps in the provision of open space there will be an increase particularly in the resident population in the sub-precinct, particularly around the former Channel 9 Studios site. • Therefore it is recommended that Burnley Park receives continued levels of improvement and maintenance levels to cater to the expanded population in the park.

7.3.6 Central Richmond Recommendations

7.3.6a Summary of overall intent

Provision and distribution

Burnley Park, the Circus Site and the system of open space along the Yarra River contribute significantly to the open space character of Central Richmond, however these are all located in the east of the precinct. Forecast is for more than 6,000 additional people to be living and working in the precinct, particularly to the western end of the precinct. There is a need to provide new Local and Small Local open spaces to cater primarily to the forecast population and better meet the open space needs of the existing population. The new open space will assist to diversify the active unstructured recreational activities in the west and assist to mitigate urban heat, provide increased urban greening and open space within a safe and easy walk of residents and workers as urban densities continue to increase in the future.

Quality and design

There is potential to diversify the recreational facilities in the western part of Central Richmond. The additional open space can be designed to provide a diversity of facilities for the existing and future population and contribute positively to mitigating urban heat island effect.

Refer to Figure 7.3F for the spatial location of recommendations for Central Richmond.

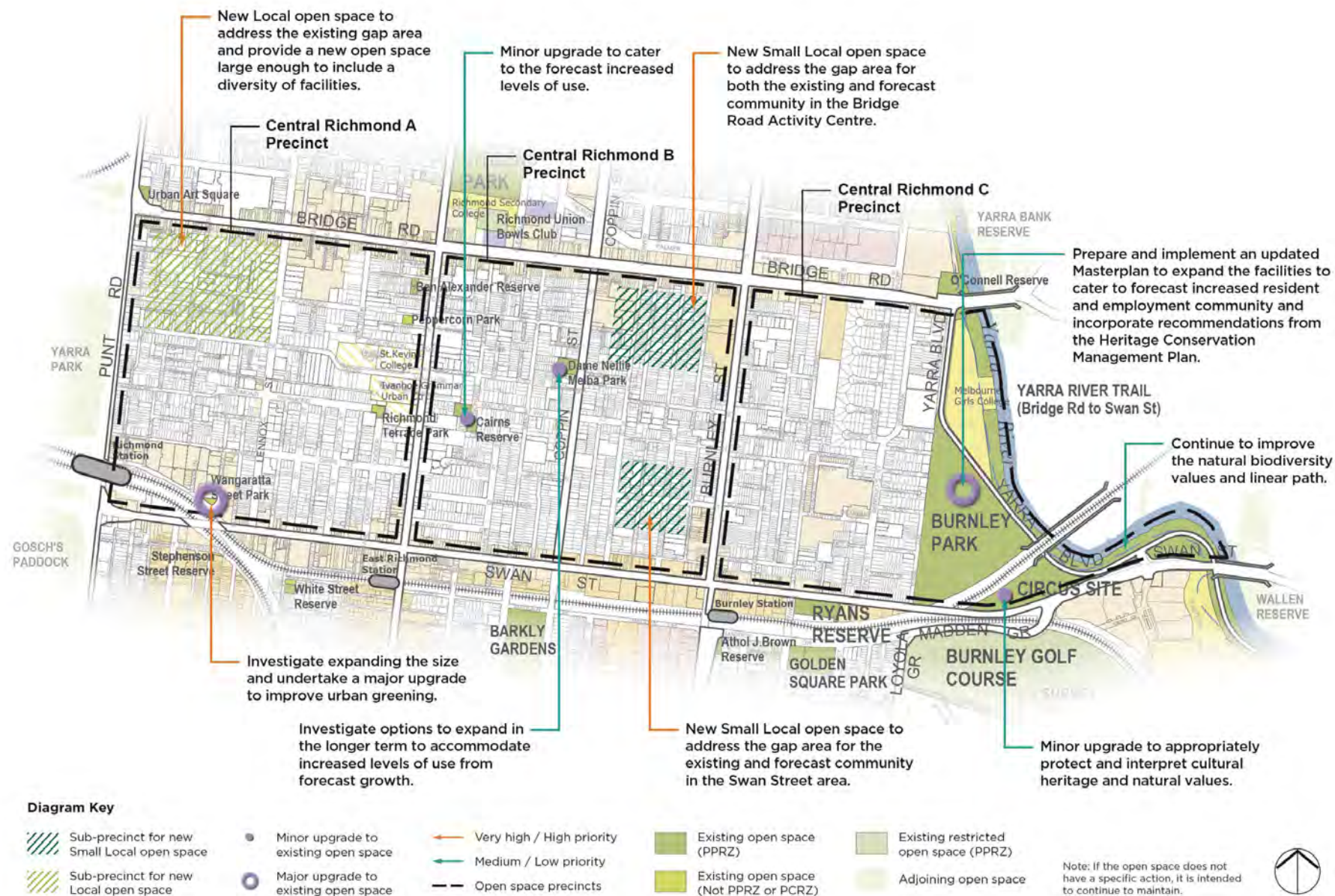


Figure 7.3F Recommendations for Central Richmond

7.3.6b Precinct Actions for Central Richmond

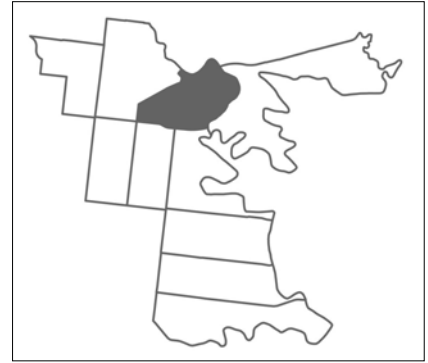
A Additional open space

No.	Action	Responsibility	Priority
7.3A-1	Provide a new Local open space in the north west of Central Richmond A as shown in Figure 7.3F for both the existing and forecast new population. The new Local open space will need to include the provision of space and facilities for unstructured active recreational uses given these are not currently well provided for in Central Richmond.	YCC Developer	Very High
7.3A-2	Provide a new Small Local open space in the north east part of Central Richmond B as shown in Figure 7.3F for both the existing and future population. The location is to be accessible via the local street network and preferably improve east-west connectivity.	YCC Developer	Very High
7.3A-3	Provide a new Small Local open space in the north east part of Central Richmond B as shown in Figure 7.3F for both the existing and future population.	YCC Developer	Very High
7.3A-4	Investigate options to expand the size of Dame Nellie Melba Park in the longer term to increase the capacity of the open space to accommodate increased levels of use as a result of forecast growth.	YCC Developer	Low

B Existing open space

No.	Action	Responsibility	Priority
7.3B-1	Ben Alexander Reserve Continue to maintain.	YCC	Medium
7.3B-2	Burnley Park Prepare a revised Landscape Masterplan that incorporates the recommendations from the 2007 CMP, investigates viable future uses of the cottage and responds to the heritage and historical values of the park. The design will need to cater to the forecast new population needs including increasing the capacity of the facilities to the accommodate the increased levels of use. This is primarily for the forecast new population.	YCC	Medium
7.3B-3	Cairns Reserve Undertake minor upgrades to adapt and cater to increased levels of use from the forecast population. This includes investigating the provision of a barbecue and picnic facility along facilities that encourage active unstructured recreation.	YCC	Medium
7.3B-4	Circus Site Undertake minor improvements to protect and appropriately interpret the cultural heritage and natural values of the site. Continue to manage this reserve for hosting major events with improved management guidelines to adequately protect the site from damage.	YCC	Ongoing

No.	Action	Respons- ibility	Priority
7.3B-5	Dame Nellie Melba Park Undertake minor upgrades to adapt and cater to increase levels of use from the forecast population. Facilities to promote informal use of this reserve including barbecue and picnic facilities to complement the facilities provided in Cairns Reserve, which is nearby. Refer to the Action 7.3A-5 regarding the longer term aim to investigate opportunities to expand the size of the open space to improve its function and use primarily for the forecast population.	YCC	Low
7.3B-6	Peppercorn Park Continue to maintain.	YCC	Ongoing
7.3B-7	Richmond Terrace Park Continue to maintain.	YCC	Ongoing
7.3B-8	Wangaratta Street Park Prepare a Concept Plan to guide the future expansion and upgrade of Wangaratta Street Park. This includes: <ul style="list-style-type: none"> • Investigating additional road closure to expand the size of the open space. • Increase the urban greening and cooling character of this open space including additional moisture absorbing surfaces, garden beds, trees and turf. 	YCC	High
7.3B-9	Yarra River Trail – Bridge Rd to Swan St Continue to undertake improvements as required to the natural biodiversity values and linear path consistent with the cultural and natural values of the river corridor.	YCC	Ongoing



7.4 Clifton Hill

7.4.1 Introduction

Merri Creek defines the eastern extent of Clifton Hill, with Queens Parade to the north west and the Alexandra Parade to the south. The land form is relatively flat and grades down towards Merri Creek.

The land use has historically been primarily residential, with non-residential use located along Hoddle Street, Queens Parade and Alexandra Parade/Eastern Freeway. A range of large strategic sites have progressively been redeveloped over recent years to medium density mixed use. A core area of non-residential use is to be retained between the railway and Hoddle Street south of Clifton Hill Station along with some near the corner of Smith Street and Alexandra Parade. The other types of land use include the Clifton Hill and Spensley Street Primary Schools and open space. The existing open space network significantly contributes to the precinct character, with Darling Gardens and Mayors Park west of Hoddle Street and the Merri Creek open space corridor on the eastern boundary of the

With the predominantly residential land use in the precinct the resident population is greater than the worker population in Clifton Hill, as follows:

- Existing residential population 2016: 6,792 (*Source: .id Consulting population forecasts, 2018*)
- Existing estimated worker population 2016: 920 (*Source: SEES, SGS 2018*)

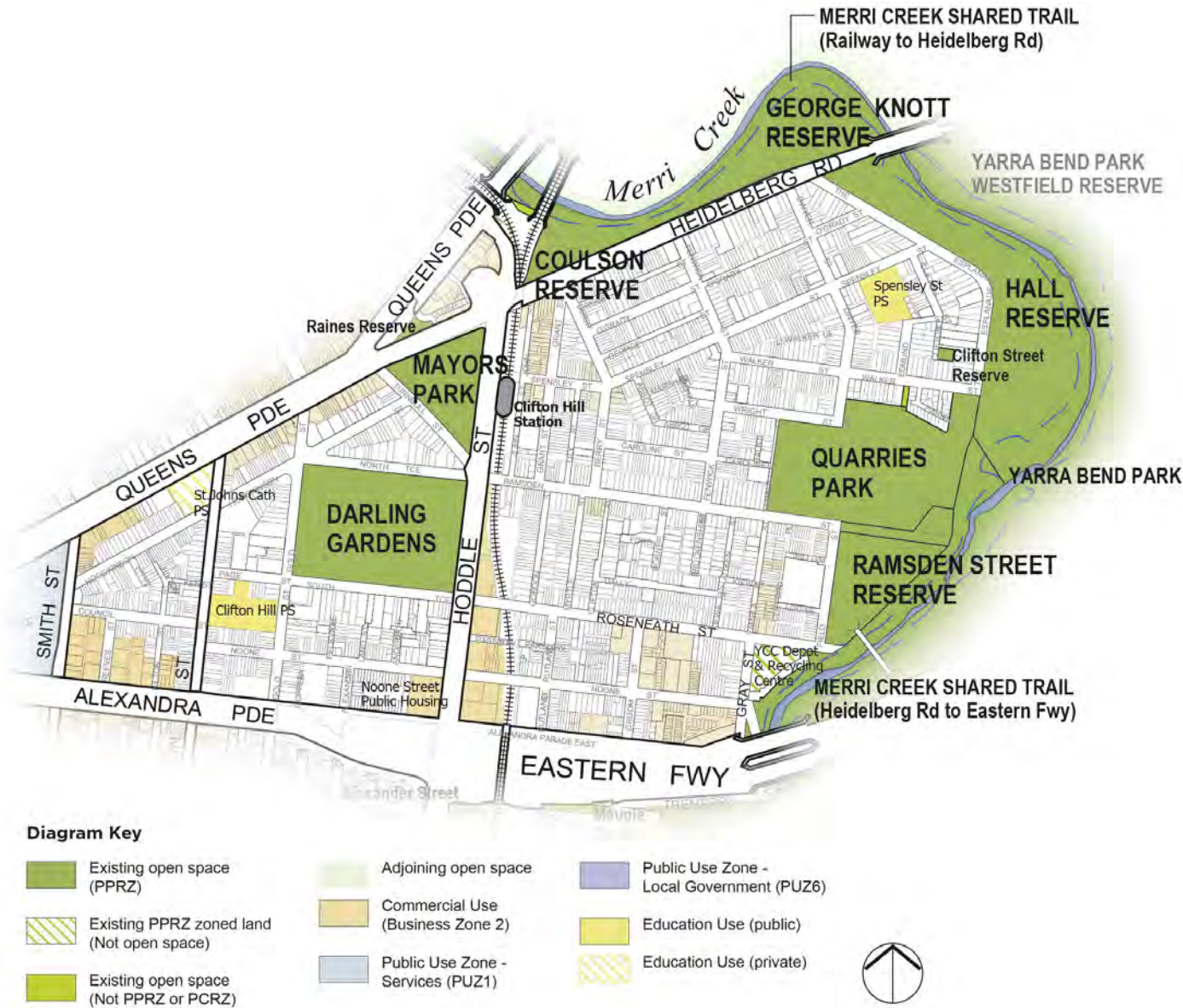


Figure 7.4A Existing open space in Clifton Hill

7.4.2 Existing open space

7.4.2a Open space precinct description

Hoddle Street forms a major physical barrier to easy and safe access to open space in Clifton Hill, and defines the two open space sub-precincts, Clifton Hill A and B, as shown in Figure 7.4C below.



Figure 7.4B Open space sub-precincts for Clifton Hill

Clifton Hill A

- Open space sub-precinct Clifton Hill A is located between Punt Road and Church Street, from Victoria Street in the north to Bridge Road in the South.
- Open space located in this sub-precinct includes
 - Darling Gardens
 - Mayors Park
- Darling Gardens is one of Melbourne's signature Victorian Gardens and is identified as locally significant as an early and important recreation facility within Clifton Hill and Collingwood. Of note are the mature deciduous trees including two recorded by the National Trust of Victoria. The Darling Gardens Masterplan (2015) guides the future upgrades to the gardens.
- Mayors Park located north of Darling Gardens complements it by providing structured sport and recreation facilities including the Collingwood Leisure Centre and the Mayors Park tennis and netball courts. Other facilities include a playground, open grassed area, paths and planting.
- Other major land use in this precinct includes the Clifton Hill Primary School and the non-residential uses to the south along Alexandra Parade.
- The *Yarra Housing Strategy* (2018) identifies two Moderate Change areas. One is in the south-east adjoining Alexandra Parade between Wellington and Hoddle Streets. The second is the land adjoining Queens Parade. The balance of the precinct is identified as minimal change and non-residential use as shown in Figure 7.4D.

Clifton Hill B

- Open space sub-precinct Clifton Hill B is located between Church and Burnley Streets, north of Bridge Road.
- Open space located in this sub-precinct includes
 - Clifton Street Reserve

- Coulson Reserve
- Hall Reserve
- Quarries Park
- Ramsden Street Reserve
- Merri Creek Shared Trail (Heidelberg Road to the Eastern Freeway)
- Merri Creek Shared Trail (Railway to Heidelberg Road)
- The majority of the open space reserves are located along Merri Creek and adjoin each other. The only open space located away from the continuous open space corridor along the creek is Clifton Street Reserve.
- Coulson Reserve and George Knott Reserve are primarily for structured sporting purposes with the Merri Creek Shared Trail located through and adjoining them. Located north of Heidelberg Road, they are not easily accessible from within the precinct and can only be accessed via the Merri Creek Trail shared trail crossing at Heidelberg Road.
- Hall Reserve is primarily for unstructured recreational use with two playgrounds and path connections down to the Merri Creek Trail, which directly adjoins the reserve. It has a natural bushland character.
- Quarries Park contains both structured sporting facilities and large regional play space, while Ramsden Street Reserve is primarily for structured sport.
- Merri Creek Shared Trail is continuous along this reserve adjacent to the creek and joins the Main Yarra Trail at Dights Falls at the confluence of the waterways in Abbotsford.
- The land use is predominantly standard and medium density residential with the area of non-residential use between the railway and Hoddle Street. Other land use includes the Spensley Street Primary School and open space.
- The *Yarra Housing Strategy* (2018) includes a few Incremental Change areas but is predominantly Minimal Change, as shown in Figure 7.4D.

7.4.2b Quantity of open space in Clifton Hill

The 9 existing open spaces in Clifton Hill have a combined total area of 41.18 hectares. This represents approximately 24.6 per cent of the total land area of the precinct. Additionally there is one existing restricted open space, being George Knott Reserve, which is 2.35 hectares in size. Adding the restricted open space to the other 9 open spaces results in a total of 43.53 hectares and represents 26 per cent of the total land area of the precinct.

Table 7.4-1 *Number, size and type of open space*

No	Hierarchy	Area (ha)	%
3	Regional	18.74	46%
5	City wide	22.37	54%
0	Neighbourhood	0.00	0%
0	Local	0.00	0%
1	Small Local	0.07	0%
9	TOTAL	41.18	100%

7.4.2c Open space hierarchy, character and quality

The linear open space along Merri Creek is an important habitat and recreational corridor for wider Melbourne. Downstream of Heidelberg Road it feels more spacious given the extensive Yarra Bend Park adjoins the eastern side of Merri Creek. For this reason, Hall Reserve adjoining the Merri Creek Trail reserves has been identified as Regional open space. Quarries Park has a natural bushland character towards the creek and the major play space including picnic and skate facility, along with the sports field for soccer including the pavilion in the western part of the park. The southern end of Hall Reserve also has a second soccer pitch. Quarries Park is classified as a City-wide open space. Similarly, Ramsden Street Reserve with the outdoor sports fields including a full sized AFL oval that is used for cricket and football.

In contrast to the natural bushland character and setting for the open space reserves along the Merri Creek Darling Gardens provides an established Victorian exotic public garden character. It is the most popular open space in the resident open space survey with more than 60 per cent of respondents indicating that they visit it. Mayors Park on the other hand is identified as being not well used in the open space survey. This may in part be due to its smaller size and close proximity to Darling Gardens.

As a point of different from other precincts in the City of Yarra, there are no Local open spaces and only one Small Local open space being Clifton Street Reserve located in the heart of the residential area between Walker and Spensley Streets. It is not specifically nominated in the resident open space survey and provides a green open grassed area with trees and a couple of picnic tables.

Table 7.4-2 Existing open space, hierarchy and character classification

Name	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Clifton Street Reserve	0.07	Small Local	Informal	Urban heat mitigation
Coulson Reserve	1.03	City-wide	Sporting	Waterway, Botanical
Darling Gardens	7.24	City-wide	Heritage	Public garden, Botanical
Hall Reserve	11.02	Regional	Linear	Sporting, Heritage, Native bushland, Nature conservation, Play
Mayors Park	2.46	City-wide	Sporting	Restricted sport and recreation, Public garden
Quarries Park	8.33	City-wide	Sporting	Linear, Play, Native bushland, Nature conservation, Seating/viewing
Ramsden Street Reserve	3.32	City-wide	Sporting	Waterway, Nature conservation
Merri Creek Shared Trail (Heidelberg Rd to Eastern Freeway)	3.98	Regional	Linear	Waterway, Nature conservation
Merri Creek Shared Trail (Railway to Heidelberg Road)	3.73	Regional	Linear	Waterway, Nature conservation
Total	41.18			
Restricted open space				
George Knott Reserve	2.35	City-wide	Restricted sport and recreation	Waterway
Total including restricted open space	43.5286			

7.4.2d Distribution of open space in Clifton Hill

The existing open space has been allocated an appropriate hierarchy as shown in Table 7.4-2 above and a corresponding walking catchment appropriate to it, as described in Table 3-1 and 3-5 of this report. The areas of the precinct that are located outside the walking catchments of the different open space reserves are referred to as 'gap areas' and are shown in white in Figure 7.4C on the next page. The assessment of the adequacy of the existing open space network in Clifton Hill is informed by the analysis of the spatial distribution of open space. As one of the key aims of this Strategy is for everyone to live and work within a safe and easy walk of open space, the recommendations will focus on addressing the gaps in the existing open space network.

For Clifton Hill, there are no major gaps in the existing open space network, with the only gap being the area between the railway and Hoddle Street. Given that people working in this precinct can access open space via the local street network, this is not identified as being a high priority to address. While no major redevelopment is planned, if the urban densities were to increase in the future between the railway and Hoddle Street, additional Small Local open space may be required to be provided.

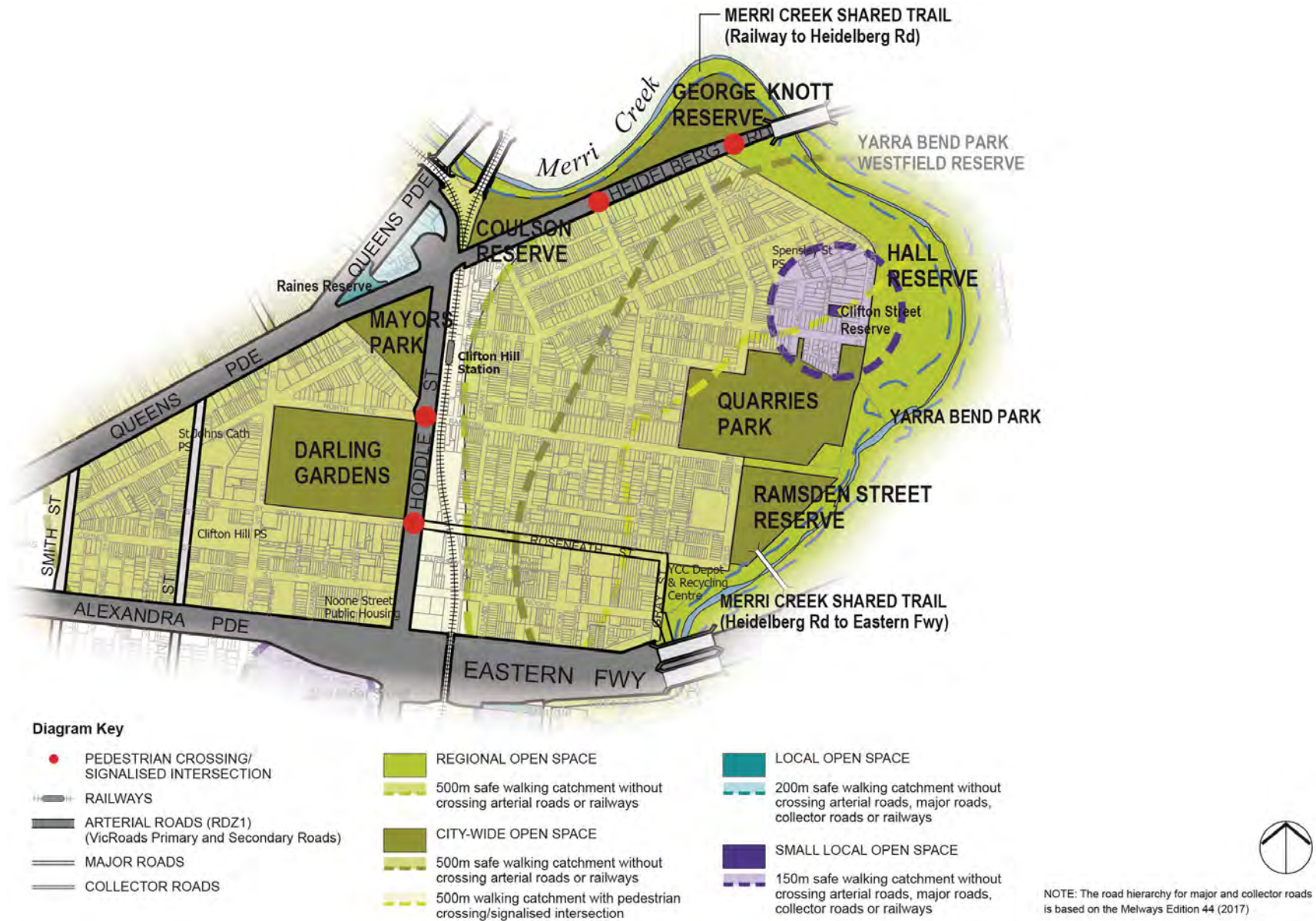


Figure 7.4C Gap analysis for Clifton Hill

7.4.3 How residents use open space

A total of 68 resident surveys were received from Clifton Hill, which represents approximately 5 per cent of the total resident surveys received. The .id Community Profile identifies that 7 per cent of the City of Yarra's population lives in Clifton Hill.

Clifton Hill is well provided for with open space and this is reflected in the responses to the survey in this precinct. There is an appreciation of the bushland qualities of open space given the proximity to Merri Creek and while it is appreciated the most frequently visited open space is Darling Gardens, primarily for play, dog walking and meeting people. In relation to facility provision in open space, respondents have requested additional facilities including shelters and seats. Overall the use of open grassed areas, walking paths and seats is higher than the Municipal average and they value the trees and request more in the streetscapes and open space. Dogs and children are integral to the respondents lives as is enjoying a picnic, playing sport and exercising outdoors.

Table 7.2-3 Most frequently visited open space

No.	Name	Reasons to visit	Suggested improvements
Open space within walking distance			
43	Darling Gardens	<ul style="list-style-type: none"> • Playground (14) • Dog walking (9) • Socialising with friends / family (6) • Convenient / on the way (5) • Picnics (5) • Close to home (4) • Trees (4) • Walking (4) 	<ul style="list-style-type: none"> • No improvements required (5) • Fence the playgrounds (3) • Additional lighting required (3) • Improvements are appreciated (2)
22	Quarries Park	<ul style="list-style-type: none"> • Dog walking (9) • Playground (78) • Exercising (5) • BBQ facilities (2) • Walking (2) 	<ul style="list-style-type: none"> • More BBQs required (3) • More bins required (2) • Dog drinking facilities required (2) • Additional lighting required (2)
19	Edinburgh Gardens	<ul style="list-style-type: none"> • Dog walking (17) • Exercising (4) • Picnics (4) • Socialising with friends / family (4) • Relaxing (3) 	<ul style="list-style-type: none"> • No improvements required (3) • More bins required (1)
7	Yarra Bend Park	<ul style="list-style-type: none"> • Dog walking (3) • Exercising (2) 	<ul style="list-style-type: none"> • Additional dog poo bags and bins required (3) • Cyclists to go slower through the park (1)
Open space beyond walking distance			
10	Edinburgh Gardens	<ul style="list-style-type: none"> • Picnics (4) • Socialising with friends / family (3) • Diverse activities (2) 	<ul style="list-style-type: none"> • No improvements required (1)
5	Fairfield Park	<ul style="list-style-type: none"> • Socialising with friends/family (2) 	<ul style="list-style-type: none"> • Sport clubrooms need upgrading (2) • Open space needs to be upgraded (1)
4	Royal Botanical Gardens Melbourne	<ul style="list-style-type: none"> • Entertainment for adults and children (2) 	<ul style="list-style-type: none"> • Additional exercise equipment required (1)

No.	Name	Reasons to visit	Suggested improvements
4	Yarra Bend Park	<ul style="list-style-type: none"> Natural character of the open space (1) 	<ul style="list-style-type: none"> Additional playgrounds required (1)

Values of open space (top five)

- 79% Trees
- 78% Place to relax and unwind
- 68% An escape from the built environment
- 66% The feeling of space
- 53% Just being outside

Types of open space used (top five)

- 97% Open space along Yarra River, 97% Large parks and gardens
- 93% Open space along the Merri Creek
- 82% Large sporting reserves
- 81% Small local parks, 81% Local streets for exercise
- 54% medium sized parks

Activities and facilities in open space (top five)

- 90% Open grassed areas
- 87% Walking paths
- 77% Seats
- 74% Drinking fountains
- 62% Cycle paths

General comments

This was an open ended section of the survey where respondents could write any additional comments. The following list are comments made by four or more people:

- Open space is valued (6)
- Additional open space is required particularly as densities increases (4)
- Council is doing a good job with the overall strategy (5)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix B.

7.4.4 Analysis of future change and open space needs

7.4.4a Forecast future population

Quantity

The table below shows the forecast population growth for the residential and worker populations in Clifton Hill. A further breakdown of the forecasts for the three open space sub-precincts within Clifton Hill have been prepared by .id Consulting to assist with analysis of where forecast change will occur.

Residential population forecasts are sourced from .id Consulting (2018) and the worker population estimates are calculated from the floor area growth forecasts in the *Spatial Economic and Employment Strategy, SGS, 2018* (SEES, 2018).

The resident population growth is minor with an overall change in residential population of 9 per cent comprising an additional 640 residents between 2016 and 2031. The worker population is forecast to increase by approximately 37 per cent, with an additional 345 workers between 2016 and 2031.

The resident population forecasts through to 2041 illustrate that there is still additional capacity for growth beyond 2031 in Clifton Hill. While this Strategy is primarily addressing the open space needs of the existing and forecast population through to 2031, it is useful to understand the context of the magnitude of change beyond the Strategy timeframe.

Table 7.4-4 Resident population forecasts for Clifton Hill open space sub-precincts

SUB-PRECINCT	2016	2031	Difference 2016-2031
Clifton Hill A	1,675	1,987	312
% change Clifton Hill A			19%
Clifton Hill B	5,117	5,445	328
% change Clifton Hill B			6%
Total Clifton Hill	6,792	7,432	640
Total % Change			9%

Table 7.4-5 Worker population estimates for Clifton Hill open space sub-precincts

EMPLOYMENT/RETAIL PRECINCT	2016	2031	DIFFERENCE	% CHANGE
Clifton Hill A				
Smith Street Retail Precinct	386	566	180	46%
Hoddle Street Employment Precinct	119	156	37	31%
<i>Total estimated worker population Clifton Hill</i>	<i>505</i>	<i>722</i>	<i>216</i>	<i>43%</i>
Clifton Hill B				
Hoddle Street Employment Precinct	416	545	129	31%
<i>Total estimated worker population Clifton Hill</i>	<i>416</i>	<i>545</i>	<i>129</i>	<i>31%</i>
Retail and employment precinct totals				
Smith Street Retail Precinct	386	566	180	46%
Hoddle Street Employment Precinct	535	700	166	31%
<i>Total estimated worker population Clifton Hill</i>	<i>921</i>	<i>1,266</i>	<i>345</i>	<i>37%</i>

7.4.4b Population change impacts on open space

The additional numbers of people living and working in Clifton Hill are anticipated to be accommodated within the existing open space network. This is due the lower numbers of people compared with the quantity and distribution of open space, combined with the location of anticipated forecast change.

The most populous age range is the 25 to 49 age range followed by 60 to 69 age range. In the future, there is forecast to be a slight decline in the 25 to 49 age range and increases in the 70+ age range and the 12 to 24 age range as well. This suggests a reduction in young families and an increase in the ageing population. Lone person households are the most numerous and this is forecast to increase through to 2031. These forecast changes mean there needs to be an emphasis on catering to all age groups in open space design with a focus on social facilities given the high proportion of people living in lone person households.

7.4.5c Where change will occur

The forecast resident population increase in Clifton Hill will be concentrated west of Hoddle Street in open space precinct Clifton Hill A in areas along Queens Parade and Alexandra Parade. The employment population is forecast to be located in the Hoddle Street and Queens Parade and across open space precincts Clifton Hill A and B. Refer Figures 7.4E and 7.4F below for the spatial distribution of forecast change.

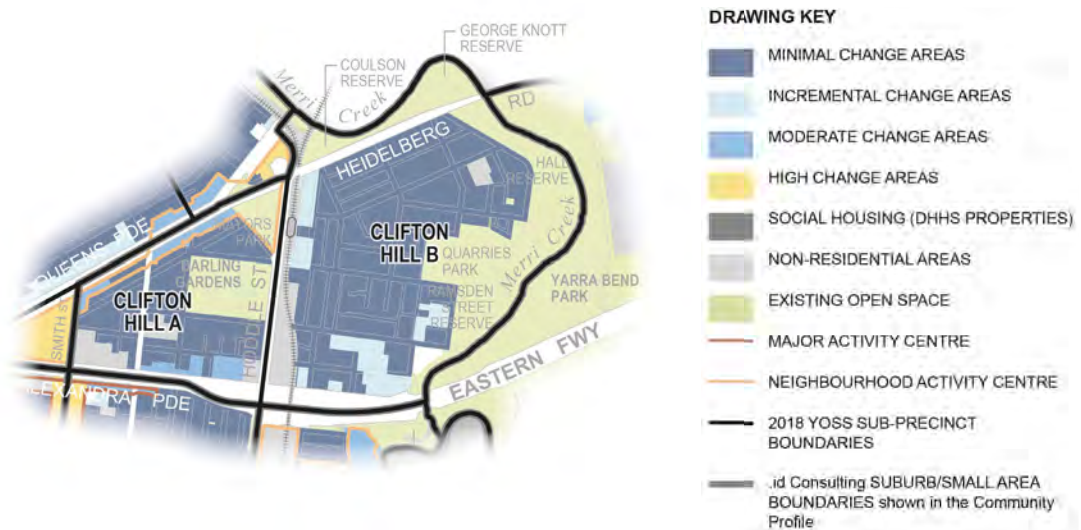


Figure 7.4D Open space sub-precincts and the Strategic Housing Framework (YHS, 2018)



Figure 7.4E Open space sub-precincts and the Employment and Retail Precincts (SEES, 2018)

7.4.5d Open space distribution and future need in Clifton Hill

In Clifton Hill Hoddle Street and the railway form the main north south barriers to safe and easy walking access to open space. Therefore Clifton Hill has been divided into two main open space precincts, Clifton Hill A and B.

Sub-precinct	Conclusions
Clifton Hill A Refer to Section 7.4.2 for the description of existing open space and character.	<ul style="list-style-type: none"> • A 19 per cent increase in the resident population is forecast with an additional 312 residents by 2031. • A 43 per cent increase in the worker population is forecast with an additional 216 workers by 2031. • The existing open space network is diverse in character and has capacity to accommodate increased levels of use within it, particularly with the proposed improvements in the Darling Gardens Masterplan. • Recommend continued implementation of the Darling Gardens Masterplan as a priority to meet the increased levels of use from the forecast worker and resident population in this sub-precinct. • In the longer term, review the future opportunities to improve facilities and character in Mayors Park, given the relatively low levels of use. Improvements to the character and facilities will primarily be for the forecast resident and worker population.
Clifton Hill B Refer to Section 7.4.2 for the description of existing open space and character.	<ul style="list-style-type: none"> • A 6 per cent increase in the resident population is forecast with an additional 328 residents by 2031. • A 31% increase in the worker population is forecast with an additional 129 workers by 2031. • With the relatively low levels of forecast worker population increase in this precinct, it is not necessary at this stage to provide additional open space for the worker population between Hoddle Street and the railway. However, change in this location will need to be monitored, and if more than 300 additional workers or residents are proposed in the gap area, then an additional Small Local open space would be required. • Undertake minor upgrades to Quarries Park to improve passive surveillance and the natural conservation values. In the medium term improve the condition of the play space and picnic facilities. • Undertake minor upgrades to Hall Reserve to improve the social facilities in it including seating and picnic and barbecue facilities to accommodate increased levels of use. • Continue to maintain the other open space reserves.

7.4.6 Clifton Hill Recommendations

7.4.6a Summary of overall intent

Provision and distribution

Clifton Hill is well provided for with open space, with only one small gap area between Hoddle Street and the railway. An additional Small Local open space would only be required in the long term if the employment population in the gap area is estimated to substantially increase.

Quality and design

There is a need to improve the diversity of facilities that appeal to a range of age groups, particularly the older age groups who are forecast to grow over the planning period. Additionally, the open space designs need to encourage social activity in open space with the forecast increase in lone person households.

Refer to Figure 7.4F for the spatial location of recommendations for Clifton Hill.

