Royal Botanic Gardens Victoria **Melbourne Gardens**

Master Plan 2020–2040

ROYAL BOTANIC GARDENS VICTORIA

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View across the Melbourne Gardens and Ornamental Lake to the CBD

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The *Melbourne Gardens Master Plan 2020-2040* is the result of the work and support of many people, both within and outside Royal Botanic Gardens Victoria (RBGV). The report was prepared in response to the *Royal Botanic Gardens Victoria Corporate Plan 2014-2019* under the direction of Tim Entwisle, Director and Chief Executive Royal Botanic Gardens Victoria and the core design team of Chris Cole, Executive Director Melbourne Gardens, Andrew Laidlaw, Senior Landscape Architect and Andrea Proctor, Landscape Architect.

Major contributions were provided through the conceptual architectural design work of Kerstin Thompson Architects in their Nature and Science Precinct Conceptual Master Plan and the valuable heritage guidance from Context Pty Ltd. We acknowledge and thank the contributors from these studios.

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FOREWORD

Preparing a new Master Plan for what many believe is one of the world's great botanic gardens is an exciting and important task. There is an obligation to preserve and protect the elegance of the original William Guilfoyle design, and a timely need to celebrate the stories of a place with deep history and Aboriginal heritage extending millennia beyond its 174 years as a botanic garden. In an increasingly urbanised society experiencing significant climate change, our botanic gardens must also seek new, thoughtful and creative ways to strengthen our connection with nature and history. Most critically at this time, there is an urgent need to safeguard Victoria's future by protecting its State Botanical Collection with the construction of a new National Herbarium of Victoria, and to use that opportunity to unlock those collections for scientific research and to deepen our community's connection with nature.

The Melbourne Gardens landscape must continue to change and evolve, and has long provided a green sanctuary and botanical resource for Melbourne. The community living around Melbourne Gardens continues to grow, with the population in Greater Melbourne forecast to double to 8 million by 2040. In close proximity to the Melbourne Gardens, a major new transport hub, the Anzac Station is currently under construction. This will enable more people to access the gardens. At the same time, we must adapt our botanic gardens to an unprecedented climate challenge, threatening natural and garden landscapes alike.

Royal Botanic Gardens Victoria is a scientific organisation and embedded within the landscape are collections of plants supporting conservation, discovery and learning. The living plant collections evolve with the changing needs of our community and the constraints of climate. Held within Melbourne Gardens is the National Herbarium of Victoria, home to the irreplaceable State Botanical Collection with its 1.5 million preserved plant specimens dating back to the 1600s and painstakingly collected from across the globe. The combined living and preserved plant collections underpin Victoria's response to urgent issues in climate change, biosecurity, natural resource management and Victoria's therapeutic, agrifood and fibre economy.

This Master Plan is more than plants and landscapes. It is about protecting an important State asset and shaping a future for one of the most beautiful and important botanic gardens in the world.

Nature and Science Precinct: The living heart of our city

In this new Master Plan, we build on Melbourne's premier green space to stake out a vision for Melbourne Gardens and for Melbourne itself. The premier project is the Nature and Science Precinct which will join the Arts and Culture, and Sports and Entertainment precincts as Melbourne's third major destination by the Yarra River. Delivered in stages, the Nature and Science Precinct will highlight the three unique dimensions of a world-leading botanic garden: nature, culture and science. The Precinct will be an exciting new collection of built form, landscape and interpretive elements, reaching from the existing Works Yard, past Oak Lawn to the art deco 1934 Herbarium building and beyond to the National Heritage Listed Melbourne Observatory, restoring it for contemporary use. Key to this development is a new Herbarium building. This program will safeguard and protect the growing State Botanical Collection—the ark for Victoria's flora—from pest, disease, fire and flood in a purpose-built vault deep beneath the ground. It will inspire ever-increasing numbers of visitors and Victorians with the plant knowledge, collections, programs and stories of RBGV, and share the vivid cultural stories of Traditional Owners at Melbourne Gardens as the gateway for nature in Melbourne.

Through the Nature and Science Precinct, the Gardens will collaborate with its neighbours and like-minded organisations in partnerships that support learning, biodiversity knowledge, and horticultural and scientific research excellence. One of the country's richest botanical libraries and treasures of the Collection will be on public display for the very first time. New learning and exhibition spaces will inspire visitors and deepen engagement with nature for all ages. Currently being restored by dedicated volunteers from the Astronomical Society of Victoria in

Nature Play in the Gardens

collaboration with Museums Victoria, the return of the Great Melbourne Telescope to its original home in the Melbourne Observatory will be another major project of heritage significance.

The Precinct will address a number of other RBGV's key strategic objectives, such as increasing visitation and participation—particularly children, families, younger people, older Australians and marginalised communities—and establishing the Gardens as a leader in biodiversity conservation, learning and climate resilience.

Landscape design highlights

An exciting project is the proposed new entrance gate to the Yarra. This is to be created between A Gate and H Gate, punctuating the Gardens' long northern border and creating a direct connection to the City of Melbourne's boat landing. Following consultation with the Traditional Owners, this new entrance will be known as Birrarung Gate, and will explore indigenous landscape and plantings in all its forms, creating strong connections to Long Island and vistas over the Ornamental Lake. Another exciting project is a terraced garden with a focus on health and wellbeing which will be created inside A Gate. The terrace will blur the edges between the Tan Track and the Gardens, providing a new meeting place with shaded seating and expansive views across the landscape.

One of the driest and hottest parts of Melbourne Gardens is its south-east corner, home to Guilfoyle's Volcano developed as part of the previous Master Plan. Due to extraordinary support from a donor, a new Arid Garden will be complete in 2020 and form part of the larger Arid and Drylands Precinct, showcasing and interpreting the valuable Fields cacti and succulent collection.

Huntingfield Lawn will be gently re-contoured to establish a venue for small scale theatrical performances, as have been presented at Melbourne Gardens for decades. A new City Gate with an arid planting theme will be created at the Temple of the Winds, reflecting Guilfoyle's original vision and providing visitors with views across Melbourne to the Dandenong Ranges. Finally, the northern slopes of Hopetoun Lawn are to be developed into a Wild Wood, a natural bush kindergarten providing families with a natural, unstructured play space rarely found in cities.

This is an urgent yet beautiful plan, one to preserve irreplaceable specimens and usher in a major renewal of our much loved and world renowned Royal Botanic Gardens at Melbourne Gardens. As for all master plans, we anticipate future readers will use this Plan as a guide, noting specifics may evolve as new information emerges. However, the impact and ambition of the Melbourne Gardens Master Plan will remain unchanged, responding as it does to sound community consultation processes and forecast need, future modelling, and gathering evidence for climate impact of unprecedented magnitude.

As we emerge from the impacts of devastating bushfires and the worldwide COVID-19 pandemic, there has never been a more important time to value and protect Melbourne Gardens for future generations. They are, and will continue to be, the inspiration and lungs of our city, and a major international attraction for the State of Victoria.

We welcome you to embrace and support this vision.

Chris Trotman
Chair, 2020
Royal Botanic Gardens Board Victoria

Ken Harrison AM
Chair, 2013 - 2020
Royal Botanic Gardens Board Victoria

Professor Tim Entwisle
Director and Chief Executive
Royal Botanic Gardens Victoria

Chris Cole
Executive Director Melbourne Gardens

School group enjoying Princes Lawn

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TERMINOLOGY AND NAMING

Board: Refers to the Royal Botanic Gardens Board Victoria, the body that has ultimate accountability under the *Royal Botanic Gardens Act 1991*.

Botanic Gardens or *Royal Botanic Gardens Melbourne:* Historical terms for the site.

Cranbourne Gardens: Refers to the Cranbourne land under the management of Royal Botanic Gardens Victoria including the remnant bushland and Australian Garden.

DELWP: Department of Environment, Land, Water and Planning, the responsible State Government Department

Director and Chief Executive: the person responsible for the day-to-day control and management of all parts of the organisation under the *Royal Botanic Gardens Act 1991*.

Melbourne Gardens: Refers to the South Yarra land under management of Royal Botanic Gardens Victoria. Includes the National Herbarium of Victoria, Original Botanic Gardens, The Ian Potter Foundation Children's Garden and the Melbourne Observatory site. Also referred to as 'the Gardens' or simply 'Royal Botanic Gardens'.

Melbourne Observatory: Refers to the parcel of land to the Gardens' south-west which is under the authority and management of Royal Botanic Gardens Victoria. Also referred to as 'the Observatory'.

National Herbarium of Victoria: Refers to the building on the corner of Birdwood Avenue and Dallas Brooks Drive, home to the State Botanical Collection in 2020.

Nature and Science Precinct: A new precinct bringing together nature, culture and science at Melbourne's green heart (the area including Domain Parklands, Government House, The Shrine of Remembrance, Sidney Myer Music Bowl and Melbourne Gardens). The Precinct encompasses Melbourne Observatory, The Ian Potter Foundation Children's Garden, National Herbarium of Victoria and the Works Yard (Centre for Gardens Leadership) and will be further developed in consultation with the State Government and neighbouring land managers.

Original Botanic Gardens: The parcel of land east of Dallas Brooks Drive that was the extent of the Royal Botanic Gardens Melbourne land holdings prior to 1992.

Royal Botanic Gardens Victoria or RBGV: the whole organisation including the sites at Melbourne and Cranbourne, the National Herbarium of Victoria and the State Botanical Collection.

State Botanical Collection: Refers to the scientific collection of preserved plants, algae and fungi under the stewardship and management of Royal Botanic Gardens Victoria and held within the National Herbarium of Victoria including the specimen collection, library, archive/s and botanical art collections.

The Ian Potter Foundation Children's Garden: Also referred to as 'the Children's Garden'. The garden for children located between Melbourne Observatory and the rest of the Melbourne Gardens, on land once part of the Domain Parklands (City of Melbourne).

Traditional Owners: Refers to the Boonwurrung and Woiwurrung peoples of the Kulin Nation. The organisations that represent the Traditional Owner interests at Melbourne Gardens are Boon Wurrung Foundation, Bunurong Land Council Aboriginal Corporation (BLCAC), and Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation. RBGV acknowledges and collaborates with all the Traditional Owners.