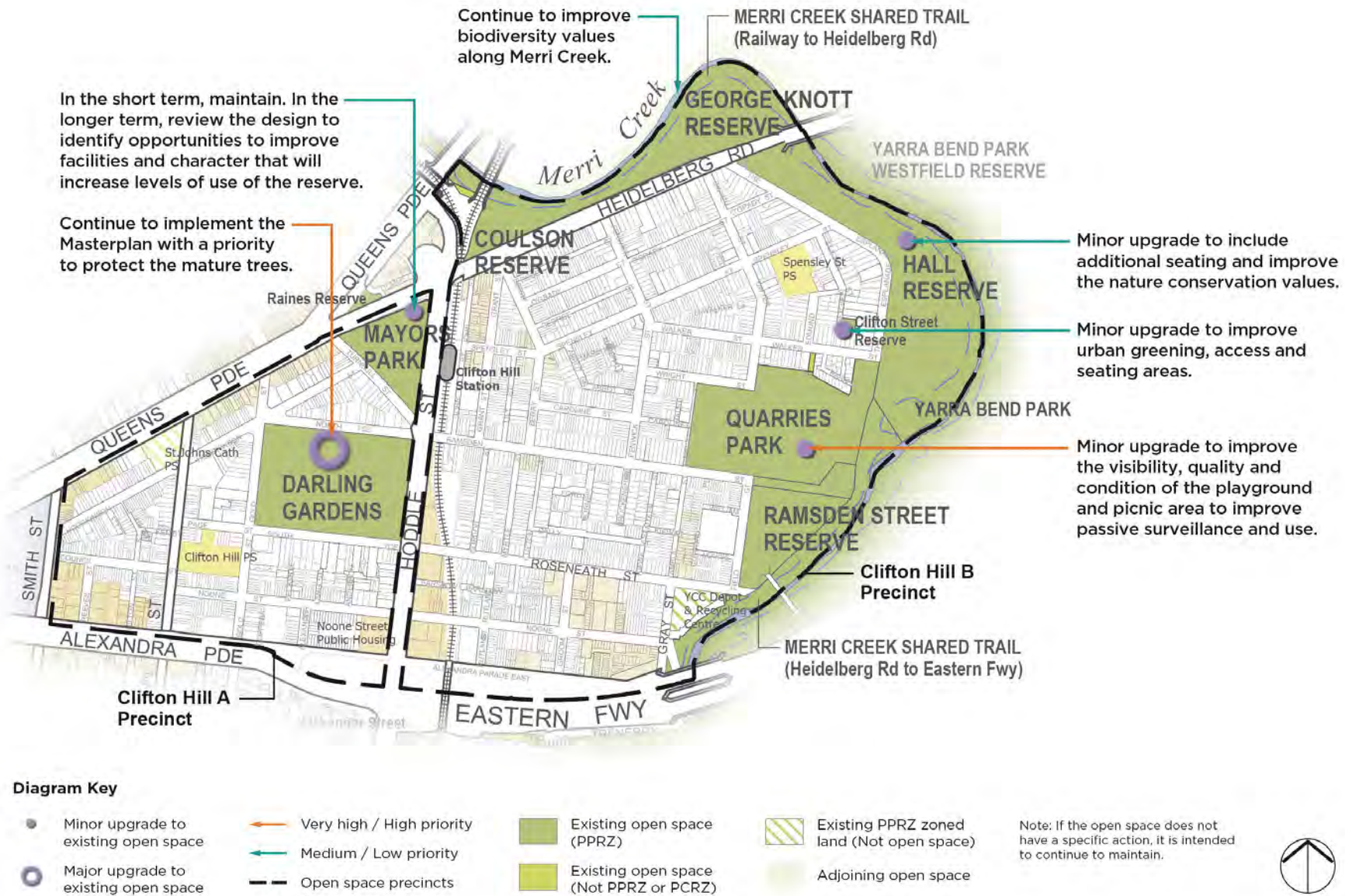


Figure 7.4F Recommendations for Clifton Hill

7.4.6b Precinct Actions for Clifton Hill

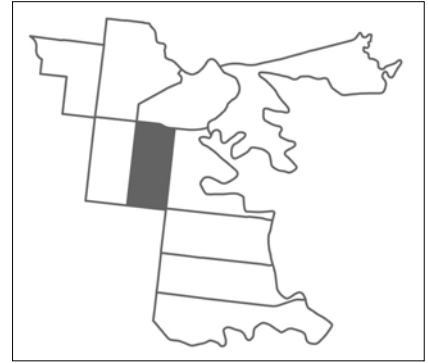
A Additional open space

No.	Action	Responsibility	Priority
7.4A-1	If substantial change occurs in the future between Hoddle Street and the Railway there is potential that a new Small Local open space may be required subject to an open space needs assessment. This would only be required if there is a change to the forecast growth and is not included in the contribution rate calculation and is not included on Figure 7.4F.	YCC	N/A

B Existing open space

No.	Action	Responsibility	Priority
7.4B-1	Clifton Street Reserve Undertake a minor upgrade to improve the design of this space including paths, social meeting areas and improved greening. This is primarily for the existing population.	YCC	Low
7.4B-2	Coulson Reserve Continue to maintain.	YCC	Ongoing
7.4B-3	Darling Gardens Continue to implement the Darling Gardens Masterplan, with priority given to the protection and care of the mature canopy trees, improving the quality and condition of the open grassed areas.	YCC	High
7.4B-4	George Knott Reserve Continue to maintain.	YCC	Ongoing
7.4B-5	Hall Reserve Undertake minor upgrade to Hall Reserve to provide additional seating area and picnic areas to enjoy the expansive views over the reserve and the create social spaces for the people to meet and spend time in the reserve. This will cater to both the forecast increased workers and residents and the existing population.	YCC	Medium
7.4B-6	Mayors Park In the short term continue to maintain. In the longer term review the design of this open space to identify opportunities to improve its level of use and complement the facilities and character of the nearby Darling Gardens. This will cater to both the forecast and existing population.	YCC	Low
7.4B-7	Merri Creek Shared Trail (Railway to Heidelberg Rd) Continue to improve the biodiversity values.	YCC	Ongoing
7.4B-8	Merri Creek Shared Trail (Heidelberg Road to Eastern Freeway) Continue to improve the biodiversity values.	YCC	Ongoing
7.4B-9	Quarries Park Undertake minor upgrades to improve the passive surveillance along with the condition of the playground and picnic area. This will cater to both the forecast and existing population.	YCC	High

No.	Action	Responsibility	Priority
7.4B-10	Ramsden Street Reserve Continue to maintain.	YCC	Ongoing



7.5 Collingwood

7.5.1 Introduction

The urban context of Collingwood is changing from the industrial context to a high density mixed use character with residential, business, retail and commercial uses in renovated former industrial buildings. It is characterised by a lack of open spaces due to its industrial past when they did not set aside public open space in the original layout. A series of Small Local open spaces have been retrofitted into Collingwood in more recent times with the increased awareness of the value of open space to community health and wellbeing. The worker and resident survey respondents have identified they highly value the Small Local open spaces and they are expressing high level of use, and in some cases experiencing signs of overuse and over development. As expected, people travel outside of Collingwood to larger areas of open space, with the most common being Fitzroy Gardens.

Historically the land use in Collingwood has been a relatively unplanned mix of housing, retail and industry and a range of land parcel sizes. The historical records identify that the original industries in Collingwood included brewing and boot-makers. This changed to include textile clothing and footwear industries along with other service industries including the automotive repair and service industries. Since the 1990s there has been a change to business uses along with higher density housing in renovated heritage listed industrial buildings. More recently an arts precinct has emerged focussed around the former Collingwood TAFE site in a spine that extends down to the Abbotsford Convent and smaller galleries that have established themselves.

Smith Street is a vibrant Major activity centre with a business, retail and commercial core centred around Smith Street, extending into the Collingwood Employment precinct.

The Smith Street Structure Plan provides overall strategic direction for the future Major Activity Centre. It reinforces it *'.....as a mixed use area where businesses and residential apartment exist side by side and as an area where light industry and associated uses continue to contribute to the local Yarra economy.'* (Smith Street Structure Plan, p. 11)

The *Johnston Street Local Area Plan*, adopted by Council December 2015, provides the key direction for the future change in the Johnston Street Neighbourhood activity centre. The *Yarra Housing Strategy* (2018) provides direction on the future level of change for residential use within the precinct. The *Gipps Street Precinct Local Area Plan*, adopted by Council February 2010 was the basis for the rezoning a former Industrial Area to a Commercial 2 Zone (C2Z) to reflect and support the contemporary businesses moving

into the area. The C2Z does not allow residential use to encourage and supported the mixed use character of Collingwood.

With the mixed land use, there is a significant worker population in Collingwood which is about 40 per cent greater than the resident population, as follows:

- Existing residential population 2016: 9,141 (*Source: .id Consulting population forecasts, 2018*)
- Existing estimated worker population 2016: 14,810 (*Source: SEES, SGS 2018*)

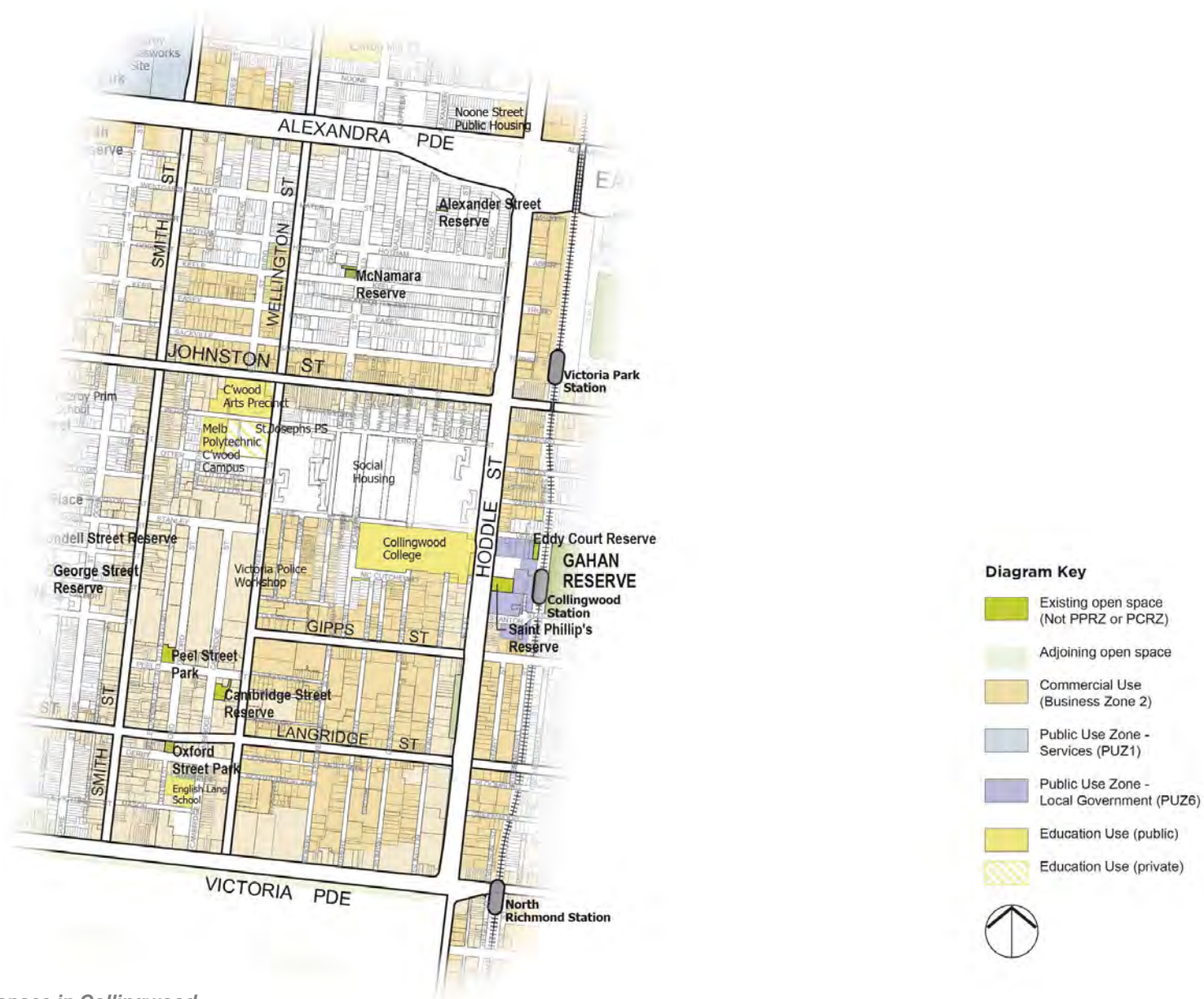


Figure 7.5A Existing open space in Collingwood

7.5.2 Existing open space

7.5.2a Description

Church and Burnley Streets are major north south roads in Collingwood and define three open space sub-precincts, Collingwood A, B and C.



Figure 7.5B Open space sub-precincts for Collingwood

Collingwood A

- Open space sub-precinct Collingwood A is located between Alexandra Avenue and Johnston Street, from Smith Street in the west to Hoddle Street in the east.
- Open space located in this sub-precinct includes
 - Alexandra Street Reserve
 - McNamara Reserve
- McNamara Reserve is located on a prominent and accessible corner and is highly visible and accessible. The playground dominates the open space however there is potential to consider a more integrated design.
- Alexandra Street Reserve is located in a local access street and is not easily visible and accessible to the local community. As with McNamara Reserve it has a small playground with seating and trees.
- The land use in this sub-precinct is predominantly residential combined with commercial use to the south west and some smaller area of mixed use in the north.
- The Smith Street Major activity centre guides the commercial to the west of the sub-precinct.

- The *Yarra Housing Strategy* (2018) identifies a high change areas area in the north west of the sub-precinct within the Smith Street Major activity centre. An area of moderate change is identified along Johnston Street and falls within the direction of the *Johnston Street Local Area Plan*. An area of non-residential land is identified in the in the south west within area currently zoned as C2Z and the balance is identified as minimal change. Refer to Figure 7.5D

Collingwood B

- Open space sub-precinct Collingwood B is located between Johnston Street in the north and Victoria Street in the south and between Smith Street to the west and Wellington Street to the east.
- Open space located in this sub-precinct includes
 - Cambridge Street Park
 - Oxford Street Park
 - Peel Street Park
- Cambridge Street Park has been fully redeveloped since the 2006 Strategy. At that time, this was the only open space in the whole of this sub-precinct. The upgrade includes a range of facilities including a play area, picnic and barbecue facility and the public art that is integrated into the playground. It is an example of slight over-development of this open space relative to its size and the height of built form surrounding the site.
- Peel Street Park has been developed as a passive open space and well suited to the nearby worker community with seating, grassed areas and informal uses. This open space has been implemented as an action from the 2006 Strategy and has been well received by the community and is nominated as the most visited open space in Collingwood in the worker and resident surveys.
- Oxford Street Park has been developed more recently, as an action from the 2006 Strategy. The open space provides seating and greening in highly urban precinct. It does not appear to be well used in the opens space surveys.
- The land use includes the Melbourne Polytechnic Collingwood Campus and the Collingwood Arts Precinct along with remainder of the precinct being mixed use and commercial use.
- The majority of the mixed use area comprises medium and high density development.
- The *Yarra Housing Strategy* (2018) identifies a high change area in the vicinity of Langridge Street with the majority of the precinct identified to be moderate change with some smaller pockets of incremental change.

Collingwood C

- Open space sub-precinct Collingwood C is bounded by Johnston Street to the north, Gipps Street to the south, Wellington Street to the west and Hoddle Street to the east.
- There is no public open space located in this sub-precinct.
- Land use includes social housing, Collingwood College, residential use and commercial/business use.
- The *Yarra Housing Strategy* (2018) Identifies areas of moderate change along Johnston Street and the southern part of Hoddle Street with the remaining identified as non-residential use.

Collingwood D

- Open space sub-precinct Collingwood D is bounded by Gipps Street to the north, Victoria Street to the south, Wellington Street to the west and Hoddle Street to the east.
- There is no public open space located in this sub-precinct.
- Land use includes social housing, Collingwood College, residential use and commercial/business use.
- The *Yarra Housing Strategy* (2018) Identifies areas of moderate change along Victoria Street and Hoddle Street with the remaining being identified as non-residential use.

7.5.2b Quantity of open space in Collingwood

The 5 existing open spaces in Collingwood have a combined total of 0.34 hectares. This represents approximately 0.3 per cent of the total land area of the precinct. Additionally there are two existing encumbered open spaces that are 0.24 hectares in size. Adding the restricted open space to the 5 open spaces results in a total of 0.58 hectares and represents 0.5 per cent of the total land area of the precinct.

Table 7.5-1 Number, size and type of open space

No	Hierarchy	Area (ha)	%
0	Regional	0.00	0%
0	City wide	0.00	0%
0	Neighbourhood	0.00	0%
2	Local	0.22	65%
3	Small Local	0.12	35%
5	TOTAL	0.34	100%

7.5.2c Open space hierarchy, character and quality

In Collingwood there are 2 Local and 3 Small Local open spaces, with the two additional encumbered open spaces which function as tree reserves the major arterial roads including Hoddle Street Alexandra Parade.

Cambridge Street Reserve and Peel Street Park are the two Local open spaces, with Peel Street Park being the most visited open space in the precinct, followed by Cambridge Street Reserve. Peel Street Park caters to both the worker and resident community with the provision of seating and an open grassed area which is popular for dog walking/exercise, however there is potential to improve the character and greening of this space with additional trees and consideration of improving the layout to improve the quality of grass and create a useable area for unstructured recreation. Cambridge Street Park provides play and picnic facilities which primarily appeals to residents rather than workers. The scale of development relative to the size of this open space means that it overwhelms the open space and this is reflected in the community survey outcomes.

Oxford Street Park, located close to Cambridge Street Reserve and Peel Street Park, is characterised as a public square the provides seating and some greening. It is the second most visited open space in Collingwood for people to relax, have lunch, enjoy the

sunlight and green space. McNamara Reserve is characterised as informal and is located north the Johnston Street. The community survey respondents did visit the open space, similarly they did not visit Alexander Street Reserve either. Alexander Street Reserve is characterised as play as it only provides play and seating. There is a need to review the design of McNamara Reserve given its low levels of use. Similarly, Alexander Street Reserve is not well used and this is likely due to its small size and location.

Hoddle Street Reserve and Alexandra Pde/Bendigo Street Reserve are both encumbered by traffic noise and movement and provide some greening adjacent to these major arterial roads. They are also long and narrow in the size making them difficult to use and are therefore not counted as part of the open space network.

Table 7.5-2 Existing open space, hierarchy and character classification

Name	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Alexander Street Reserve	0.02	Small Local	Informal	
Cambridge Street Reserve	0.11	Local	Play	Urban plaza
McNamara Reserve	0.05	Small Local	Informal	Play, Seating/viewing
Oxford Street Park	0.05	Small Local	Public square	
Peel Street Park	0.11	Local	Urban plaza	
Total	0.34			
Encumbered open space				
Hoddle Street Reserve (btwn Langridge and Gipps Sts)	0.22	Small Local		Cnr Langridge & Hoddle Sts
Alexandra Pde/Bendigo St Reserve	0.02	Small Local		Cnr Bendigo Street & Alexandra Parade
Total encumbered open space	0.2423			

7.5.2d Distribution of open space in Collingwood

The existing open space has been allocated an appropriate open space hierarchy as shown in Table 7.5-2 above and a corresponding walking catchment appropriate to it, as described in Table 3-1 and 3-5 of this report. The areas of the precinct that are located outside the walking catchments of the different open space reserves are referred to as 'gap areas' and are shown in white in Figure 7.5C on the next page. The assessment of the adequacy of the existing open space network in Collingwood is informed by the analysis of the spatial distribution of open space. As one of the key aims of this Strategy is for everyone to live and work within a safe and easy walk of open space, the recommendations will focus on addressing the gaps in the existing open space network.

For Collingwood, the major gaps in the existing open space network occur between Smith Street and Wellington Street, north of Johnston Street, and between Wellington Street and Hoddle Street south of Johnston Street. To assist with the open space analysis, Collingwood has been divided into three open space sub-precinct. These are shown in Figure 7.5C

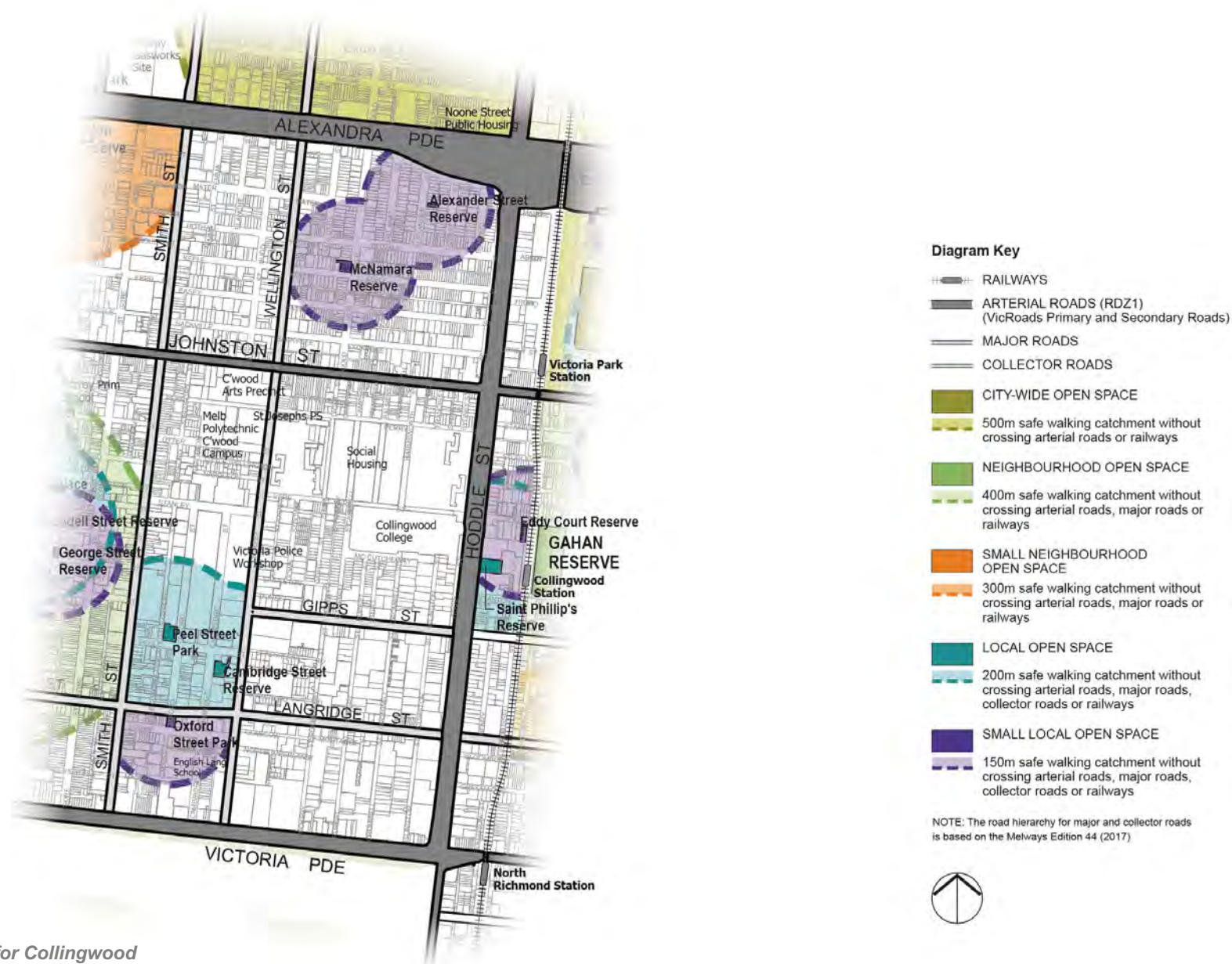


Figure 7.5C Gap analysis for Collingwood

7.5.3 How residents use open space

A total of 99 resident surveys were received from the Collingwood precinct. A summary of the results of the worker survey is included in the next section 7.5.4.

Table 7.5-3 Most frequently visited open space

No.	Name	Reasons to visit	Suggested improvements
Open space within walking distance			
35	Peel Street Park	<ul style="list-style-type: none"> • Close to home (7) • Dog walking (5) • Being outside (5) • Dog friendly (4) • Green open space (4) • Convenient/on the way (4) 	<ul style="list-style-type: none"> • Improve seating design (6) • More shade required (5) • Improve open space layout and design (4) • Dog owners to clean up after their dogs (3)
22	Oxford Street Park	<ul style="list-style-type: none"> • To have lunch (6) • Relaxing (4) • Close to home (3) 	<ul style="list-style-type: none"> • Dog owners to clean up after their dogs (2) • Graffiti to be removed (2) • More shade required (2)
20	Fitzroy Gardens	<ul style="list-style-type: none"> • Exercising (5) • Green open space (4) • Close to home (3) • Dog walking (3) 	<ul style="list-style-type: none"> • No improvements required (2) • Café / kiosk facilities needed (1)
13	Edinburgh Gardens	<ul style="list-style-type: none"> • Dog walking (4) • Close to home (1) 	<ul style="list-style-type: none"> • Maintenance of drinking fountains (2) • No improvements required (2)
10	Darling Gardens	<ul style="list-style-type: none"> • Informal ball games / sport (3) • Convenient / on the way (2) 	<ul style="list-style-type: none"> • No improvements required (2) • Additional toilets required (2)
Open space beyond walking distance			
15	Edinburgh Gardens	<ul style="list-style-type: none"> • Socialising with family / friends (5) • Picnics (4) • Dog walking (3) 	<ul style="list-style-type: none"> • No improvements required (2) • Café / kiosk facilities needed (1)
7	Yarra Bend Park	<ul style="list-style-type: none"> • Jogging/running (2) • Walking (2) 	<ul style="list-style-type: none"> • Manage shared trail use between cyclists and pedestrians (1) • Reduce speed that cyclists can ride through this park (1)
6	Fitzroy Gardens	<ul style="list-style-type: none"> • Beauty and ambience of open space (2) • Peacefulness of open space (1) 	<ul style="list-style-type: none"> • More dog of leash areas required (1) • More dog poo bags and bins required (1)
6	Royal Botanical Gardens Melbourne	<ul style="list-style-type: none"> • Walking (2) • Café / kiosk facilities (1) 	<ul style="list-style-type: none"> • No improvements required (1) • Additional botanical gardens required (1)

Values of open space (top five)

- 77% Trees
- 74% A place to relax and unwind
- 71% An escape from the built environment
- 55% The feeling of space
- 53% Just being outside

Types of open space used (top five)

- 90% Small local parks
- 88% Large parks and gardens
- 87% Open space along the Yarra River
- 77% Large sporting reserve, 77% Urban Squares, 77% Local streets for exercise
- 68% Medium sporting reserves

Activities and facilities in open space (top five)

- 81% Open grassed areas
- 79% Seats
- 78% Walking paths
- 66% Drinking fountains
- 61% Cycle paths

General comments

This was an open ended section of the survey where respondents could write any additional comments. The following list are comments made by four or more people:

- Additional open space is required (11)
- Additional open space is required particularly as densities increase and the less private open space (8)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix B.

7.5.4 How existing workers use open space

113 workers were surveyed in the Epworth Hospital and Bridge Road area about open space.

Frequency of use of open space near the workplace

- 88 per cent of those surveyed visit open space near their workplace with 53 per cent of them nominated they visit open space frequently.

Reasons to visit open space near the workplace

The three top reasons workers visit open space near their place are:

- 66% to be outdoors as a break from work
- 42% to socialise / meet colleagues / friends
- 19% to eat lunch

Most frequently visited open space

No.	Name
15	Fitzroy Gardens
13	Royal Botanic Gardens
11	Parks (names were not specified)
10	Citizens Park
8	Barkly Gardens
8	Yarra Park

Suggestions for improvements to the open space network

The following list is the comments made by 4 or more people:

- Additional open space required (15)
- No improvements required to open space (9)
- Additional car parking required (5)
- Public toilets - additional required (4)

7.5.5 Analysis of future change and open space needs

7.5.5a Forecast future population

Quantity

The table below shows the forecast population growth for the residential and worker populations in Collingwood. A substantial change is forecast with an additional estimated 15,000 people living and working in Collingwood by 2031. A further breakdown of the forecasts for the four open space sub-precincts within Collingwood have been prepared by .id Consulting to assist with analysis of where forecast change will occur. There is significant variation in the forecast change between the different sub-precincts as shown.

Residential population forecasts are sourced from .id Consulting (2018) and the worker population estimates are calculated from the floor area growth forecasts in the *Spatial Economic and Employment Strategy, SGS, 2018* (SEES, 2018).

The resident population growth is significant with an overall change of 57 per cent or an additional 5,206 residents between 2016 and 2031. The worker population is estimated to increase by approximately 70 per cent, with an additional 10,358 additional workers between 2016 and 2031.

The resident population forecasts through to 2041 illustrate that there is additional capacity for growth beyond 2031 in Collingwood, however the rate of growth is slower than forecast for the 2016 to 2031 period. While this Strategy is primarily addressing the open space needs of the existing and forecast population through to 2031, it is useful to understand the context of the magnitude of change beyond the Strategy timeframe.

Table 7.5-4 Resident population forecasts for Collingwood open space sub-precincts

SUB-PRECINCT	2016	2031	Difference 2016-2031
Collingwood A	2,381	3,846	1,465
% change Collingwood A			62%
Collingwood B	3,075	6,065	2,990
% change Collingwood B			97%
North Collingwood C	2,551	2,798	247
% change Collingwood C			10%
North Collingwood D	1,134	1,638	504
% change Collingwood D			44%
Total Collingwood	9,141	14,347	5,206
Total % Change			57%

Table 7.5-5 Worker population estimates for Collingwood open space sub-precincts

EMPLOYMENT/ RETAIL PRECINCT	2016	2031	DIFFERENCE	% CHANGE
Collingwood A				
Smith Street Retail Precinct	2,029	2,972	943	46%
<i>Total estimated worker population Collingwood A</i>	<i>2,029</i>	<i>2,972</i>	<i>943</i>	<i>46%</i>
Collingwood B				
Smith Street Retail Precinct	3,767	5,519	1,751	46%
Victoria Parade Employment Precinct	1,290	1,946	656	51%
<i>Total estimated worker population Collingwood B</i>	<i>5,058</i>	<i>7,464</i>	<i>2,407</i>	<i>48%</i>
Collingwood C				
Smith Street Retail Precinct	290	425	135	46%
Gipps Street Employment Precinct	1,585	3,568	1,984	125%
<i>Total estimated worker population Collingwood C</i>	<i>1,874</i>	<i>3,993</i>	<i>2,118</i>	<i>113%</i>
Collingwood D				
Smith Street Retail Precinct	97	142	45	46%
Victoria Parade Employment Precinct	3,167	4,776	1,609	51%
Gipps Street Employment Precinct	2,585	5,822	3,236	125%
<i>Total estimated worker population Collingwood D</i>	<i>5,849</i>	<i>10,740</i>	<i>4,891</i>	<i>84%</i>
Precinct Total				
Smith Street Retail Precinct	6,182	9,056	2,874	46%
Victoria Parade Employment Precinct	4,457	6,722	2,265	51%
Gipps Street Employment Precinct	4,170	9,390	5,220	125%
<i>Total estimated worker population Collingwood</i>	<i>14,810</i>	<i>25,168</i>	<i>10,358</i>	<i>70%</i>

7.5.5b Population change impacts on open space

The additional quantity of people living and working in Collingwood will place increased pressures and demands on the existing open space. The pressures will include increased volumes of people in the open space utilising the facilities, leading to overcrowding in open space, lack of access to existing facilities and deterioration in the quality of natural features such as grass areas due to compaction from increased use. Due to the limited amount of open space in Collingwood, Peel Street Park already shows signs of over-use with difficulty in maintaining the grassed areas and the poor condition of garden beds.

The forecast change in demographics between 2011 and 2016 shows a proportional increase in the 18 to 34 age ranges and a decline in younger people and those in the older age range as well. This means that open space design needs to appeal to the 18 to 34 age range as well as providing for all age groups. Given there has also been an increase in lone person households and couples without children, open space will need to focus on providing facilities that encourage socialising in open space including seating areas and picnic facilities. There will also be a need to promote fitness and exercise by increasing the diversity of facilities that encourage this.

7.5.5c Where change will occur

The forecast resident population increase in Collingwood will be concentrated in sub-precincts Collingwood A and B. The worker population increase is estimated to occur across Collingwood B, C and D, particularly in the Gipps Street and Smith Street employment precincts. Refer to Figures 7.5D and 7.5E below.

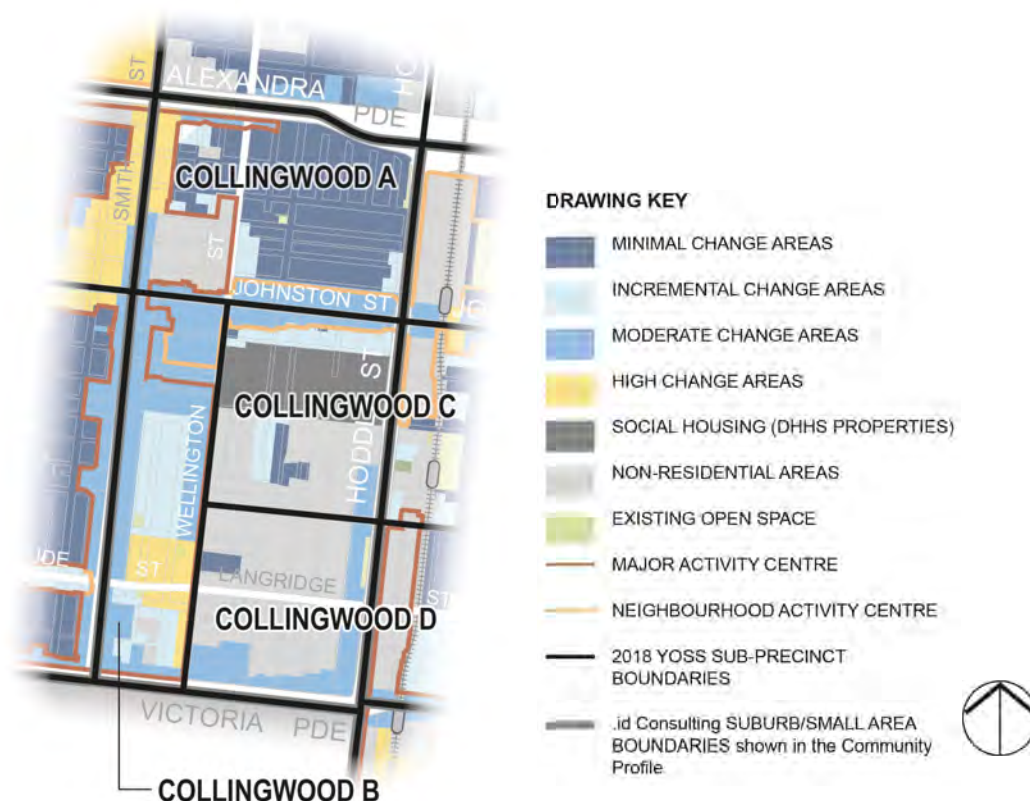


Figure 7.5D Open space sub-precincts and the Strategic Housing Framework (YHS, 2018)

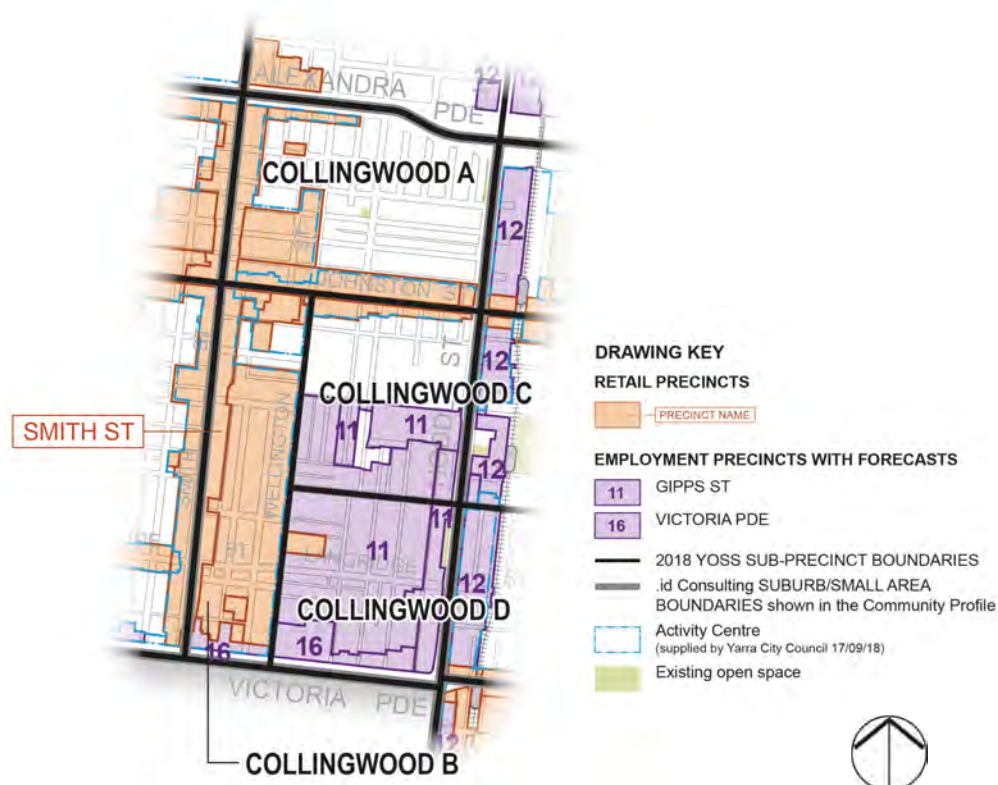


Figure 7.5E Open space sub-precincts and the Employment and Retail Precincts (SEES, 2018)

7.5.5d Open space distribution and future need in Collingwood

Within Collingwood the major roads form barriers to safe and easy access to open space. These sub-precincts are based on the ability of people working or living in Collingwood to easily reach open space. The open space survey results confirm that residents travel outside Collingwood to visit large areas of open space with the most popular being Fitzroy Gardens and Edinburgh Gardens, mainly for exercising and dog walking. The high value placed on trees, the need to relax and unwind and an escape from the built environment in the open space surveys supports the need to provide more open space in Collingwood, and ensure that it includes natural features and trees. The survey results xx with site xx confirms that people visit small local open spaces as well, particularly when they are nearby.

Sub-precinct	Conclusions
Collingwood A Open space sub-precinct Collingwood A. Refer to Section 7.5.2 for the description of existing open space and character.	<ul style="list-style-type: none"> A 62 per cent increase in the resident population is forecast with an additional 1,465 residents by 2031. A 46 per cent increase in the worker population is estimated with an additional 943 workers by 2031. The existing open space network lacks diversity of character and facilities with both existing Small Local open spaces offering play facilities when the demographics indicate a higher proportion of people in the 18 to 34 year age range. The open spaces provide limited unstructured recreation opportunities.