The Ornamental Lake, once a rich hunting ground called *Tromgin* by the Aboriginal people

1 Executive Summary

Oak Lawn

Royal Botanic Gardens Victoria's Melbourne Gardens is widely admired as a living work of art and one of the world's most beautiful botanic gardens. Picturesque vistas across lakes and sweeping lawns are punctuated with magnificent specimen trees and intricately detailed garden beds, providing a cool oasis and iconic setting in the green heart of Melbourne. Yet this is not only a place of respite for locals and international visitors. It is home to the National Herbarium of Victoria (holding the internationally important State Botanical Collection) as well as a living collection of over 8,000 plant species. The interconnected science, horticulture and learning programs at Melbourne Gardens all contribute to the health of the community and natural environment.

For millennia, the site was an important meeting place by the Yarra River for the Traditional Owners and peoples of the Kulin Nation, and Aboriginal history continues to inform the understanding of the site today. Since 1846, the Gardens have been Melbourne's sanctuary and playground, and a home in the city for sciences including botany (plant sciences), astronomy, meteorology and timekeeping. The Gardens have been a central witness to the city's changing history, society and character, a site for major cultural events and a place for individual memories and rich experiences. As a special place, the Gardens is deeply ingrained in the psyche of Victorians and is a key part of Melbourne's reputation as one of the world's most liveable and green cities.

FUTURE READY

Royal Botanic Gardens Victoria's aspirations are to build on this legacy, maintaining the heritage Gardens, while enabling the organisation to deepen community engagement with nature and its sites, deliver upon its scientific mission, develop and improve the landscape character, and protect the Gardens from detrimental change. Melbourne is a rapidly growing city in a changing world, and Melbourne Gardens must respond to this. The Master Plan has been developed against a backdrop of a changing climate, increased recognition of Aboriginal heritage values, construction of the new Anzac Station, the City of Melbourne's *Domain Parklands Master Plan 2019-2039,* and the evolving role we play in the broader life and wellbeing of the city.

Critically, the Master Plan also responds meaningfully to the goals of key Victorian Government policies and plans, in particular the *Victorian Visitor Economy Strategy* (2016) and *Protecting Victoria's Environment: Biodiversity 2037*, as well as the City of Melbourne's *Resilient City Strategy 2026*.

In developing this Plan, RBGV has responded to a risk identified as 'Extreme' by the Board, the urgent need to safeguard the irreplaceable treasures of the $252 million State Botanical Collection. The Board also identified a major risk if the RBGV fails to engage the public with the mission, vision, programs and values of the organisation. Addressing these key risks with the aim of transforming RBGV for social and scientific impact underpins the plans for the Nature and Science Precinct, the Master Plan's premier project.

NATURE AND SCIENCE PRECINCT

The Nature and Science Precinct is in part designed to transform the Gardens' arrival experience and its connection to the City of Melbourne. The Precinct includes a sensitively designed below-ground herbarium and vaults, the re-modelling of the historic 1934 building and a welcoming public space along the current Dallas Brooks Drive alignment. With strong connections to the rest of Melbourne Gardens, Melbourne Observatory and The Ian Potter Foundation Children's Garden, it will become the Gardens' 'destination meeting


Revitalise A Gate to focus on health and wellbeing with connection to the Tan, strong planting displays and a new Learning and Participation and Visitor Services space
Create a gently contoured natural amphitheatre for small performances and passive recreational use
Lakeside Conservatory where people can work, rest and play immersed in an incredible plant experience, whatever the weather
Major new entrance connecting to the Yarra River and showcasing the indigenous landscape in all its forms
Establish a new nature play experience and bush kinder
Restore the Melbourne Observatory to public open space defined by lawns and low garden beds
Convert the current Visitor Centre into the Learning and Participation Centre
Service marina for maintenance and tenants
Gardens storage and option for shared operations
Expand The Ian Potter Foundation Children's Garden
Provide a new home for the State Botanical Collection and create a major new Gardens' entrance and principal visitor engagement spaces
Reconfigure the works yard to better service the RBGV
Create a new Herb and Medicinal Garden
Create a Sensory Garden with a focus on access for all
Rework Ellis Stones Rockery to support the picturesque landscape
Create a new Arid and Drylands Precinct connecting North America Drylands Collection, Arid Garden Guilfoyle's Volcano and Eucalypt lawn
Yarra River
Domain Parklands
Huntingfield Lawn Amphitheatre
Temple of the Winds
North Gate (H)
City Gate
Alexandra Avenue
Yarra River
Birrarung Gate
Relocated Lakeview Rest House
Terrace Gardens
Terrace Gate (A)
Long Island
Wild Wood
Ornamental Lake
Hopetoun Lawn
Lakeside Conservatory
Anderson Street
East Gate (B)
Eastern Lodge
Perennial Border
Melbourne Observatory
Nature and Science Precinct
The Ian Potter Foundation Children's Garden
Main Gate
National Herbarium of Victoria
Fern Gully
Eastern Lawn
Shrine of Remembrance
Oak Lawn
Mueller Gate (F)
Arid Garden
Guilfoyle Gate (C)
Works Yard
Guilfoyle's Volcano
Birdwood Avenue
Domain Parklands
South Gate (E)
Domain Road Gate (D)
0 metres 100
N

point'. The Precinct will include Oak Lawn and extend to a Centre for Gardens Leadership at the existing Works Yard.

The National Herbarium of Victoria on Birdwood Avenue is a focal point for the Precinct. Housed within the Herbarium is the State Botanical Collection of over 1.5 million preserved specimens of plants, fungi and algae, the Victorian Conservation Seedbank, rare and threatened species types and specimens dating back to the 1600s. All are invaluable to the conservation, botany, biosecurity, pharmaceutical and agriculture industries of Victoria. The Collection cannot be replaced if lost.

A new, state-of-the-art National Herbarium is to be constructed underground addressing the critical issues arising from a lack of space and grossly inadequate conservation conditions in the current building. The new Herbarium will be sensitively constructed around the original 1934 building.

Building upon its success, The Ian Potter Foundation Children's Garden will be broadened as part of the Precinct, with links to new learning and exhibition spaces established in the current Visitor Centre and restaurant building. The land around the Melbourne Observatory and current car park is to be returned to public open space, with paths, garden beds and lawns connecting it to the Domain Parklands. This provides an appropriate setting for the return of the Great Melbourne Telescope and other restored works at the western edge of the Precinct.

There is also a need for staff to transition from the existing retrofitted buildings and other inadequate office space, to spaces that encourage greater collaboration, innovation and productivity. A Whole-of-Precinct blueprint, including a Accommodation Review Master Plan, will be prepared to give clear guidance about the requirements and principles that will underpin and drive a unified precinct and stronger sense of place.

As a vibrant visitor experience, the Nature and Science Precinct will be an exciting new addition to Melbourne. It will attract new partners and investment to the Gardens. Expansive and international in scope and scale, it aligns with Melbourne's other significant precinct plans.

MAJOR LANDSCAPE PROJECTS

Over the last 20 years, Royal Botanic Gardens Victoria has led many new landscape projects including The Ian Potter Foundation Children's Garden, Guilfoyle's Volcano, Long Island Redevelopment and Working Wetlands, all carefully guided by previous Master Plans. The next 20 years provides the opportunity to continue this work. A highlight will be a new gate to be created between A Gate and H Gate, providing an entrance along the Gardens' long northern border, resulting in a direct connection to the upgraded boat landing on the Yarra River. This entrance, to be known as Birrarung Gate, will explore indigenous landscape and plantings with strong connections to Long Island, vistas over the Ornamental Lake and a new arrival point to the Gardens. Meanwhile the area at A Gate, the Gardens' second most used entrance, will be redeveloped into a terraced garden with a focus on health and wellbeing and a rich, contemporary design.

Huntingfield Lawn, a finger of land between the northern border of Government House and Alexandra Avenue, has long been underused. Barely recognised as part of the Gardens by the general public, this area is to be gently re-contoured to create a new venue for small-scale theatrical performances, programming and other visitor experiences. Following the ridge line from Huntingfield Lawn, Hopetoun Lawn is to be developed into a Wild Wood, a natural bush kindergarten area to provide families with a natural, unstructured play space rarely found in cities. This development will relieve pressure on The Ian Potter Foundation Children's Garden, which receives thousands of visitors each year.

A primary influence on the Master Plan has been the Gardens' need to respond to climate change, a process guided by the influential Landscape Succession Strategy for Melbourne Gardens. The driest and hottest part of the Gardens is its south-east corner, home to Guilfoyle's Volcano, the Arid Garden and other dry climate collections. This area is to be developed into an Arid and Drylands Precinct with the rejuvenation of the Arid Garden, which will showcase the valuable Fields cacti and succulent collection.

All the projects mentioned respond to a direct need, and in some cases have been identified in previous Master Plans. However, this 20-year plan provides the opportunity to consider more global options for the future. One of these longer-term opportunities is a new Lakeside Conservatory on the current site of the Terrace Tearooms. As a 'habitat for humans', this indoor pleasure garden could burst with plants, where people come at all times of the year to work, rest, play, socialise and meet in a landscape environment that provides an intrinsic and profound connection to nature. Sitting sensitively in the landscape as a grand folly, this structure would become a major new landmark and destination in Melbourne.

The Master Plan's suite of new projects is complemented by a series of smaller scale projects including garden bed renovations, infrastructure restorations and conservation work. These include the new Sensory Garden, Herb and Medicinal Garden, triangle beds, reworking of the Ellis Stones Rockery, rejuvenation of the islands and picturesque rockeries, and replacement of the bridges with ornamental structures. Creating more appropriate landscape settings for the historic lodges, follies and Gardens' entrances will also be implemented.

DEVELOPMENT GUIDELINES

The Master Plan is not limited to landscape projects. Guided by the aim to be fully accessible and socially inclusive, it also addresses the day-to-day use of the Gardens, improving comfort for everyone who uses them. It also supports other values of the Gardens, providing guidance on the protection of the picturesque landscape, improvement of the living collections and supporting the Gardens' role as an urban green space and wildlife refuge. For visitors and staff, the movement of maintenance and service vehicles around the site is to be improved, together with reconsideration of materials storage.

This Master Plan provides an agreed vision for Melbourne Gardens, guiding its development over the next 20 years and enabling a continuation of the RBGV's long and responsible stewardship of the site.