Sub-precinct	Conclusions
	<ul style="list-style-type: none"> • Recommend a new Small Local open space between Smith and Wellington Streets to cater to both the existing and forecast population as shown in Figure 7.5E. The location will need to be accessible and visible and preferably located on a corner site with both east-west and north south access via the local street network. This small local open space will provide for the needs of the 18 to 34 demographic. • Identify opportunities to increase the size of McNamara Reserve to provide a Local open space. The larger size will allow for a greater diversity of facilities to be provided to appeal to a diversity of age groups. • Undertake a major upgrade to McNamara Reserve. • Investigate the opportunity to either expand the size Alexander Street Reserve - preferably including east-west access to it or expanding the public street frontage. If this is not viable, then seek an alternative location for a new Small Local open space towards the south of Collingwood A close to the moderate change area and replace Alexander Street Reserve. The new Small Local open space is to be accessible via the local street network and with public roads/laneways to at least two sides.
<p>Collingwood B</p> <p>Open space sub-precinct Collingwood B. Refer to Section 7.5.2 for the description of existing open space and character.</p>	<ul style="list-style-type: none"> • A 97 per cent increase in the resident population is forecast with an additional 2,990 residents by 2031. Review of the population forecasts to 2041 indicates that population growth will slow to 27 per cent. • A 48 per cent increase in the worker population is estimated with an additional 2,407 workers by 2031. • While two new Small Local open spaces have been established in the southern part of the precinct since the 2006 Strategy along with an upgrade to Cambridge Street Reserve, these open spaces are already experiencing over-development and over use. • Provide an additional Small Local open space in the north part of Collingwood B precinct to primarily cater to the forecast worker and population in the moderate change area identified in the <i>Yarra Housing Strategy</i>. • Investigate options to increase the size of Peel Street Park, Cambridge Street Reserve and the Oxford Street Park given they are located in the forecast high change area in the <i>Yarra Housing Strategy</i>. Alternatively, seek provision of two additional Small Local open spaces, one north of Langridge Street and the other south of Langridge Street.
<p>Collingwood C</p> <p>Open space sub-precinct Collingwood C. Refer to Section 7.5.2 for the description of existing open space and character.</p>	<ul style="list-style-type: none"> • A 10 per cent increase in the resident population is forecast with an additional 247 residents by 2031. Between 2031 and 2041 a 27 per cent increase is forecast with an additional 1,636 residents. This increased rate of growth forecast beyond 2031 means that it will be important to consider future open space opportunities on any of the larger redevelopment sites within this planning period, particularly if this relates to the redevelopment of social housing in the precinct.

Sub-precinct	Conclusions
	<ul style="list-style-type: none"> • A significant 113 per cent increase in the worker population is estimated for this precinct, with an additional 2,118 workers by 2031. • Currently there is no public open space in this precinct, with the social housing area and Collingwood College providing ancillary open space. • Provide a new Small Neighbourhood open space Collingwood C to cater to both the existing and forecast population. In the future (i.e. 2031 to 2041) this open space will need to be increased in size to provide a new Local open space and it is recommended that this be considered in the siting of this new Small Neighbourhood open space. • Please refer to Figure 7.5F.
<p>Collingwood D</p> <p>Open space sub-precinct Collingwood D. Refer to Section 7.5.2 for the description of existing open space and character.</p>	<ul style="list-style-type: none"> • A 44 per cent increase in the resident population is forecast with an additional 504 residents by 2031. • A significant 84 per cent increase in the worker population is estimated for this precinct, with an additional 4,891 workers by 2031. • Currently there is no public open space in this precinct and the majority of the precinct will continue to be for non-residential use. • Therefore it is recommended that a new Local open space is provided in the vicinity of Langridge Street in an accessible location and relatively central as illustrated in Figure 7.5E. Given there is currently no open space in this precinct, this new open space will also benefit the existing population. • Provide access to the new Small Local open space in the vicinity of Langridge Street to be within an easy and safe walk of the worker population including potentially future residents living in along the southern section of this sub-precinct near Victoria Parade. Given there is currently no open space in this precinct, this new open space will also benefit the existing population. • Please refer to Figure 7.5F.

7.5.6 Collingwood Recommendations

7.5.6a Summary of overall intent

Provision and distribution

The majority of the Small Local open spaces in Collingwood are experiencing high levels of use. With the forecast substantial population increase of approximately 15,000 people by 2031, there is a need to provide additional open space in Collingwood, including new Small Neighbourhood, Local and Small Local open spaces. The recommendations include expanding the size of selected existing Small Local open spaces to allow inclusion of a greater diversity of facilities. The additional distributed open spaces will also assist to mitigate urban heat, provide increased urban greening and open space within a safe and easy walk of residents and workers as urban densities continue to increase in the future. This will positively contribute to the health and wellbeing of residents and workers.

Quality and design

There is a need to increase and improve the recreational quality and diversity of facilities in the Small Local open spaces in Collingwood. The additional open space can be designed to provide a diversity of facilities for the existing and future population and contribute positively to mitigating urban heat island effect.

Refer to Figure 7.5F for the spatial location of recommendations for Collingwood.

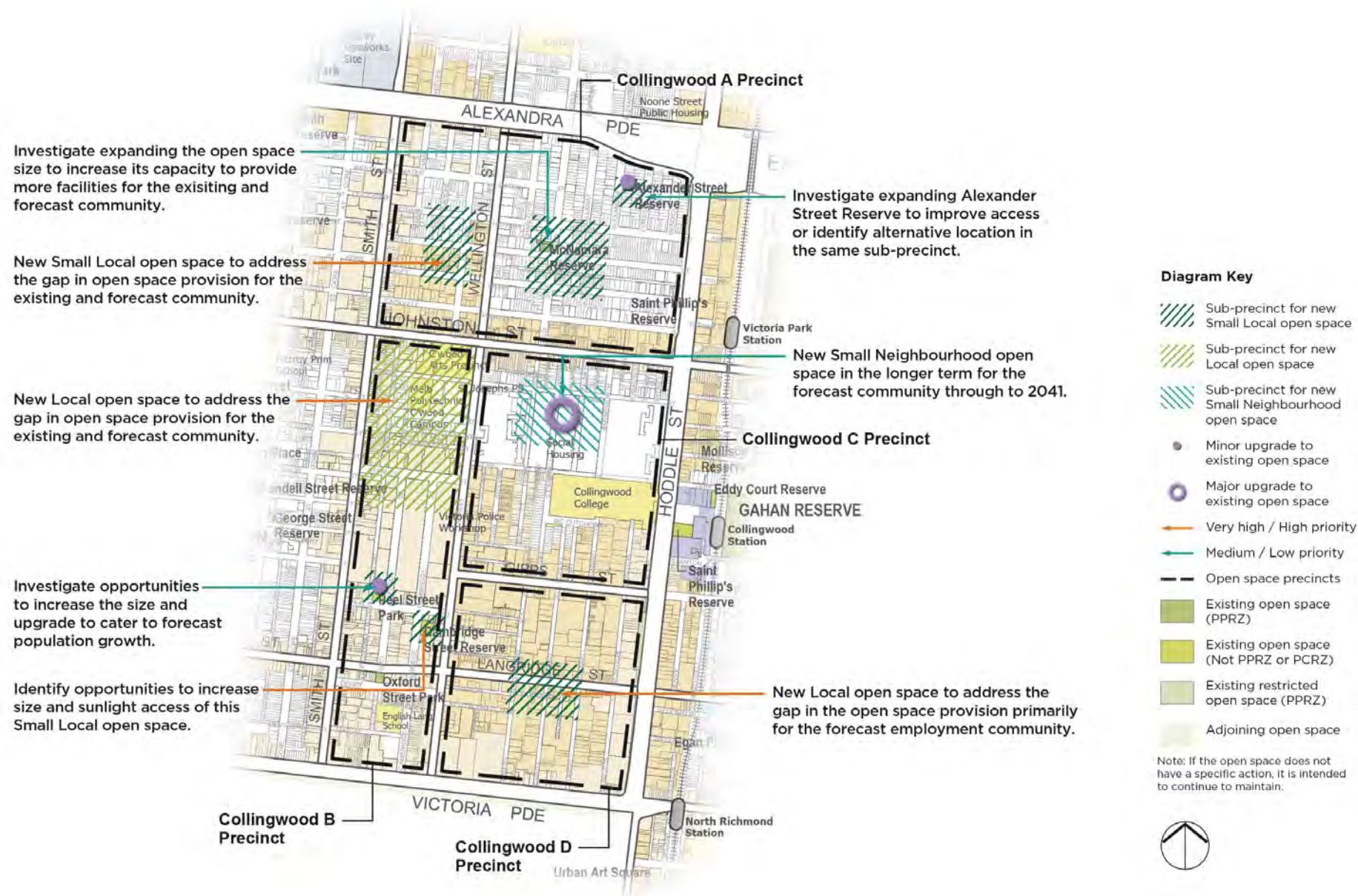


Figure 7.5F Recommendations for Collingwood

7.5.5b Precinct Actions for Collingwood

A Additional open space

No.	Action	Responsibility	Priority
7.5A-1	Provide a new Small Local open space between Smith and Wellington Streets in open space precinct Collingwood A to cater to the existing and forecast population.	YCC Developer	Very High
7.5A-2	Investigate options to expand the size of McNamara Reserve to increase it to a Local open space size to provide space to include diversity of facilities that appeal to both the existing and forecast community.	YCC Developer	Medium
7.5A-3	Investigate options to expand the size of Alexander Street Reserve in Collingwood A to make it more accessible and useable. Alternatively provide a new Small Local open space for both the existing and forecast population in a more accessible and visible location in Collingwood A sub-precinct. This can either be in addition to Alexandra Reserve, or to replace it.	YCC	Medium
7.5A-4	Provide a new Local open space in the northern part of open space precinct Collingwood B. This is to cater to both the existing and forecast population in the moderate change area.	YCC Developer	Very High
7.5A-5	Increase the size of Peel Street Park and Cambridge Street Reserve to accommodate additional facilities and people, given both these open spaces are experiencing signs of over-development.	YCC Developer	Very High
7.5A-6	Provide a new Small Neighbourhood open space in Collingwood C. The future open space will need to be accessible to the moderate change area associated with Johnson Street to the north and any future change to the social housing estate. This can be staged so that it firstly provides a Local open space and can be expanded later to a Small Neighbourhood to cater to the 2041 forecast population	YCC Developer	High
7.5A-7	Provide a new Small Local open space between Gipps and Langridge Streets for both the existing and forecast worker population in Collingwood D.	YCC Developer	High

B Existing open space

No.	Action	Responsibility	Priority
7.5B-1	Alexander Street Reserve Refer to Action 7.5A-3 regarding investigating the potential option to expand the size and suitable alternative more accessible locations for a new open space. Once the size, location and whether the existing open space is to be retained, undertake capital works improvements to establish a new open space or upgrade the existing.	YCC	Medium

No.	Action	Respons- ibility	Priority
7.5B-2	Cambridge Street Reserve Investigate opportunities to increase the size of Cambridge Street Reserve including options of utilising part of the adjoining road reserve. This will increase the area and also sunlight access, particularly in winter.	YCC	High
7.5B-3	McNamara Reserve In the short to medium term continue to maintain. As part of the future expansion to the reserve in the long term, undertake a major upgrade to include facilities appropriate to the existing and forecast new community. Refer to Action 7.5A-2 regarding the increase of its size.	YCC	Low
7.5B-4	Oxford Street Park Continue to maintain.	YCC	Ongoing
7.5B-5	Peel Street Park In the short term, undertake a minor upgrade to this open space to provide additional trees, shade, improve seating and improve the layout and condition of the open grassed area primarily for the new population due to increased levels of use. In the longer term, undertake a major upgrade to incorporate the expanded area of open space. Refer to Action 7.5A-5.	YCC	Medium



7.6 Cremorne, Richmond South and Burnley

7.6.1 Introduction

Cremorne, Richmond South and Burnley is a combined precinct bounded to the north by Swan Street, to the South and east by the Yarra River (Birrarung) and the west by Punt Road. The topography is relatively flat and falls gradually to the river.

Cremorne is identified as a Major Employment Precinct in Yarra and the remaining land with the Commercial 2 zoning defines the extent of the employment precinct. The area has made a gradual transition from predominantly industrial use to a wider mix of activities including commercial offices and creative industries. The precinct is characterised by a variety of lot sizes, building stock and condition. The physical diversity has been an important factor in attracting a diversity of economic activities. The *Yarra Spatial Economic and Employment Strategy* (SEES) supports the protection of the major employment precinct Cremorne. It forecasts continued growth in the non-residential use, evidenced by the recent spike in office developments in the precinct. The SEES forecasts an approximate 20 per cent increase in floor area between 2016 and 2031. There are also pockets of residential use amongst the predominantly commercial use.

Richmond South is predominantly residential with retail and commercial use along Church and Swan Streets, and industrial use to the south east associated with the major power terminal station located there. Burnley, between Burnley Street and Loyala Grove is predominantly residential with some business and commercial use adjoining Twickenham Crescent in the south and along Swan Street. East of Loyala Grove the land use is predominantly open space combined with business/commercial use and education with the University of Melbourne Burnley Campus.

Swan Street and Church Streets are major retail, commercial and business precincts in North Richmond. The *Victoria Street Structure Plan*, adopted by Council in April 2010, provides the key direction for the future expansion and change within it. The *Yarra Housing Strategy* (2018) provides direction on the future level of change for residential use within the precinct. The *Swan Street Structure Plan* prepared in 2014 provides direction on streetscape, built form and public realm improvements for Swan Street, Church Street and Cremorne.

With the mixed land use, there is a significant worker population in this precinct which is estimated to be more than four times the size of the resident population, as follows:

- Residential population 2016: 4,622 (*Source: .id Consulting population forecasts, 2018*)
- Estimated worker population 2016: 17,024 (*Source: SEES, SGS 2018*)

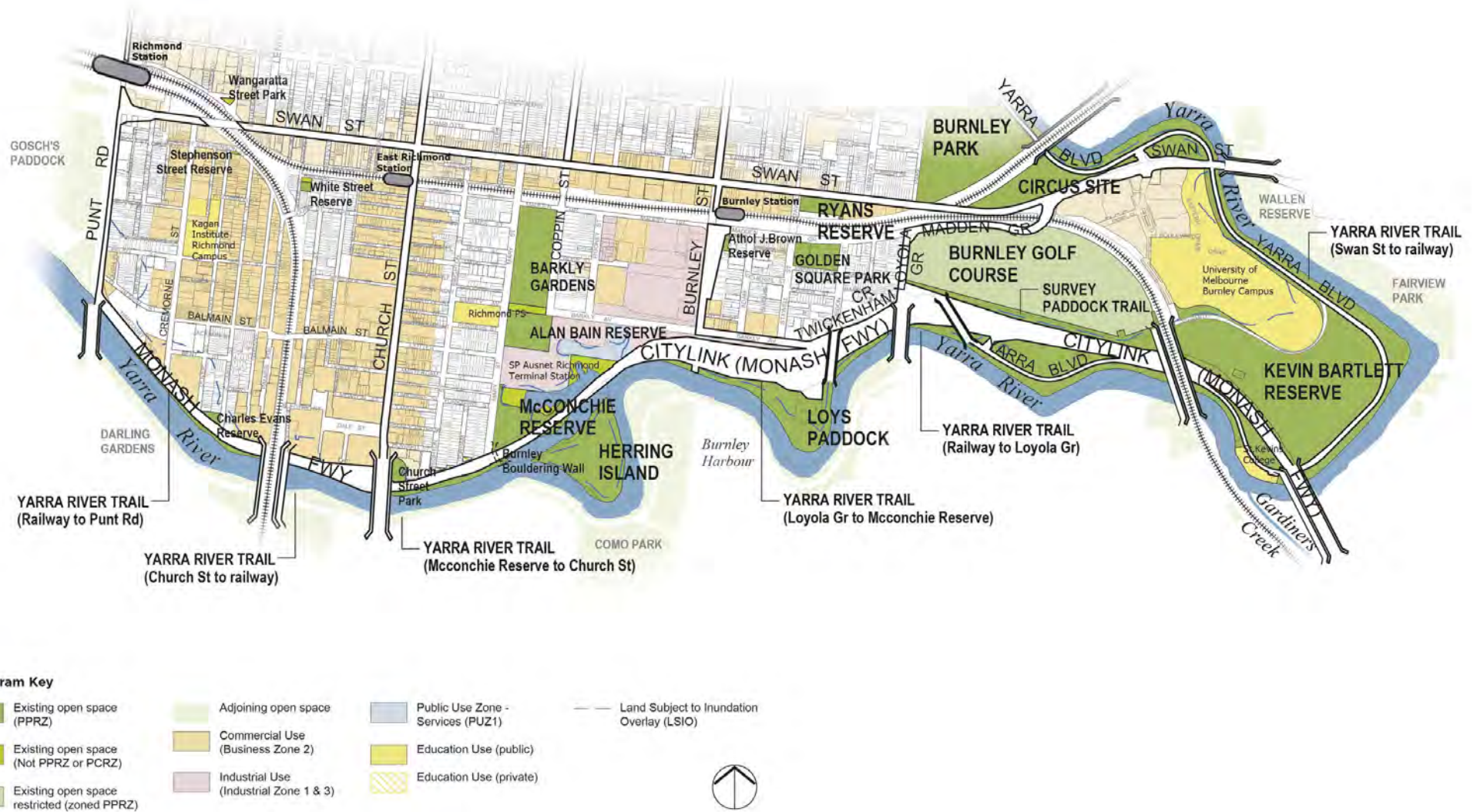


Figure 7.6A Existing open space in Cremorne, Richmond South and Burnley

7.6.2 Existing open space

7.6.2a Sub-precinct Description

Punt Road, Church Street, Burnley Street and Loyola Grove are major north south roads in this precinct and define four open space sub-precincts being Cremorne, Richmond South, Burnley A and Burnley B. These are illustrated in Figure 7.6B



Figure 7.6B Open space sub-precincts for Cremorne, Richmond South and Burnley

Cremorne

- Located between Punt Road and Church Street, from Swan Street in the north to The Yarra River in the South.
- Open space located in this sub-precinct includes
 - Charles Evans Reserve
 - Stephenson Street Reserve
 - White Street Reserve
 - Yarra River Trail (Church Street to Railway)
 - Yarra River Trail (Railway to Punt Road)
- The three Small Local open spaces are located in different parts of Cremorne however there are gaps in open space provision. Stephenson Street Reserve is narrow with seating and a mature tree, while Charles Evans and White Street Reserves are larger and have playgrounds, paths and seats. Charles Evans Reserve is located between the freeway sound walls and apartments with limited natural sunlight access to the reserve and is difficult to access. White Street Reserve on the other hand is set in the heart of a residential precinct and the path is frequently used as a cut through for people accessing the underpass that crosses under the railway line to Swan Street.
- While the Yarra River Trail traverses the southern boundary of Cremorne, it is separated from the precinct by the Monash Freeway. Access into the trail on the north side of the River is via Punt Road and McConchie Reserve in South Richmond. Access to the Main Yarra Trail on the south side of the Yarra River is provided at Church Street.
- The predominantly non-residential land use in Cremorne means there is a significant worker population who use open space and are requesting additional open space be provided.

- The Yarra Housing Strategy (2018) identifies two high change areas. One is in the south west and Moderate Change along Punt Road and Swan Street. The existing residential precincts are identified as minimal change area. The balance of the precinct is non-residential, which is forecast to continue to redevelop and intensify as described in the SEES (SGS, 2018).

Richmond South

- Richmond South is located between Church and Swan Street and the Yarra River.
- Open space located in this sub-precinct includes (in alphabetical order):
 - Alan Bain Reserve
 - Barkly Gardens
 - Church Street Park
 - Herring Island
 - McConchie Reserve
 - Yarra River Trail (McConchie Reserve to Church Street)
- Barkly Gardens is a well-used Municipal open space that is characterised as a Public Garden with heritage values. Directly adjoining it, Alan Bain Reserve provides structured sporting use via the sports field complementing the unstructured recreational use of Barkly Gardens.
- McConchie Reserve is uniquely different Regional open space that directly adjoins the Yarra River with the Monash Freeway separating the reserve from the River. The bouldering walls under the freeway combined with the deeply incised wetland located in the base of a former quarry adds to its character.
- Williams Reserve has been recently upgraded and is characterised as an urban plaza. The Victoria Street frontage is paved with seating and picnic facilities along with open grassed areas, playground and mature trees.
- Herring Island is located in the Yarra River and is only accessible via boat from the river, with a public landing located on the southern bank in Como Park in the City of Stonnington. Herring Island is managed by Parks Victoria.
- The Yarra River Trail provides major east-west connectivity along the north bank of the Yarra River and is accessible from McConchie Reserve via an underpass under the Monash Freeway.
- Church Street Park has been created on what was a former entry ramp to the Monash Freeway. The park includes an open grassed area, seating, picnic, play and outdoor table tennis.
- Other land use apart from the residential and open space includes a major electrical terminal station, Burnley Tunnel emissions tower, the Metropolitan Fire Brigade, Richmond Primary College, the Yarra Primary School as shown in Figure 7.6B.
- The Yarra Housing Strategy (2018) identifies High and Moderate Change Areas between Swan Street and the railway, while the majority of the existing residential areas are shown as Minimal Change Areas. The balance of the precinct is non-residential, and the area adjoining Church Street is forecast to continue to redevelop and intensify as described in the SEES (SGS, 2018).

Burnley A

- Burnley A is located between Burnley Street and Loyala Grove and between Swan Street and the Yarra River.
- Open space located in this sub-precinct includes:
 - Athol J. Brown Reserve
 - Golden Square

- Loys Paddock
- Ryans Reserve
- Yarra River Trail (Loyala Gr to McConchie Reserve)
- Golden Square, located in the heart of the residential precinct is a Small Neighbourhood open space with mature native and exotic trees, a playground and open grassed area.
- Lloys Paddock is a Regional open space that directly adjoins the Main Yarra Trail. The reserve is impacted by the traffic noise from the on-ramp to the Monash Freeway from Twickenham Crescent and also by the transmission towers and easement. The Yarra River Trail traverses through the reserve and it has natural biodiversity values.
- Ryans Reserve, located between Swan Street and the railway has tennis courts and that are available for use on a fee paying basis.
- Adjacent to Burnley Street, Athol J. Brown Reserve is a long narrow reserve with mature trees and as tree reserve rather than recreational use.
- Land use is a combination of industrial, business, commercial and residential use.
- The Yarra Housing Strategy (2018) includes a High Change Area between Swan Street and the railway. There is a combination of Incremental Change and Minimal Change for the remaining residential areas within the precinct.

Burnley B

- Burnley B is the area east of Loyala Grove and south Swan Street and comprises large open space reserves adjacent to the Yarra River.
- Open space located in this sub-precinct includes:
 - Burnley Golf Course
 - Kevin Bartlett Reserve
 - Survey Paddock Trail
 - Yarra River Trail (Swan Street to Railway) and (Railway to Loyala Gr)
- Managed by the City of Yarra, Burnley Golf Course is an 8 hole public golf course.
- Kevin Bartlett Reserve is a major sporting reserve for the City of Yarra and includes 4 soccer fields, an oval, sports pavilions, car parking and playground.
- The Main Yarra Trail continues adjacent to the Yarra River includes stands of mature remnant River Red Gums. The Gardiners Creek Trail joins to the Main Yarra Trail in this sub-precinct.
- The Capital City Trail that is located south of Burnley Golf Course in a reserve that is known as the Survey Paddock Trail, after the original land subdivision in the early 1800s.
- Land use is a combination of open space, business and education, with Burnley Business Park and the University of Melbourne Burnley Campus located adjoining the open space.
- The Burnley Business Park is forecast to continue to expand in the SEES (SGS, 2018).

7.6.2b Quantity of open space in Cremorne, Richmond South and Burnley

The 19 existing open spaces in this precinct have a combined total area of 44.32 hectares. This represents approximately 19 per cent of the total land area of the precinct. Additionally there are two restricted open spaces with a combined total of 14.03 hectares. The majority of the restricted open space is Burnley Golf Course being 13.37 hectares with Ryans Reserve at 0.66 hectares. Adding the two restricted open spaces to the other

19 open spaces results in a total of 58.35 hectares and represents 25.1 per cent of the total land area of the precinct.

Table 7.6-1 Number, size and type of open space (excluding restricted open space)

No	Hierarchy	Area (ha)	%
9	Regional	39.59	59%
4	City wide	17.38	38%
1	Small Neighbourhood	0.83	2%
1	Local	0.38	1%
4	Small Local	0.17	0%
19	TOTAL	43.32	100%

7.6.2c Open space hierarchy, character and quality

The open space corridor along the Yarra River is an important habitat and recreational corridor for wider Melbourne. It is therefore designated as a Regional open space and is managed to protect and improve the habitat and recreational values. Access to the Yarra River itself, the bushland and natural qualities of this linear corridor are key reasons people visit this open space. Burnley Golf Course is also defined as Regional open space in recognition of the regional sporting use and also the intention of council to improve its role in the biodiversity values.

Kevin Bartlett Reserve and Alan Bain Reserve have the City-wide hierarchy due to their sporting character classification, providing facilities primarily for people living and working in Yarra. While these reserves are designed primarily for structured sport, people also use them for unstructured recreation and informal uses, including exercising dogs, informal ball sports, walking and jogging. Barkly Gardens has a unique heritage and public garden character is recognised to be of significance to the City of Yarra and has therefore been given a City-wide hierarchy.

The Small Neighbourhood open space, Golden Square Park has an informal character with open grass, scattered trees and a playground and is in need of an upgrade. Church Street Park was established in the last few years and is located in a high density precinct, on a major road and has a more formal layout and context with a diversity of spaces and is characterised as an Urban plaza. The Small Local open spaces in Cremorne are all within a changing urban context, with two of them characterised as play due to the dominance of the play facilities in the open space and Stephensons Reserve is characterised as seating/viewing. Athol J Brown Reserve is informal in character given it contains some scattered trees and grass.

Table 7.6-2 Existing open space, hierarchy and character classification

Name	Area Ha	City of Yarra Hierarchy	Primary Character Classification	Secondary Character Classification
Alan Bain Reserve	1.17	City-wide	Sporting	
Athol J Brown Reserve	0.06	Small Local	Informal	
Barkly Gardens	2.67	City-wide	Heritage	Play, Public garden
Charles Evans Reserve	0.10	Small Local	Play	
Church Street Park	0.27	Local	Urban plaza	
Golden Square Park	0.83	Small Neighbourhood	Informal	
Herring Island	3.19	Regional	Waterway	Nature conservation, Public art
Kevin Bartlett Reserve	12.88	City-wide	Sporting	
Loys Paddock	3.48	City-wide	Linear	Waterway, Nature conservation
McConchie Reserve	2.43	Regional	Seating/Viewing	Water feature, Waterway, Service easement, Linking space, Nature conservation, Play
Stephenson Street Reserve	0.02	Small Local	Seating/Viewing	
Survey Paddock Trail	0.96	Regional	Linear	Linking space
White Street Reserve	0.11	Local	Informal	Play
Yarra River Trail – Church St to Railway	0.16	Regional	Linear	Waterway
Yarra River Trail – Loyala Gr to McConchie Reserve	3.35	Regional	Linear	Waterway
Yarra River Trail – McConchie Reserve to Church St	0.39	Regional	Linear	Waterway
Yarra River Trail – Railway to Loyala Gr	1.80	Regional	Linear	Waterway, Nature conservation
Yarra River Trail – Railway to Punt Rd	0.90	Regional	Linear	Waterway
Yarra River Trail – Swan St to Railway	9.57	Regional	Linear	Waterway, Nature conservation
Total	44.32			
Restricted open space				
Burnley Golf Course	13.37	Regional	Restricted sporting	Nature conservation
Ryans Reserve	0.66	City-wide	Restricted sporting	
Total Restricted open space	14.03			

7.6.2d Distribution of open space in Cremorne, Richmond South and Burnley

The existing open space has been allocated an appropriate open space hierarchy as shown in Table 7.6-2 above and a corresponding walking catchment appropriate to it, as described in Table 3-1 and 3-5 of this report. The areas of the precinct that are located outside the walking catchments of the different open space reserves are referred to as 'gap areas' and are shown in white in Figure 7.6C on the next page. The assessment of the adequacy of the existing open space network in this precinct is informed by the analysis of the spatial distribution of open space. As one of the key aims of this Strategy is for everyone to live and work within a safe and easy walk of open space, the recommendations will focus on addressing the gaps in the existing open space network.

For this precinct, the major gaps in the existing open space network occur in Cremorne, with the other sub-precincts being well provided for.

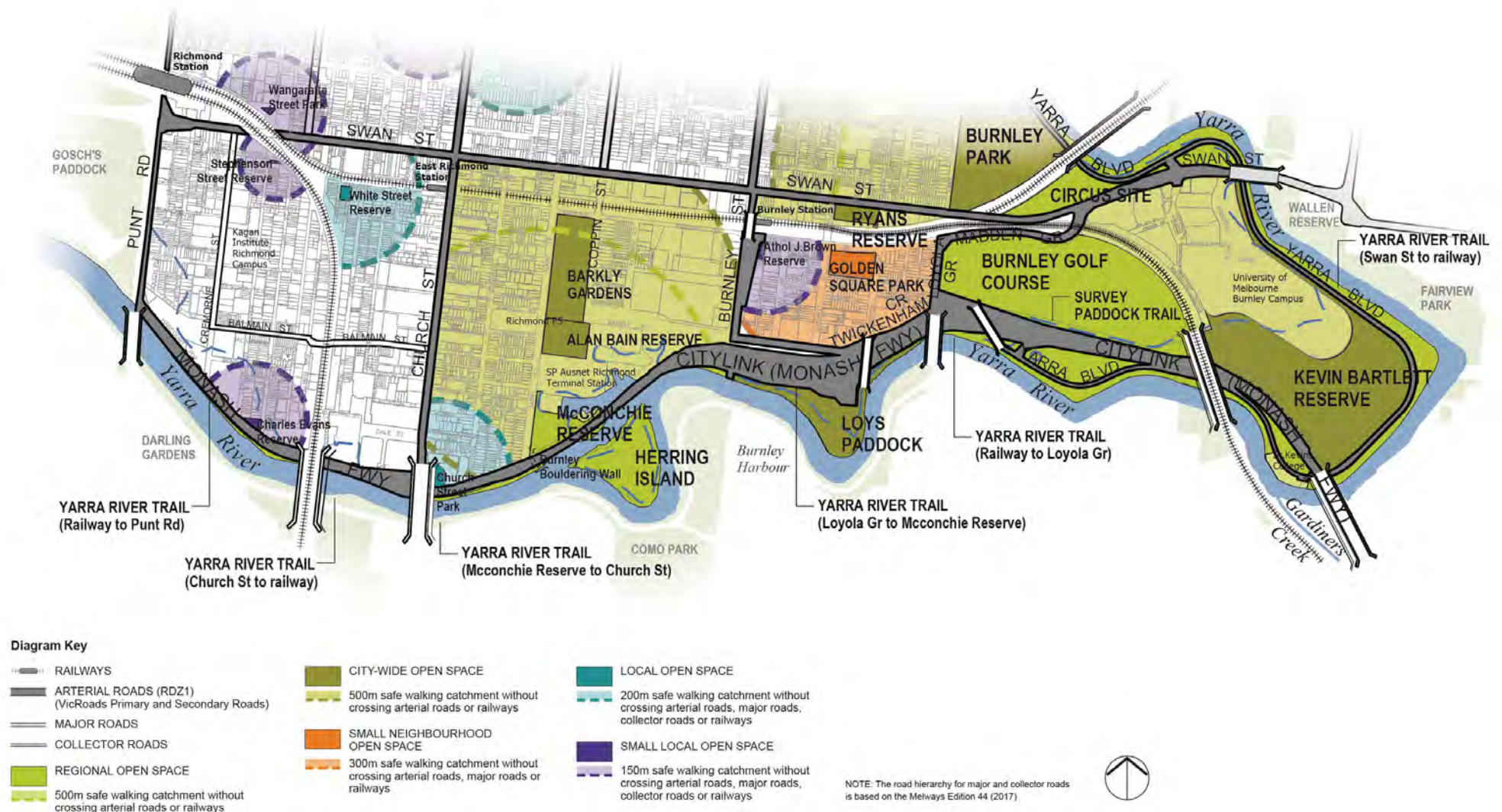


Figure 7.6C Gap analysis for Cremorne, Richmond South and Burnley

7.6.3 How residents use open space

A total of 94 resident surveys were received from the Cremorne, Richmond South and Burnley. Please note that in addition to these, 117 surveys were also completed by workers in the precinct in Swan and Church Streets precinct. A summary of the results of the worker survey is included in the next section 7.6.4.

The 94 resident surveys completed for this precinct represents 7 per cent of the total surveys received. The .id Community Profile identifies that 6 per cent of the City of Yarra's population lives in this precinct.

Table 7.6-3 Most frequently visited open space

No.	Name	Reasons to visit	Suggested improvements
Open space within walking distance			
43	Barkly Gardens	<ul style="list-style-type: none"> • Playground (11) • Picnic facilities – BBQS (8) • Close to home (6) • Socialising with friends/family (6) 	<ul style="list-style-type: none"> • Toilets require maintenance (5) • Picnic facilities – shade required (4) • Playground – shade required (3) • No improvements required (3)
29	Citizens Park	<ul style="list-style-type: none"> • Sport – junior football including Auskick (8) • Sport – children (5) • Dog walking (5) 	<ul style="list-style-type: none"> • Sporting facilities require upgrade – clubrooms (7) • Dog owners need to clean up dog waste (6) • Sporting facilities – clubrooms need to cater to girls (5)
18	Burnley Park	<ul style="list-style-type: none"> • Dog walking (4) • Walking (3) 	<ul style="list-style-type: none"> • Improve the Caretaker's cottage (3) • Additional exercise equipment required (3)
11	White Street Reserve	<ul style="list-style-type: none"> • Sport - informal ball games (2) • Being outdoors in the natural environment (2) 	<ul style="list-style-type: none"> • Upgrade playground(2)
9	Charles Evans Reserve	<ul style="list-style-type: none"> • Socialising with friends/family (3) • Dog friendly (2) • Close to home (2) • Picnics (2) • Play (2) 	<ul style="list-style-type: none"> • Grassed area requires improvement (4) • Additional open space required(2) • Picnic facilities – BBQ required (2)
8	Golden Square Park	<ul style="list-style-type: none"> • Close to home (3) • Playground (3) • Dog walking (2) 	<ul style="list-style-type: none"> • Public toilets – additional required (4) • Playground – shade required (3) • Picnic facilities – additional BBQs required (2)
Open space beyond walking distance			
9	Kevin Bartlett Reserve	<ul style="list-style-type: none"> • Sport (6) • Sport – junior football (3) 	<ul style="list-style-type: none"> • Sporting facilities – clubrooms require facilities for girls (2) • Additional bins (2)
8	Citizens Park	<ul style="list-style-type: none"> • Sport (3) 	

Values of open space (top five)

- 77% Place to relax and unwind
- 73% Trees
- 66% The feeling of space
- 64% Place for children to play
- 62% An escape from the built environment

Types of open space used (top five)

- 89% Open space along Yarra River
- 88% Large parks and gardens
- 86% Local streets for exercise
- 84% Small local parks
- 82% Large sporting reserves

Activities and facilities in open space (top five)

- 78% Drinking fountains
- 77% Open grassed areas
- 71% Walking paths
- 69% Cycle paths
- 67% Public toilets and 67% Seats

General comments

This was an open ended section of the survey where respondents could write any additional comments. The following list are comments made by three or more people:

- Additional open space is required particularly as densities increase and the less private open space (19)
- Open space contributes to liveability (3)
- Open space – provide additional multi-use spaces (3)
- Conflicts between cyclists and pedestrians on shared paths (3)
- Additional sporting facilities are required for girls (3)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix B.

7.6.4 How existing workers use open space

117 workers were surveyed in the Swan Street and Church Street precincts about open space.

Frequency of use of open space near the workplace

- 90 per cent of those surveyed visit open space near their workplace.

Reasons to visit open space near the workplace

The four top reasons workers visit open space near their place are:

- 74% to be outdoors as a break from work
- 38% to socialise / meet colleagues / friends
- 30% to eat lunch
- 17% to meet family

Most frequently visited open space

No.	Name
27	Church Street*
22	Parks
15	Barkly Gardens
9	Gardens
4	Dale Street
4	Flagstaff Gardens
4	Yarra Park

*It is unclear from the survey outcome if Church Street includes the park or the streetscape only.

Suggestions for improvements to the open space network

The following list is the comments made by 4 or more people:

- Additional open space required (16)
- Additional seating required (12)
- Additional greening (4)
- Additional trees (4)

7.6.5 Analysis of future change and open space needs**7.6.5a Forecast future population****Quantity**

The table below shows the forecast population growth for the resident and worker populations in Cremorne, Richmond South and Burnley. A further breakdown of the residential forecasts in each of the four open space sub-precincts have been prepared by .id Consulting to assist with analysis.

Resident population forecasts are sourced from .id Consulting (2018) and the worker population estimates are calculated from the floor area growth forecasts in the *Spatial Economic and Employment Strategy, SGS, 2018* (SEES, 2018).

The resident population growth is significant with an overall change in residential population of 106 per cent or an additional 4,917 residents between 2016 and 2031. The worker population is estimated to increase by approximately 55 per cent, with an additional 9,160 workers between 2016 and 2031.

The resident population forecasts through to 2041 indicate that the resident population is forecast to continue to grow in Cremorne, Richmond South by approximately 38 and 40 per cent respectively, and only 3 per cent in Burnley A.

Table 7.6-4 Resident population forecasts for North Richmond open space sub-precincts

SUB-PRECINCT	2016	2031	Difference 2016-2031
Cremorne	2,195	6,034	3,839
% change Cremorne			175%
Richmond South	1,546	1,939	393
% change Richmond South			25%
Burnley A	881	1,566	685
% change Burnley A			78%
Burnley B	0	0	0
% change Burnley B		0%	0%
Total Cremorne, Richmond South and Burnley	4,622	9,539	4,917
Total % Change			106%

Table 7.6-5 Worker population estimates for Cremorne, Richmond South and Burnley open space sub-precincts

EMPLOYMENT/ RETAIL PRECINCT	2016	2031	DIFFERENCE	% CHANGE
Cremorne				
Swan Street Retail Precinct	737	1,054	317	43%
Employment Precinct 9	4,860	8,160	3,300	68%
Employment Precinct 7	4,643	6,915	2,272	49%
<i>Total estimated worker population Cremorne</i>	10,241	16,130	5,889	58%
Richmond South				
Swan Street Retail Precinct	1,050	1,502	451	43%
Employment Precinct 7	1,897	2,825	928	49%
<i>Total estimated worker population Richmond South</i>	2,947	4,326	1,379	47%
Burnley A				
Swan Street Retail Precinct	447	639	192	0%
<i>Total estimated worker population Burnley A</i>	447	639	192	43%
Burnley B				
Employment Precinct 3	3,070	4,770	1,700	0%
<i>Total estimated worker population Burnley B</i>	3,070	4,770	1,700	55%
Retail and employment precinct totals				
Swan Street Retail Precinct	2,234	3,195	960	43%
Employment Precinct 9	4,860	8,160	3,300	68%
Employment Precinct 7	6,540	9,740	3,200	49%
Employment Precinct 3	3,070	4,770	1,700	55%
Total Cremorne, Richmond South and Burnley	16,704	25,865	9,160	55%

7.6.5b Population change impacts on open space

The additional quantity of people living and working in the precinct will place increased pressures and demands on the existing open space. In Richmond South and Burnley where there are larger open space reserves the additional demands on open space will be less noticeable than in Cremorne. In Cremorne the existing open spaces are small in size and currently comprise just under 2 per cent of the total precinct area. The increased

population use of open space will lead to overcrowding, lack of access to existing facilities and deterioration in the quality of natural features such as grass areas due to compaction from increased use.

The forecast change in demographics with a slight decrease in the number of families and young children and an increase in young adults and older people living on their own means that there will be a likely increase in the demand for facilities that encourage socialising in open space including seating areas and picnic facilities. There will also be a need to promote fitness and exercise by increasing the diversity of facilities that encourage this.

7.6.5c Where change will occur

The forecast resident and worker population increase will be concentrated in Cremorne, Richmond South. The Swan Street spine is forecast to receive high levels of residential change, and it appears the additional worker population will occur in the retail and employment precincts shown in Figures 7.6D and 7.6E below.

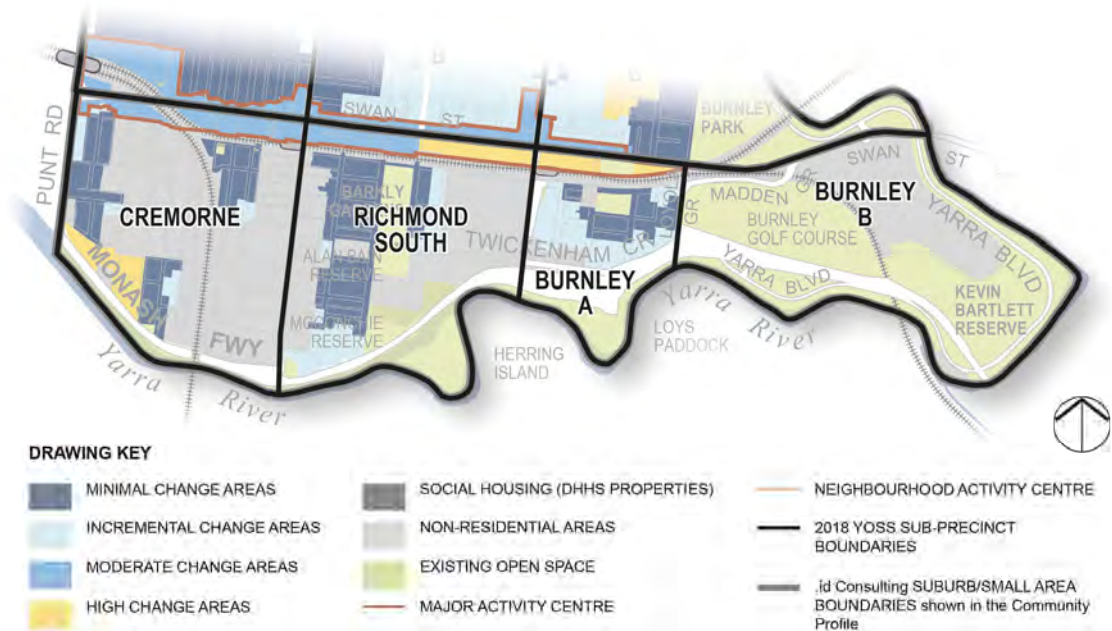


Figure 7.6D Open space sub-precincts and the Strategic Housing Framework (YHS, 2018)

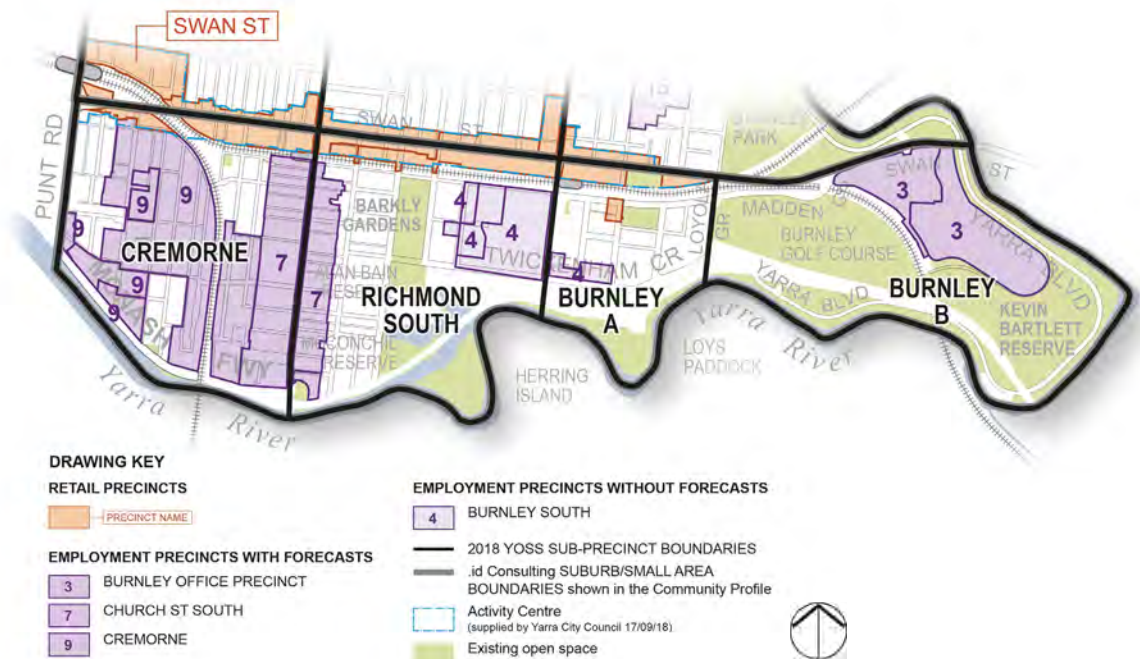


Figure 7.6E Open space sub-precincts and the Employment and Retail Precincts (SEES, 2018)

7.6.5d Open space distribution and future need in Cremorne, Richmond South and Burnley

Within this precinct the major roads form barriers to safe and easy access to open space. The open space sub-precincts are based on the ability of people working or living in this precinct to easily reach open space. The open space survey results confirm that residents travel outside the precinct to visit open space, however this is mainly due to the lack of open space in parts of the precinct.

Sub-precinct	Conclusions
Cremorne Cremorne is located between Punt Road and Church Street, with Swan Street to the north and the Yarra River to the south. Refer to Section 7.6.2 for the description of existing open space and character.	<ul style="list-style-type: none"> A 175 per cent increase in the resident population is forecast with an additional 3,839 residents by 2031. A 58 per cent increase in the worker population is estimated with an additional 5,889 workers by 2031. The existing open space network is limited with only three Small Local open spaces that offer a limited range of recreational uses due to their small size. Recommend a new Small Local open space between Punt Road and Cremorne Street and north of Kelso Street as shown in Figure 7.6F. This is to provide an open space within a safe and easy walk via the local street network. Recommend a new Small Neighbourhood open space in the vicinity of the TAFE site between Cremorne Street and the railway and the north of Balmain Street. Currently, the suggested location is on the TAFE site as this is central to this precinct with excellent access. It is large enough to provide a range of unstructured recreational facilities combined with additional greening. Importantly, this open space will be accessible via the local street network to the areas of major growth and change.

Sub-precinct	Conclusions
	<ul style="list-style-type: none"> • Recommend a new Small Local open space or expand the existing Charles Evans Reserve south of Balmain Street between Cremorne Street and the railway. This is to address both the forecast worker population and the High Change Area identified in the Housing Strategy. • A new Local open space is required in the precinct between the railway and Church Street, north of Balmain Street. This is to cater primarily for the forecast new worker and resident population, along with providing a greater diversity of facilities for the existing population. • A new Small Local open space is required in the non-residential precinct south of Balmain Street, between the railway and Church Street. There are opportunities to convert some existing privately owned open space including converting part of the Dale Street or the car parking area on Electric Street to open space for the existing and forecast worker community. • Upgrade White Street Reserve to include exercise equipment and picnic facilities to improve the character and diversity of age groups that can use the reserve. • Continue to maintain Charles Evans Reserve with minor improvements to the picnic area and playground.
<p>Richmond South</p> <p>Located between Church and Burnley Streets, south of Swan Street. Refer to Section 7.6.2 for the description of existing open space and character.</p>	<ul style="list-style-type: none"> • A 25 per cent increase in the resident population is forecast with an additional 393 residents by 2031. • A 47 per cent increase in the worker population is estimated with an additional 1,379 workers by 2031. • Given this sub-precinct includes a diversity of open space, no additional opens space is required. • Continue to undertake minor upgrades to Barkly Gardens to cater to the forecast increased levels of use. • Continue to maintain Alan Bain and McConchie Reserves.
<p>Burnley A</p> <p>Located between Burnley Street and Loyala Grove with Swan Street to the north and the Yarra River to the south. Refer to Section 7.6.2 for the description of existing open space and character</p>	<ul style="list-style-type: none"> • A significant 78 per cent increase in the resident population is forecast with an additional 685 residents by 2031. The majority are anticipated to be located in the Swan Street area, consistent with the <i>Yarra Housing Strategy 2018</i>. • A 43 per cent increase in the worker population is estimated with an additional 192 workers by 2031 in the Swan Street area. • Given the majority of the forecast population is going to live and work between Swan Street and the Railway, the Strategy recommends that Ryans Reserve is changed from being a restricted, open space to an unrestricted open space that continues to retain some tennis and/or multi-purpose courts along with an informal garden space that includes open grassed area, picnic facilities and other unstructured recreation facilities. • Undertake a major upgrade of Golden Square Park to increase the diversity of the facilities, its interface to the retail/commercial use to the west of the park and the overall character.

Sub-precinct	Conclusions
	<ul style="list-style-type: none"> Review the future use and design of Athol J Brown Reserve as part of the future major upgrade of Golden Square Park to complement the character and facilities in the upgraded Golden Square Park.
Burnley B Located between Loyala Grove and the Yarra River. Refer to Section 7.6.2 for the description of existing open space and character.	<ul style="list-style-type: none"> A 55 per cent increase in the worker population is estimated with an additional 1,700 workers by 2031. Currently there is no existing resident population and no future resident population is forecast for this precinct. Given this sub-precinct is predominantly open space, no additional open space is required. Review the provision of suitable sports facilities at Kevin Bartlett Reserve for female participation. Undertake a review of Burnley Golf Course to confirm whether there is a need to continue the golfing use or whether there is a greater demand for other structured community sporting uses in the future. Continue to protect and improve the biodiversity values of the Yarra River corridor.

7.6.6 Cremorne, Richmond South and Burnley Recommendations

7.6.6a Summary of overall intent

Provision and distribution

Barkly Gardens and the system of open space along the Yarra River contribute to the open space character of this precinct. With the forecast substantial increase in the resident and worker population, a key recommendation is to provide new Small Neighbourhood, Local and Small Local open space reserves in Cremorne to cater to the forecast nearly 10,000 additional workers and residents in Cremorne. With the forecast significant increase in urban densities along Swan Street and across the southern part of the Municipality, there is also a longer term opportunity to introduce more diverse golfing options and other sporting uses at Burnley Public Golf Course. Strengthening the natural biodiversity values along the Yarra River corridor will contribute to the character and resilience of Richmond South and Burnley.

Quality and design

There is potential to improve the quality and diversity of facilities in the existing open spaces in this precinct. The additional open space in Cremorne will be designed to provide a diversity of facilities for the existing and future population and contribute positively to mitigating urban heat island effect.

Refer to Figure 7.6F for the spatial location of recommendations for this precinct.

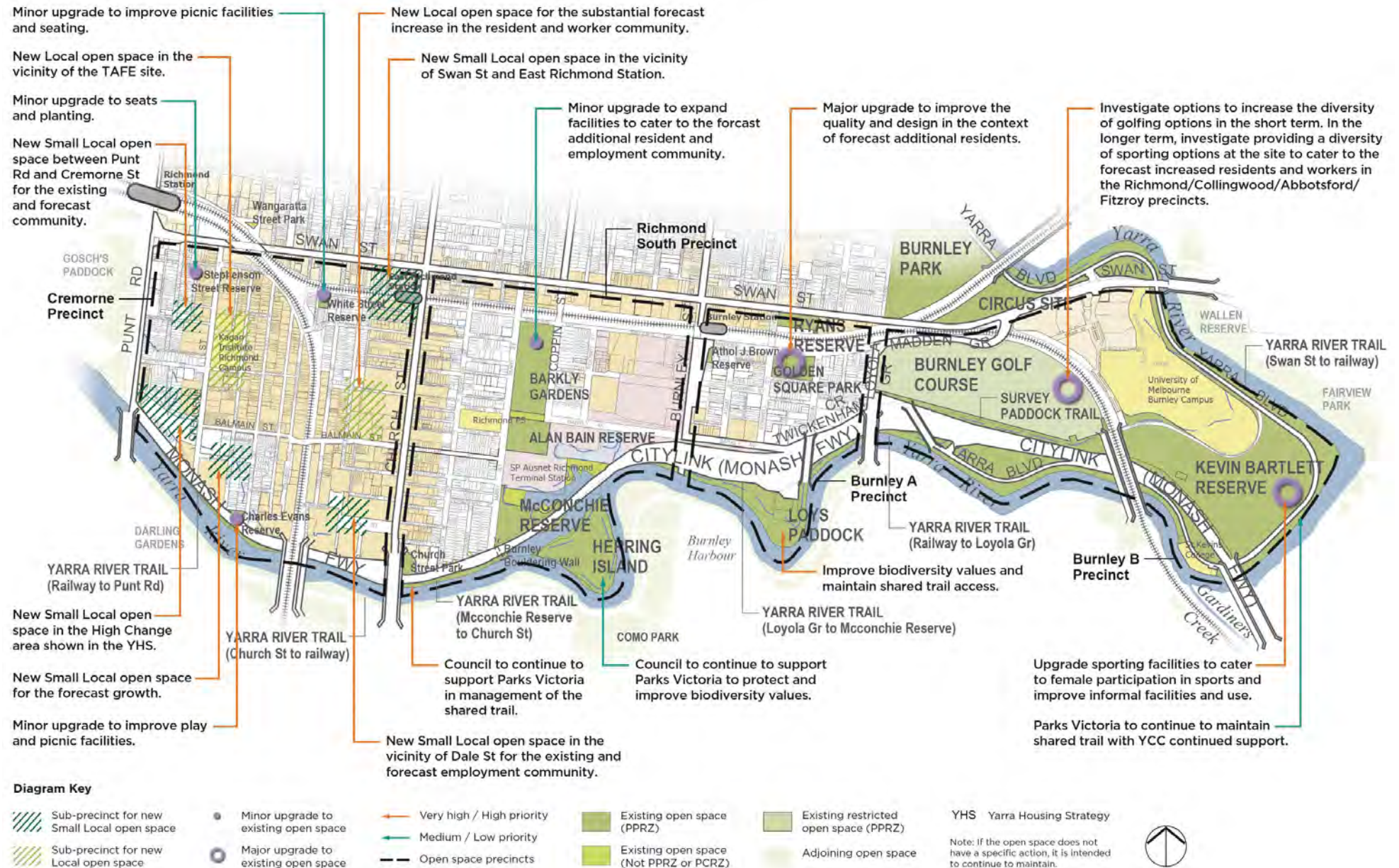


Figure 7.6F Recommendations for Cremorne, Richmond South and Burnley

7.6.5b Precinct Actions for Cremorne, Richmond South and Burnley

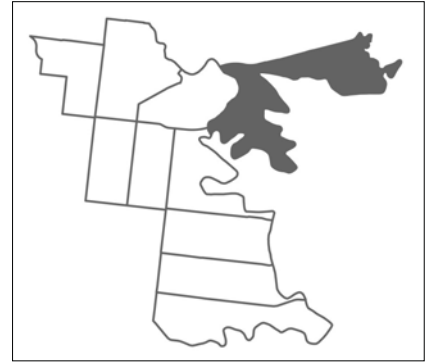
A Additional open space

No.	Action	Respons- ibility	Priority
7.6A-1	Provide a new Small Neighbourhood open space in Cremorne in the vicinity of the Kangan TAFE site. There is potential to investigate locating this on the car park and improving east-west connectivity as well. This new open space is primarily for the new population and also for the existing population.	YCC Developer	Very High
7.6A-2	Provide a new Small Local open space in the north-west area of Cremorne between Punt Road and Cremorne Street as shown in Figure 7.6F. This is to cater for both the forecast new and the existing population north of Kelso Street.	YCC Developer	Very High
7.6A-3	Provide a new Small Local open space in the south-west part of Cremorne in close proximity to the High Change Area shown in the <i>Yarra Housing Strategy 2018</i> . This is primarily to cater to the forecast new resident and worker population.	YCC Developer	Very High
7.6A-4	Provide a new Small Local open space between Cremorne Street and the railway, south of Balmain Street, as shown in Figure 7.6F. This will primarily be for the forecast new population.	YCC Developer	Very High
7.6A-5	Provide a new Local open space between the railway and Church Street and north of Balmain Street. This will complement the existing White Street Reserve, which is already well used, and cater to the forecast substantial increase in the worker and resident population. Options for future open space include the car park near East Richmond Station and the on the Bryant and May Site. The future open space will preferably be large enough to provide for unstructured active recreation including multi-use court, half courts, exercise equipment combined with urban greening and picnic and barbecue facilities.	YCC Developer	Very High
7.6A-6	Provide a new Small Local open space in the employment precinct south of Balmain Street and between the railway and Church Street. There is an opportunity to investigate changing the configuration of Dale Street to create a public open space and/or the configuration of the square on Electric Street. This will cater to both the existing and forecast worker population.	YCC Developer	Very High
7.6A-7	Provide a new small local open space in the north or south of East Richmond Station primarily for the forecast population in the and Swan Street precinct.	YCC Developer	Very High

B Existing open space

No.	Action	Responsibility	Priority
7.6B-1	Alan Bain Reserve Continue to maintain.	YCC	Ongoing
7.6B-2	Athol J Brown Reserve Continue to maintain.	YCC	Medium
7.6B-3	Barkly Gardens Undertake minor upgrades to the playground and other unstructured recreation facilities to cater to increased levels of use for forecast population.	YCC	Medium
7.6B-4	Burnley Golf Course Undertake a major review of the future use of this public open space to investigate options to increase the diversity of golfing options at the Burnley Golf Course in the short to medium term. In the longer term, investigate the feasibility to provide a diversity of sporting options offered at this site. This is investigation only, and the space is intended to continue to be primarily used for structured sporting uses.	YCC	Very High
7.6B-5	Charles Evans Reserve Undertake minor upgrades including investigating improving the picnic and play facilities.	YCC	High
7.6B-6	Church Street Park Continue to maintain.	YCC	Ongoing
7.6B-7	Golden Square Park Undertake a major upgrade to better cater to the needs of the existing and forecast population including: <ul style="list-style-type: none"> • Improve the quality and design of the open grassed area. • Increase the variety of unstructured recreation facilities in the open space to appeal to a more diverse age group. • Activate the interface between the park and the adjoining commercial use to the west of the reserve. 	YCC	High
7.6B-8	Herring Island Council supports the need for this open space and its contribution to the biodiversity values of the Yarra River Corridor.	PV	Ongoing
7.6B-9	Kevin Bartlett Reserve Investigate options to upgrade the sporting facilities to better cater to female participation in sport. As part of the future upgrade improve the passive and informal facilities provided at the reserve primarily for the forecast population as part of the future increased levels of use.	YCC	High
7.6B-10	Loys Paddock Continue to improve the natural biodiversity values with appropriate indigenous revegetation while maintaining appropriate access for the Main Yarra Trail.	YCC	Ongoing
7.6B-11	McConchie Reserve Continue to maintain.	YCC	Ongoing
7.6B-12	Ryans Reserve Continue to maintain as a sporting facility.	YCC	Low

No.	Action	Respons- ibility	Priority
7.6B-13	Stephenson Street Reserve Undertake minor upgrade to improve seating opportunities and landscape character with additional planting.	YCC	Ongoing
7.6B-14	Survey Paddock Trail PV to continue to maintain.	PV	Ongoing
7.6B-15	White Street Reserve Undertake a minor upgrade including provision of improved picnic facilities and review of the play facility and options to improve the seating and other uses. If opportunities arise in the future, investigate expanding the size of this open space to improve its function and use.	YCC	Medium
7.6B-16	Yarra River Trail – Church St to Railway Continue to maintain.	PV (YCC)	Ongoing
7.6B-17	Yarra River Trail – Loyala Gv to McConchie Reserve Continue to maintain.	YCC	Ongoing
7.6B-18	Yarra River Trail – McConchie Reserve to Church St PV to continue to maintain and YCC continues to support the importance of accessibility through this section of trail.	PV (YCC)	Ongoing
7.6B-19	Yarra River Trail – Railway to Loyala Gr Continue to maintain.	YCC	Ongoing
7.6B-20	Yarra River Trail – Railway to Punt Rd PV to continue to maintain.	PV (YCC)	Ongoing
7.6B-21	Yarra River Trail – Swan St to Railway PV to continue to maintain and YCC continues to support the importance of accessibility through this section of trail.	PV (YCC)	Ongoing



7.7 Fairfield - Alphington

7.7.1 Introduction

Fairfield and Alphington are located between the Merri Creek and Darebin Creek with the Yarra River defining its southern boundary and Heidelberg Road its north.

The waterways and open space define the character of these precincts. Yarra Bend Park, Yarra Bend Public Golf Course and Fairfield Park make up more than half of Fairfield. Within Yarra Bend Park is the Melbourne Polytechnic Fairfield Campus and some business/commercial and use to the north along Heidelberg Road, while the majority of the rest of Fairfield is residential. East of Chandler Highway Alphington is a predominantly residential area with the privately owned and run Latrobe Golf Club on the Yarra River, Alphington Park and Wetlands and the proposed future linear open space along Darebin Creek. The area is experiencing significant change with the redevelopment of the former Alphington Paper Mills site into a new residential community with approximately 2,500 dwellings. As part of the planning process, the provision of new public open space has been shown in the Development Plan and is illustrated on Figure 7.7A as future open space. The *Alphington Paper Mill Development Plan, Alpha Partners and Glenvill 2016*, is the approved plan for the site. The *Yarra Housing Strategy (2018)* provides direction on the future level of change for residential use within the precinct.

With the mixed land use, there is a significant worker population in Fairfield and Alphington which is about 20 per cent less than the resident population, as follows:

- Existing residential population 2016: 2,894 (*Source: .id Consulting population forecasts, 2018*)
- Existing estimated worker population 2016: Not available.



Figure 7.7A Existing open space in Fairfield - Alphington

7.7.2 Existing open space

7.7.2a Description

The two suburbs of Alphington and Fairfield are separated by Chandler Highway and have clear defined boundaries formed by the Heidelberg Road to the north, the Yarra River to the south and Merri Creek and Darebin Creek to the east and west. The extent of the two suburbs are shown in Figure 7.7B.

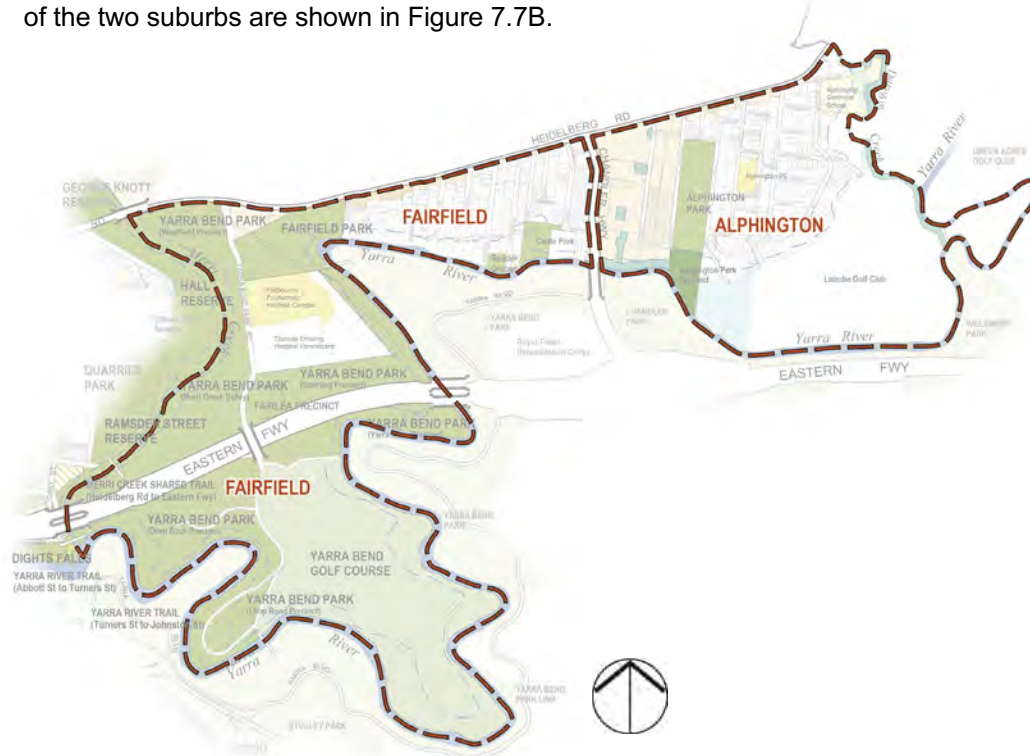


Figure 7.7B Open space sub-precincts for Fairfield and Alphington

Fairfield

- Open space located in this suburb includes
 - Coate Park
 - Fairfield Park
 - Rudder Grange
 - Yarra Bend Park
- Yarra Bend Park is a major regional open space that is Crown Land managed by Parks Victoria. The Parks Victoria Visitor Guide notes that it is the largest area of natural bushland near the heart of Melbourne and is home to the city's famous Flying-fox colony, has steep river escarpments, open woodlands, playing fields and golf courses.
- Fairfield Park directly adjoins Yarra Bend Park and is managed by the City of Yarra. It provides a diversity of facilities and provides access to the Yarra River for the boating including kayak and canoe launch facilities along with the boat hire associated with the Fairfield Boathouse and Tea Gardens. The Ivanhoe Northcote Canoe Club is based at the park and the Fairfield Amphitheatre is located in the park and accommodates up to 350 people at an event and is available for bookings. Fairfield Park Oval provides two soccer fields and a cricket ground along with cricket nets and a sports pavilion. The masterplan prepared in 2010 guides future works in the Park.

- Coate Park and Rudder Grange directly adjoin the Yarra River to the east of the precinct and an informal walking track along the Yarra River connects them both. Coate Park has mature exotic plantings and open grassed area with seats and picnic facilities. The existing masterplan prepared in 2002 guides future works.
- The *Yarra Housing Strategy* (2018) identifies two Moderate Change areas, with one at the corner of Chandler Highway and Heidelberg Road and the other to the north of Fairfield Park. The remainder of the residential area is noted as Minimal Change.
- The non-residential land use forms part of the Fairfield Employment Precinct, however there are no employment forecasts for this area.

Alphington

- Open space located in this sub-precinct includes
 - Alphington Park
 - Alphington Park Wetlands
- Alphington Park provides for the sport and recreation needs of the existing residents and includes a sports field, bowling club, playground, picnic facilities and walking paths.
- Alphington Park Wetlands directly adjoin the Yarra River and are a peaceful location for walking and primarily for protection and improvement of the biodiversity values of the Yarra River corridor.
- Latrobe Golf Club is privately owned and provides a natural unbuilt character even though this area is not open and accessible to the public.
- A future linear open space corridor is proposed along the Darebin Creek as part of the Lower Darebin Creek Shared Trail link to the Main Yarra Trail. People living in Alphington can access the shared trail via Sparks Reserve, which is located in the City of Banyule via Heidelberg Road. Currently there is no direct access onto the trail from Alphington.
- Future open space is proposed within the Alphington Paper Mills development site and the layout shown in the 2016 Development Plan is shown in Figure 7.7A. This is a system of future Small Local and Local open space primarily for the new approximately 2,500 dwellings. The 30 metre wide reserve along the Yarra River will be accessible and will provide an open space link to Alphington Park Wetlands in the future. The land use is a combination of residential use, mixed use (Alphington Paper Mills site), special use for the Latrobe Golf Club, education for the Alphington Primary School and some commercial use along Heidelberg Road.
- The *Yarra Housing Strategy* (2018) includes one High Change area which is the Alphington Paper Mills Site. The area of commercial use on Heidelberg Road is designated as a Moderate Change area, with the remainder of the residential area being Minimal Change.

7.7.2b Quantity of open space in Fairfield and Alphington

The 6 existing open spaces in Fairfield and Alphington have a combined total area of 96.92 hectares. This represents approximately 28 per cent of the total land area of the precinct. Additionally there is 1 existing restricted open space that is 59.63 hectares in size. Adding the restricted open space to the other 6 open spaces results in a total of 156.55 hectares and represents 45.2 per cent of the total land area of the precinct.

Table 7.7-1 Number, size and type of open space

No	Hierarchy	Area (ha)	%
3	Regional	89.29	92%
1	City wide	5.50	6%
1	Neighbourhood	1.58	2%
1	Small Neighbourhood	0.54	1%
0	Local	0.00	0%
0	Small Local	0.00	0%
6	TOTAL	96.92	100%

7.7.2c Open space hierarchy, character and quality

Yarra Bend Park is noted to be the largest natural bushland area to the Melbourne CBD, being located approximately 6 kilometres from it. It also provides a significant sport and recreation precinct for the residential and working community of the City of Yarra, particularly those living nearby including in Fairfield.

Fairfield Park including the oval is a Regional open space that is managed by the City of Yarra directly and provides a combination of facilities that meet local and regional open space needs. Alphington Park on the other hand is a City-wide reserve with a predominantly sporting character and caters primarily to the sport and recreation needs of Alphington.

Alphington Park Wetland is the only area of open space that is zoned Public Conservation and Resource Zone and has a Regional hierarchy in recognition of its contribution to the habitat values of the broader Yarra River corridor.

Coate Park is the only Neighbourhood Park due to its size and the range of facilities located in it, while Rudder Grange is a Small Neighbourhood open space with a walking path and seating that currently does not connect to Coate Park as a continuous path.

A walking catchment has not been included for the future open space along the Darebin Creek given that it is fenced though Latrobe Golf Course at the end of Farm Road restricting access to the open space and Darebin Creek Trail for people living and working in Alphington.

Table 7.7-2 Existing open space, hierarchy and character classification

Name	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Alphington Park	5.50	City-wide	Sporting	Heritage, Public garden
Alphington Park Wetland	2.49	Regional	Nature conservation	Waterway, Informal
Coate Park	1.59	Neighbourhood	Public garden	Waterway, Heritage
Fairfield Park	7.97	Regional	Heritage	Public garden, Sporting, Waterway, Nature conservation, Botanical
Rudder Grange	0.54	Small Neighbourhood	Waterway	Linking space, Nature conservation, Seating/viewing
Yarra Bend Park (Deep Rock Precinct)	19.95	Regional	Sporting	Waterway, Nature conservation
Yarra Bend Park (Fairlea Precinct)	8.87	Regional	Sporting	Public parkland
Yarra Bend Park (Loop Road Precinct)	8.72	Regional	Public parkland	Sporting, Heritage, Waterway
Yarra Bend Park (Merri Creek Valley)	18.31	Regional	Waterway	Linear, Native bushland, Nature conservation, Seating/viewing
Yarra Bend Park (Westfield Precinct)	8.90	Regional	Public parkland	Waterway, Nature conservation
Yarra Bend Park (Yarra River Precinct)	14.09	Regional	Waterway	Nature conservation, Linear
Total	96.92			
Restricted open space				
Yarra Bend Public Golf Course	59.63	Regional	Restricted sporting	
Total including restricted open space	156.55			

7.7.2d Distribution of open space in Fairfield and Alphington

The existing open space has been allocated an appropriate hierarchy as shown in Table 7.7-2 above and a corresponding walking catchment appropriate to it, as described in Table 3-1 and 3-5 of this report. The areas of the precinct that are located outside the walking catchments of the different open space reserves are referred to as 'gap areas' and are shown in white in Figure 7.7C on the next page. The only gap area for this precinct is shown on the Latrobe Golf Club land and given this is private open space it is not applicable.



Figure 7.7C Gap analysis for Fairfield - Alphington

7.7.3 How residents use open space

A total of 55 resident surveys were received from the Fairfield Alphington precinct, which represents 4 per cent of the total surveys received. The .id Community Profile identifies that 3 per cent of the City of Yarra's population lives there.

It is interesting to note that despite the close proximity of Yarra Bend Park there are relatively low levels of use of the park.

Table 7.7-3 Most frequently visited open space

No.	Name	Reasons to visit	Suggested improvements
Open space within walking distance			
24	Alphington Park	<ul style="list-style-type: none"> • Dog walking (10) • Close to home (4) • Beautiful open space (3) 	<ul style="list-style-type: none"> • Upgrade the playgrounds (3) • No improvements required (2) • Netball court required (2) • More watering of the open space (2)
13	Fairfield Park	<ul style="list-style-type: none"> • Dog walking (4) • Walking (4) • Exercising (3) • Playing with children (3) 	<ul style="list-style-type: none"> • No improvements required (3) • Additional bushland required (2)
12	Coate Park	<ul style="list-style-type: none"> • Dog walking (5) • Close to home (3) • Exercising (2) 	<ul style="list-style-type: none"> • More drinking fountains (2) • Dog waste bags/bins, additional required (1)
9	Darebin Parklands	<ul style="list-style-type: none"> • Dog walking (4) • Exercising (4) • Walking (4) 	<ul style="list-style-type: none"> • Safer crossing points at major roads for cyclists (1) • Dedicated facilities for womens sport(2)
9	Yarra Bend Park	<ul style="list-style-type: none"> • Beautiful open space (3) • Dog walking (2) 	<ul style="list-style-type: none"> • Dog drinking facilities required (1) • Prohibit dogs (1)
7	Alphington Park Wetland	<ul style="list-style-type: none"> • Dog walking (5) 	<ul style="list-style-type: none"> • No improvements required (1) • Wayfinding and educational signage required (1)
Open space beyond walking distance			
10	Edinburgh Gardens	<ul style="list-style-type: none"> • Walking (2) • Beautiful (2) • Relaxing (2) 	<ul style="list-style-type: none"> • No improvements required (3)
3	Abbotsford Convent Arts Precinct	<ul style="list-style-type: none"> • Socialising with friends/family (5) 	<ul style="list-style-type: none"> • No improvements required (3) • Regular maintenance and cleaning required (2)
93	Quarries Park	<ul style="list-style-type: none"> • Exercising (1) • Children playing (1) 	<ul style="list-style-type: none"> • Upgrade playgrounds (1)

Values of open space (top five)

- 84% A place to relax and unwind
- 82% Trees
- 78% Habitat for native animals and plants

- 71% An escape from the built environment
- 64% Health and wellbeing, 64% Natural bushland character

Types of open space used (top five)

- 80% Local streets for exercise
- 78% Open space along the Yarra River
- 64% Small local parks
- 55% Large parks and gardens
- 45% Open space along the Merri Creek

Activities and facilities in open space (top five)

- 85% Walking paths
- 82% Open grassed areas
- 69% Seats
- 58% Cycle paths
- 45% Dog off-leash areas

General comments

This was an open ended section of the survey where respondents could write any additional comments. The following list are comments made by four or more people:

- Open space is valued (6)
- Retain the open space that is already there (4)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix B.