2 Background and Context

The Melbourne Gardens have been a cherished place of sanctuary and play for generations of visitors

Established in 1846, developed under the Directorship of eminent botanist Ferdinand Mueller and designed and overseen by renowned landscape designer and Director William Guilfoyle between 1873 and 1909, the Gardens were planned as a single Garden to support and nurture the collection and presentation of over 8,000 species of plants from around the world. The stunning design means the Gardens can now support the scientific and social research of the organisation while also providing a much-loved refuge for the over 2 million people who visit the Gardens each year[1].

2.1

PURPOSE OF THE MASTER PLAN

From its establishment in 1846 until 1997 the design, layout and development of Melbourne Gardens was overseen by a succession of Directors, and since 1991 governed by the Royal Botanic Gardens Board Victoria. By the late 1990s, it was recognised that a more formal approach to change was needed. As a result, the first Master Plan was produced in 1997. This document highlighted the need to conserve and enhance what was important about the Gardens, while allowing it to respond to the changing conditions of the 21st century. The 1997 Master Plan and its subsequent document, the 2008 Master Plan Review, achieved their aims, directing many positive changes including Guilfoyle's Volcano, the Long Island redevelopment, Working Wetlands, and the Fern Gully Restoration among other improvements to the landscape. In their entirety, these plans provided direction for landscape projects only.

Today Melbourne Gardens is presented with a new series of challenges and opportunities to those of the 1997 and 2008 Plans. The *Consolidated Engagement and Impact Strategy 2017-2020* speaks to the organisation's refreshed plans to offer more innovative and integrative nature-based programs and experiences, with a more focused invitation to international visitors, customers and local communities. Other drivers include increased recognition of Aboriginal heritage values, the new Anzac Station, Domain Parklands Master Plan, climate change and the increasing importance of green space in a growing city. To respond to these challenges, a new Master Plan will guide Melbourne Gardens through the next 20 years (2020-2040)—identifying and conserving what is important, while responding to a new set of pressures and capitalising on opportunities as they arise.

Development of the Melbourne Gardens Master Plan 2020-2040

Aboriginal Cultural Walks teach visitors about the land's rich history and thriving culture

2.2

SCOPE OF THE MASTER PLAN

The Master Plan provides an agreed and comprehensive approach to guide the development of Melbourne Gardens over the next 20 years. It is a planning tool that focuses on the physical landscape of Melbourne Gardens, and guides the major physical changes required to achieve the vision of RBGV. It is not a whole-of-organisation document and does not address management issues except where they relate specifically to landscape and infrastructure.

The Master Plan is intended to be a working document that provides agreed solutions to problems and opportunities identified during inquiry and consultation between 2016 and 2019. The Master Plan provides design resolution at a schematic level only, with further consultation, design and research required in order to implement each of the recommendations.

The primary area of land to be addressed by the Master Plan is the footprint of the living landscapes within Melbourne Gardens, which includes the Melbourne Observatory site, the National Herbarium of Victoria and The Ian Potter Foundation Children's Garden.

The Master Plan also considers the Gardens' interface with neighbouring land managers to expand and improve the presence of the Gardens beyond the historic fence line. Implementation of these projects provides opportunities for RBGV to strengthen its partnerships with industry, businesses, cultural institutions and neighbouring land managers, and support the work of the City of Melbourne as it implements its own *Domain Parklands Master Plan 2019–39* and *Resilient Melbourne Strategy*.

While the Master Plan aims to be comprehensive, occasionally new opportunities, or constraints may arise that were not anticipated within its 20-year timeframe. In such cases, new proposals would need to be considered within the context of the Master Plan and Royal Botanic Gardens Victoria's corporate and strategic plans. It is entirely conceivable that new projects may emerge which sit comfortably within the organisation's remit or some suggested developments may evolve in new ways. These projects will be developed in consultation with stakeholders and the community.

2.3

REPORT STRUCTURE

The Master Plan for Melbourne Gardens is structured across two volumes: the main report and a volume of supporting documentation.

The Royal Botanic Gardens Victoria *Melbourne Gardens Master Plan 2020-2040* is the main report: a self-contained strategic document that details the direction and priorities for the future. This will be a working document used in day-to-day operations at the Gardens and shared within the industry.

The second volume of the report, titled *Melbourne Gardens Master Plan 2020-2040: Supporting Material* contains appendices and background documentation for the Master Plan. This document provides additional reference material for Gardens' staff only, if and as required.

Tour of the Melbourne Gardens for Design Week 2019

2.4

MASTER PLAN CONSULTATION PROCESS

The Master Plan was instigated by the Board and developed by Royal Botanic Gardens Victoria staff and overseen by the Board and an External Reference Panel, chosen to provide a range of expertise (as noted in the Acknowledgements). These groups guided the development of the Master Plan and were consulted throughout the project.

The Master Plan is a collaborative document, involving an extensive consultation process and developed closely with stakeholders. Three formal consultation phases were conducted across the three years, with additional collaboration throughout the project from the Board, Executive Team, RBGV staff and key policy stakeholders such as the Department of Environment, Land, Water and Planning (DELWP), City of Melbourne and Heritage Victoria. The outcome of those consultations has informed all Master Plan proposals and was particularly important in the development of the Nature and Science Precinct. This collaborative process is illustrated on page 8, with key themes outlined below.

2.4.1 Round One Consultation: Listening Phase

Consultation to support the development of the Master Plan occurred with staff, key stakeholders and the public between July and September 2016. This work was conducted as a broad and open consultation process, with a focus on what people loved about Melbourne Gardens, what needed improvement, and what new elements they would like to see included.

Areas of interest differed slightly among the general public, staff and stakeholders, but the following common themes emerged in 2016:

- A deep love and appreciation of Melbourne Gardens as a public place and a beautiful garden in the city
- A need to preserve the rich Aboriginal and natural heritage
- A need to preserve the iconic William Guilfoyle landscape, and the vistas and sanctuary it offers
- A desire to preserve the Melbourne Observatory and improve its landscape and setting
- Continued excellence in horticultural and arboricultural maintenance standards
- Continued focus on plantings, with specific mention of existing and potential collections
- An expanding interest in food plants and food security
- The need to improve Gardens' entrances, including providing grander entrance statements
- Providing exciting and appealing new built elements
- A desire for more interactive spaces for children and adults
- A desire to improve integration of the Gardens landscape with neighbouring sites such as the Domain Parklands and Shrine of Remembrance
- The need to make use of the prominent city location to the Gardens' advantage
- The need to improve public transport accessibility to the Gardens

The need for effective wayfinding and design considerations, in particular for the elderly and people with limited mobility

A desire to develop and promote active collaborations with educational institutions and the broader community.

This feedback provided an important insight into what people valued and wanted preserved in Melbourne Gardens, as well as areas for improvement, collaboration, redesign and transformation.

2.4.2 Early Draft Master Plan

The Master Plan was developed working closely with the Board, Executive Team, RBGV Staff, Heritage Victoria, and the City of Melbourne through its Domain Parklands Master Plan. Other important stakeholders such as Traditional Owners, DELWP, and Government House were also engaged on proposals, especially for the Nature and Science Precinct. The first half of the Master Plan process was focused on determining the scope and location of the new Herbarium. Focus then shifted to the Development Guidelines, and finally the remaining Master Plan projects. Preliminary proposals were presented to staff in May and June 2018, with feedback incorporated into the Draft Melbourne Gardens Master Plan.

2.4.3 Round Two Consultation: External Stakeholder Presentations on Draft Master Plan

Stakeholder Consultation on the Draft Master Plan occurred from September 2018 to April 2019, commencing with presentations to key external stakeholders. Due to the extensive collaboration already undertaken, feedback was largely positive. Some changes were required to sections of the Development Guidelines following technical feedback from RBGV staff. This particularly related to the storage and movement of green waste on site and the management of the treatment wetlands.

Specific queries were also raised by some groups regarding plans for the Melbourne Observatory site, which were addressed by direct discussions and meetings with the individual parties or organisations. By the conclusion of this phase, the Draft Master Plan had received the in-principle approval and support of all important stakeholders, including Traditional Owner groups, the Victorian Government through the DELWP, and Heritage Victoria, the Australian Heritage Council, City of Melbourne, and Government House.

2.4.4 Round Three: General Public Consultation

The Draft Master Plan was released for public comment for one month in March and April 2019. During this period, the document was available on the RBGV website as a Summary Document with plans and images and the complete Master Plan as a text document. This was supported by a display in the Visitor Centre, two Listening Posts and two site tours. During this period the website received over 1,700 unique views, with the RBGV receiving 212 public submissions and 24 direct submissions by stakeholders and interested individuals.

Support for the Master Plan was overwhelmingly positive from those who attended the listening posts, presentations and tours. Feedback received through the website focused on three main issues: plans for the Melbourne Observatory, the proposed retirement of the Species Rose Collection and a permanent home for the Botanical Illustrators. The last of these issues was an accommodation matter, and therefore outside the scope of the Master Plan. The decision to retire the Species Roses was a concern for Living Collections rather than the Master Plan, however after reviewing the submissions received the decision was made to maintain an ornamental rose collection focusing on heat and disease tolerant taxa.

There was considerable misunderstanding around the objectives of the Master Plan proposals concerning the Melbourne Observatory, despite several presentations. This led to extensive feedback being received, primarily expressing concerns about matters outside the scope of the Master Plan and/or for proposals which were not intended to occur. Most of the key concerns raised were able to be addressed through a series of direct meetings and by clarifying sections of the Master Plan with stakeholders. The Astronomical Society of Victoria, for example, was invited to present their vision for the site directly to the RBGV Board. By the end of the consultation period, support was received from the vast majority of key stakeholders, including many whom had initially expressed concern.

With the completion of three cycles of consultation, the Draft Master Plan was presented to the RBGV Board in June 2019, receiving its approval. The final Master Plan is the result of final input from DELWP and the Board, RBGV editorial input and graphic design.

The Gardens are cared for by a dedicated team of Horticulturists

2.5

GUIDING PRINCIPLES

In developing the new Master Plan, all recommendations support the core values of Royal Botanic Gardens Victoria, its vision, mission and purpose. To assist with this, the following guiding design principles were developed for the Master Plan, identifying the underpinning principles most critical to shape the design vision for the future at Melbourne Gardens. The design principles align with the organisation's purpose to safeguard plants and plant knowledge for the wellbeing of people and the planet, as well as its future impact on conservation action, special places, social inclusion and scientific impact.