7.7.4 Analysis of future change and open space needs

7.7.4a Forecast future population

Quantity

The table below shows the forecast population growth for the residential and worker populations in Fairfield and Alphington. A further breakdown of the forecasts for the each sub-precinct within Fairfield and Alphington have been prepared by .id Consulting to assist with analysis of where forecast change will occur.

Residential population forecasts are sourced from .id Consulting (2018) and the worker population estimates are calculated from the floor area growth forecasts in the *Spatial Economic and Employment Strategy, SGS, 2018* (SEES, 2018). There are no worker population estimates available for this precinct.

The resident population growth is significant with an overall change in residential population of 214 per cent or an additional 6,205 residents between 2016 and 2031. In reviewing the forecast breakdown, the majority of the change is forecast to occur in Alphington on the Alphington Paper Mills Development site. The resident population forecasts through to 2041 illustrate that there will be an approximately 28 per cent change in Fairfield while Alphington will reduce to a 4 per cent increase. While this Strategy is primarily addressing the open space needs of the existing and forecast population through to 2031, it is useful to understand the context of the magnitude of change beyond the Strategy timeframe.

Table 7.7-4 Resident population forecasts for Fairfield and Alphington open space sub-precincts

SUB-PRECINCT	2016	2031	Difference 2016-2031
Alphington	1,245	7,393	6,148
% change Alphington			494%
Fairfield	1,649	1,706	57
% change Fairfield			3%
Total Fairfield and Alphington	2,894	9,099	6,205
Total % Change			214%

7.7.4b Population change impacts on open space

The additional quantity of people living and working in Fairfield and Alphington will place increased pressure and demand on the existing open space. The pressures will include increased volumes of people in the open space utilising the facilities particularly in the City-wide, Neighbourhood and Local open space. The Alphington Paper Mills Development Plan includes the provision of one new Small Local open space, three new Local open spaces and the 30 metre wide Yarra River corridor. This will assist to reduce the pressure on the existing open space network in Alphington.

The forecast change in demographics results in an increase in young families with children in the pre and primary school age. There is forecast to be a decline in the 12 to 17 year and 50 to 69 age range. With an increase in the number of young children, the future open space designs will need to maximise the diversity of facilities including play areas for young children.

7.7.4c Where change will occur

The forecast resident and worker population increase in Fairfield and Alphington will be concentrated in Alphington on the former Alphington Paper Mill development site along with the areas of Moderate Change as identified in the *Yarra Housing Strategy, 2018* (YHS, 2018). Refer to Figure 7.7E on the next page.

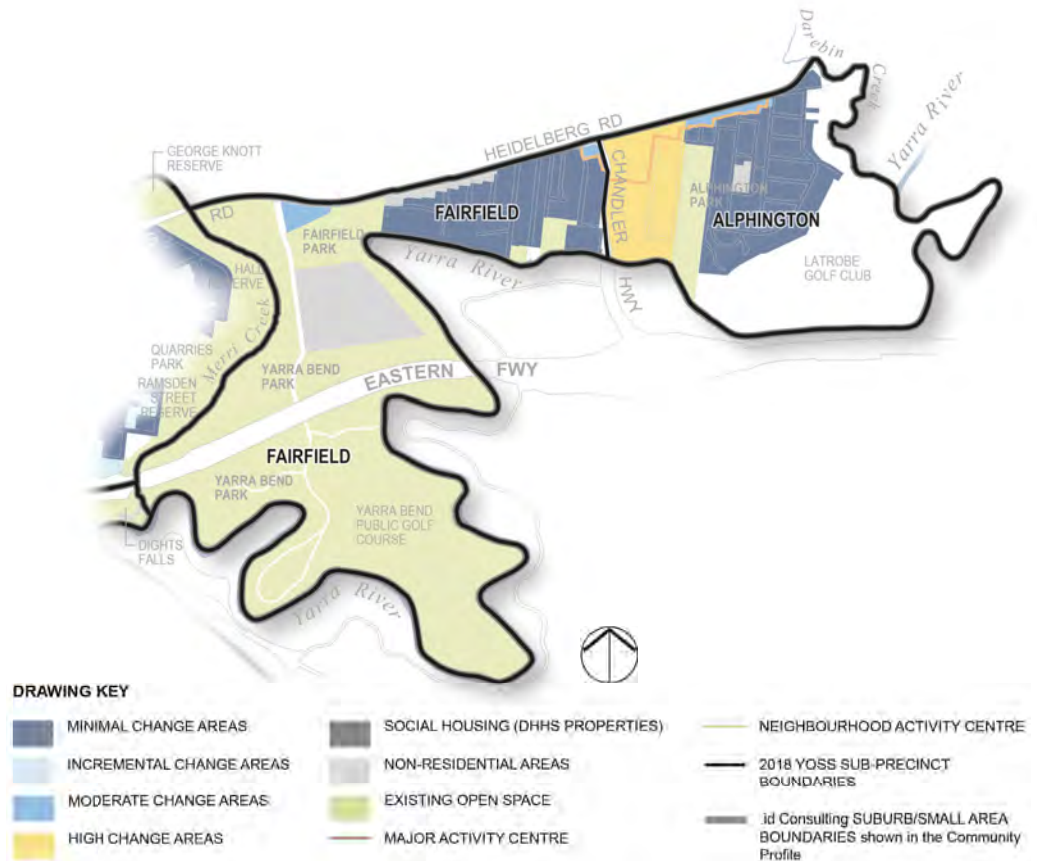


Figure 7.7D Open space sub-precincts and the Strategic Housing Framework (YHS, 2018)

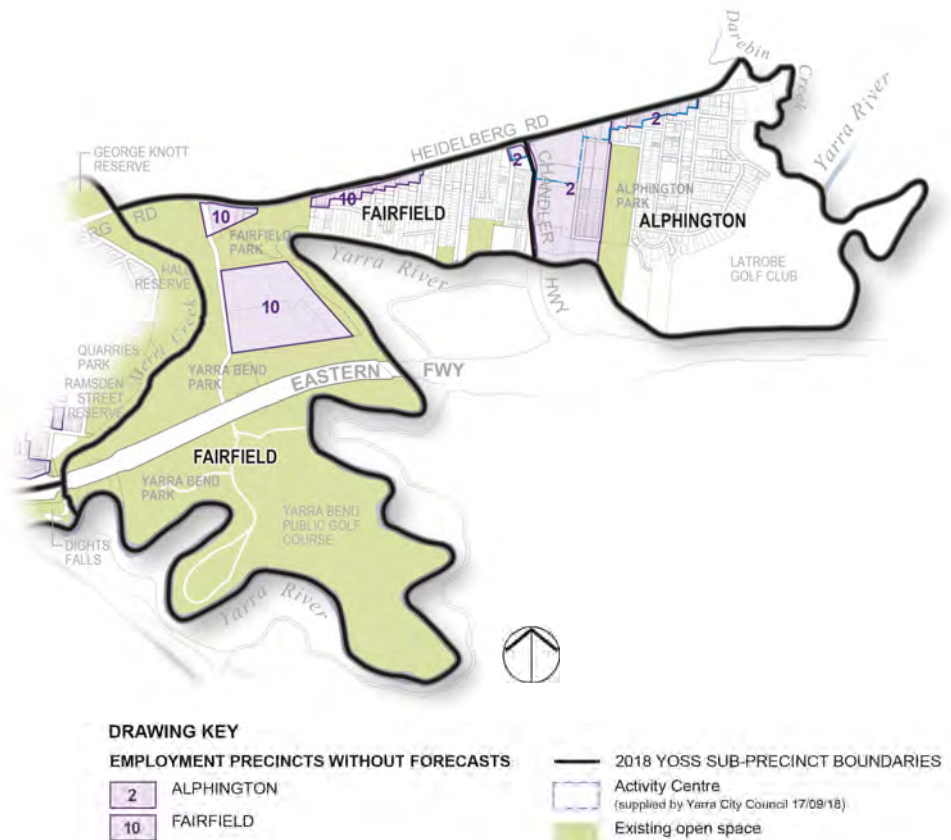


Figure 7.7E Open space sub-precincts and the Employment and Retail Precincts (SEES, 2018)

7.7.4d Open space distribution and future need in Fairfield and Alphington

The suburbs of Fairfield and Alphington are distinct and clearly defined by major roads and waterways.

Sub-precinct	Conclusions
Fairfield Refer to Section 7.7.2 for the description of existing open space and character.	<ul style="list-style-type: none"> • A 3 per cent increase in the resident population is forecast with an additional 57 residents by 2031. • Looking forward to 2041 a 28 per cent increase in the resident population is forecast with an additional 48 residents by 2041. • There is adequate open space provided for the existing and forecast population. • Minor upgrades to Coate Park and Rudder Grange to provide a bridge or formalised path, additional seating and improve the condition of the open grassed area in Coate Park. • Continue to implement the existing masterplan for Fairfield Park.
Alphington Refer to Section 7.7.2 for the description of existing open space and character.	<ul style="list-style-type: none"> • A 494 per cent increase in the resident population is forecast with an additional 6,148 residents by 2031. • Looking forward to 2041 the forecast increase slows significantly to 4 per cent. • As part of the approved Alphington Paper Mills Development Plan 2016 additional open space will be provided on the site. This includes 1 Small Local and 3 Local open spaces, with a connection to the standard 30 metre wide reserve adjacent to the Yarra River. • Undertake a major upgrade to the play and picnic facilities in Alphington Park to cater to increased levels of use from the additional population.

7.7.5 Fairfield and Alphington Recommendations

7.7.5a Summary of overall intent

Provision and distribution

Open space is well provided for and significantly contributes to the landscape character of these areas. With the significant levels of forecast growth in Alphington one new Small Local and three new Local open spaces are to be provided on the Alphington Paper Mills Development site as part of the approved Development Plan.

Quality and design

There is potential to expand the play and picnic facilities in Alphington Park to cater to the substantial increase in population, combined with ongoing upgrades to and implementation of the Fairfield Park Masterplan. The new open space designs are recommended to be reviewed in the context of ensuring there are facilities that provide for some active unstructured recreation and that they include greening and passive cooling given the high urban densities so they also contribute to mitigating urban heat island effect.

Refer to Figure 7.7F for the spatial location of recommendations for Fairfield and Alphington.

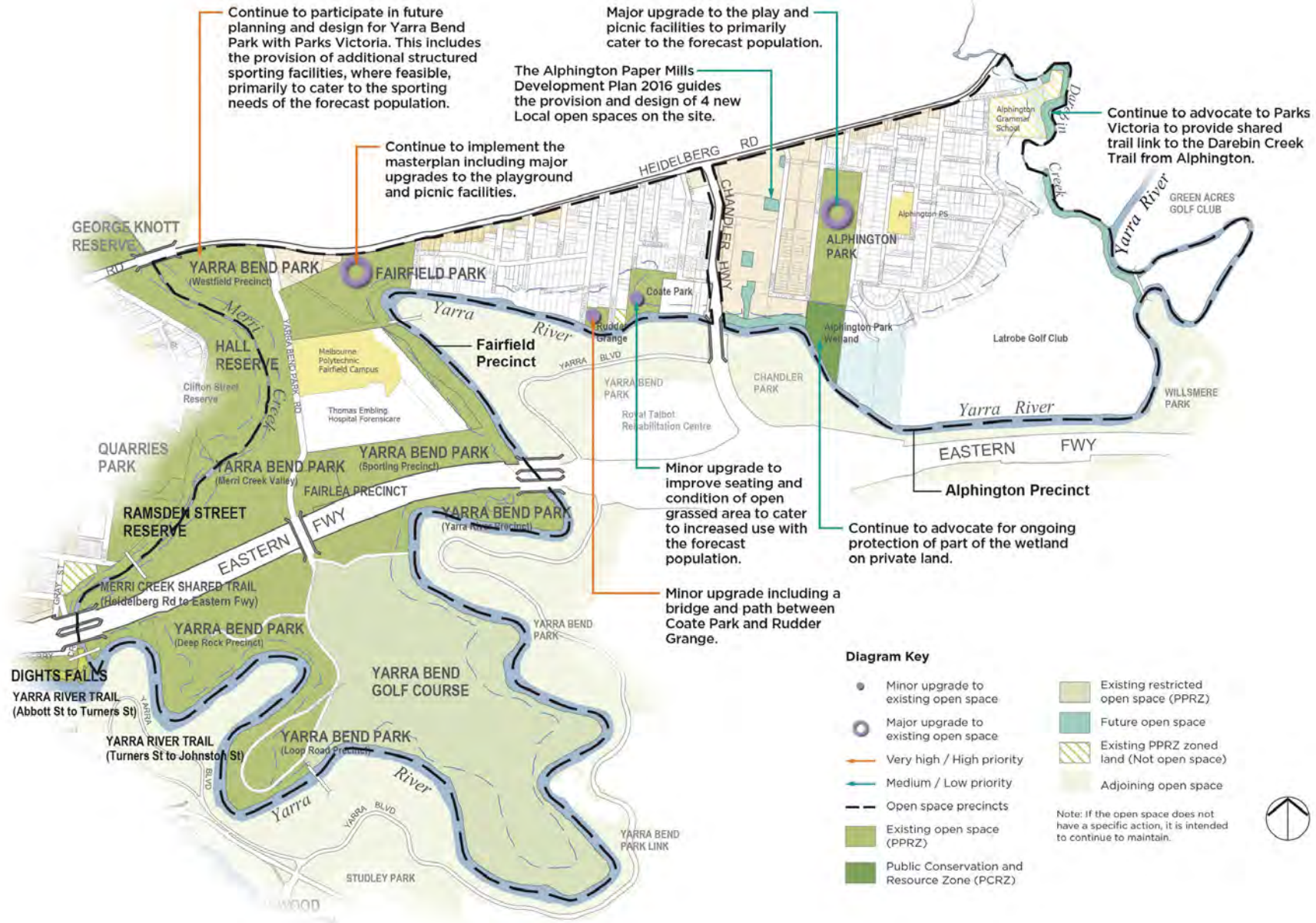


Figure 7.7F Recommendations for Fairfield - Alphington

7.7.5b Precinct Actions for Fairfield and Alphington

A Additional open space

No.	Action	Responsibility	Priority
7.5A-1	The Alphington Paper Mills Development Plan 2016 has identified the provision of 1 new Small Local open space in the north of the precinct.	Developer	High
7.5A-2	The Alphington Paper Mills Development Plan 2016 has identified the provision of 3 new Local open spaces on the site including the linking space to the 30 metre wide reserve along the Yarra River corridor.	Developer	High
7.5A-3	Continue to advocate to Parks Victoria to provide a shared trail link to the Darebin Creek Shared Trail from Alphington. Note that no costs have been included for this project as it is the responsibility of the Victorian government to provide access onto the trail.	PV (YCC)	High

B Existing open space

No.	Action	Responsibility	Priority
7.5B-1	Alphington Park Undertake a major upgrade of the playground and picnic facilities in Alphington Park to primarily cater to the forecast population.	YCC	High
7.5B-2	Alphington Park Wetland Continue to maintain and recognise the biodiversity values of the wetland. This includes advocating for ongoing protection for part of the wetland located on adjoining private land.	YCC (Adjoining land holder)	Ongoing
7.5B-3	Coate Park Undertake minor upgrade with additional seating, improve the condition of the open grassed areas and continue to improve the biodiversity values of the reserve consistent with the existing masterplan.	YCC	High
7.5B-4	Fairfield Park Continue to implement the masterplan including a major upgrade to the playground and picnic facilities at the park. Future upgrades are for both the existing and forecast population.	YCC	High
7.5B-5	Rudder Grange Undertake a minor upgrade including a bridge or formalised safe path link between Coate Park and Rudder Grange, along with additional seats and continue to improve the biodiversity values.	YCC	Medium
7.5B-6	Yarra Bend Park (all precincts) Continue to participate in the future planning and design for Yarra Bend Park to advocate for provision of additional structured sporting facilities where feasible and required in the context of limited additional space being available to cater to the sporting needs of the forecast population in the City of Yarra.	PV (YCC)	High and Ongoing



7.8 Fitzroy

7.8.1 Introduction

Fitzroy is bounded to the north by Alexandra Parade, to the South by Victoria Parade, the west by Nicholson Street and the east by Smith Street. The land is gently undulating with Brunswick Street on a ridgeline.

The land use of Fitzroy is mixed with core residential precincts combined with the commercial spines running north south and east west along the major roads. There are large pockets of mixed use and an area of social housing known as the Atherton Gardens Estate. Other key land use includes St Vincents Hospital and the Catholic University along Victoria Parade. Brunswick Street, Gertrude Street, Smith Street and Johnston Street are key commercial and retail precincts with cafes and restaurants along with an vibrant art scene including galleries and studios. The *Smith Street Structure Plan*, adopted by Council in November 2008, provides the key direction for the future expansion and change within it. The *Yarra Housing Strategy* (2018) provides direction on the future level of change for residential use within the precinct.

With the mixed land use, there is a significant worker population in Fitzroy which is greater than the resident population as shown below:

- Existing residential population 2016: 11,485 (*Source: .id Consulting population forecasts, 2018*)
- Existing estimated worker population 2016: 17,314 (*Source: SEES, SGS 2018*)



Figure 7.8A Existing open space in Fitzroy

7.8.2 Existing open space

7.8.2d Description

Nicholson, Brunswick and Smith Streets are major north south roads in Fitzroy and Alexandra Parade, Johnston Street and Victoria Parade define four open space sub-precincts, Fitzroy A, B, C and D. These are shown in Figure 7.8B as described below.



Figure 7.8B Open space sub-precincts for Fitzroy

Fitzroy A

- Open space sub-precinct Fitzroy A is located between Alexandra Parade and Johnston Street, and between Nicholson and Brunswick Streets.
- Open space located in this sub-precinct includes
 - Garryowen Park
- This Local open space is located centrally in the sub-precinct and includes seating and play facilities. There are no gaps in open space distribution in this precinct due to its relatively central location.
- The land use includes a combination of mainly residential use to the north and mixed use to the south.
- The *Yarra Housing Strategy* (2018) identifies this precinct to be a combination of minimal change in the north and incremental change in the south.

Fitzroy B

- Open space sub-precinct Fitzroy B is located between Johnston Street and Victoria Parade and between Nicholson and Brunswick Streets.
- Open space located in this sub-precinct includes:

- Frank King Park
- King William Reserve
- Frank King Park is Small Local open space which has a public garden character with seats and planting and appears as a private open space given it is fenced.
- King William Reserve by contrast contains a range of unstructured recreation facilities including a half court and playground along with a seating area.
- The land use is predominantly residential with retail/commercial and higher density residential along Brunswick and Johnston Streets. South of Gertrude Street the land use is predominantly residential area with St Vincents Hospital.
- The *Yarra Housing Strategy* (2018) includes two moderate change areas with the remainder identified as minimal and incremental change.

Fitzroy C

- Open space sub-precinct Fitzroy C is located between Alexandra Parade and Johnston Street and between Brunswick and Smith Streets.
- Open space located in this sub-precinct includes
 - Smith Reserve
- Smith Reserve is a Small Neighbourhood open space located on Alexandra Parade adjacent to the Fitzroy Pool. The open space is informal in character and includes an open grassed area for informal games and dog off-lead exercise, a picnic and barbecue facility and fenced playground.
- Land use is a combination of residential, mainly to the north and then mixed use with higher density residential to the south closer to Johnston Street.
- The *Yarra Housing Strategy* (2018) identifies the mixed use area to the south and east as a high change area. Areas of moderate change are shown along Brunswick Street and also in the south, with the balance shown as minimal change.

Fitzroy D

- Open space sub-precinct Fitzroy D is located between Johnston Street and Victoria Parade and between Brunswick and Smith Streets.
- Open space located in this sub-precinct includes:
 - Atherton Reserve
 - Condell Street Reserve
 - George Street Reserve
 - Greeves Street Reserve
 - Whitlam Place
- Atherton Reserve is a Neighbourhood open space and is popular for informal ball sports with the soccer ground and also for dog walking/exercise and play.
- Condell Street Reserve is a Local open space with some mature shade trees, open grassed areas, path link and a small play facility.
- George Street Reserve is a Small Local open space with mature trees, path and seat and is mainly used as linking space.
- Greeves Street Reserve includes seats with some planting.
- Whitlam Place, located opposite the Fitzroy Town Hall and Library has shade trees, seating, paths and monument and functions as a linking space and a space for relaxing and sitting.
- Land use is predominantly residential with commercial and business use along the major roads bordering the precinct and also along Gertrude Street in the south. Fitzroy Town Hall and Library provides a civic hub along with Fitzroy Primary School and the Sacred Heart Primary School.

- The *Yarra Housing Strategy* (2018) identifies a high change area along Johnston Street in the north and moderate change along Brunswick and Smith Streets. The majority of the remainder of the precinct is identified as minimal change. Pockets of non-residential use include the Australian Catholic University site on Victoria Parade in the south.

7.8.2a Quantity of open space in Fitzroy

The 9 existing open spaces in Fitzroy have a combined total area of 2.27 hectares. This represents approximately 1.6 per cent of the total land area of the precinct.

Table 7.8-1 Number, size and type of open space

No	Hierarchy	Area (ha)	%
0	Regional	0.00	0%
0	City wide	0.00	0%
1	Neighbourhood	1.14	50%
1	Small Neighbourhood	0.58	29%
3	Local	0.43	19%
4	Small Local	0.12	5%
9	TOTAL	2.27	100%

7.8.2b Open space hierarchy, character and quality

Atherton Reserve is the Neighbourhood open space for Fitzroy and while it appears to be well used, the open space survey identified it is slightly less popular than Condell Street Reserve. The soccer field is used as a sports ground for informal and structured sport and is available for other activities including ball sports, jogging and exercising dogs. Other facilities include the cricket nets, a path and two seating areas with picnic tables. Atherton Reserve adjoins the Cubbies Adventure Playground which is a supervised play area. While the reserve is positioned centrally there is a lack of passive surveillance in it which may contribute to the lower levels of informal use. Condell Street is nearby and provides a complementary character with mature exotic trees and a public play facility, however it is poorly located in the open space and there is potential to expand and improve it along with the layout and facilities in the reserve. Whitlam Place is the other Local open space which is located nearby to Condell Street Reserve and has a distinctly different character and functions well without a play facility.

The two Small Local open spaces are limited in size and there is potential to improve the character of George Street Reserve with additional planting and seating.

Table 7.8-2 Existing open space, hierarchy and character classification

Name	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Atherton Reserve	1.14	Neighbourhood	Informal	Linking space
Condell Street Reserve	0.20	Local	Informal	Play
Frank King Park	0.05	Small Local	Public garden	Formal
Garryowen Park	0.11	Local	Informal	Play
George Street Reserve	0.03	Small Local	Linking space	Seating/viewing
Greeves Street Reserve	0.01	Small Local	Seating/viewing	
King William Reserve	0.02	Small Local	Urban plaza	Play
Smith Reserve	0.58	Small Neighbourhood	Informal	Play
Whitlam Place	0.11	Local	Public square	
Total	2.27			

7.8.2c Distribution of open space in Fitzroy

The existing open space has been allocated an appropriate open space hierarchy as shown in Table 7.8-2 above and a corresponding walking catchment appropriate to it, as described in Table 3-1 and 3-5 of this report. The areas of the precinct that are located outside the walking catchments of the different open space reserves are referred to as 'gap areas' and are shown in white in Figure 7.8C below. The assessment of the adequacy of the existing open space network in Fitzroy is informed by the analysis of the spatial distribution of open space. As one of the key aims of this Strategy is for everyone to live and work within a safe and easy walk of open space, the recommendations will focus on addressing the gaps in the existing open space network.

For Fitzroy, the major gaps in the existing open space network occur south of Gertrude Street and between Rose and Johnston Streets, between Brunswick Street and Smith Street. These are shown in Figure 7.8C on the next page.



Figure 7.8C Gap analysis for Fitzroy

7.8.3 How residents use open space

A total of 121 resident surveys were received from the Fitzroy precinct. A summary of the results of the worker survey is included in the next section 7.8.4.

Table 7.8-3 Most frequently visited open space

No.	Name	Reasons to visit	Suggested improvements
Open space within walking distance			
67	Edinburgh Gardens	<ul style="list-style-type: none"> • Dog walking (13) • Socialising with friends / family (13) • Relaxing (11) • Walking (10) • Large open space (8) • Dog friendly (7) • Picnics (7) • Playground (7) • Close to home (5) • Playing with children (5) 	<ul style="list-style-type: none"> • No improvements required (7) • Dog fenced off areas required (3) • Dog drinking facilities required (2) • More exercise equipment needed (2) • More shade required for playgrounds (2)
47	Carlton Gardens	<ul style="list-style-type: none"> • Convenient / on the way (8) • Relaxing (7) • Close to home (6) • Dog walking (5) 	<ul style="list-style-type: none"> • No improvements required (6) • Dog off leash areas required (3) • Separate paths for cyclists and pedestrians (2)
24	Smith Reserve	<ul style="list-style-type: none"> • Close to home (8) • Playground (8) • Dog walking (5) 	<ul style="list-style-type: none"> • More fencing required (3) • More seating required (3) • Traffic noise management (3)
16	Condell Reserve	<ul style="list-style-type: none"> • Playground (6) • Close to home (5) • Playing with children (5) 	<ul style="list-style-type: none"> • Empty bins frequently (5) • Shade required for playground (3) • Additional playgrounds required (2)
14	Atherton Reserve	<ul style="list-style-type: none"> • Dog walking (3) • Close to home (2) • Exercise dogs (2) • Playing with children (2) 	<ul style="list-style-type: none"> • Upgrade playgrounds (2) • Additional fenced dog off leash areas required (2) • Prohibit dog off leash (1)
14	Fitzroy Gardens	<ul style="list-style-type: none"> • Walking (6) • Convenient / on the way (3) 	<ul style="list-style-type: none"> • No improvements needed (1)
Open space beyond walking distance			
13	Edinburgh Gardens	<ul style="list-style-type: none"> • Socialising with friends / family (4) • BBQ facilities (2) • Dog friendly (2) 	<ul style="list-style-type: none"> • More toilets required (2) • More bins required (1) • Bins to be emptied more frequently (1)
7	Royal Botanical Gardens Melbourne	<ul style="list-style-type: none"> • Peaceful open space (3) • Relaxing (2) 	<ul style="list-style-type: none"> • No improvements required (1)
6	Darling Gardens	<ul style="list-style-type: none"> • Playgrounds (3) • Picnics (2) 	<ul style="list-style-type: none"> • No improvements required (2)
6	Yarra Bend Park	<ul style="list-style-type: none"> • Cycling (4) • Dog walking (2) • Socialising with friends / family (2) 	<ul style="list-style-type: none"> • Dog agility park required (1) • Maintain paths (1) • Additional playgrounds required (1)

No.	Name	Reasons to visit	Suggested improvements
5	Merri Creek Precinct	<ul style="list-style-type: none"> • Cycling (1) • Dog walking (1) • Exercising (1) 	<ul style="list-style-type: none"> • More access to the river for canoeing (1)
5	Yarra River Precinct	<ul style="list-style-type: none"> • Dog walking (2) 	<ul style="list-style-type: none"> • Additional boat sheds required to hire (1)

Values of open space (top five)

- 76% Place to relax and unwind
- 76% Trees
- 54% It's accessible
- 53% Just being outside, 53% The feeling of space
- 52% A place for children to play, 52% Health and well being

Types of open space used (top five)

- 69% Local streets for exercise
- 65% Small local parks
- 64% Large parks and gardens
- 29% medium sized parks
- 27% Urban squares

Activities and facilities in open space (top five)

- 88% Walking paths
- 69% Open grassed areas
- 67% Drinking fountains
- 59% Public toilets, 59% Seats
- 53% Cycle paths

General comments

This was an open ended section of the survey where respondents could write any additional comments. The following list are comments made by four or more people:

- Additional open space required (6)
- Additional open space is required particularly as densities increase and the less private open space (5)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix B.

7.8.4 How existing workers use open space

144 workers were surveyed in Fitzroy in Brunswick Street including near Victoria Parade.

Frequency of use of open space near the workplace

- 90 per cent of those surveyed visit open space near their workplace with only 10 per cent nominating they did not visit open space.

Reasons to visit open space near the workplace

The three top reasons workers visit open space near their place are:

- 66% to be outdoors as a break from work
- 46% to socialise / meet colleagues / friends
- 28% to eat lunch
- 21% to exercise for fitness
- 19% to meet family
- 12% to travel to and from work

Most frequently visited open space

No.	Name
28	Parks (names not provided)
25	Edinburgh Gardens
20	Carlton Gardens
20	Fitzroy Gardens
7	Small local park
6	Smith Reserve

Suggestions for improvements to the open space network

- Additional open space required (25)
- More greening/green open space (12)
- No improvements required to open space (11)
- Additional seats (8)
- More trees (7)

7.8.5 Analysis of future change and open space needs

7.8.5a Forecast future population

Quantity

The table below shows the forecast population growth for the residential and worker populations in Fitzroy. A further breakdown of the forecasts for the four open space sub-precincts within Fitzroy have been prepared by .id Consulting to assist with analysis of where forecast change will occur.

Residential population forecasts are sourced from .id Consulting (2018) and the worker population estimates are calculated from the floor area growth forecasts in the *Spatial Economic and Employment Strategy, SGS, 2018* (SEES, 2018).

The resident population growth is significant with an overall change in residential population of 38 per cent or an additional 4,333 residents between 2016 and 2031. The worker population is estimated to increase by approximately 48 per cent, with an additional 8,202 additional workers between 2016 and 2031.

The resident population forecasts through to 2041 illustrate that there is still additional capacity for growth beyond 2031 in Fitzroy and it is forecast to continue to grow at a

similar rate with an additional nearly 5,000 residents by 2041. While this Strategy is primarily addressing the open space needs of the existing and forecast population through to 2031, it is useful to understand the context of the magnitude of change beyond the Strategy timeframe and to consider this in relation to the securing new open space.

Table 7.8-4 Resident population forecasts for Fitzroy open space sub-precincts

SUB-PRECINCT	2016	2031	Difference 2016-2031
Fitzroy A	1,326	2,059	733
% change Fitzroy A			55%
Fitzroy B	2,536	3,033	497
% change Fitzroy B			20%
Fitzroy C	2,376	3,648	1,272
% change Fitzroy C			54%
Fitzroy D	5,227	7,058	1,831
% change Fitzroy D			35%
Total Fitzroy	11,465	15,798	4,333
Total % Change			38%

Table 7.8-5 Worker population estimates for Fitzroy open space sub-precincts

EMPLOYMENT/ RETAIL PRECINCT	2016	2031	DIFFERENCE	% CHANGE
Fitzroy A				
Brunswick Street Retail Precinct	2,195	3,208	1,013	46%
<i>Total estimated worker population Fitzroy A</i>	2,195	3,208	1,013	46%
Fitzroy B				
Brunswick Street Retail Precinct	1,596	2,333	737	46%
Victoria Parade Employment Precinct	4,575	6,899	2,324	51%
<i>Total estimated worker population Fitzroy B</i>	6,171	9,232	3,061	50%
Fitzroy C				
Brunswick Street Retail Precinct	1,197	1,750	553	46%
Smith Street Retail Precinct	1,449	2,123	674	46%
<i>Total estimated worker population Fitzroy C</i>	2,646	3,872	1,226	46%
Fitzroy D				
Brunswick Street Retail Precinct	1,663	2,430	768	46%
Victoria Parade Employment Precinct	2,698	4,069	1,371	51%
Smith Street Retail Precinct	1,642	2,406	763	46%
<i>Total estimated worker population Fitzroy D</i>	6,003	8,904	2,902	48%
Retail and employment precinct totals				
Brunswick Street Retail Precinct	6,650	9,720	3,070	46%
Victoria Parade Employment Precinct	7,273	10,968	3,695	51%
Smith Street Retail Precinct	3,091	4,528	1,437	46%
<i>Total estimated worker population Fitzroy</i>	17,014	25,216	8,202	48%

7.8.5b Population change impacts on open space

The additional quantity of people living and working in Fitzroy will place increased pressures and demands on the existing open space and also for new open space. The pressures will include increased volumes of people in the open space utilising the facilities, leading to overcrowding in open space, lack of access to existing facilities and deterioration in the quality of natural features such as grass areas due to compaction from increased use.

The demographic trends continue to have the young workforce (25 to 34 age range) as the dominate age group with a slight decline in the 18 to 24 age range and slight increase in the 50+ age groups. There is a similar number of children in the 0 to 17 age groups indicating that young families will continue to be a key part of the community make up. This means that there will be a need to continue to provide a diversity of opens space facilities that appeal to a diverse community.

7.8.5c Where change will occur

The forecast resident and worker population increase in Fitzroy will be concentrated in some of the key gap areas including north of Johnston Street and Victoria Parade south of Gertrude Street. The areas of future change are illustrated in Figures 7.8D and 7.8E below.

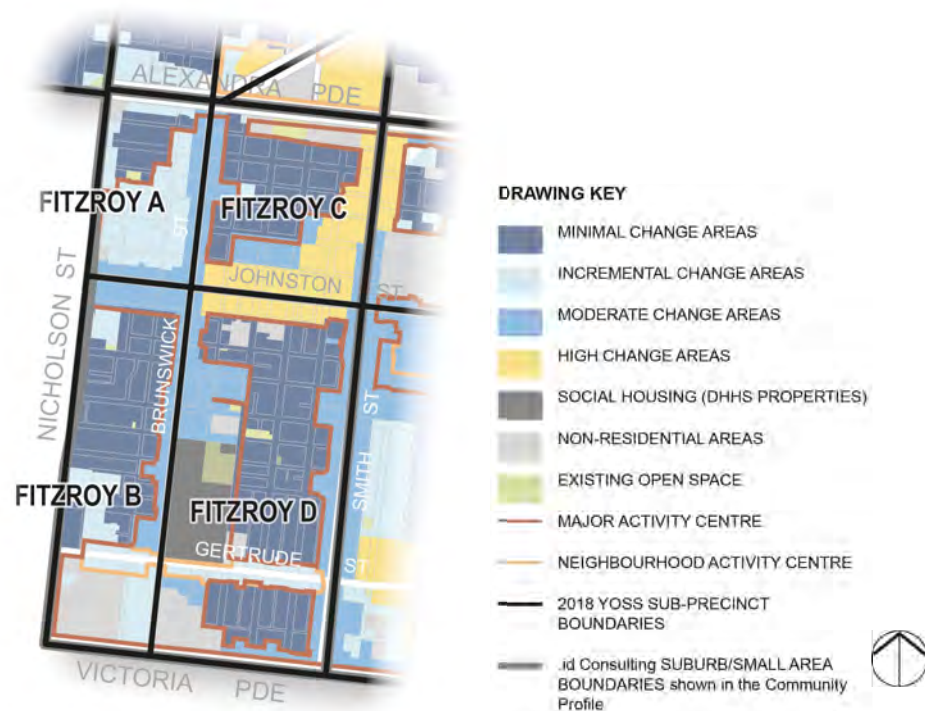


Figure 7.8D Open space sub-precincts and the Strategic Housing Framework (YHS, 2018)

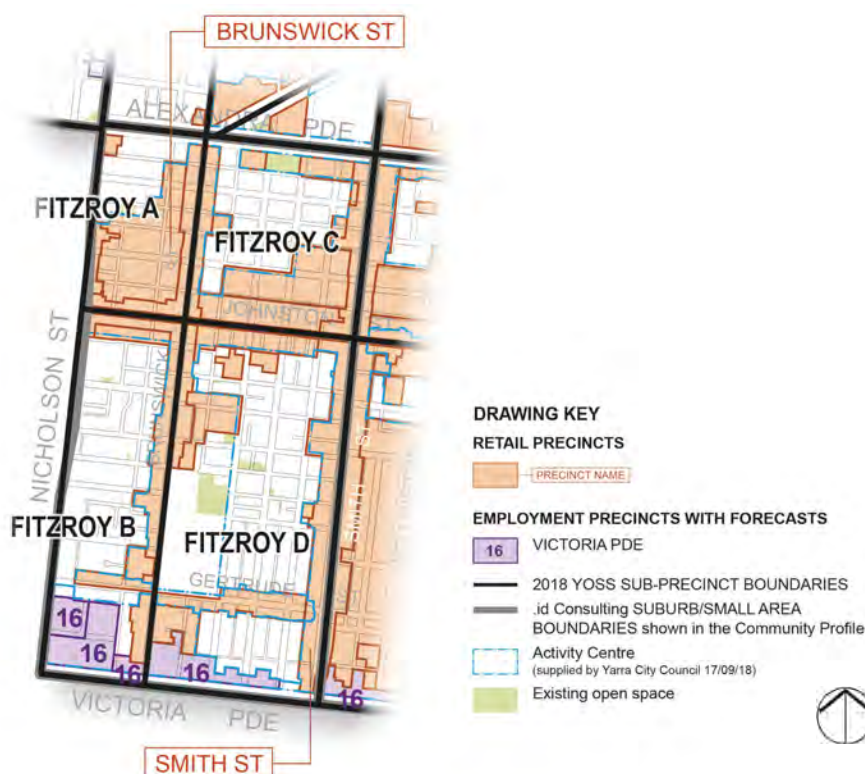


Figure 7.8E Open space sub-precincts and the Employment and Retail Precincts (SEES, 2018)

7.8.5d Future open space needs in Fitzroy

Within Fitzroy the major roads form barriers to safe and easy access to open space, and therefore the analysis has been undertaken on a sub-precinct basis. The open space sub-precincts are based on the ability of people working or living in Fitzroy to easily reach open space. The open space survey results confirm that residents travel outside Fitzroy to visit open space, primarily for the beauty and diversity of character in the large public gardens including Carlton Gardens, Fitzroy Gardens and Edinburgh Gardens. The high value placed on the need to relax and unwind in the open space surveys supports the need to ensure that adequate areas of green open space with natural features are provided in all parts of Fitzroy.