For people

Our Gardens exist to support the wellbeing of all people

Our Gardens are for people. They are accessible and welcoming to everybody, providing a place of sanctuary against the backdrop of an expanding global city. The Gardens offer opportunities for diverse experiences such as discovery, learning, quiet reflection, celebration and inspiration, alongside providing essential physical and emotional connection with nature. Social benefit and engagement is integral to all that we do. We recognise our distinctive role as a place that has been cherished by successive generations of local, regional and international visitors, and offers unique programs and events for communities to thrive and connect.

For science and discovery

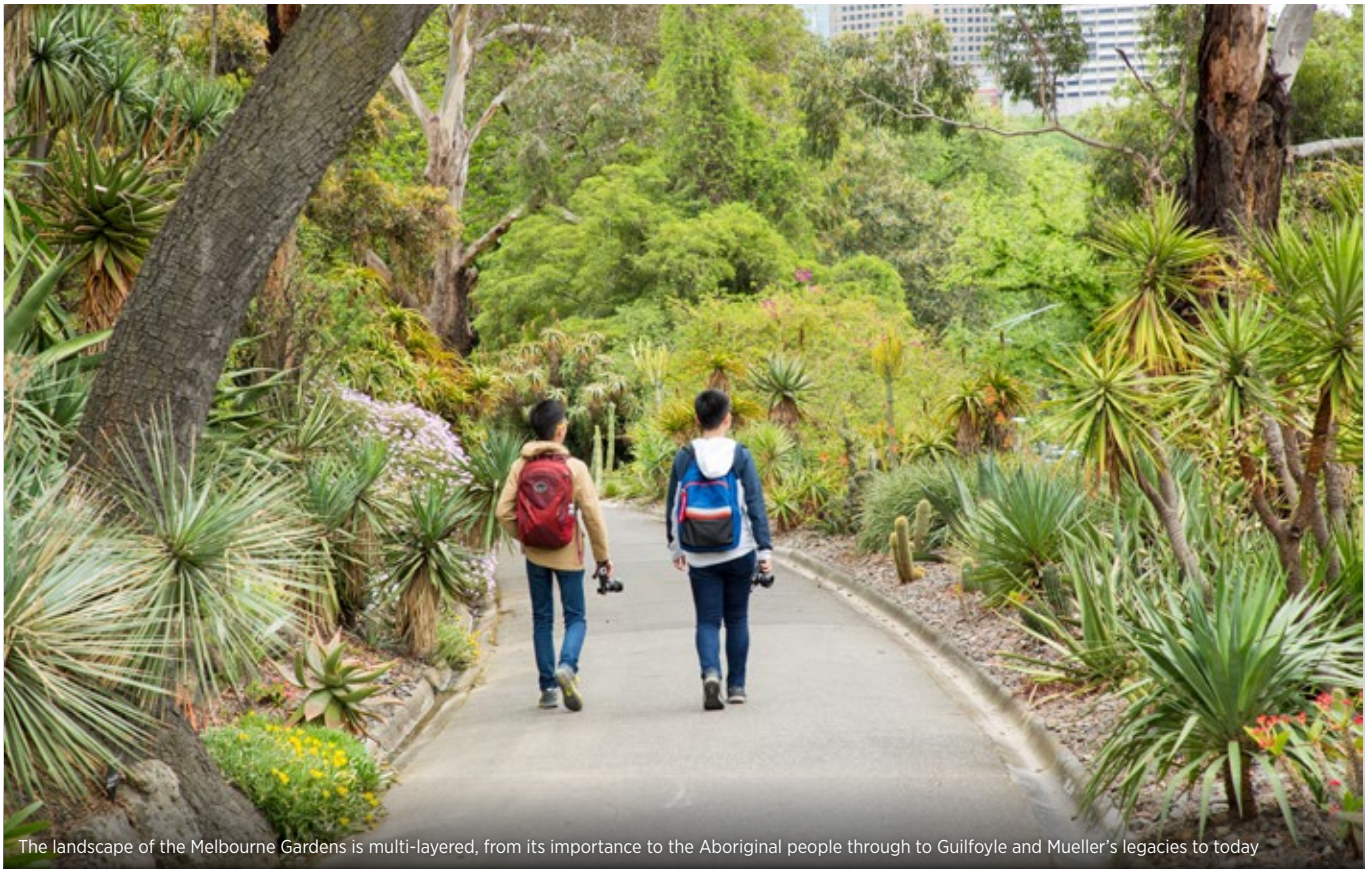
Our Gardens are living landscapes that contribute to scientific innovation and educational excellence

The living landscapes and collections within the Gardens support the community's investment in scientific innovation and plant knowledge, providing a vehicle for botanical and wider research. Our landscape management, public engagement and design processes are informed by contemporary science and the knowledge created through scientific endeavour. Melbourne Gardens provides a living laboratory for researchers in many disciplines, and an opportunity for children and visitors of all ages to engage vibrantly and easily with our work as a scientific institution.

For the environment

Our Gardens are a valuable urban green space that allows us to demonstrate leading approaches to conservation, biodiversity and urban habitat

Royal Botanic Gardens Victoria recognises the critical importance of environmental stewardship, and the interconnectedness of all our actions on the planet. The responsibility to care for our Gardens extends beyond minimising inputs—we work to have a net positive benefit on the environment. Our Gardens are a valuable green space, providing tree canopy, cool air, refuge and green lungs for the expanding city. Through best practice, we improve habitat for all living things, and collaborate with the City of Melbourne and other organisations to support environmental research in the State of Victoria.



The landscape of the Melbourne Gardens is multi-layered, from its importance to the Aboriginal people through to Guilfoyle and Mueller's legacies to today

For horticultural stewardship

Providing outstanding care for living landscapes

A love of plants and a sense of pride are reflected in the landscape maintenance standards and horticultural curation at Melbourne Gardens. Our living collections are curated to represent a diverse array of plants from around the world, and carefully managed to inspire and educate visitors on the important role plants play in all our lives. We are responsible custodians for these collections, embracing our role as an industry leader in landscape curation and management. Living collections evolve continuously, responding to environmental pressures and remaining contemporary and relevant in planning and design.

For beauty

Supporting what is important in our Gardens through good design

We view good design, and the sense of beauty and wellbeing it inspires, as integral to our role as stewards of Melbourne Gardens. Guilfoyle's original design, with its picturesque style and sweeping views is an extraordinary legacy which continues to inspire. We use creative and adaptive design as a means of showcasing plants and facilitating public engagement. Our design work is innovative and responsive, a reflection of Royal Botanic Gardens Victoria's contemporary role as custodians of a cherished public landscape.

For excellence

Being aspirational in our goals as a world leader in botanic gardens design and management

We strive for excellence in all that we do from world-leading landscape care and management through to creative programming and audience development. We share and collaborate with others, including regional, national and international botanic gardens, health, science, education and cultural partners, to establish strong relationships that inform and support our work and others.

For future generations

Conserving and celebrating all aspects of Aboriginal and other cultural heritage

The Gardens' history is deeply embedded in the living landscape. Our heritage is multi-layered, built by a succession of land managers starting with the Boonwurrung and Woiwurrung peoples of the Kulin Nation. The now-iconic botanic landscape, established by Ferdinand Mueller and transformed by William Guilfoyle, makes our Gardens unique and the history of scientific and cultural endeavour at the Gardens and Melbourne Observatory provides an ongoing legacy. However, the Gardens' culture and heritage is a living thing, where the past is valued and conserved while at the same time change is embraced, in order to demonstrate social, aesthetic and scientific value for all visitors of all ages.

3 Site History

Melbourne Gardens looking over the Yarra to Richmond Hill, 1863
Image courtesy of State Library of Victoria *Botanical Gardens* by Francois Cogne

The following chapter outlines the history and development of Melbourne Gardens, including the National Herbarium of Victoria and Melbourne Observatory. This history draws on a number of sources, in particular the *Royal Botanic Gardens Melbourne Master Plan* (1997), the Context Pty Ltd *Conservation Management Plan* (2018), *Aboriginal Heritage Values* (2018), Pamela Jellie's *Chronological Landscape History of the Royal Botanic Gardens Melbourne* (1996), and Allom Lovell & Associates Pty Ltd's *The Old Observatory Site Conservation Management Plan* (1997).

3.1

ABORIGINAL HERITAGE

The site of Melbourne Gardens and area around *Birrarung* (the Yarra River) and *Tromgin* (the Aboriginal name for the Gardens' lagoon) is part of the traditional lands of the Aboriginal peoples, today described as members of the Kulin Nation; specifically, the Boonwurrung and Woiwurrung peoples[2]. The land to the south of *Birrarung* was associated with the Yalukit Willam, a Boonwurrung clan, with Woiwurrung clans also identifying with *Birrarung*.[3] The boundary and extent of the area shared between these peoples remains unclear, however the land holds strong connections for all the Traditional Owners and there is a long history of Aboriginal people living in the landscape.[4]

The connections of the Traditional Owners are to Country – that is to the lands and waters traditionally held by the tribes and clans[5]. For Melbourne Gardens this particularly includes the higher land to the east and west, folding down to *Tromgin* and *Birrarung*.[6] Links to the surrounding landscape are extensive, although not all can be seen today. However, views from the high points within Melbourne Gardens and Government House look out to the *Tanderrum* ceremonial site to the north of *Birrarung* as well as surrounding high ground including the Dandenongs, Arthurs Seat, Macedon Ranges, Emerald Hill (South Melbourne) and Batmans Hill. The high point itself, now the site of Government House, is an important site to the Traditional Owners, where corroborees are known to have taken place[7].

From the important high ground, the land sloped steeply away to *Tromgin,* a rich hunting ground. *Birrarung*, later to be artificially straightened, wound into the Gardens following the sedimentary escarpment that now rises steeply from Alexandra Avenue to the Temple of the Winds. The original alignment of the river remains, being present beneath the Gardens as an alluvial aquifer with the river's southern bank following what is now the northern edge of Long Island. A second water source in the form of a creek ran through the Gardens, flowing into *Tromgin* to eventually feed *Birrarung*; a natural drainage line which can now be seen in Fern Gully and at the northern end of Nymphaea Lily Lake.