Sub-precinct	Conclusions
Fitzroy A Open space sub-precinct Fitzroy A. Refer to Section 7.8.2 for the description of existing open space and character.	<ul style="list-style-type: none"> A 55 per cent increase in the resident population is forecast with an additional 733 residents by 2031. We note that in this precinct, the population is forecast to continue to increase with an additional 1,113 living there by 2041, taking it from 1,326 residents in 2016 to 3,172 in 2041. A 46 per cent increase in the worker population is estimated with an additional 1,013 workers by 2031. Garryowen Park is the only existing open space and caters primarily for the resident population. Recommend a new Small Local open space in the southern part of the sub-precinct in proximity to the moderate and incremental change areas. Given the forecast population will be living and working in a higher density context, the new open space will contribute to mitigating urban heat island

Sub-precinct	Conclusions
	<p>effect and focus on facilities that complement those in Garryowen Park.</p> <ul style="list-style-type: none"> Continue to maintain Garryowen Park to substantially meet the needs of the existing population living and working in the northern parts of the sub-precinct, along with the increased levels of use from the forecast population in that area.
<p>Fitzroy B</p> <p>Open space sub-precinct Fitzroy B. Refer to Section 7.8.2 for the description of existing open space and character.</p>	<ul style="list-style-type: none"> A 20 per cent increase in the resident population is forecast with an additional 497 residents by 2031. A 50 per cent increase in the worker population is estimated with approximately 3,061 additional workers by 2031. Two thirds of these are forecast to be in the Victoria Parade employment precinct in the gap area. Frank King Park and King William Reserve provide a diversity of facilities for the existing community. However given their small size the additional of more than 3,500 forecast people living and working in this sub-precinct will impact on these open spaces. Undertake a minor upgrade to Frank King Park to investigate removal or reducing the fencing to the reserve to open it up to be more accessible to the community. Provide a new Local open space north of Gertrude Street towards Brunswick Street close to the area of moderate change identified in the Yarra Housing Strategy.
<p>Fitzroy C</p> <p>Open space sub-precinct Fitzroy C. Refer to Section 7.8.2 for the description of existing open space and character</p>	<ul style="list-style-type: none"> A 54 per cent increase in the resident population is forecast with an additional 1,272 residents by 2031. A 46 per cent increase in the worker population is estimated with an additional approximately 1,226 additional workers by 2031. Smith Reserve is the most visited open space in Fitzroy with many survey respondents noting the impact of traffic noise, movement and air pollution on the open space. A major upgrade is required to this reserve for both the existing and forecast population. The forecast growth is identified to occur in the south and east parts of this sub-precinct, which corresponds with an existing gap area in open space provision. Therefore a new Small Local open space is recommended to provide open space within safe walking distance of existing and future residents and workers in the moderate and high change areas. Please refer to Figure 7.8F.
<p>Fitzroy D</p> <p>Open space sub-precinct Fitzroy D. Refer to Section 7.8.2 for the description of existing open space and character</p>	<ul style="list-style-type: none"> A 35 per cent increase in the resident population is forecast with an additional 1,831 residents by 2031. A 48 per cent increase in the worker population is estimated with approximately 2,902 additional workers by 2031. Atherton Reserve is important for people to exercise and enjoy a larger sense of space. There is potential to undertake a major upgrade of the nearby Condell Street Reserve to improve and expand the play facility, include picnic facilities, paths and the open grassed areas with excellent passive surveillance nearby to Atherton Reserve.

Sub-precinct	Conclusions
	<ul style="list-style-type: none"> • George Street Reserve has the potential to be improved with additional greening and seating to strengthen the open space character and cater to more people using it for seating. • Whitlam Place and Greeves Street Reserve function well as part of the existing open space network and will continue to be maintained. • The forecast employment growth particularly is identified to occur in the Victoria Parade employment precinct associated with the Australian Catholic University and the non-residential land along Victoria Parade. This area lacks any nearby open space that is within safe and easy walking distance. • Therefore a new Small Local open space is recommended south of Gertrude Street in sub-precinct Fitzroy D. The open space will be for both the existing and forecast community and will assist mitigate urban heat island effect. 50/50 • Please refer to Figure 7.8F

7.8.6 Fitzroy recommendations

7.8.6a Summary of overall intent

Provision and distribution

Atherton Reserve is the largest open space in Fitzroy and will continue to be improved by strengthening its role for informal ball and sports and large open space. It will be complemented by a major upgrade to Condell Street Reserve to create a community park with updated and expanded play and picnic facilities along with improvements to the trees, and garden beds and greened areas. Combined with Whitlam Place which has a distinctly different character, it will create a quality hub of open space around the civic heart of Fitzroy Library and Town Hall. A series of new open spaces are proposed to address existing gaps in the open space network and to meet the significant forecast population growth, along with the expansion to selected existing Small Local open space. Given the framework of the existing open space and the fine grain of development a series of new Small Local open spaces are proposed so that the existing and forecast community live and work within a safe and easy walk of green open space.

Quality and design

There is potential to improve the recreational quality and diversity of facilities in the existing and proposed open space network. Given the urban densities, increasing the quality of these green spaces including maximising moisture absorbing surfaces will assist to mitigate urban heat island effect the future. The additional open spaces will be designed to complement the existing network that combined will provide a diversity of facilities for the existing and future population.

Refer to Figure 7.8F for the spatial location of recommendations for Fitzroy.

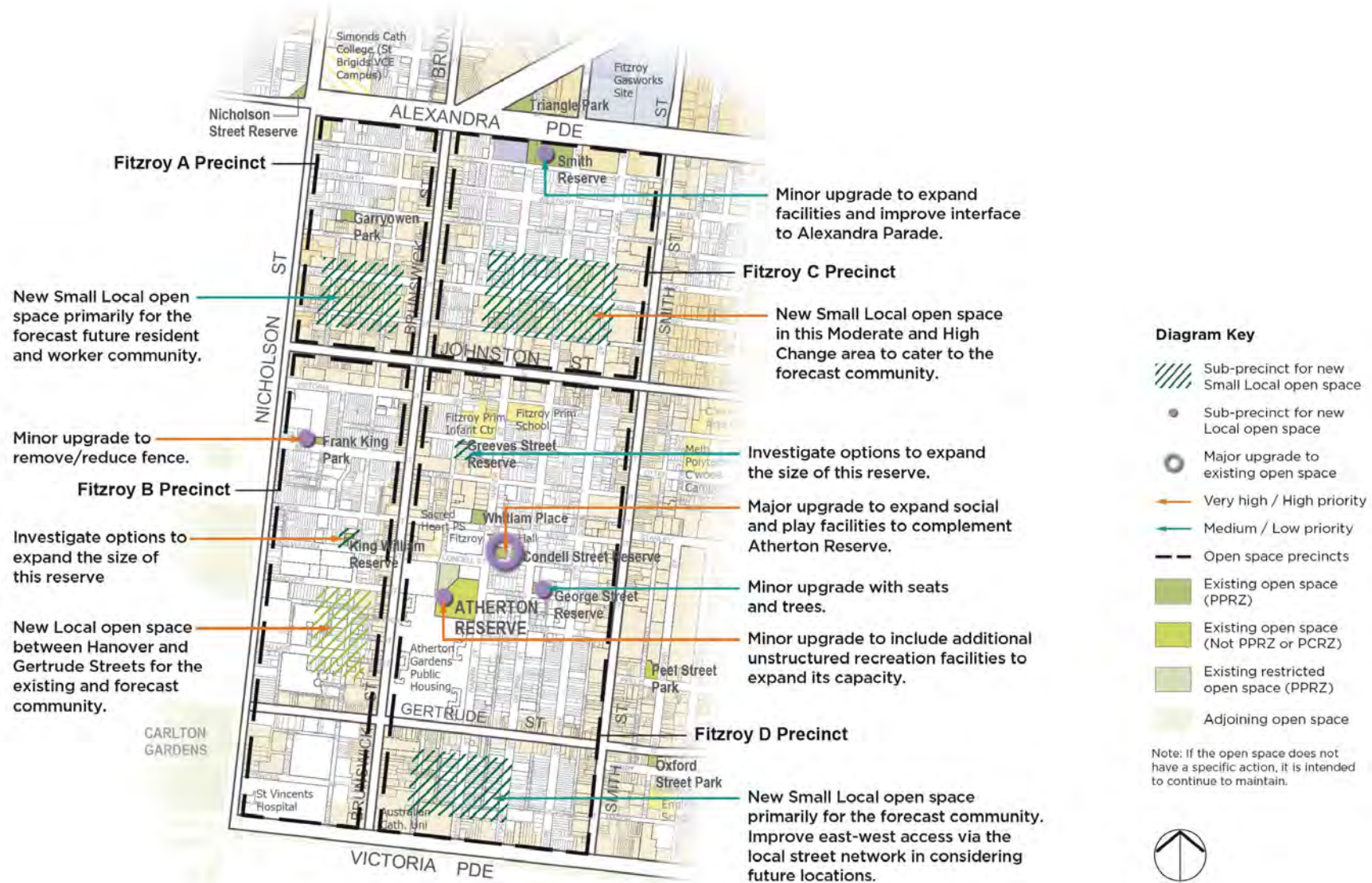


Figure 7.8F Recommendations for Fitzroy

7.8.6b Precinct Actions for Fitzroy

A Additional open space

No.	Action	Respons- ibility	Priority
7.8A-1	Provide a new Small Local open space in the southern part of open space sub-precinct Fitzroy A. This open space will primarily provide for the forecast future population that will be living and working the southern part of the precinct. The open space will have a role in mitigating urban heat island effect and provide facilities that meet the needs of the forecast future residents and workers and complement those provided in Garryowen Park.	YCC Developers	Medium
7.8A-2	Provide a new Local open space between Hanover and Gertrude Streets in open space sub-precinct Fitzroy B. This open space will be for both the existing and forecast population given the limited size of King William Reserve further north. This open space design will complement King William Reserve and assist to mitigate urban heat island effect as the urban density increases in this area.	YCC Developer	High
7.8A-3	Investigate options to increase the size of King William Reserve to increase the capacity of this existing open space to cater to the forecast population.	YCC Developer	Medium
7.8A-4	Provide a new Small Local open space in the southern part of open space sub-precinct Fitzroy C primarily for the forecast resident and worker population and also for the existing population.	YCC Developer	High
7.8A-5	Provide a new Small Local open space south of Gertrude Street in sub-precinct Fitzroy D. This is for both the existing and forecast population and to mitigate urban heat island effect.	YCC Developer	Medium
7.8A-6	Investigate options to expand the size of Greeves Street Reserve in sub-precinct Fitzroy D. This is primarily for the forecast population and to improve its role in mitigating urban heat island effect.	YCC Developer	Medium

B Existing open space

No.	Action	Respons- ibility	Priority
7.8B-1	Atherton Reserve Undertake a minor upgrade to install fitness equipment/outdated table tennis or other facilities adjacent to the path to increase the diversity of recreation facilities that encourage fitness and use of this open space. This will be for the both the existing and forecast population given the scale of forecast growth.	YCC	Ongoing

No.	Action	Respons- ibility	Priority
7.8B-2	Condell Street Reserve Undertake a major upgrade to significantly expand the unstructured recreation and social facilities including the playground, picnic and barbecue facilities, paths and open grassed area. This will be for the both the existing and forecast population given the scale of forecast growth and complement the facilities at Atherton Reserve.	YCC	High
7.8B-3	Frank King Park Minor upgrade required to investigate options to remove the fence to make the open space more welcoming and accessible, given the lack of other open space within safe and easy walking distance of residents and workers in this sub-precinct.	YCC	High
7.8B-4	Garryowen Park Continue to maintain.	YCC	Medium
7.8B-5	George Street Reserve Undertake a minor upgrade to increase planting and seating to improve the function and use of this reserve.	YCC DHHS	Medium
7.8B-6	Greeves Street Reserve Investigate options to expand the size of this open space to increase its function and use in the context of forecast population growth. Refer to Action 7.8A-6.	YCC	Ongoing
7.8B-7	King William Reserve Continue to maintain.	YCC	Ongoing
7.8B-8	Smith Reserve Prepare and implement a masterplan for this reserve to improve the interface to Alexandra Parade, upgrade the play and picnic facility to cater to the increased levels of use anticipated in the future along with potential expansion of the overall size. This will be for the both the existing and forecast population.	YCC	Medium
7.8B-9	Whitlam Place Continue to maintain.	YCC	Ongoing



7.9 Fitzroy North

7.9.1 Introduction

Merri Creek defines the eastern extent of Clifton Hill, with Queens Parade to the north west and the Alexandra Parade to the south. The land form is relatively flat and grades down towards Merri Creek.

The land use is predominantly residential, with non-residential use located along the major arterials including Queens Parade Brunswick Street, Nicholson Street and Alexandra Parade. The former inner circle railway has been converted to open space which provides connectivity between the major areas of open space. Edinburgh Gardens is located on the heart of this Fitzroy North and is Victorian era garden that complements the Victorian architecture of the residential neighbourhood around it. Wide streetscapes in the residential area between Queens Parade and St Georges Road contributes to the overall landscape character and greening of Fitzroy North.

A range of large strategic sites have progressively been redeveloped over recent years to medium density mixed use from non-residential uses which has increased the density of the neighbourhood. Social housing is located through the precinct, along with the Rushall Park, the Victorian era retirement village located on Rushall Crescent near the railway.

A number of schools are located in the Fitzroy North including the Merri Creek Primary School, Fitzroy High School and Fitzroy Primary School. On the south side of Queens Parade the former Fitzroy Gasworks Site has recently been rezoned by the Minister for Planning as part of Amendment C243 to Mixed Use and Public Use Zone 2. Development Victoria has commenced planning for a new school, sports facility and residential development on this site. The school on the site is currently known as Fitzroy Gasworks (Senior Campus) and is intended to be the new senior campus for Collingwood College and Fitzroy High School. The remainder of the site is identified to have a sports facility, affordable housing and high density housing. The open space provision for this site has already been determined by Development Victoria and is not included in this Open Space Strategy.

With the predominantly residential land use in the precinct the resident population is greater than the worker population in Clifton Hill, as follows:

- Existing residential population 2016: 12,357 (*Source: .id Consulting population forecasts, 2018*)
- Existing estimated worker population 2016: No data is available (*Source: SEES, SGS 2018*)

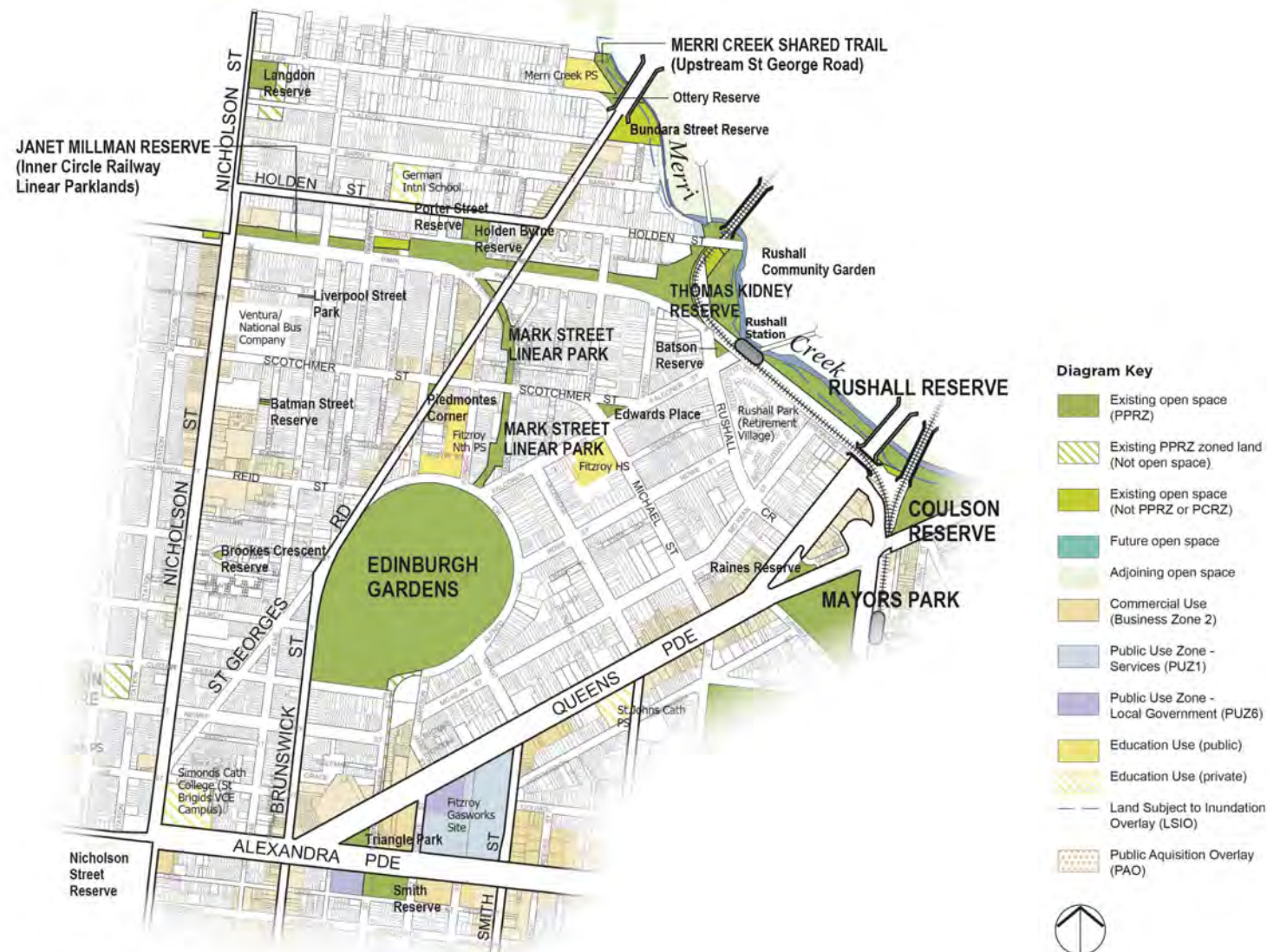


Figure 7.9A Existing open space in Fitzroy North

7.9.2 Existing open space

7.9.2a Open space precinct description

The arterial and major roads in Fitzroy North form a barrier to easy and safe access to open space. Additionally, due to the size of Fitzroy North, A and B and C and D have been defined along Scotchmer/Michael Streets, which are collector roads. This was to understand the changes in forecast change within each of them, however for the analysis we have not considered Scotchmer and Michael Streets as barriers to access to open space. The major roads define a series of five open space sub-precincts being Fitzroy North A, B, C, D and E as shown in Figure 7.9B below.



Figure 7.9B Open space sub-precincts for Fitzroy North

Fitzroy North A

- Open space sub-precinct Fitzroy North A is located between Nicholson Street and St Georges Road and between May and Scotchmer Streets.
- Open space located in this sub-precinct includes
 - Holden Byrne Reserve
 - Janet Millman Reserve (Part of the Inner Circle Railway Linear Parklands)
 - Langdon Reserve
 - Merri Creek Shared Trail (Upstream St Georges Road)
 - Porter Street Reserve
 - Liverpool Street Park
- The Inner Circle Railway Linear Parklands provides excellent east-west access through this sub-precinct which at a broader scale links Merri Creek Shared Trail corridor and Princes Park located in the City of Melbourne. Additional to the linear open space there are Local open spaces that directly adjoin it including Porter Street Reserve and Holden Byrne Reserve.
- Langdon Reserve in the north of the sub-precinct is well used and includes a playground, open grassed area, basketball half court and seating, and Liverpool

Street Park is a Small Local open space to the south providing seating and planting in a linear for directly adjoining the road reserve.

- Merri Creek Shared Trail is located to the north east directly adjoining Merri Creek Primary School and provides good linear connectivity to the north.
- The land use is predominantly residential with some non-residential use along Nicholson Street and the St Georges Road along with the Merri Creek Primary School and the German International School on Holden Street.
- Areas of public housing are included in this sub-precinct adjoining Langdon Street Reserve.
- The *Yarra Housing Strategy* (2018) designated the majority of the precinct as Minimal Change, with pockets of Incremental Change along St Georges Road and Nicholson Street. There are no employment estimates available for the St Georges Road and Queens Parade Retail Precincts.

Fitzroy North B

- Open space sub-precinct Fitzroy North B is located between Nicholson and Brunswick Street, south of Scotchmer Street.
- Open space located in this sub-precinct includes:
 - Batman Street Reserve
 - Brookes Crescent Reserve
 - Piedmontes Corner
- The three Small Local open spaces have quite different characters with Piedmontes Corner being an urban square, Batman Street Reserve providing play and seating and the Brookes Crescent Reserve being a seating space with trees.
- The land use is predominantly residential with the Simonds Catholic College St Bridges VCE Campus adjoining Alexandra Parade and some mixed use along Nicholson Street and Scotchmer Street.
- There is a proposed new Small Local open space being contributed as part of a major development site on the corner of Reid and Nicholson Streets.
- The *Yarra Housing Strategy* (2018) includes a larger area of Incremental Change associated with the mixed used and General Residential Zones along Nicholson Street, Alexandra Parade and St Georges Road. The balance of the precinct is Minimal Change.

Fitzroy North C

- Open space sub-precinct Fitzroy North C is located between St Georges Road and Queens Parade, defined to the north by Merri Creek and the south west by Michael Street.
- Open space located in this sub-precinct includes
 - Batson Reserve
 - Bundara Street Reserve
 - Edwards Place
 - Inner Circle Railway Linear Parklands
 - Mark Street Linear Park
 - Raines Reserve
 - Rushall Reserve
 - Thomas Kidney Reserve
- Inner Circle Railway Linear Parklands and Mark Street Linear Park provide excellent east west and north south connectivity through the precinct. They link key parklands

including the Merri Creek Shared Trail and Edinburgh Gardens, outside the sub-precinct.

- Open space along the Merri Creek corridor includes Bundara Street Reserve and Rushall Reserve. Batson Reserve adjoins the Merri Creek Corridor at the entry to Rushall Station and Thomas Kidney Reserve is at the junction of the Inner Circle Railway Linear Parklands and Merri Creek corridor. Two footbridges provide connectivity across Merri Creek to the open space corridor on the north east side of the creek in the City of Darebin.
- A series of smaller Local and Small Local open spaces includes Raines Reserve and Edwards Place.
- Land use is predominantly residential with the large heritage listed retirement village, Rushall Park located between Rushall Crescent and the railway. There is also a recently constructed aged care facility between Queens Parade and Hoddle Street.
- The *Yarra Housing Strategy* (2018) includes a High Change area in the land between the Queens Parade and Hoddle Street/Heidelberg Road. A Moderate Change area adjoins Queens Parade, while the majority of the balance of the area is Minimal Change with small pockets of Incremental Change.

Fitzroy North D

- Open space sub-precinct Fitzroy North D is located between Brunswick Street and Queens Parade and extending north east to Michael Street.
- Open space located in this sub-precinct includes:
 - Edinburgh Gardens
 - Mark Street Linear Park
- Edinburgh Gardens is the most popular open space reserve in the City of Yarra. Originally reserved in 1862 the sports field now WT Peterson Oval and also known as the Brunswick Street Oval is used by the Fitzroy Football Club and Edinburgh Cricket Club. The Fitzroy Bowling Club was established on the site in 1872 and the Fitzroy Tennis Club, originally established in 1894 is also located there. The park also includes extensive areas for unstructured recreation with tree lined paths, informal open grassed areas, dog off-leash areas, table tennis and a playground.
- Mark Street Linear Park provides north south connectivity to the main east-west Former Inner Circle Railway Linear Park.
- The sub-precinct is predominantly residential with some non-residential land use along Queens Parade, including along the former spur railway alignment between Queens Parade and the Edinburgh Gardens. To the north of the gardens is the Fitzroy Primary School and the Fitzroy High School.
- The *Yarra Housing Strategy* (2018) includes a High Change area in the south west adjoining Queens Parade, along with two Moderate Change Areas and Incremental Change.

Fitzroy North E

- Open space sub-precinct Fitzroy North E is a triangular precinct defined by Queens Parade and Alexandra Parade with Smith Street to the east.
- Open space located in this sub-precinct includes:
 - Triangle Park
- Triangle Park includes mature exotic trees to the perimeter with low mounds and an open grassed area.
- The sub-precinct includes some residential use in the original Victorian era terraces combined with non-residential business/commercial uses west of George Street. East

of George street is the former Fitzroy Gasworks Site which has recently been rezoned for future education and residential use.

- The *Yarra Housing Strategy* (2018) highlights the former Fitzroy Gasworks Site as a High Change area.

7.9.2b Quantity of open space in Fitzroy North

The 19 existing open spaces in Fitzroy North have a combined total are of 29.56 hectares. This represents approximately 12.8 per cent of the total land area of the precinct.

Table 7.9-1 Number, size and type of open space

No	Hierarchy	Area (ha)	%
3	Regional	4.87	16%
3	City wide	21.89	74%
2	Neighbourhood	1.0	3%
7	Local	1.67	6%
4	Small Local	0.14	0%
19	TOTAL	5.81	100%

7.9.2c Open space hierarchy, character and quality

The linear open space corridor along Merri Creek is identified as Regional open space being recognised for the broader recreational and biodiversity values that are present along the creek corridor. The Inner Circle Railway Linear Parklands extend east-west through Fitzroy North from Merri Creek and linking through Carlton North, Princes Hill and to Princes Park. There are off-road shared paths that provide excellent access along these linear open space reserves for walking and cycling. They also connect to larger open space systems along the Merri Creek and west through the City of Melbourne to Royal Park and Moonee Ponds Creek.

The most popular open space in the City of Yarra is Edinburgh Gardens which is designated as a City-wide open space with extensive facilities that cater to both structured and unstructured recreation along with social facilities. The heritage values are currently stated as being of Local significance, with specific listings in the Victorian Heritage Database for the Brunswick Street Oval Grandstand and the Classical Revival Rotunda, built in 1925.

The Local and Small Local open space network provides a diversity of spaces that form an important part of the open space network, particularly west of Brunswick Street/St Georges Road.

Table 7.9-2 Existing open space, hierarchy and character classification

Name	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Batman Street Reserve	0.04	Small Local	Informal	Play
Batson Reserve	0.07	City-wide	Linking space	Heritage, Linear
Brookes Crescent Reserve	0.04	Small Local	Seating/viewing	Informal
Bundara Street Reserve	0.91	Regional	Linking space	Waterway, Seating/viewing
Edinburgh Gardens	17.37	City-wide	Heritage	Public garden, Structured sporting
Edwards Place	0.13	Local	Informal	Native bushland, Linking space
Holden Byrne Reserve	0.33	Local	Formal	Heritage, Linking space, Play, Botanical
Janet Millman Reserve (Part of Inner Circle Railway Linear Parklands)	2.71	City-wide	Linear	Informal, Native bushland, Linking space, Service easement, Heritage
Langdon Reserve	0.43	Local	Informal	Play
Liverpool Street Park	0.02	Small Local	Seating/viewing	
Mark Street Linear Park	1.00	Neighbourhood	Linear	
Merri Creek Shared Trail – Upstream St Georges Road	0.39	Regional	Linear	Waterway, Nature conservation
Ottery Reserve	0.11	Local	Seating/viewing	Waterway, Nature conservation
Piedmontes Comer	0.04	Small Local	Significant road reservation	Public square
Porter Street Reserve	0.10	Local	Linking space	Formal
Raines Reserve	0.41	Local	Significant road reservation	
Rushall Reserve	3.57	Regional	Linear	Waterway, Nature conservation
Thomas Kidney Reserve	1.73	City-wide	Linking space	Community garden, Linear, Native bushland, Service easement, Heritage
Triangle Park	0.16	Local	Significant road reservation	Seating/viewing
Total	29.56			

7.9.2d Distribution of open space in Fitzroy North

The existing open space has been allocated an appropriate open space hierarchy as shown in Table 7.9-2 above and a corresponding walking catchment appropriate to it, as described in Tables 3-1 and 3-5 of this report. The areas of the precinct that are located outside the walking catchments of the different open space reserves are referred to as 'gap areas' and are shown in white in Figure 7.9C on the next page. The assessment of the adequacy of the existing open space network in Fitzroy North is informed by the analysis of the spatial distribution of open space. As one of the key aims of this Strategy is for everyone to live and work within a safe and easy walk of open space, the recommendations will focus on addressing the gaps in the existing open space network.

For Fitzroy North, the gaps in the existing open space network occur between Nicholson Street and Brunswick Street, and also in the triangle of land in the south between Queens Parade and the Alexandra Parade.



Figure 7.9C Gap analysis for Fitzroy North

7.9.3 How residents use open space

A total of 170 resident surveys were received from the Fitzroy North precinct which represents 13 per cent of the total surveys received. The .id Community Profile identifies that 13 per cent of the City of Yarra's population lives in Fitzroy North.

Fitzroy North includes Edinburgh Gardens which is the most popular open space. The survey respondents greatly appreciate it for dog walking, exercise, play and meeting friends. There is concern about increasing density of development and the negative impacts on open space, and that more open space needs to be provided to meet the growing community's needs. While Edinburgh Gardens is appreciated there are concerns about the level of use, inappropriate behaviour in the gardens and the ongoing maintenance to manage the high levels of use. Clear designation of dog off-leash areas with fencing were suggested and the need to separate children and dogs from speeding cyclists. Open space being uninviting was one of the top reasons respondents of Fitzroy North did not visit open space with personal safety in third place which was explained in part by comments in the other category as being related to the conflicts between dogs and other park users.

Table 7.9-3 Most frequently visited open space

No.	Name	Reasons to visit	Suggested improvements
Open space within walking distance			
157	Edinburgh Gardens	<ul style="list-style-type: none"> • Dog walking (48) • Relaxing (26) • Walking (25) • Socialising with friends / family (24) • Exercising (23) • Picnics (20) • Playing with children (15) • Close to home (12) • Playground (12) 	<ul style="list-style-type: none"> • More toilets required (13) • No improvements required (9) • Dog fenced off leash areas required (7) • Dog drinking facilities required (6) • Additional exercise equipment needed (6)
18	Darling Gardens	<ul style="list-style-type: none"> • Dog walking (7) • Walking (4) • Peaceful (3) 	<ul style="list-style-type: none"> • No improvements required (2) • Prohibit cyclists from the area (1) • Dog fenced off leash areas required (1) • Prohibit dogs (1)
17	Curtain Square	<ul style="list-style-type: none"> • Playground (5) • Dog walking (4) • Picnics (4) 	<ul style="list-style-type: none"> • Additional trees required (2) • Maintenance of dog-off leash areas required (2) • Improve usability for dogs (1)
17	Park Street Reserve	<ul style="list-style-type: none"> • Dog walking (5) • Cycling (4) • Walking (4) 	<ul style="list-style-type: none"> • More bins required (3) • Additional drinking fountains required (3) • No improvements required (2)
16	Merri Creek Precinct	<ul style="list-style-type: none"> • Walking (5) • Dog walking (4) • Natural character of open space (4) 	<ul style="list-style-type: none"> • Regular maintenance and cleaning required (2) • Maintenance of paths required (2)

No.	Name	Reasons to visit	Suggested improvements
			<ul style="list-style-type: none"> • Maintenance of path vegetation required (2) • Improve weed control (2)
10	Princes Park	<ul style="list-style-type: none"> • Exercising (6) 	<ul style="list-style-type: none"> • Additional lighting required for morning runs (2)
Open space beyond walking distance			
24	Yarra Bend Park	<ul style="list-style-type: none"> • Dog walking (8) • Natural character of open space (8) • Exercising (3) • Picnics (3) 	<ul style="list-style-type: none"> • No improvements required (5) • Improve paths (2) • Additional toilets required (2)
10	Edinburgh Gardens	<ul style="list-style-type: none"> • Dog walking (3) • Picnics (3) • Exercising (2) • Large open space (2) • Playing with children (2) • Socialising with friends / family (2) 	<ul style="list-style-type: none"> • More dog drinking facilities required (1) • Dog owners to have control of their dogs (1) • Cycle paths needed through park (1)
9	Yarra River Corridor	<ul style="list-style-type: none"> • Natural character of the open space (4) • On the way cycling (2) • Walking (2) 	<ul style="list-style-type: none"> • Manage pedestrian and cyclists use of shared path (1) • Limit development (1) • Connecting paths required (1) • Path vegetation needs more maintenance (1) • Wayfinding and education signage required (1)
8	Royal Botanical Gardens Melbourne	<ul style="list-style-type: none"> • Gardens (2) 	<ul style="list-style-type: none"> • No improvements required (2)
7	Carlton Gardens	<ul style="list-style-type: none"> • Walking (3) • Convenient / on the way (2) 	<ul style="list-style-type: none"> • No Improvements required (1) • Allow cyclists to use the gardens (1)
7	Fitzroy Gardens	<ul style="list-style-type: none"> • Café and kiosk facilities (2) • Peaceful open space (20) 	<ul style="list-style-type: none"> • No improvements required (2)
7	Merri Creek Precinct	<ul style="list-style-type: none"> • Dog walking (3) • Open space (3) • Exercising (2) 	<ul style="list-style-type: none"> • Regular rubbish removal required (1) • More bins required (1)
	Princes Park	<ul style="list-style-type: none"> • Dog walking (3) • Paths (2) 	<ul style="list-style-type: none"> • More fenced dog off-leash areas required (2) • More bins required (1)

Values of open space (top five)

- 90% Trees
- 82% Place to relax and unwind
- 72% The feeling of space
- 71% An escape from the built environment
- 69% Just being outside

Types of open space used (top five)

- 87% Large parks and gardens
- 76% Local streets for exercise
- 54% Open space along the Merri Creek

- 50% Small local parks
- 26% Urban squares

Activities and facilities in open space (top five)

- 92% Walking paths
- 87% Open grassed areas
- 79% Cycle paths
- 77% Drinking fountains
- 75% Seats

General comments

This was an open ended section of the survey where respondents could write any additional comments. The following list are comments made by four or more people:

- Open space valued (18)
- Additional open space is required particularly as densities increase and the less private open space (7)
- Open space contributes to liveability (5)
- Open space keep/retain what there is (4)
- Maintenance and management valued (5)
- Enforce dog regulations (4)
- Dog fenced off-leash areas required (4)
- Improve dog regulation signage (4)
- Appreciate the opportunity to complete the survey (4)
- Council is doing a good job regarding open space (4)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix B.

7.9.4 Analysis of future change and open space needs

7.9.4a Forecast future population

Quantity

The table below shows the forecast population growth for the residential population in Fitzroy North. Currently, there are no estimates for the worker population in Fitzroy North as the forecast floor area change was not provided in the *Spatial Economic and Employment Strategy*, SGS, 2018.

A further breakdown of the residential population forecasts for the five open space sub-precincts within Fitzroy North have been prepared by .id Consulting to assist with analysis of where forecast change will occur.

The resident population growth is reasonably high with an overall change in residential population of 22 per cent or an additional 2,755 residents between 2016 and 2031.

The resident population forecasts through to 2041 indicate that there is substantial growth forecast in Fitzroy North E sub-precinct which includes the former Fitzroy Gasworks Site

with an additional approximately 1,700 people forecast to live there by 2041 compared to the 42 who are forecast to live there by 2031.

The other key precinct with forecast change through to 2041 is Fitzroy North A, where an additional approximately 900 people are forecast to live there by 2041. For Fitzroy B, C and the forecast population change between 2031 and 2041 reduces to approximately 200 people in each.

Table 7.9-5 Resident population forecasts for Fitzroy North open space sub-precincts

SUB-PRECINCT	2016	2031	Difference 2016-2031
Fitzroy North A	3,271	3,608	337
% change Fitzroy North A			10%
Fitzroy North B	3,387	4,063	676
% change Fitzroy North B			20%
Fitzroy North C	2,874	3,826	952
% change Fitzroy North C			33%
Fitzroy North D	2,784	3,573	789
% change Fitzroy North D			28%
Fitzroy North E	41	42	1
% change Fitzroy North E			2%
Total Fitzroy North	12,357	15,112	2,755
Total % Change			22%

7.9.4b Population change impacts on open space

The additional quantity of people living and working in Fitzroy North will place increased pressures and demands on the existing open space. In sub-precincts Fitzroy A, C and E the additional demands are likely to be met within the existing open space network. In Fitzroy B and D the pressures will include increased volumes of people in the open space utilising the facilities and may lead to overcrowding due to the lack of existing open space to accommodate the use.

The forecast change in demographics is only minor with a slight increase in the 60+ age range and decrease in the young families. However, 25 to 34 year olds remain the most populous age group, followed by the 35 to 49 and then the 50 to 59 year olds. There is forecast to be an increase in lone person households and a decrease in couple families with dependents. As a result of this change there will be a need to provide a diversity of recreational facilities and include social facilities given that a higher proportion of people will be living alone.

7.9.4c Where change will occur

The forecast resident population increase in Fitzroy North is distributed across the precinct, but with the High and Moderate Change areas identified in the *Yarra Housing*

Strategy (YHS) on the north and south sides of Queens Parade. Additionally, the YHS identifies Incremental Change in other parts of the precinct. Refer to Figure 7.9D for the spatial location of these. While no employment population is available for Fitzroy North there are retail and employment precincts identified in the SGS Spatial Economic and Employment Strategy (SGS, 2018) and these are shown in Figure 7.9E.

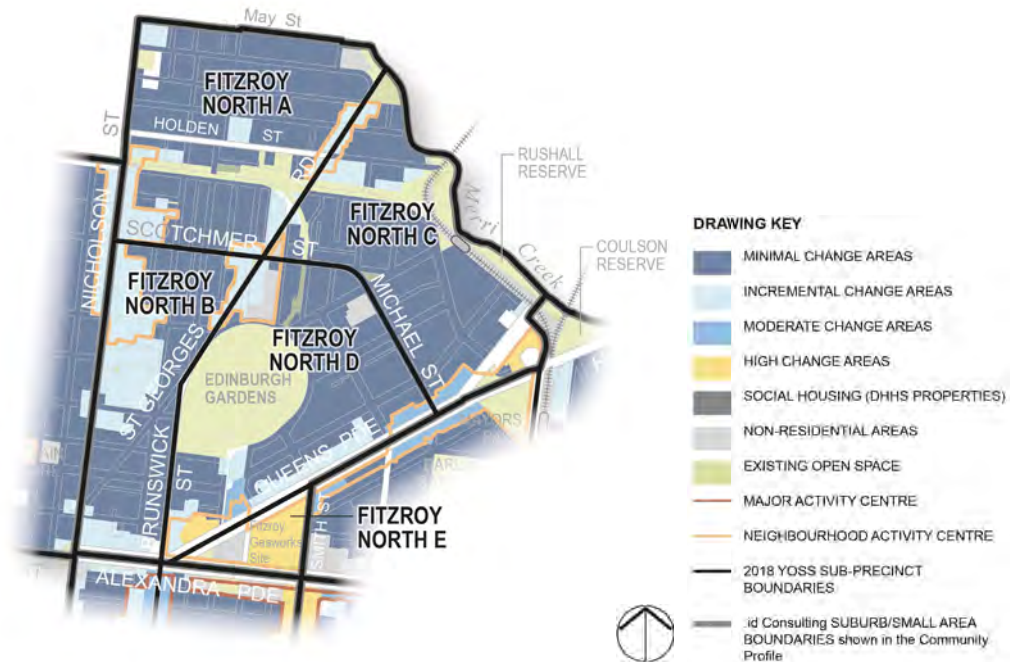


Figure 7.7D Open space sub-precincts and the Strategic Housing Framework (YHS, 2018)



Figure 7.7E Open space sub-precincts and the Employment and Retail Precincts (SEES, 2018)

7.9.5d Open space distribution and future need in Fitzroy North

Within Fitzroy North open space is well distributed in the north and east parts so the precinct. However there are some issues arising regarding perceived over-use of Edinburgh Gardens with respondents to community survey complaining of inappropriate behaviour, overcrowding and that the levels of maintenance are not adequate to address the high levels of using, particularly rubbish in the park. From the survey outcomes Edinburgh Gardens is the most visited open space and with forecast population growth across the City it is anticipated that the levels of use will continue to increase. So, while there may not be physical gaps in the open space network there is potentially a need to add to the open space network in Fitzroy North to provide alternative smaller Local open spaces that the community can also use if Edinburgh Gardens is too crowded.

Sub-precinct	Conclusions
Fitzroy North A Refer to Section 7.9.2 for the description of existing open space and character.	<ul style="list-style-type: none"> • A 10 per cent increase in the resident population is forecast with an additional 337 residents by 2031. However a 25 per cent increase in the population is forecast to 2041, with an additional 889 people to forecast to be living there by then. • No worker population forecasts are available for Fitzroy North. • There is a gap in the provision of open space north of Holden Street. Recommend improving the quality of the streetscapes in the local street network to improve accessibility to existing open space. • Undertake a major upgrade to Langdon Reserve to meet the needs of the existing and forecast population. This includes reviewing the location, size and design of the play facility with the potential to create a larger open grassed area and picnic facilities to appeal to a greater diversity of the community. • Undertake minor upgrades to the Holden Byrne Reserve and Janet Millman Reserve to increase the capacity of the picnic and seating areas within the open space to cater to forecast growth. Additionally, minor upgrade is also proposed to Ottery Reserve.
Fitzroy North B Refer to Section 7.9.2 for the description of existing open space and character.	<ul style="list-style-type: none"> • A 20 per cent increase in the resident population is forecast with an additional 676 residents by 2031. • No worker population forecasts are available for Fitzroy North. • There are gaps in the existing open space network and a new Small Local open space is recommended to address this for both the existing and forecast population in the southern part of the sub-precinct.
Fitzroy North C Refer to Section 7.9.2 for the description of existing open space and character	<ul style="list-style-type: none"> • A 33 per cent increase in the resident population is forecast with an additional 952 residents by 2031. • No increase in the worker population is forecast. • While there are no gaps in the provision of open space in this sub-precinct the majority of existing and forecast residents will use Edinburgh Gardens in sub-precinct Fitzroy North D. Given the popularity of Edinburgh Gardens across the City, it is proposed to expand Edwards Place by

Sub-precinct	Conclusions
	<p>narrowing the road pavement. This will allow a major upgrade to this open space to provide an alternative open space within walking distance of the existing and forecast community as an alternative to Edinburgh Gardens, particularly when the Gardens are busy during events or on weekends.</p> <ul style="list-style-type: none"> • Please refer to Figure 7.9F.
<p>Fitzroy North D Refer to Section 7.9.2 for the description of existing open space and character.</p>	<ul style="list-style-type: none"> • A 28 per cent increase in the resident population is forecast with an additional 789 residents by 2031. • No worker population forecasts are available for Fitzroy North. • Please refer to the explanation regarding the proposed new Local open space in Fitzroy North C sub-precinct. • Undertake minor upgrades to the Edinburgh Gardens to increase the capacity of the unstructured sporting and informal social facilities where feasible, consistent with the Masterplan and heritage values.
<p>Fitzroy North E Refer to Section 7.9.2 for the description of existing open space and character</p>	<ul style="list-style-type: none"> • A 2 per cent increase in the resident population is forecast changing it from 41 to 42 residents by 2031. Within the timeframe of this Strategy, no additional open space or works will be required. • However, a 4,000 per cent increase in the resident population is forecast between 2031 and 2041, with an additional 1,680 residents forecast to be living there by 2041. We assume the majority of this forecast population is planned to live on the former Fitzroy Gasworks Site. • No worker population forecasts are available for Fitzroy North. • Therefore it is recommended that a new Local open space is provided in this sub-precinct for the forecast population, however this is not required for the existing population. The existing plans show Small Local open space spaces, however this Strategy recommends combining them to form a larger Local open space to provide a more diverse range of facilities in the open space. • Please refer to Figure 7.9F.

7.9.5 Fitzroy North Recommendations

7.9.5a Summary of overall intent

Provision and distribution

With Edinburgh Gardens, Merri Creek and the Inner Circle Railway Linear Parklands Fitzroy North has a diverse and connected open space network. The network will be strengthened with the additional of one Small Local open space so that everyone living in Fitzroy North can easily walk to open space nearby in the future. This includes expanding Edwards Place Reserve near Edinburgh Gardens so that the local community can use it when the gardens are busy given they are the most popular open space in the City.

Quality and design

There is potential to improve the recreational quality and diversity of facilities in the Small Local open spaces in Fitzroy North so that they appeal to all age groups. The additional open space can be designed to provide a diversity of facilities for the existing and future population.

Refer to Figure 7.9F for the spatial location of recommendations for Fitzroy North.

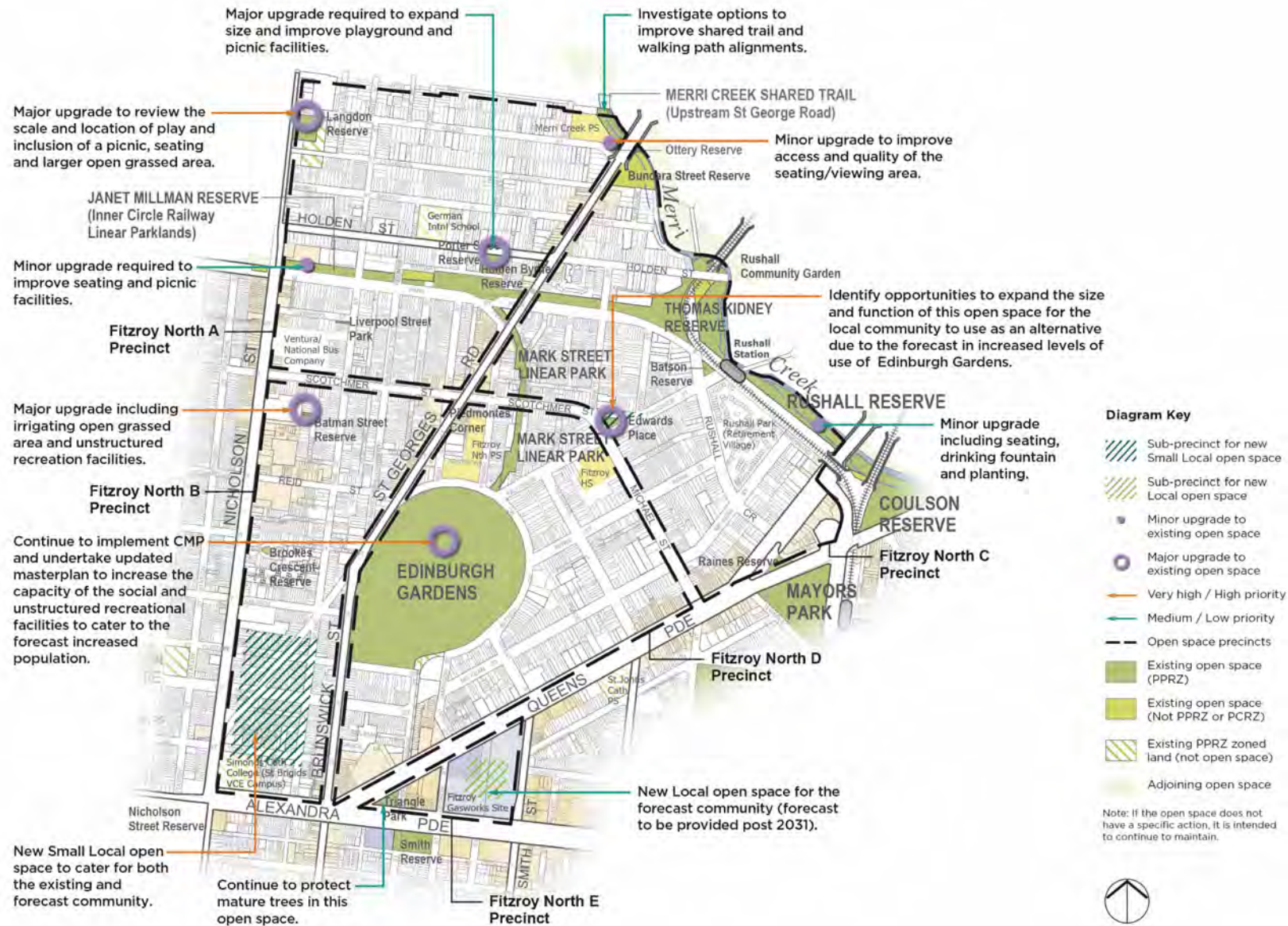


Figure 7.9F Recommendations for Fitzroy North

7.9.5b Precinct Actions for Fitzroy North

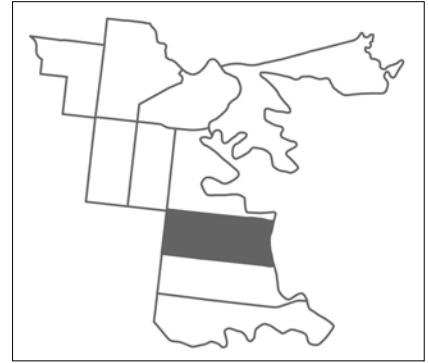
A Additional open space

No.	Action	Responsibility	Priority
7.9A-1	Provide a new Small Local open space in sub-precinct North Fitzroy B to provide a new open space to address the gap in open space provision in the southern part of the sub-precinct for both the existing and forecast population.	YCC	Medium
7.9A-2	Provide a new Local open space in sub-precinct Fitzroy E for the new population that is forecast to live and work on the former Fitzroy Gasworks Site. Currently, the population is not forecast to live there until post 2031, hence the low priority given to this action.	YCC Developer	Low

B Existing open space

No.	Action	Responsibility	Priority
7.9B-1	Batman Street Reserve Undertake a major upgrade to this reserve including investigating options to irrigate the open grassed area and include unstructured recreation facilities appropriate to the needs of the existing and forecast community.	YCC	Ongoing
7.9B-2	Batson Reserve Continue to maintain.	YCC	Ongoing
7.9B-3	Brookes Crescent Reserve Continue to maintain.	YCC	Ongoing
7.9B-4	Bundara Street Reserve Continue to maintain.	YCC	Ongoing
7.9B-5	Edinburgh Gardens Continue to implement the recommendations of the CMP for the northern precinct. Undertake and implement an updated masterplan, particularly in the context of anticipated increased levels of use from the substantial forecast population in the City of Yarra.	YCC	High
7.9B-6	Edwards Place Identify opportunities to increase the size of this open space converting existing road reserves to increase the function and use of this open space for the community when Edinburgh Gardens is being used for major events. This includes a major upgrade to expand the facilities.	YCC	Ongoing
7.9B-7	Holden Byrne Reserve Undertake a major upgrade to expand the size and improve the quality of the playground and picnic facilities to increase the capacity of the reserve in the context of forecast growth.	YCC	Medium
7.9B-8	Janet Millman Reserve (Inner Circle Railway Linear Parklands) Undertake a minor upgrade to improve seating and picnic facilities.	YCC	Medium

No.	Action	Respons- ibility	Priority
7.9B-9	Langdon Reserve Undertake a major upgrade including review of the scale and location of the playground and inclusion of picnic facility, additional seating and larger open grassed area.	YCC	Low
7.9B-10	Liverpool Street Park Continue to maintain.	YCC	Ongoing
7.9B-11	Mark Street Linear Park Continue to maintain.	YCC	Ongoing
7.9B-12	Merri Creek Shared Trail – Upstream St Georges Road Investigate options to improve condition and definition of the shared trail and the secondary walking trails in this location.	YCC	Ongoing
7.9B-13	Ottery Reserve Minor upgrade to improve access and upgrade seating to take advantage of the views down over the Merri Creek corridor.	YCC	High
7.9B-14	Piedmontes Corner Continue to maintain.	YCC	Ongoing
7.9B-15	Porter Street Reserve Continue to maintain.	YCC	Ongoing
7.9B-16	Raines Reserve Continue to maintain.	YCC	Ongoing
7.9B-17	Rushall Reserve Minor upgrade including for additional seating, drinking fountain and planting to make it more accessible for the local community.	YCC	Ongoing
7.9B-18	Thomas Kidney Reserve Continue to maintain.	YCC	Ongoing
7.9B-19	Triangle Park Continue to maintain this open space including protecting the existing mature trees in this space which is encumbered by traffic movement and noise.	YCC	Ongoing



7.10 North Richmond

7.10.1 Introduction

North Richmond is bounded to the north by Victoria Street, to the South by Bridge Road, the west by Punt Road and the east by the Yarra River (Birrarung). The land falls away to the river from north west where the prominent hill is known as Richmond Hill or Dockers Hill.

The land use of North Richmond is mixed with a combination of residential, business, commercial, retail, industrial use and open space. Victoria Street and Bridge Road are major retail, commercial and business precincts in North Richmond. The *Victoria Street Structure Plan*, adopted by Council in April 2010, provides the key direction for the future expansion and change within it. The *Yarra Housing Strategy* (2018) provides direction on the future level of change for residential use within the precinct. The *Bridge Road Streetscape Masterplan*, adopted by Council in 2017 identifies streetscape improvement projects including identifying potential future public spaces along its spine.

With the mixed land use, there is a significant worker population in North Richmond which is about 20 per cent less than the resident population, as follows:

- Existing residential population 2016: 13,260 (*Source: .id Consulting population forecasts, 2018*)
- Existing estimated worker population 2016: 10,910 (*Source: SEES, SGS 2018*)

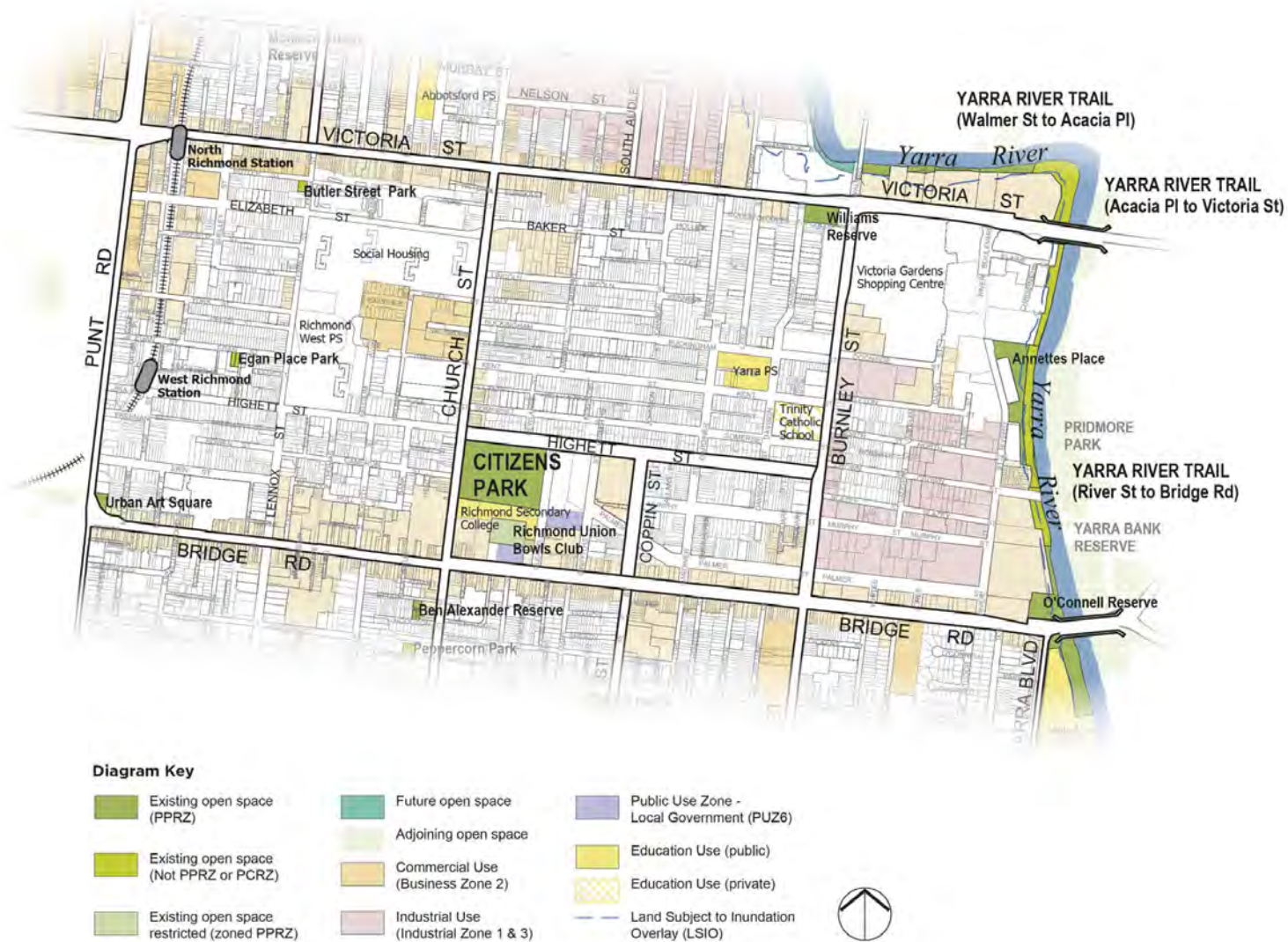


Figure 7.10A Existing open space in North Richmond

7.10.2 Existing open space

7.10.2a Description

Church and Burnley Streets are major north south roads in North Richmond and define three open space sub-precincts, North Richmond A, B and C.

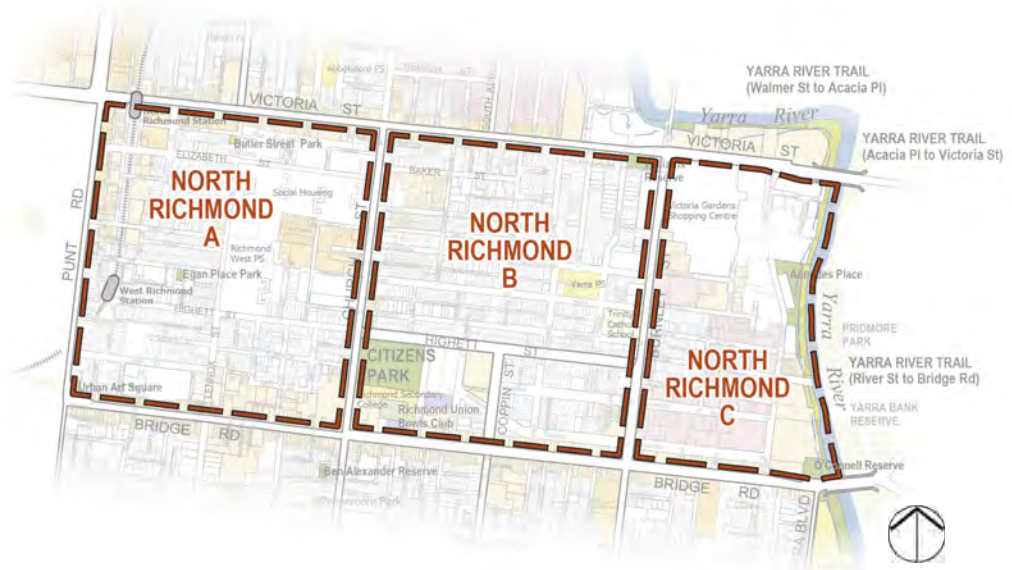


Figure 7.10B Open space sub-precincts for Richmond North

North Richmond A

- Open space sub-precinct North Richmond A is located between Punt Road and Church Street, from Victoria Street in the north to Bridge Road in the South.
- Open space located in this sub-precinct includes
 - Butler Street Park
 - Egan Place Park
 - Urban Art Square
- These three Small Local open spaces are distributed across the sub-precinct., however there are gaps in open space provision in this sub-precinct. Urban Art Square and Butler Street Park are characterised as urban plazas, while Eagan Street Park is characterised as play.
- The land use includes the major employment precinct associated with the Epworth Hospital in the south, Bridge Road retail, Victoria Street, and mixed use employment precincts adjoining Church Street in the east and between Punt Road the railway in the north west.
- Two large public housing estates to the north and south of Elizabeth Street central to the sub-precinct with high density housing. Other land use includes the Richmond West Primary School in the vicinity of the public housing estates.
- The Yarra Housing Strategy (2018) identifies two high change areas. One is in the north-west around the North Richmond railway station which forms part of the Victoria Street Activity Centre and Retail Precinct. The other is in the south east within the Bridge Road Activity Centre and Retail Precinct.

- Public housing occupies a large proportion of the residential land use in the sub-precinct, with the balance being predominantly identified as incremental change areas, as shown in Figure 7.10D.

North Richmond B

- Open space sub-precinct North Richmond B is located between Church and Burnley Streets, north of Bridge Road.
- Open space located in this sub-precinct includes
 - Citizens Park
 - Williams Reserve
 - Richmond Union Bowls Club
- Citizens Park is an extremely well-used Municipal open space that is characterised as a sporting reserve. It caters to the structured sporting and unstructured recreational needs of people from all parts of Richmond and Cremorne. Given the size of the open space and its central and highly visible location, it appeals to a diversity of people and accommodates a wide range of uses.
- Williams Reserve has been recently upgraded and is characterised as an urban plaza. The Victoria Street frontage is paved with seating and picnic facilities along with open grassed areas, playground and mature trees.
- The Richmond Union Bowls Club is a restricted open space and provides for structured sporting use only.
- The land use includes the Richmond Town Hall and City of Yarra municipal offices, the Richmond Secondary College, the Yarra Primary School, and commercial and business uses along Bridge Road and Victoria Street as shown in Figure 7.10A
- The majority of the precinct comprises terraces including original timber worker cottages, combined with some more recent medium and high density housing.
- The Yarra Housing Strategy (2018) includes two high change areas. One is located east of Citizens Park and the other is along Bridge Road within the Activity Centre. The balance of the sub-precinct is predominantly shown as incremental change with some minimal change areas in the north east.

North Richmond C

- Open space sub-precinct North Richmond C is located between Burnley Street and the Yarra River, north of Bridge Road.
- Open space located in this sub-precinct includes
 - Annette's Place
 - O'Connell Reserve
 - Yarra River Trail (River St to Bridge Rd)
- Annette's Place is a Neighbourhood open space near the Yarra River and is characterised as seating/viewing. It was established as part of the Victoria Gardens redevelopment in the 1990s. O'Connell Reserve is a Small Neighbourhood open space that directly adjoins the Yarra River and is characterised as seating/viewing as well. The Yarra River Trail is a Regional open space that is characterised as linear and provides both the shared trail access and the important riparian biodiversity link along the Yarra River.
- Land use is a combination of industrial, business, commercial and residential use. This includes high density residential near the Yarra River and along Bridge Road.
- The Yarra Housing Strategy (2018) includes two high change areas. One is shown in the north over the Victoria Gardens site which forms part of the Victoria Street Activity Centre. The other is located on the north side of Bridge Road within the Activity Centre. In the south east, the Strategy shows a moderate change area adjacent to the Yarra River with the balance being shown as incremental change.

7.10.2b Quantity of open space in North Richmond

The eight existing open spaces in North Richmond have a combined total area of 5.81 hectares. This represents approximately 3 per cent of the total land area of the precinct. Additionally there is one existing restricted open space that is 4.61 hectares in size. Adding the restricted open space to the other eight open spaces results in a total of 62.67 hectares and represents 3.3 per cent of the total land area of the precinct.

Table 7.10-1 Number, size and type of open space

No	Hierarchy	Area (ha)	%
1	Regional	0.82	14%
1	City wide	2.47	43%
1	Neighbourhood	1.35	23%
1	Small Neighbourhood	0.65	11%
1	Local	0.30	5%
3	Small Local	0.21	4%
8	TOTAL	5.81	100%

7.10.2c Open space hierarchy, character and quality

The linear open space along the Yarra River is an important habitat and recreational corridor for wider Melbourne. It is therefore designated as a Regional open space and is managed to protect and improve the habitat and recreational values. Access to the Yarra River itself, the bushland and natural qualities of this linear corridor are key reasons people visit this open space.

The sporting facilities at Citizens Park provide the context for the City-wide hierarchy and its sporting character classification. While the main oval is used for structured sport, it also receives high levels of unstructured recreation and informal uses, including exercising dogs, informal ball sports, jogging around the oval, lying on the oval and reading books and socialising. Annette's Place is the only Neighbourhood open space in the precinct, catering primarily to the people living and working in Victoria Gardens development but also benefits from being located adjacent to the Yarra River corridor. There is some scope to improve the character and facilities in this open space, however the close proximity of adjoining housing opening directly onto the reserve will impact on its future design.

The Small Neighbourhood and Local open spaces have different characters, with O'Connell Reserve providing seating and viewing over the Yarra River corridor and Williams Reserve being a local park with a urban plaza context on Victoria Street. Two of the three Small Local open spaces also are characterised as urban plazas, with Egan Place Park primarily designed for play. With the increased urban densities in this precinct, these local open spaces have the potential to have a greater role in urban greening and cooling.

Table 7.10-2 Existing open space, hierarchy and character classification

Name	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification
Annettes Place	1.35	Neighbourhood	Seating/Viewing	Play, Nature conservation, Waterway, Linking space
Butler Street Park	0.05	Small Local	Urban Plaza	
Citizens Park	2.47	City-wide	Sporting	Play
Egan Place Park	0.06	Small Local	Play	
O'Connell Reserve	0.65	Small Neighbourhood	Seating/Viewing	Waterway
Urban Art Square	0.10	Small Local	Significant road reservation	Urban Plaza
Williams Reserve	0.30	Local	Urban Plaza	Play, Public garden
Yarra River Trail – River St to Bridge Rd	0.82	Regional	Linear	Waterway, Nature conservation
Total	5.81			
Restricted open space				
Richmond Union Bowling Club	0.46	City-wide	Restricted sporting	
Total Restricted open space	0.46			

7.10.2d Distribution of open space in North Richmond

The existing open space has been allocated an appropriate open space hierarchy as shown in Table 7.10-2 above and a corresponding walking catchment appropriate to it, as described in Tables 3-1 and 3-5 of this report. The areas of the precinct that are located outside the walking catchments of the different open space reserves are referred to as 'gap areas' and are shown in white in Figure 7.10C on the next page. The assessment of the adequacy of the existing open space network in North Richmond is informed by the analysis of the spatial distribution of open space. As one of the key aims of this Strategy is for everyone to live and work within a safe and easy walk of open space, the recommendations will focus on addressing the gaps in the existing open space network.

For North Richmond, the major gaps in the existing open space network occur between Punt Road and Church Street, along with some gaps in the precinct between Church Street and Burnley Streets. To assist with the open space analysis, North Richmond has been divided into three open space sub-precinct. These are shown in Figure 7.10C.

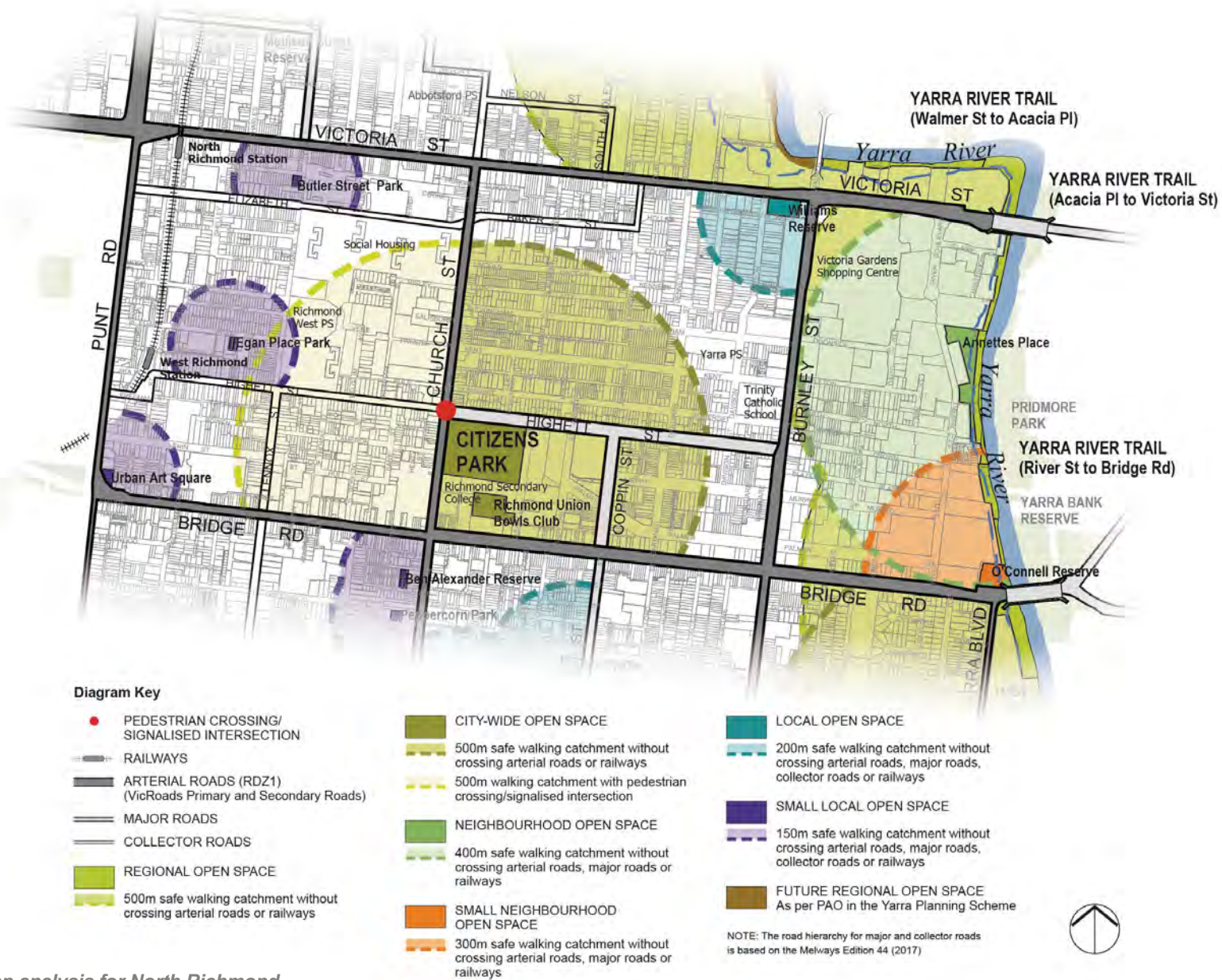


Figure 7.10C Gap analysis for North Richmond

7.10.3 How residents use open space

A total of 158 resident surveys were received from the North Richmond. Please note that in addition to these, 113 surveys were also completed by workers in Richmond, near the Epworth Hospital and Bridge Road. A summary of the results of the worker survey is included in the next section 7.10.4.

The 158 resident surveys completed for North Richmond represents 13 per cent of the total surveys received. The .id Community Profile identifies that 15 per cent of the City of Yarra's population lives in North Richmond.

Table 7.10-3 Most frequently visited open space

No.	Name	Reasons to visit	Suggested improvements
Open space within walking distance			
110	Citizens Park	<ul style="list-style-type: none"> • Access (16) • Walking (16) • Exercising (15) • Dog walking (9) • Playground (8) • Exercising dogs (6) • Socialising with friends / family (6) • Convenient/on the way (5) • Dog friendly (5) • Informal ball games (5) • Relaxing (5) • Sport (5) 	<ul style="list-style-type: none"> • No improvements required (35) • Dog waste requires cleaning (8) • Upgrade required (4) • Upgrade the playground (4)
25	Yarra River Corridor	<ul style="list-style-type: none"> • Walking (9) • Cycling (7) • Natural character (4) • Peaceful (4) • Respite from busy roads and traffic (3) • Escape from the built environment (3) 	<ul style="list-style-type: none"> • No improvements required (3) • Limit developments (2) • Additional seating (2)
22	Williams Reserve	<ul style="list-style-type: none"> • Relaxing (3) • Socialising with friends / family (3) • Close to home (3) • Playground (3) • Playing with children (3) 	<ul style="list-style-type: none"> • No improvements required (5) • Dog waste bags/bins, additional required (2)
13	Fitzroy Gardens	<ul style="list-style-type: none"> • Walking (4) • Large space / size (2) 	<ul style="list-style-type: none"> • No improvements required (5) • Additional lighting (2)
Open space beyond walking distance			
10	Fitzroy Gardens	<ul style="list-style-type: none"> • Walking (2) • Beautiful (2) • Relaxing (2) 	<ul style="list-style-type: none"> • No improvements required (3)
9	Edinburgh Gardens	<ul style="list-style-type: none"> • Socialising with friends/family (5) 	<ul style="list-style-type: none"> • No improvements required (3) • Regular maintenance and cleaning required (2)
9	Yarra Bend Park	<ul style="list-style-type: none"> • River setting (4) • Large space / size (2) 	<ul style="list-style-type: none"> • No improvements required (5)
7	Barkly Gardens	<ul style="list-style-type: none"> • Playground (3) 	<ul style="list-style-type: none"> • No improvements required (2)

No.	Name	Reasons to visit	Suggested improvements
		<ul style="list-style-type: none"> • Large space / size (2) 	
7	Kevin Bartlett Reserve	<ul style="list-style-type: none"> • Sport (5) 	<ul style="list-style-type: none"> • Sport clubrooms require upgrade/maintenance (2)
5	Carlton Gardens	<ul style="list-style-type: none"> • Socialising with friends/family (4) 	<ul style="list-style-type: none"> •

- 54% Place to relax and unwind
- 58% Trees
- 48% The feeling of space
- 46% Just being outside
- 44% An escape from the built environment

Types of open space used (top five)

- 84% Open space along Yarra River
- 82% Small local parks
- 79% Large parks and gardens
- 74% Local streets for exercise
- 64% Large sporting reserves

Activities and facilities in open space (top five)

- 80% Walking paths
- 66% Open grassed areas
- 63% Seats
- 50% Cycle paths
- 50% Drinking fountains

General comments

This was an open ended section of the survey where respondents could write any additional comments. The following list are comments made by four or more people:

- Additional open space is required particularly as densities increase and the less private open space (6)
- Appreciate the opportunity to complete the survey (4)
- Council is doing a good job regarding open space (4)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix B.

7.10.4 How existing workers use open space

113 workers were surveyed in the Epworth Hospital and Bridge Road area about open space.

Frequency of use of open space near the workplace

- 88 per cent of those surveyed visit open space near their workplace with 53 per cent of them nominated they visit open space frequently.