The indigenous landscape of Melbourne Gardens included the Ecological Vegetation Classes of grassy woodland on the hill tops and plains grassy woodland on the slopes. The southern bank of *Birrarung* was made up of swamp scrub, with tall marsh within and around *Tromgin* and riparian woodland along the *Birrarung* corridor.[8] On *Birrarung's* northern bank was damp sands herb-rich woodland. Together these landscapes provided a rich and fertile environment which supported the people.[9] Indigenous vegetation was dominated by River Red Gums *(Eucalyptus camaldulensis),* Swamp Paperbark *(Melaleuca ericifolia)*, Drooping Sheoak (*Allocasuarina verticillata*) and Kangaroo Grass (*Themeda triandra)* among other taxa. Remnants of some of these species can still be seen today.

The site of Melbourne Gardens would have been a plentiful and varied source of food and other important material for Aboriginal people. It was abundant with water birds, fish and eels, a range of small to medium or large mammals (kangaroos, wallabies, possums), tubers and fruits; as well as useful plant fibers from rushes and reeds and the bark of *Eucalyptus camaldulensis* for canoes.[10] This land was used by Aboriginal people for hunting, fishing, and ceremonial purposes, and was an important place where Aboriginal people visited, lived and were possibly both born and buried.[11] This life changed forever with the arrival of European settlers in 1835.

In 1836, a government mission reserve for the Aboriginal people of Melbourne was established on the south bank of the Yarra with the objective of 'civilising' and protecting them. This site occupied nearly 900 acres, including north-eastern parts of Melbourne Gardens, and was known as the "Yarra Mission". At the mission, administered by George Langhorne and his wife, Aboriginal children were fed, and adults were provided with rations in exchange for work. The mission operated until 1839 when Police Magistrate, William Lonsdale ordered that it be closed after an altercation with Langhorne. It is unclear where the Aboriginal people went upon closure of the mission, but some people continued to camp at *Tromgin* within the site of the present-day Melbourne Gardens[12].

Land for the Gardens was reserved for botanic gardens purposes in 1846 and the same year a new Aboriginal mission site was established on the Merri Creek, with many Aboriginal people in Melbourne moved to the new mission. It is likely that Aboriginal people continued to camp at *Tromgin* into the 1850s as it was an established camping site, and away from the CBD, where Aboriginal people were discouraged[13].

By the 1850s the number of Aboriginal people in Melbourne had fallen dramatically, and the Woiwurrung and Boonwurrung peoples were relocated elsewhere. In 1863, after the failure of an Aboriginal reserve at Acheron, a large area near Healesville known as Coranderrk was selected and set aside for an Aboriginal reserve. Among those who settled there was William Barak, who had attended Langhorne's school at the Melbourne mission.

Sketch from Punt Road looking towards the Melbourne Gardens, 1875
Image courtesy of State Library *The First Punt* by Wilbraham Frederick Evelyn, of Victoria

Following the *Yarra Improvement Act 1896*, intended to reduce damage caused by flooding, the course of the Yarra River was straightened. This enabled the acquisition of a large portion of land to the north side of the Gardens, and the main lagoon to be separated from the river to form an enclosed lake. Through this process much of the native vegetation and landscape was lost, although today a small number of ancient River Red Gums (*Eucalyptus camaldulensis)* and thickets of Swamp Paperbark (*Melaleuca ericifolia*) survive.

As the land now occupied by Melbourne Gardens and Domain Parklands remained undeveloped for many decades, it continued to be used by the Aboriginal people for much longer than most places in central Melbourne. To this day, the Gardens continue to represent a remnant, albeit an altered one, of the Aboriginal landscape and a link to past Aboriginal land use. The Aboriginal Heritage Values document, commissioned by Royal Botanic Gardens Victoria in 2017 and developed in consultation with the Traditional Owners, identifies these associations and paints a strong picture of a living landscape with ongoing connections to Country for the Woiwurrung and Boonwurrung peoples.

3.2

DEVELOPMENT OF BOTANIC AND PUBLIC GARDENS

The European colonisation of Australia corresponded with a time of increased botanical and horticultural interest within the British Empire. Previously unknown species of plants were being collected from newly discovered areas of the world and botanic gardens were being established as adjuncts to educational institutions in England (at Oxford) and on the Continent (Padua)[14]. With the abundance of new species being introduced to horticulture, plant collection and display, especially of the new and unusual, became somewhat of a British national passion; nowhere was this passion more publicly displayed than in botanic gardens.

In the south of England this enthusiasm for plant collection centred around Kew[15], encouraged by Royal patronage. By the time of European settlement of Australia, Kew Gardens had become a scientific centre[16], spurred on by both economic and scientific pursuits. The influence of what became Royal Botanic Gardens Kew was critical in the establishment of botanic gardens in Australia and by the 1850s major botanic gardens had been developed in Sydney, Hobart, Melbourne and Brisbane[17].

In their original context, botanic gardens were scientific centres, where plants were displayed according to various botanical systems, rather than as objects of ornamentation. Herbaria were built for the collection and preservation of pressed specimens, supplemented by botanical libraries[18]. These institutions were important for the new colony, as they provided a place for the collation and description of Australian botanical discoveries, as well as centres for trialling exotic species of potential economic and agricultural importance.

Over time, and especially in the Australian context, botanic gardens developed a secondary function as places for public use and enjoyment. As the industrial revolution led to cities becoming increasingly overcrowded and unhealthy, new ideas emerged about the importance of providing parkland for the recreation of the people. Green spaces were seen to have moral and health benefits, providing respite from the polluted and crowded cities and places where all classes could mix freely[19].

The result of this 19th century emphasis on public parkland can be seen throughout Australia, and in Melbourne's inner ring of public parks. The design of Melbourne Gardens represents the culmination of this way of thinking, where Ferdinand Mueller's rigid scientific layout was remodelled by William Guilfoyle into a picturesque landscape that merged both scientific function with public enjoyment.

The original course of Birrarung, showing the construction of Alexandra Avenue and the cut for straightening the river, 1898
Image courtesy of State Library of Victoria *Alexandra Avenue, formation 1898, new cut for straightening the river partly excavated*

The falls on the Yarra near present day Princes Bridge. The falls provided a barrier to the saline bay water until their removal in 1883
Image courtesy of State Library of Victoria *The ferry and the falls on the Yarra* by Wilbraham Frederick Evelyn

3.3

EUROPEAN SETTLEMENT OF MELBOURNE

The settlement of the Port Philip District of the colony of New South Wales was authorised by Governor Sir Richard Bourke in 1836, one year after John Batman and John Pascoe Fawkner had individually arrived from Tasmania and established unauthorised, and initially competing, claims on the territory[20]. The first township was established at Williamstown, but due to a lack of fresh water a new location was selected further inland on the northern banks of the Yarra River[21], where a small set of falls provided a barrier between the fresh water in the river and the saline in the bay. In 1837 the central grid of streets was laid out, the first land sales conducted, and the new town Melbourne, named in honour of the English Prime Minister, was born. Almost immediately land started to be set aside for public parks and gardens, in keeping with Victorian ideas on the benefits of public open space. Flagstaff Gardens, although originally a cemetery, was a popular public resort by the 1840s, Fitzroy Gardens was set aside in 1848, Royal Park in 1854 and Carlton Gardens in 1855. However, the first of these dedicated public gardens was the Domain, set aside as parkland in 1841[22].

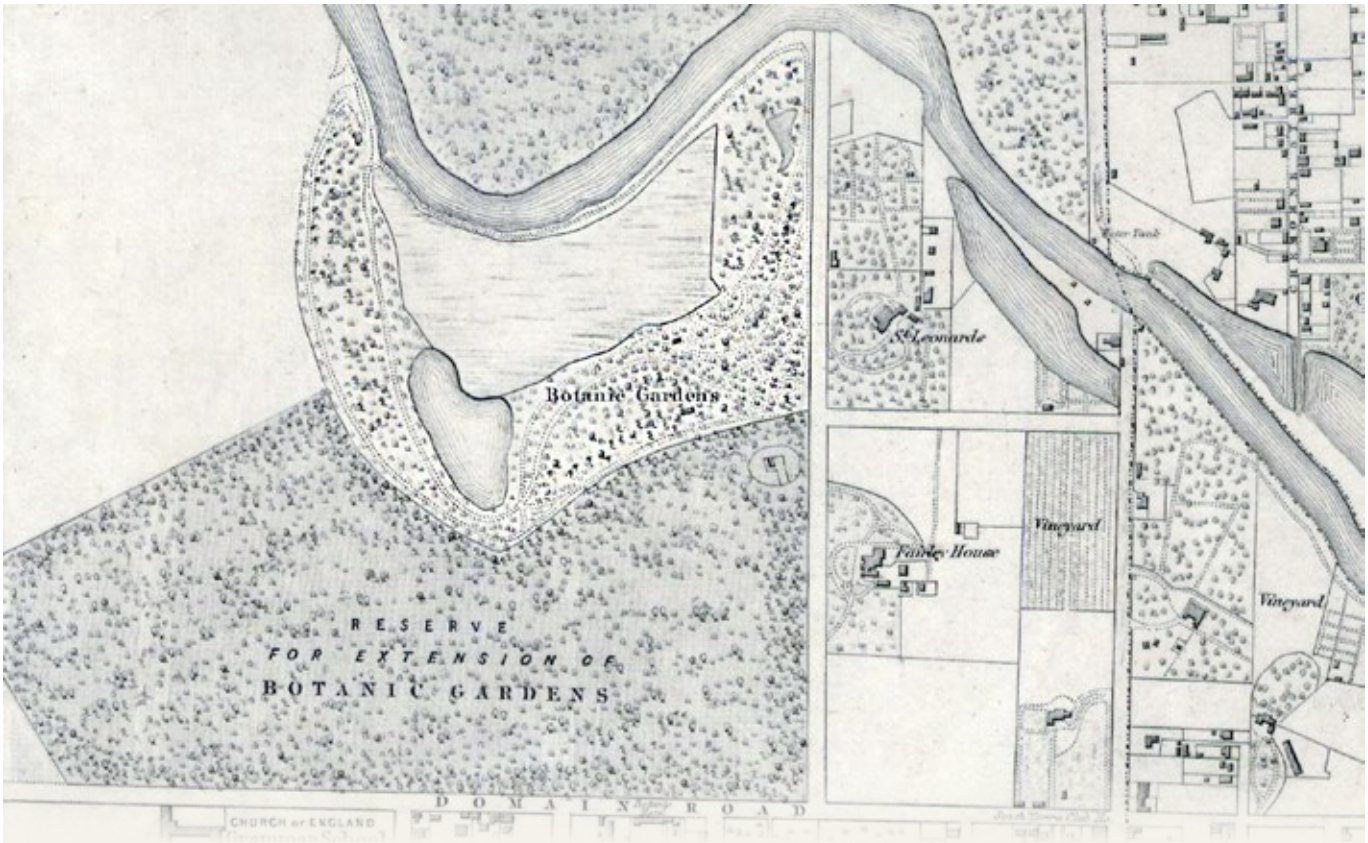
In keeping with the British idea of establishing large park lands, or 'Domains', around royal or aristocratic estates, 83 acres were set aside on the southern banks of the Yarra for 'Government House and Grounds'. The site was selected by Superintendent Charles Joseph La Trobe, in anticipation of the Port Phillip district eventually becoming a separate colony.[23] The provision of large tracts of publicly accessible, landscaped grounds around vice regal residences can be found in many cities including Sydney, Adelaide, Cape Town and Vancouver. Frequently these Domains also became the site of botanic gardens, with Hong Kong, Sydney and Hobart botanic gardens all being located within the Governor's Domain. When a previous proposal to reserve Batman Hill (near present-day Spencer Street) for a botanic garden lapsed, Superintendent Latrobe selected an alternative site of 92 acres on the banks of the Yarra, adjacent to the Domain[24].

3.4

HISTORY OF MELBOURNE GARDENS

3.4.1
Selection of the Site

The site of the present-day Melbourne Gardens was reserved in 1846, just 11 years after the foundation of Melbourne. The land had been withdrawn from sale by Superintendent La Trobe during the depression of the 1840s, and when a new site was needed for botanic gardens, the land was identified by La Trobe as an appropriate site. The site was well-suited for development as a botanic garden. The shelter and northerly aspect of its small valley provided favourable horticultural conditions, its proximity to the town and new suburbs enhanced its accessibility, and the undulating topography and small stream flowing into a lagoon promised attractive landscape scenery. The reservation of the lands for botanic gardens was formally approved by New South Wales Governor Gipps in 1846, a date taken as the establishment of the Gardens. In the same year the Botanic Gardens Committee met for the first time, funds were allocated for the commencement of works and John Arthur was appointed the first Superintendent, a position he held until his death in 1849.



Earliest known plan illustrating the Melbourne Gardens, showing a parterre on the south-east bank of the lake, 1855
Image courtesy of State Library of Victoria *Melbourne and its suburbs* compiled by James Kearney

3.4.2 Beginnings: Arthur and Dallachy 1846–57

The first plan for the layout of the Gardens is thought to be by Henry Ginn, Clerk of Works to the Port Phillip District (1846–51) and later Colonial Architect (1851–53). As Secretary to the Botanic Gardens Committee, Ginn is thought to have drawn up a plan of the Domain and Botanic Gardens in 1846 and later designed the under-gardener's cottage (Plant Craft Cottage)[25]. He also produced the Gardens' first two annual reports.

Initial improvements of the Gardens were undertaken by the Scotsman John Arthur, who was appointed Superintendent in March 1846. The earliest works included planting around the lagoon and fencing and cultivating the ground below Anderson Street on a slope now known as Tennyson Lawn. This planting included the extant *Ulmus procera* on Tennyson Lawn, once a group of four trees known as Arthur's Elms and among the oldest surviving exotic specimens in the Gardens. To embellish the eastern entrance of the Gardens, a formal parterre garden with circular beds and ornamental plantings was developed with views over the lagoon to the city beyond.[26] This parterre can be seen on the 1855 plan of the site.

When Arthur died of cholera in 1849, just three years after his appointment, he was immediately replaced with another Scottish landscape gardener, John Dallachy who consolidated and extended the established framework. Dallachy maintained Arthur's parterre and continued to implement Ginn's plan of the site.[27] Major works included the development of a network of parallel paths that fitted the contours of the site, excavation of the lagoon and straightening of edges following severe flooding in 1849[28], construction of an under-gardener's residence (Plant Craft Cottage) in 1850, and a propagating glasshouse and nursery circa 1851.

Regarding planting, Arthur and Dallachy exploited the natural aspects of the site and combined exotic plants with indigenous vegetation, much of which was initially retained; a practice common in the early days of many of Melbourne's Parks. Dallachy in particular is credited for bringing a great interest in exploration and plant collecting to the Gardens. He made several expeditions across Victoria and New South Wales and is reputed to have found the headwaters of the Yarra River[29]. When Henry Ginn produced his 1852 report it included a catalogue of 1,420 taxa growing within the Gardens, including many native genera.[30]

During this period the Gardens served not only as a place of science, but as one of the few perceived pleasant public spaces available to the early settlers of Melbourne. The Gardens became a focal point for socialising, recreation, public celebrations and charity functions. When the declaration announcing Victoria's colonial separation from New South Wales was announced in July 1851, it was made under a spreading River Red Gum in the Gardens now known as the Separation Tree[31].

Portrait of Ferdinand Mueller while Director of the Gardens, c.1863
Image courtesy of State Botanical Collection

Mueller's System Garden with Gardens House in the background, 1869
Image courtesy of State Botanical Collection

3.4.3
The Botanist: Mueller 1857–73

In 1857 Government Botanist Ferdinand Mueller, later Baron Ferdinand von Mueller, was promoted to the role of Director of the Botanic Gardens. Mueller had been working closely with Dallachy, and on his appointment as Director, Dallachy became curator, concentrating on plant collecting.[32]

Mueller's 1853 description of the purposes of botanic gardens as '*an establishment for the diffusion of knowledge, for the experimental introduction of foreign plants into our adopted country or for multiplying the treasures which our flora offers and as a healthy locality for recreation'*, formed the basis of his vision for the Gardens. The Gardens' size, complexity and importance as a research centre for the colony grew rapidly under Mueller's directorship. Through his plant collecting and exchanges, Mueller built up a significant collection of plants for the Herbarium and Gardens. He also established international and regional links with other botanical institutions.

Mueller carried out an ambitious program for the Gardens' scientific development. An early project was the development of an elaborate parterre system garden in the western area of the Gardens. A wide range of plants were also cultivated for experimental purposes, including plants of possible economic value to the colony, or of broad horticultural interest. In addition, Mueller grouped native and exotic trees in collections, the most notable being a pinetum on the western slopes of the reserve now known as the Hopetoun and Huntingfield Lawns.

An extensive building and landscaping program was undertaken including a substantial network of tree-lined walks, an iron perimeter fence, a conservatory and propagating house, offices and residences, the Yarra foot bridge (later replaced by Morell Bridge), an aviary, animal enclosures, and the Museum of Economic Botany.

A new bandstand was built which became a focal point for social occasions, alongside other ornamental features such as bowers, rockwork, grottoes, rustic bridges and flower borders. The lagoon was treated as both a picturesque landscape feature and a sanctuary for birdlife, with the north-east area developed as a picnic ground.

While Mueller's scientific achievements were widely recognised there was an increased public disapproval about his horticultural expertise and taste in landscape gardening[33]. Mueller believed plants to be naturally lovely and did not see the creation of a beautiful landscape to be an object in itself; instead aiming to educate the public through the creation of a system garden and plant labels[34]. However, this did not mean that the public were unwelcome, as he saw the Gardens as a healthy location for public recreation and people still visited in their thousands.

Mueller's lack of concern with landscape beauty and recognition of public taste in Gardens was eventually to be his downfall. By 1870 public discontent had increased to the point where a Board of Inquiry was set up to review the Gardens' management, with the ultimate finding that while Mueller had assembled a valuable plant collection, he had not managed the gardens "*as to give general satisfaction*". In 1873 Muller was asked to resign as Director, although he continued his work as the Government Botanist, a position he held until his death in 1896. His eventual replacement as Director of the Botanic Gardens was his talented young protégé, William Guilfoyle.

3.4.4
The Designer: Guilfoyle 1873–1909

Born in Chelsea, London in 1840, Guilfoyle already had extensive experience when appointed 'Curator of Botanic and Domain Gardens', although aged only 33. As the eldest of 11 surviving children he had worked at his father's Double Bay nursery from a young age and undertaken plant collecting trips to northern NSW and Southern Queensland. In 1868 he joined a British war ship on a five-month tour of the South Pacific, producing a series of water colour sketches and detailed account of the journey which so impressed Mueller that he forwarded it to London for publication. On his return the family selected 250 hectares of land on the Tweed River as a sugar farm and experimental nursery, and it was his work at the nursery and tropical garden that led, through an encounter with James Casey, Victoria's Commissioner of Crown Lands, to his appointment at Melbourne.

Although Guilfoyle shared Mueller's views on the scientific purposes of the Gardens, he believed its design should be balanced by recreational and aesthetic considerations, saying *'No necessity exists for allowing botanical correctness and landscape effect to clash in the development of the Melbourne Botanic Gardens. To combine the two … has been my design from the beginning … I have every confidence that the results will be a garden in which the facility of research and scientific classification will combine with the sterling beauties of the scenery.'*

Towards this end Guilfoyle swept away the initial garden layout, and extensively re-modelled the site to enhance its beauty. He favoured the picturesque tradition of 18th century English landscape gardens, where landscape elements were arranged to produce scenic views and resemble landscape paintings. This meant elegant, sweeping lawns, bold curves, handsome tracts of water and picturesque elements such as summer houses and bowers creating focal points in the landscape. Guilfoyle's genius partially lay in his ability to rationalise the High Victorian taste for ostentatious ornamentation with a gardenesque elegance and sensibility. The result was a "well-controlled rationalisation of Victorian garden ideals"[35], and the public approved.