Reasons to visit open space near the workplace

The three top reasons workers visit open space near their place are:

- 66% to be outdoors as a break from work
- 42% to socialise / meet colleagues / friends
- 19% to eat lunch

Most frequently visited open space

No.	Name
15	Fitzroy Gardens
13	Royal Botanic Gardens
11	Parks
10	Citizens Park
8	Barkly Gardens
8	Yarra Park

Suggestions for improvements to the open space network

The following list is the comments made by 4 or more people:

- Additional open space required (15)
- No improvements required to open space (9)
- Additional car parking required (5)
- Public toilets - additional required (4)

7.10.5 Analysis of future change and open space needs

7.10.5a Forecast future population

Quantity

The table below shows the forecast population growth for the residential and worker populations in North Richmond. A further breakdown of the forecasts for the three open space sub-precincts within North Richmond have been prepared by .id Consulting to assist with analysis of where forecast change will occur.

Residential population forecasts are sourced from .id Consulting (2018) and the worker population estimates are calculated from the floor area growth forecasts in the *Spatial Economic and Employment Strategy, SGS, 2018* (SEES, 2018).

The resident population growth is significant with an overall change in residential population of 52 per cent or an additional 7,419 residents between 2016 and 2031. The

worker population is forecast to increase by approximately 32 per cent, with an additional 4,264 additional workers between 2016 and 2031.

The resident population forecasts through to 2041 illustrate that there is still additional capacity for growth beyond 2031 in North Richmond. While this Strategy is primarily addressing the open space needs of the existing and forecast population through to 2031, it is useful to understand the context of the magnitude of change beyond the Strategy timeframe.

Table 7.10-4 Resident population forecasts for North Richmond open space sub-precincts

SUB-PRECINCT	2016	2031	Difference 2016-2031
North Richmond A	7,129	9,358	2,229
% change North Richmond A			31%
North Richmond B	5,675	7,265	1,590
% change North Richmond B			28%
North Richmond C	1,531	5,131	3,600
% change North Richmond C			235%
Total North Richmond	14,335	21,754	7,419
Total % Change			52%

Table 7.10-5 Worker population estimates for North Richmond open space sub-precincts

EMPLOYMENT/ RETAIL PRECINCT	2016	2031	DIFFERENCE	% CHANGE
North Richmond A				
Victoria Street Retail Precinct	1,487	2,104	617	41%
Bridge Road Retail Precinct	3,907	4,925	1,018	26%
Hoddle Street Employment Precinct	208	272	64	31%
Total estimated worker population North Richmond A	5,602	7,301	1,700	30%
North Richmond B				
Victoria Street Retail Precinct	850	1,202	353	41%
Bridge Road Retail Precinct	3,754	4,732	978	26%
Total estimated worker population North Richmond B	4,603	5,934	1,331	29%
North Richmond C				
Victoria Street Retail Precinct	2,974	4,208	1,234	41%
Total estimated worker population North Richmond C	2,974	4,208	1,234	41%
Retail and employment precinct totals				
Victoria Street Retail Precinct	5,311	7,514	2,204	41%
Bridge Road Retail Precinct	7,661	9,657	1,996	26%
Hoddle Street Employment Precinct	208	272	64	31%
Total estimated worker population North Richmond	13,179	17,444	4,264	32%

7.10.5b Population change impacts on open space

The additional quantity of people living and working in North Richmond will place increased pressures and demands on the existing open space. The pressures will include increased volumes of people in the open space utilising the facilities, leading to overcrowding in open space, lack of access to existing facilities and deterioration in the quality of natural features such as grass areas due to compaction from increased use.

The forecast change in demographics with a slight decrease in the number of families and young children and an increase in young adults and older people living on their own means that there will be a likely increase in the demand for facilities that encourage socialising in open space including seating areas and picnic facilities. There will also be a need to promote fitness and exercise by increasing the diversity of facilities that encourage this.

7.10.5c Where change will occur

The forecast resident and worker population increase in North Richmond will be concentrated in the Bridge Road and Victoria Street Retail Precincts, combined with the areas of major change identified in the *Yarra Housing Strategy, 2018* (YHS, 2018). Refer to Figures 7.10D and 7.10E below.

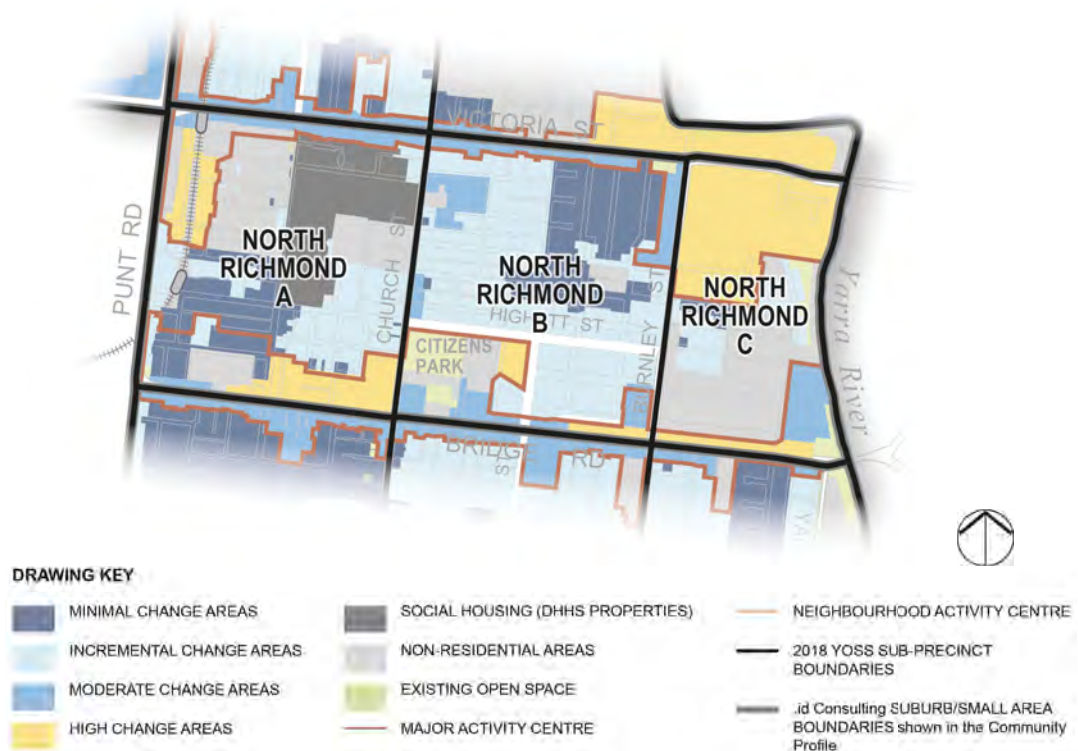


Figure 7.10D Open space sub-precincts and the Strategic Housing Framework (YHS, 2018)

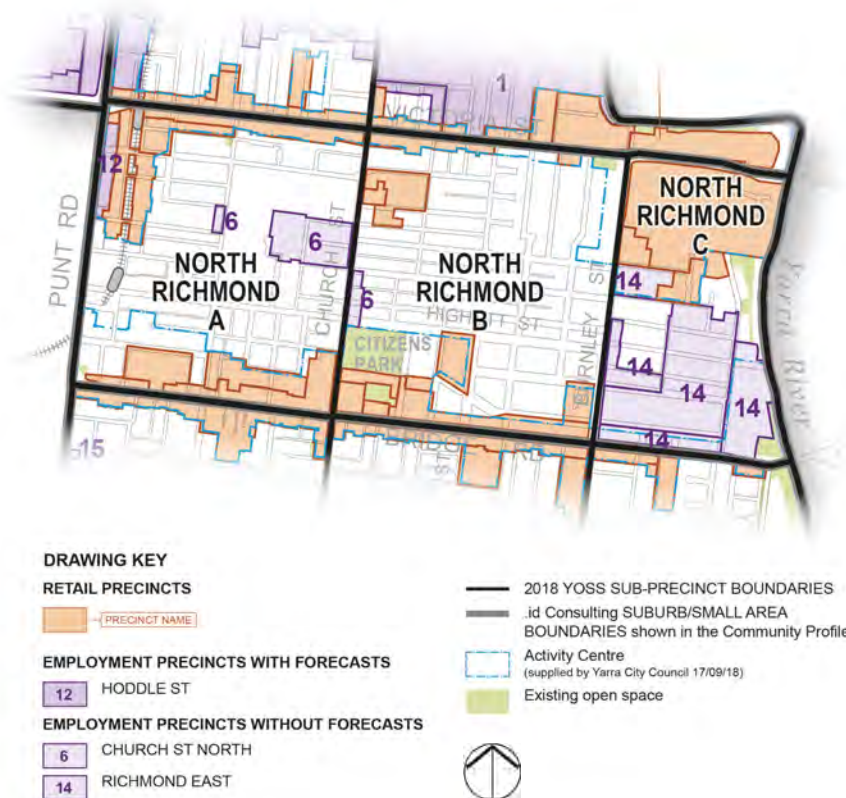


Figure 7.7E Open space sub-precincts and the Employment and Retail Precincts (SEES, 2018)

7.10.5d Open space distribution and future need in North Richmond

Within North Richmond the major roads form barriers to safe and easy access to open space. However, where traffic signals are located adjacent to Regional, City-wide and Neighbourhood open space, then the walking catchment extends across the major road, but in a lighter colour. This recognises that for many fit and healthy people, the major road may not present a physical or psychological barrier to visiting the open space, while for some people, particularly those with less mobility, the young and elderly, easy and safe access may not be applicable to them.

These sub-precincts are based on the ability of people working or living in North Richmond to easily reach open space. The open space survey results confirm that residents travel outside North Richmond to visit open space, primarily for the beauty and diversity of character in the large public gardens including the Royal Botanic Gardens, Fitzroy Gardens and Edinburgh Gardens. The high value placed on the need to relax and unwind in the open space surveys supports the need to ensure that adequate areas of green open space with natural features are provided in North Richmond.

Sub-precinct	Conclusions
<p>North Richmond A</p> <p>Open space sub-precinct North Richmond A (NRA) is located between Punt Road and Church Street, from Victoria Street in the north to Bridge Road in the South. Refer to Section 7.10.2 for the description of existing open space and character.</p>	<ul style="list-style-type: none"> • A 31 per cent increase in the resident population is forecast with an additional 2,229 residents by 2031. • A 30 per cent increase in the worker population is forecast with an additional 1,700 workers by 2031. • The existing open space network lacks diversity of character and facilities to offer a range of recreational uses, and are all of the similar small size being less than 1,000 sqm, and provide limited unstructured recreation opportunities. • Recommend a new Neighbourhood open space central to the sub-precinct, as shown in Figure 7.10F. This suggested location is on existing State government land, is central to this precinct with excellent access and large enough to provide a diverse range of unstructured recreational facilities combined with social spaces and additional greening. Importantly, this open space will be accessible via the local street network to the areas of major growth and change. • In the south-east area of the precinct, close to the forecast high change areas, a new Small Local open space is recommended to provide an open space within a safe walk of residents and workers without the need to cross Highett Street (which is a collector road). Refer to location shown on Figure 7.10F. • Upgrade Egan Place Park including investigating the potential to expand the size of this open space.
<p>North Richmond B</p> <p>Open space sub-precinct North Richmond B (NRB) is located between Church and Burnley Streets, north of Bridge Road. Refer to Section 7.10.2 for the description of existing open space and character.</p>	<ul style="list-style-type: none"> • A 28 per cent increase in the resident population is forecast with an additional 1,590 residents by 2031. • A 20 per cent increase in the worker population is forecast with an additional 1,331 workers by 2031. • While there are no gaps in the provision of open space there will be a significant increase in the number of people using Citizens Park in the future from all parts of Richmond. Therefore it is recommended that an additional Small Neighbourhood open space is provided in the south east part of the sub-precinct North Richmond C (refer below). This will provide new open space primarily for the forecast worker and resident population in close proximity to the Bridge Road Activity Centre and the high change precinct identified in the YHS as shown in Figure 7.10D. • Continue to undertake minor upgrades to Citizens Park as required to ensure it is meeting the communities needs and levels of use. • Continue to maintain Williams Reserve in the short term and review the opportunities to improve its role in mitigating urban heat with sustainable water reuse in the future.
<p>North Richmond C</p> <p>This sub-precinct is located between Burnley Street and the Yarra River, north of Bridge Road. Refer to Section 7.10.2 for the</p>	<ul style="list-style-type: none"> • A significant 235 per cent increase in the resident population is forecast with an additional 3,600 residents by 2031. • A 41 per cent increase in the worker population is forecast with an additional 1,234 workers by 2031. • While there are no gaps in the provision of open space there will be a significant increase in the resident population in both the north east and south east parts of the sub-precinct.

Sub-precinct	Conclusions
description of existing open space and character	<ul style="list-style-type: none"> • Therefore it is recommended that an additional Small Neighbourhood open space is provided in the south east area of the sub-precinct as part of the future redevelopment of the larger land parcels in the precinct. This will focus on providing a green space to assist with mitigating urban heat and provide recreational facilities that complement the seating/viewing character of the other two existing open spaces. It is also recommended that improved north south pedestrian connectivity within the precinct is achieved as part of the redevelopment process. This in part will also address the future open space needs of forecast residents and workers in North Richmond B. • Undertake a major upgrade to Annettes Place to provide a greater diversity of spaces and facilities to better cater to the forecast population as part of the major redevelopment in proximity to this open space. • Please refer to Figure 7.10F.

7.10.6 North Richmond Recommendations

7.10.6a Summary of overall intent

Provision and distribution

Citizens Park and the system of open space along the Yarra River contribute significantly to the open space character of North Richmond. With the forecast substantial increase in the resident and worker population in North Richmond, a key recommendation is to provide a new Neighbourhood Park to cater primarily to the forecast population and better meet the open space needs of the existing population. Combined with this is the recommendation to provide three new Small Local open spaces to support the existing local open space network across North Richmond. This will assist to mitigate urban heat, provide increased urban greening and open space within a safe and easy walk of residents and workers as urban densities continue to increase in the future.

Quality and design

There is potential to improve the recreational quality and diversity of facilities in the Small Local open spaces in North Richmond. The additional open space can be designed to provide a diversity of facilities for the existing and future population and contribute positively to mitigating urban heat island effect.

Refer to Figure 7.10F for the spatial location of recommendations for North Richmond.

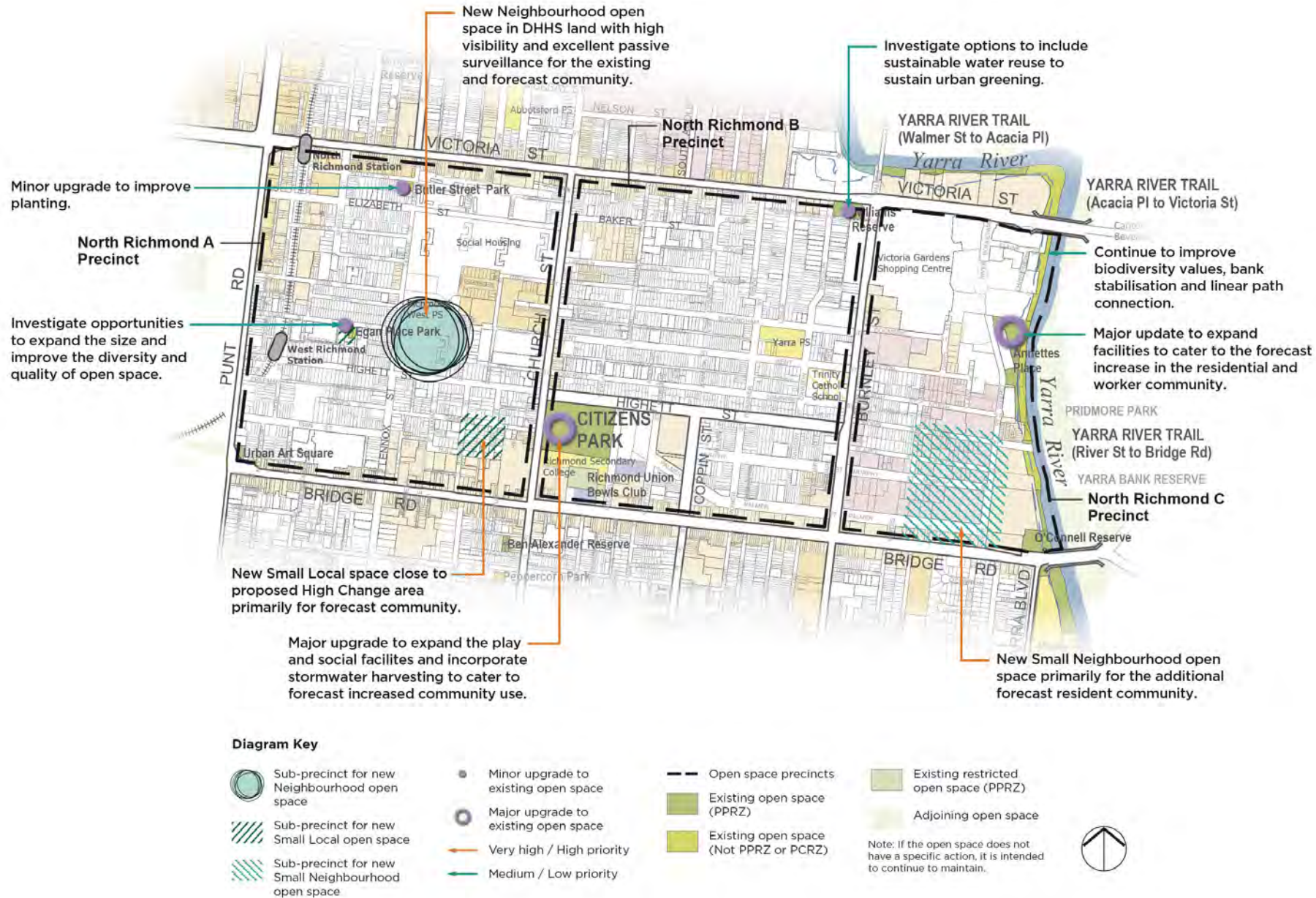


Figure 7.10F Recommendations for North Richmond

7.10.5b Precinct Actions for North Richmond

A Additional open space

No.	Action	Responsibility	Priority
7.10A-1	Provide a new Neighbourhood open space in Sub-precinct North Richmond A. There is potential to provide this on the DHHS land, central to the sub-precinct and accessible to the existing and forecast new population.	YCC DHHS Developer	Very High
7.10A-2	Provide a new Small Local open space in the Bosisto/Cameron Street area north of Bridge Road as shown in Figure 7.10F. This is to cater primarily to the forecast new population in the high change area in the south east portion of sub-precinct North Richmond A.	YCC Developer	Very High
7.10A-3	Provide a new Small Neighbourhood open space in sub-precinct North Richmond C primarily for the forecast population. This is to be located in the south east area of the sub-precinct in the vicinity of Murphy Street and improve the north south pedestrian connectivity between Bridge Road Murphy Street if feasible.	YCC Developer	Very High

B Existing open space

No.	Action	Responsibility	Priority
7.10B-1	Annettes Place Continue to maintain in the short term. In the longer term, undertake a major upgrade to substantially improve the useability and character of this open space to better cater to a diversity of users given the forecast increase in the resident population in the immediate catchment of this reserve.	YCC	High
7.10B-2	Butler Street Park Continue to maintain.	YCC	Ongoing
7.10B-3	Citizens Park Undertake major upgrades including to the playground and other unstructured recreation facilities, incorporate stormwater harvesting project to improve the sustainable water re-use and management of this reserve to cater to the increased levels of use that this park will receive in the future and assist to mitigate urban heat island effect.	YCC	Medium
7.10B-4	Egan Place Park Investigate opportunities to expand the size of this open space primarily to cater to the forecast future population. Review and revise the open space design, maximising opportunities to integrate sustainable water re-use to increase the greening and the urban cooling role of this open space.	YCC	Medium
7.10B-5	O'Connell Reserve Continue to maintain.	YCC	Ongoing
7.10B-6	Urban Art Square Continue to maintain.	YCC	Ongoing

No.	Action	Respons- ibility	Priority
7.10B-7	Williams Reserve Continue to maintain. In the medium term review the options to increase sustainable water re-use in the reserve.	YCC	Low
7.10B-8	Yarra River Trail – River St to Bridge Rd Continue to undertake improvements where required to the natural biodiversity values and linear path connection.	YCC	Ongoing

8. Funding and open space contributions

8.1 Open space contribution principles

Developer contributions for public open space have been required in Victoria over many decades and are linked to the subdivision of land.

There are long-standing legislative principles with respect to these contributions. Both the 2006 Yarra Open Space Strategy and this Strategy are based on these principles. For example, both strategies:

- Provide a strategic assessment of open space needs for the future population of Yarra and recommendations for expenditure of contribution funds to meet the needs of the population on whose behalf the contributions are collected.
- Support a contribution rate that is strategically justified based on the value of open space projects.
- Ensure that contributions are used for land acquisition and capital works (not maintenance).
- Are based on the premise that contributions should not be used to make up historical deficiencies in open space provision.
- Expect contribution funding in established urban areas will generally need to be co-funded at some level with income from grants, rates or fees.

With regard to Yarra:

- The Yarra Planning Scheme currently establishes a contribution rate, and this satisfies requirements of Section 18 of the *Subdivision Act 1988* governing the assessment of open space contributions that are required to be paid.
- The Strategy recommendations and cost allocations provided to Council support the expenditure of contributions for the new open space and recreational facilities that will benefit new populations.
- The upgrading or renewal of open space and recreational facilities are prioritised in locations that will be more intensively used as a result of future redevelopment and subdivision (e.g. population increase, demographic change).

8.2 Review of existing open space contributions program and rate

8.2.1 Overview of the current contributions program

Council's open space contributions program brings in an average of over \$4 million annually to provide open space for new residents. The program is supported by a mandatory contribution rate and policy in the Yarra Planning Scheme as described in Sections 8.2.2 and 8.2.3.

The current contribution program has been successful in lifting the value of contributions when compared to the contributions that were collected before the mandatory rate was introduced in the planning scheme. The contributions help Council fund its open space program for new residents and the implementation of the 2006 Strategy.

8.2.2 Contribution rate set in the Yarra Planning Scheme

Council has set a mandatory contribution rate of 4.5% for the municipality through the schedule to Clause 53.01 of the Yarra Planning Scheme as shown below. The contribution is mandatory for all eligible subdivisions.

Figure 8A Schedule to Clause 53.01 of the Yarra Planning Scheme

Subdivision and public open space contribution

Type or location of subdivision	Amount of contribution for public open space
Land or buildings intended to be used for residential purposes.	4.5%

The contribution rate applies to the total land value of the site when more than two lots (titles) are created. The levy can be for land, equivalent cash value or a combination of the two. There are many VCAT precedents that support the principle that the type of contribution to be made is solely up to the Council. This gives the City of Yarra considerable scope to require land contributions and specify where on the subdivision the new open space is to be located, having regard to the precinct locations and criteria for new open space set out in the Strategy.

8.2.3 Clause 22.12 Public Open Space Contribution

The Council's planning scheme policy at Clause 22.12 Public Open Space Contribution incorporates the relevant findings and recommendations of the 2006 Strategy. The policy sets out the basis for the mandatory open space contribution and specifies the sub-precincts where a land contribution may be required. The criteria for land contributions is listed. There is also a caution that the design of developments will need to account for any land contribution that may be required when subdivision occurs.

8.2.4 Finance – Allocation of Moneys Received via the Public Open Space Requirement Policy, 2016

To guide implementation of the 2006 Strategy, Council adopted a policy statement on 28 June 2016 to clarify its approach to expenditure of the open space contributions collected. The Council resolution also called for an increase in the existing 4.5 per cent contribution rate in the Yarra Planning Scheme.

The policy requires funds to be separately accounted for and allocated for '*land acquisition for new reserves, undertaking open space capital works or improving existing open space.*' This is consistent with the requirements of the Subdivision Act 1988. The policy also states that funds are to be allocated in line with the adopted Strategy '*for the benefit of the population on whose behalf the funds are collected.*' There should be an equitable allocation of funds in line with where dwelling growth is greater.

The policy is consistent with the legislative principles referred to in Section 8.1.1 and Council's planning policy governing land and cash contributions.

8.3 Proposed open space contributions program

8.3.1 Development of a new contribution rate

This Strategy updates the Yarra open space program. It is timely to review the contribution rate to ensure that it will support Council's implementation of the new Strategy.

New open space contribution rates have been proposed to Council to update the Yarra Planning Scheme and reflect the changes in Yarra's open space program going forward. In calculating the possible rate options, several factors have been considered including:

- The existing open space reserves, their function, location and qualities, and the improvements to open space that the City of Yarra has undertaken since the adoption of the 2006 Strategy.
- The significant population growth, demographic change and land use change that has occurred in Yarra since the adoption of the 2006 Strategy.
- The increased open space use by the employment population in Yarra.
- The substantial redevelopment that will occur in Yarra in the short and medium term, leading to the forecast increases in both residential and employment populations.
- The need for the City of Yarra to acquire land for new open space and fund capital improvements to open space based on the detailed analysis undertaken for this Strategy.
- The value of providing an updated set of open space upgrades and new open space to respond to the changes in Yarra for a 15 year period to 2031 and beyond.
- The expectation that contributions should fund a reasonable proportion of the future open space program having regard to population growth and demographic changes, so that the open space contributions levied provide for the open space needs of the population on whose behalf the contributions are collected.
- The value of land purchase for new open space is to be included in the calculation of the new contribution rate.
- The rate should apply to all eligible subdivisions in Yarra irrespective of land use type.
- There are benefits of implementing a new municipal rate or a schedule of rates for higher and lower growth areas of Yarra, provided that the options raise the same level of contributions over a 15-year period.

Having regard to the above factors, it is anticipated that a change to the open space contribution rate would be in the order of up to 10%. It is noted that the former Amcor Alphington Paper Mill Site would be exempt from any change in the current rate because its open space contribution requirements have been established separately.

The Strategy city-wide and precinct recommendations in Sections 5 and 7 indicate how Council should implement the open space contribution rate. The Strategy indicates when land acquisitions (e.g. contributions or purchase) are required and how cash contributions should be spent to meet the needs of the population on whose behalf they are collected. There are minimum criteria for land acquisition and priorities for implementation of projects. The 2006 Strategy requirements are included in the current Clause 22.12 of the Yarra Planning Scheme. The policy will need to be updated (as noted in Section 9.1) when this Strategy is adopted.

8.3.2 Comparison of the proposed rate with adjoining municipalities

Many inner Melbourne councils have a scheduled open space contribution rate in their planning schemes. The councils that border the City of Yarra use the schedule to Clause 53.01 as shown in Table 8-1. Recently established rates are based on strategic open space studies that can be supported through the planning scheme amendment and Planning Panel process. The trend is to match higher rates (above 5 per cent) to higher growth locations. The Yarra schedule is the only one that confines the contribution schedule to residential development.

Table 8-1 Open space contribution rates for adjoining municipalities

Municipality	Clause 53.01 type or location of subdivision	Rate
Yarra	<i>Land or buildings intended to be used for residential purposes.</i>	4.5%
Banyule	A subdivision that creates more than one additional separately disposable parcel of land.	5%
Boroondara	None specified. [defaults to individual subdivision levies]	None
Darebin	Sliding scale 2 to 5+ lots	2% - 5%
Melbourne	Fishermans Bend Urban Renewal Area	8%
	High growth areas shown on maps	7.06%
	Moderate and low growth areas shown on maps	5%
Moreland	12 suburb locations shown on a map	2.5% - 6.8%
Stonnington	Suburbs of Glen Iris, Malvern, Malvern East, Toorak and Kooyong	5%
	Suburbs of Armadale, Prahran, Windsor and South Yarra	8%
	One site with a specific rate in Armadale	8%

8.3.3 Open space precincts where a land contribution may be required

The Strategy identifies locations where new open space will be required. In some cases, it will be appropriate for Council to require a land contribution for all or part of the contribution assessment to create a new open space reserve. The land contribution may be part of a larger parcel of land that Council is assembling. The precincts where land acquisition is recommended based on Council's existing growth framework as described in this Strategy are shown in the table on the following page.

Table 8-2 Precincts where a land contribution may be sought

Precinct	Sub-precincts	Comments
Abbotsford	Abbotsford A, B, C and D	Abbotsford A is for land along the Yarra River corridor only.
Alphington	Alphington	This applies to the Alphington Paper Mills Site and also the PAO along Darebin Creek.
Carlton North	Carlton North	Refer to precinct recommendations.
Central Richmond	Central Richmond A, B and C	Refer to precinct recommendations.
Clifton Hill	Clifton Hill B	In the longer term only, in the west of the precinct if future high density development occurs on the larger sites along Hoddle Street that are currently not forecast to change
Collingwood	Collingwood A, B, C and D	Refer to precinct recommendations.
Cremorne	Cremorne	Refer to precinct recommendations.
Fitzroy	Fitzroy A, B, C and D	Refer to precinct recommendations.
Fitzroy North	Fitzroy North A, B, C and E	Refer to precinct recommendations.
North Richmond	North Richmond A, B and C	Refer to precinct recommendations.

Note: If development occurs in addition to the planned development described in each precinct, then Council may levy a land contribution additional to the precinct recommendations for new open space.

8.3.4 Yarra Development Contributions Plan 2017

Council intends to introduce a Development Contributions Plan (DCP) in the Yarra Planning Scheme to fund over 700 social and physical infrastructure projects throughout the municipality. The purposes of this DCP are clear and the Plan states at page 24 that, *"It should be noted that the projects shown in this DCP do not overlap with Council's Open Space Levy."*

8.4 Capital works and land acquisition

8.4.1 Capital works

Council's capital works program for open space in the City of Yarra is informed by the list of actions in the existing Open Space Strategy 2006. The program is funded by a combination of different Council revenue sources including open space contributions and external grants.

Approximately 70 per cent of the actions from the 2006 Strategy have been implemented via the capital works program, including the capital works to construct the five new open spaces that have been delivered since the Strategy was prepared.

The Strategy has prepared a new strategic program of works to be implemented over a 15-year timeframe. Where an action is either wholly or partly attributable to the forecast population it has been included in the Strategy Preliminary Opinion of Probable Cost (POPC).

The Strategy POPC apportions the cost for each Action between the existing and forecast population based on the benefit derived from the works. This Strategy POPC will form the basis of the revised open space contribution rate calculation. The priorities in the Strategy POPC are based on the open space needs analysis undertaken for each precinct.

8.4.2 Land acquisition

The five new public open space reserves that have been delivered since the preparation of the 2006 Open Space Strategy have been established on existing public land. Council has recently negotiated and secured a new Small Local open space in North Fitzroy on a redevelopment site and will also receive a series of new open space reserves as part of the Approved Development Plan for the Alphington Paper Mills Site.

A key issue for Council in implementing the 2006 Strategy has been the difficulty in securing new land area as open space. The majority of the development sites are too small to contribute a viable area of land for public open space. In response to this, the Strategy has prepared the POPC using the Capital Improved Value (CIV) rather than the undeveloped land value for the cost of acquiring new land area as open space. This recognises that Council will need to purchase land for new open space rather than solely rely on land contributions or conversion of Council owned land from another use.

Additionally, the Strategy has identified small sub-precincts and the type of new open space required in each sub-precinct. This now provides a clear framework for Council to undertake a more detailed assessment of individual sites within each for the defined sub-precincts to identify suitable locations for new open space. This is described in more detail in Section 5.3.2 of the Strategy.

9. Implementation

9.1 Responsibilities and actions

Implementation of this Open Space Strategy will primarily be the responsibility of the Open Space Planning Team within the Planning and Placemaking Division of Council.

A number of areas of Council will also be responsible for implementing key actions and recommendations.

Area of Council	Responsibilities
Open space planning team	<p>Responsible for coordinating the implementation of the Strategy. This includes:</p> <ul style="list-style-type: none"> • Undertake open space sub-precinct assessments for the 31 sub-precincts identified as requiring additional open space in the Strategy. Proactively flag public and private land opportunities for potential future acquisition of land for new open space consistent with the Strategy recommendations. • 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 Strategic and Statutory Planning. • Ensure open space needs are adequately recognised and provide input to the open space component of Structure Plans, local area plans and other planning documents.
Open space capital works team	<ul style="list-style-type: none"> • Prepare and implement concept and landscape design plans for open space reserves in accordance with the Design and Management Guidelines in this Strategy. • Implement the capital works program in open space and prioritise the works in the renewal program to complement the capital works program.

Area of Council	Responsibilities
Open space maintenance team	<ul style="list-style-type: none"> • Ongoing maintenance and management of open space. • Annual budget for operational and maintenance expenditure in open space.
Strategic and statutory planning	<p>Ensure the Yarra Planning Scheme and other strategic documents guiding future development are consistent with the Strategy including:</p> <ul style="list-style-type: none"> • Amend the planning scheme to implement key strategic elements of public open space, especially Council's open space objectives and strategies and its public open space program as contained in this Strategy. • Review the current Local Planning Policy for open space contributions and update consistent with this Strategy, e.g. precincts where land may be requested as a contribution, criteria for new open space. • Introduce new local policy with respect to guidelines at 5.4.1 for development adjoining public open space and guidelines at 5.4.2 for sunlight access to public open space. • Include requirements for new open space in Structure Plan and local area plan documents and related planning scheme amendments consistent with the Strategy recommendations. Include detailed direction on built form and sunlight access for medium and high density precincts (e.g. Design and Development Overlay provisions). • Continue to administer the public open space contributions program and make budget allocations in accordance with Strategy costings. • Liaise with developers in the initial development application stage to achieve desired outcomes for open space as set out in this Strategy. • Consider if use of the Public Acquisition Overlay is warranted in specific circumstances. • Coordinate activities and conduct referrals and coordination of outcomes between the Open Space Planning Team, Strategy Planning and Statutory Planning. • Ensure that existing reserves and land added to the public open space network is zoned Public Park and Recreation Zone or Public Conservation and Resource Zone.
Urban design	<ul style="list-style-type: none"> • Responsible for gaining input from the Open Space Planning Team in relation to open space provision in future structure plans, streetscape plans, urban design frameworks and local area plans.
Recreation and leisure	<ul style="list-style-type: none"> • Determine the structured sport and recreation facility provision in open space in the context of the recommendations in the Strategy. Responsible for structured sport and recreation facility provision and management in open space including the annual sports facility and ground allocations. • Responsible for the provision and ongoing management of the leisure facilities in open space.

Area of Council	Responsibilities
Community Cultural Development	<ul style="list-style-type: none"> • Responsible for scheduling and managing festivals and events in open space in consultation with Parks and Open Space. • Responsible for delivery of public art in open space in partnership with Parks and Open Space.
Traffic and civil engineering	<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 and car parks. • Prepare and implement Local Area Traffic Management Plans including seeking input from the Open Space Planning Team regarding opportunities for future road closures that provide new or expand existing open space. • Provide technical advice and assistance regarding sustainable water use in open space.
Financial services	<ul style="list-style-type: none"> • Contribute to achievement of the Strategy through the annual budget process. • Allocate public open space contributions as a percentage of open space project budgets in accordance with Strategy costings. • Maintain an effective recording system for public open space contributions to assist appropriate recording of contributions and spending of funds.
Local laws	<ul style="list-style-type: none"> • Domestic animal management. • Development and enforcement of regulations in and adjoining open space.

9.2 Priorities

The priorities identified in the Strategy provide some guidance on the order of how the actions are intended to be implemented. They are broadly based on the following:

- Trends in forecast resident and worker population growth
- Land use trends
- Gap areas
- Community consultation outcomes
- Other relevant strategies and plans.

The Strategy has an implementation timeframe of 15 years and is intended to be implemented generally in accordance with the priorities in the Action tables. Loosely the time period correlates to the following:

Very High	Years 1 to 4
High	Years 5 to 8
Medium	Years 7 to 12
Low	Years 13 to 15

It is noted however, that changes to the forecast trends can occur and priorities may need to be adjusted to respond to these changes, particularly the allocation of adequate resources, budgets and funding to implement the works program.

A more detailed implementation program will be developed progressively as the Strategy is implemented. This program will allow a more detailed breakdown of responsibilities for each action and track its progress.

9.3 Monitoring

Implementation and monitoring of the Strategy will aim to:

- Establish a committee to oversee the implementation of the Strategy to ensure ongoing commitment and awareness of the Strategy at all levels of Council.
- Establish an appropriate system of planning, documenting and recording the works completed from the Strategy.
- Regularly monitor the implementation of the Strategy to assess the progress and success of the recommendations. This is particularly important for the provision of new open space.
- Regularly report internally on the Strategy progress including the open space contributions program.
- Review the Strategy at the 5 year and 10 year points to monitor its implementation.
- Integrate the implementation of the Strategy with other existing and future Council plans and strategies.

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Appendix A

Drawings

The following set of drawings are to be printed at A3 size from the separate file provided Volume 2 of 3.

Drawing No.	Drawing Title
YOSS-01a	Existing Open Space
YOSS-01b	Existing Open Space and Education Use
YOSS-01c	Existing Open Space Detail Plan
YOSS-02a	Existing Open Space and Heritage Overlays
YOSS-02b	Topography and Waterways
YOSS-02c	Waterways and Relevant Overlays
YOSS-02d	Waterways and Design and Development Overlay
YOSS-03a	Open Space Hierarchy
YOSS-03b	Gap Analysis
YOSS-04	Existing Land Use and Open Space Sub-precincts
YOSS-05	Adopted Strategic Housing Framework and Open Space Sub-precincts
YOSS-06	Employment and Retail Precincts and Open Space Sub-precincts

Appendix B

Community consultation report

Print from separate File Volume 3 of 3.