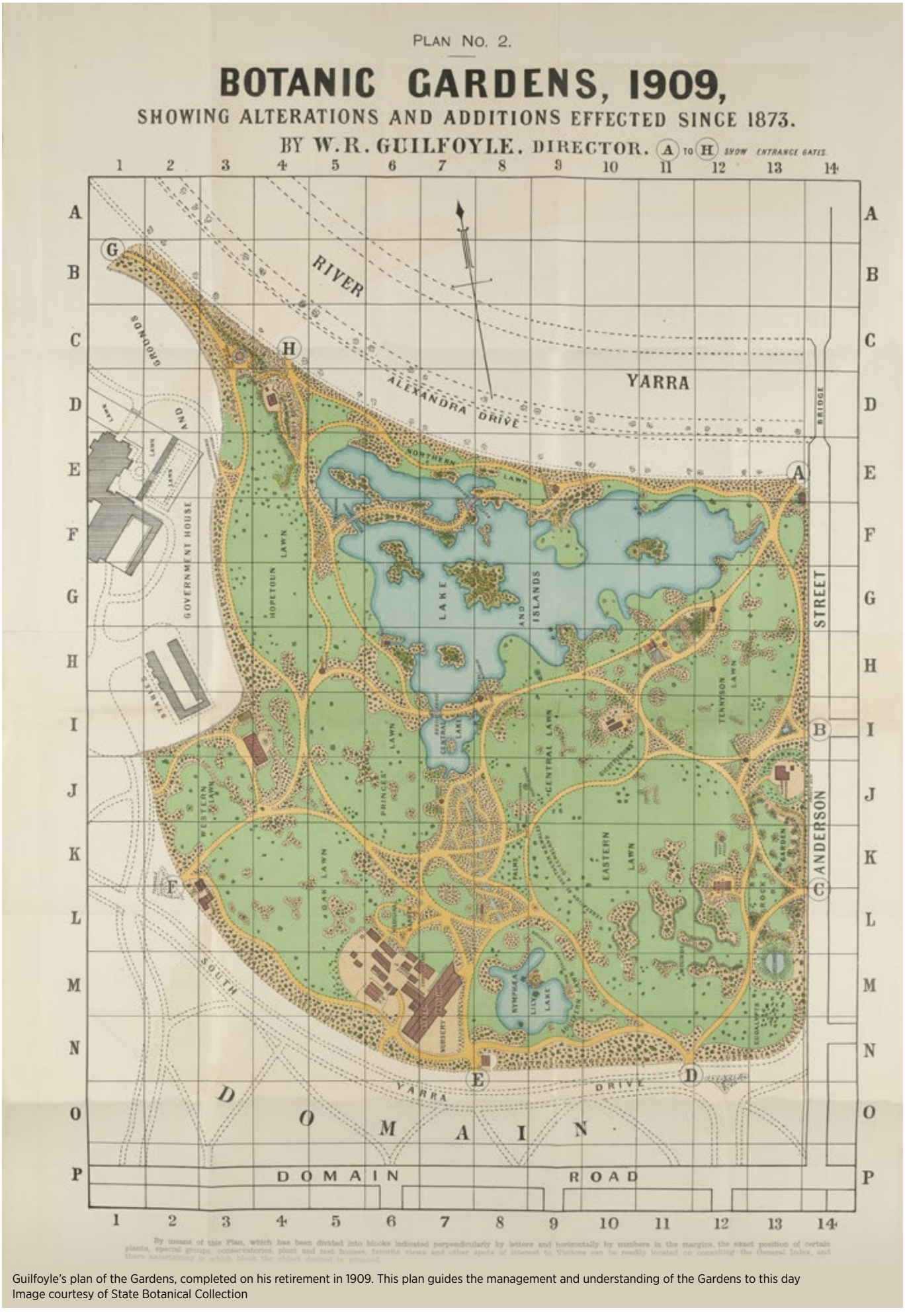
Guilfoyle reorganised Mueller's straight paths, lines of trees and isolated specimens into naturalistic clumps and massed plantings. He replaced the extensive tree-lined walks with a simplified network of curvilinear paths, established spacious lawns and transformed the lagoon into a clear, reflective lake. Significantly, Guilfoyle dispersed the taxonomic collections throughout the landscape to create picturesque effects. This approach, while by no means surrendering their scientific purpose to aesthetics, was inspired and created the integrated landscape that we know today.

The introduction of many gardenesque elements satisfied popular expectations of a pleasure garden including elaborate floral displays, specimen trees on lawns and ornamental garden structures including large pots as focal points in rockeries. Guilfoyle adopted the 'subtropical' bedding style that was widely used in Europe in the mid-19th century, with an innovative interpretation of the style using southern hemisphere plants. This interpretation established a distinctive, lush planting character. It is probable that Guilfoyle's experience of the subtropical flora of the Tweed River Valley and the Pacific Islands strongly influenced many of his landscape designs. Such influences are still visible in the volcano like design of Guilfoyle's 1876 bluestone reservoir, a cone-shaped feature built at the Gardens' highest point and with lava flow like garden beds cascading down the hill to the mounds.

In 1875, additional land was added from the Domain to the Gardens southern boundary, part of which Guilfoyle later developed as the Australian Border featuring mainly rainforest plants. Following the *Yarra Improvement Act 1896* the Yarra River was deepened and straightened to control flooding, with works being completed in 1900. This significantly altered the northern boundary of the Gardens and prompted major redevelopments in the area, including the final stage of the lagoon's transformation into the Ornamental Lake. Guilfoyle's legacy of a unified landscape gave the Gardens a strong design framework for its future development. This framework has endured under successive Directors and defines the character of the Gardens to this day.

Portrait of William Guilfoyle while Director of the Gardens, c.1900
Image courtesy of State Botanical Collection

Guilfoyle's classically inspired Temple of the Winds, c.1907
Image courtesy of State Library of Victoria *Botanic Gardens, Melbourne*



Guilfoyle's plan of the Gardens, completed on his retirement in 1909. This plan guides the management and understanding of the Gardens to this day
Image courtesy of State Botanical Collection

3.4.5
Consolidation: Cronin, Laidlaw, Rae, Jessep 1909–57

When William Guilfoyle retired as Director of the Gardens in 1909 the landscape bore little resemblance to the botanically correct, but architecturally rigid landscape of Mueller's time. One of Guilfoyle's final tasks was the production of a plan of the Gardens showing the *"Alterations and Additions Effected since 1873".* This plan shows a cohesive, ornamental landscape with strong gardenesque and picturesque characteristics, and has formed the basis of future understanding of the landscape and interpretation of Guilfoyle's design.

Guilfoyle's successors, John Cronin (1909–21), William Laidlaw (1923-25), Frederick Rae (1925–41) and Alexander Jessep (1941–57) oversaw a time of relative stability for the Gardens, faithfully maintaining the inherited landscape design, though with some difficulty during the war years. However, the influence of personal horticultural preferences had a considerable impact on the planting character. Some of the most obvious changes occurred under Jessep's direction. Many boldly planted rockeries were exchanged for massed displays of finer textured plants, particularly camellias, azaleas and rhododendrons; while palms, a favourite of Guilfoyle, were disliked by Jessep who instructed that they were no longer to be used as memorial trees. A small land parcel (0.7 hectares) was added to the north-west area of the Gardens from Government House Reserve in 1933. The site was treated essentially as an arboretum with conifers and some eucalypts and was named the Huntingfield Lawn, in honour of the then Governor, the first born in Australia.

In 1934, a new herbarium was constructed as a gift from Sir Macpherson Robertson, an Australian businessman and philanthropist, to celebrate the centenary of European settlement in Victoria. The new herbarium development included the addition of extra land to the Gardens and the erection of new gates (F Gate) that had originally stood in Carlton Gardens. In 1946 a cactus garden, now called the Arid Garden, was created on the site of Guilfoyle's Eastern Lawn Palm House.

3.4.6
Rationalisation: Pescott, Churchill, Taylor 1957–1992

Following a request submitted soon after the visit of Queen Elizabeth II in 1954, the Gardens were granted permission to use the 'Royal' prefix in 1958. Guilfoyle's landscape framework remained largely intact over the next 40 years, although the effects of time, modernisation, ad hoc development and shifting expectations of the landscape resulted in some changes to its overall character. As vegetation matured, the scale and sense of enclosure within the Gardens altered. Diversity in the understorey was lost as trees aged, and demand to find suitable locations for new trees put pressure on the landscape, leading to inappropriate tree placement and the loss of significant views.

This period saw a dilution of the distinct taxonomic groupings that characterised Guilfoyle's era and an increase in geographic, ecological, conservation and horticultural themes, reflecting the wider scope of modern scientific enquiry and the changed role of botanic gardens. Meanwhile, there was a reduction in the number of feature floral displays, possibly

Her Royal Highness Queen Elizabeth II planting a *Lophostemon confertus* on Hopetoun Lawn, 1954
Image courtesy of State Botanical Collection

The Ellis Stones Rockery shortly after it was replanted from its original alpine concept, 1970
Image courtesy of State Botanical Collection

due to changing tastes and the need to reduce maintenance.

Under Pescott's Directorship several alterations occurred, which diluted Guilfoyle's picturesque landscape. These changes responded to larger maintenance problems and were typical of the era. The cruciform Bougainvillea Rest House was demolished and replaced with the Clematis Shelter, A Gate Lodge was demolished, and the original Gardens' residence at B Gate Lodge was replaced with a modern building in 1964. Perhaps the most significant of these changes was the replacement of Guilfoyle's romantic, single arched Eel Bridge and those on Long Island with strictly utilitarian and low maintenance concrete and steel structures in 1966–67. Another development during this period was the rockery constructed by celebrated landscaper Ellis Stones in 1967. This rockery was intended for small, European rock plants, but the micro-climate was found to be unsatisfactory and it was replanted in 1970.

In 1970 Pescott retired and was replaced by David Churchill in 1971. Churchill was the last Director to live in Gardens House and held the post for 15 years. Developments under Churchill included the Herb Garden (1983), Grey Garden (1985), and most significantly, the construction of the Tea Rooms. The lakeside location had been used as a Tea House since 1900, however the 1975 development was considerably larger than the small kiosk destroyed by fire in 1970. In 1981 Plant Craft Cottage was established in the 1850 under-gardener's cottage near H Gate, on the edge of the Bluff Rockery. Churchill retired in 1986, and was replaced by John Taylor, who was appointed Manager and Acting Director pending appointment of the Board.

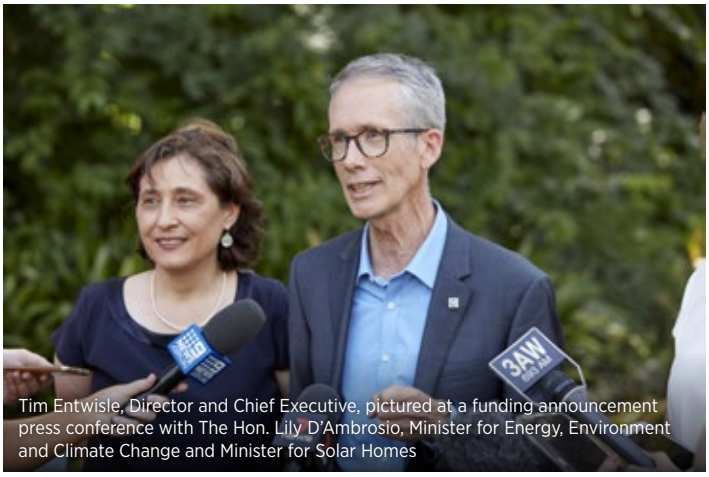
During this period there was a growth in education and interpretive services, which explained the collections and the Gardens' history and roles to the public. This period also generated considerable community support for the Royal Botanic Gardens, with the Friends of the Royal Botanic Gardens Melbourne established in 1982. This group continues to be a generous supporter of Gardens' projects.

A revival of outdoor performances occurred during this period. The first production of Shakespeare in the Gardens took place in 1987, followed by the annual live performance of *Wind in the Willows* two years later. Moonlight Cinema on Central Lawn, overlooking the Central Lake commenced in 1994.

In the 1980s a Government inquiry recommended the establishment of a Board to manage the Gardens for the people of Victoria. The Royal Botanic Gardens Board Victoria was subsequently established as a statutory authority under the *Royal Botanic Gardens Act 1991*, which also made provision for the roles of Director and Chief Executive of the Gardens and Chief Botanist.

As a result of the Act, 1992 saw a number of changes at Melbourne Gardens. During this year the Gardens came under the responsibility of the Board, management of the 2.4 hectare Melbourne Observatory was transferred to the Gardens, and Dr Philip Moors was appointed Director and Chief Executive, a post he held until 2012.

Phil Moors with staff planting a *Eucalyptus pulchella* to mark 20 years of service, 2012



Tim Entwisle, Director and Chief Executive, pictured at a funding announcement press conference with The Hon. Lily D'Ambrosio, Minister for Energy, Environment and Climate Change and Minister for Solar Homes

3.4.7 The Last 28 Years: Moors and Entwisle and Boards 1992–2020

Many new developments at Melbourne Gardens have occurred in the last 28 years, along with an increased recognition of the importance of bringing strategic planning and scientific process to the management of the living landscapes. These changes have been overseen since 1991 by the Royal Botanic Gardens Board Victoria, led by led by Mr William Irvine (1992-1997), Mr David Adam (1997-2005), Ms Elaine Canty AM (2005-2013), Mr Ken Harrison AM (2013-2020) and Mrs Chris Trotman (2020 onwards). Early projects from this period include the automation of the irrigation system (1993-94), the Australian Rainforest Collection (1994), the Tea Rooms expansion (1994) and the Observatory Gate redevelopment (1999).

At the initiative of Dr Moors, guided by the Board, the first Master Plan for the Gardens was produced in 1997 and outlined a number of projects to be implemented over the next 20 years, including the Perennial Border renewal (1998), Green Organics Recycling Centre (1998), Species Rose Collection (1999), Long Island (2004), Public Toilets (2006), Guilfoyle's Volcano (2010), Working Wetlands (2012) and Fern Gully Restoration (2015). Another significant change in this period was the appointment of a Landscape Architect, who became responsible for the design of the site, replacing the Director's role as designer in chief.

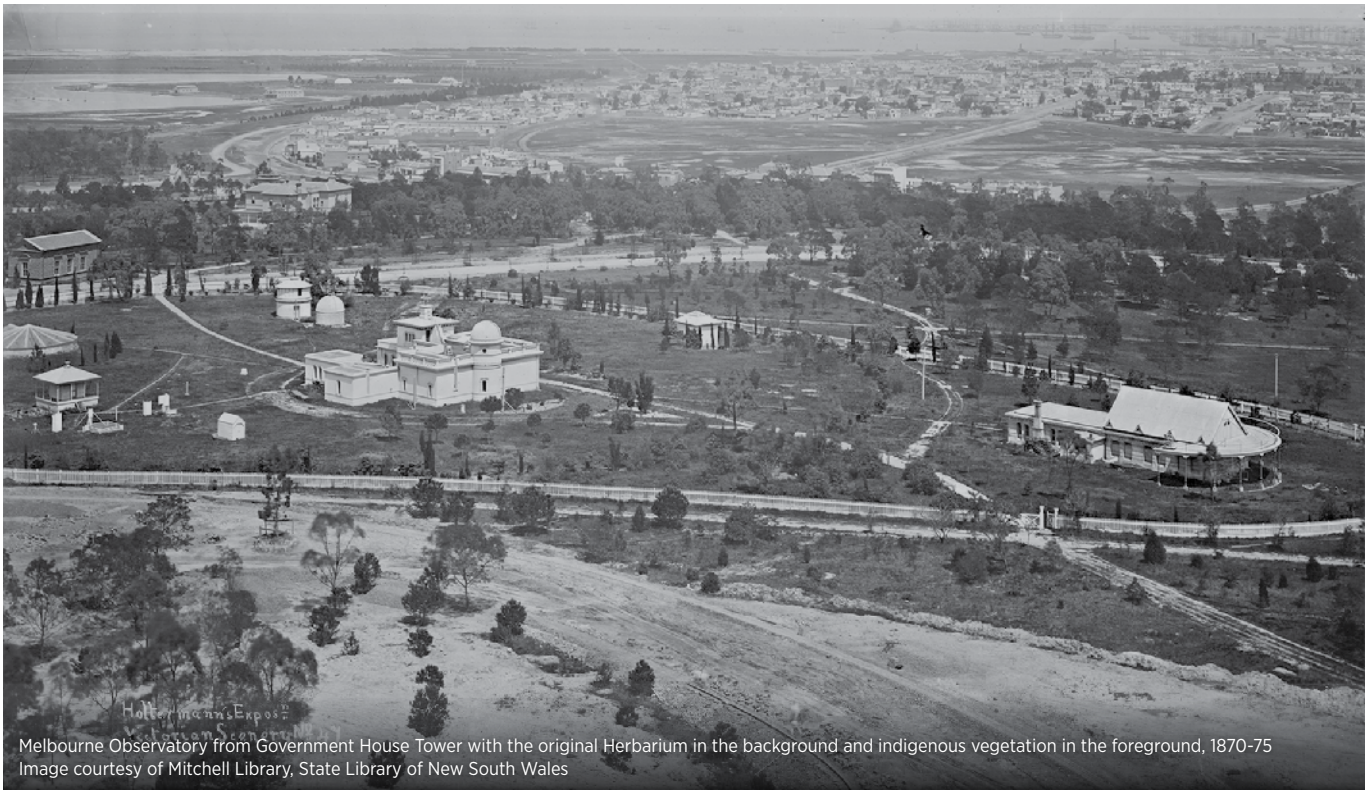
Completed in 1999, Observatory Gate was a significant new development to link the Melbourne Observatory to the rest of the Melbourne Gardens. Works included a new western link path through Western Lawn, a new entrance gate (Observatory Gate), and the then award-winning building by Peter Elliot housing the Observatory Café, Visitor Centre and Gardens Shop. In 1998, another opportunity emerged for the Gardens, with the transfer of a parcel of land from Kings Domain South (between the Melbourne Observatory and the rest of Melbourne Gardens), to the Royal Botanic Gardens Victoria. This 0.7 hectare site became The Ian Potter Foundation Children's Garden, which was opened with much acclaim in 2004. The garden was designed by Landscape Architect Andrew Laidlaw and has become the benchmark for children's gardens in Australia. Both Observatory Gate and the Children's Garden fell outside the scope of the 1997 Master Plan but were compatible with the planning objectives of that time.

The Gardens faced new challenges in the 1990s as it responded to an outbreak of the highly infectious pathogen fire blight (*Erwinia amylorora*) in 1997, and the over-population of the Gardens colony of indigenous Grey-headed Flying Foxes. This colony had begun to gather in the Gardens in the 1980s, growing so rapidly that it caused significant damage to the mature trees in the Fern Gully and on Oak Lawn. In 2003, with the assistance of the then Department of Sustainability and Environment, the bats were systematically relocated from the Gardens to a native bushland area in Yarra Bend Park. Meanwhile the first stage of the award-winning Australian Garden was opened at the Royal Botanic Gardens Victoria's Cranbourne Gardens in 2006, with the second stage completed in 2012.

During the millennium drought (1996–2010), the Gardens struggled with water security and algal blooms. In a move to reduce its dependence on potable water, the Working Wetlands project was implemented, harvesting water from surrounding streets and treating it by continued circulation through planted treatment systems. As part of this work Guilfoyle's reservoir, long overgrown and off limits to the public, was restored in 2010 as a contemporary interpretation of his original vision of a volcano spilling garden beds and rocks across the Gardens' highest point. Both projects were highly successful, with about 40% of the Gardens irrigation water now coming from non-potable sources, a reduction in algal outbreaks, and Guilfoyle's Volcano becoming one of the Gardens' most popular visitor attractions.

On the retirement of Dr Philip Moors, botanist and experienced botanic gardens executive Professor Tim Entwisle became the new Director and Chief Executive in 2013. Professor Entwisle and the Board brought a new vision for Melbourne Gardens—instigating a plan for a Nature and Science Precinct to integrate the Melbourne Observatory with the rest of Melbourne Gardens. A new organisational vision and mission (2014) and visual identity (2015) for Royal Botanic Gardens Victoria were created. In 2014, the Children's Garden celebrated its 10-year anniversary with festivities and additional landscape work supported by The Ian Potter Foundation.

By this time one of the few remaining Master Plan recommendations to be fulfilled was the restoration of Guilfoyle's historic Fern Gully. This iconic and much-loved landscape had languished under the pressures of drought, Flying Fox infestation and pathway deterioration. Works for the pathway renewal were completed in 2015, and Fern Gully, once again, become a show piece of Melbourne Gardens. Designed by Andrew Laidlaw,



Melbourne Observatory from Government House Tower with the original Herbarium in the background and indigenous vegetation in the foreground, 1870-75
Image courtesy of Mitchell Library, State Library of New South Wales

initial works included the installation of accessible steel boardwalks, timber seats, ornamental bridges and new plantings, followed by the construction of three health and wellbeing gardens in 2019. These gardens added another layer to the Melbourne Gardens experience; being intimate, personal spaces in the middle of a public garden.

Earlier in the decade, the Gardens struggled with vandalism. The William Tell Rest House and Lakeview Rest House were set alight in 2014, and there were attacks on several historic trees and valuable plants, especially around the Arid Garden and Guilfoyle's Volcano. Most significant of these incidents were the 2010 and 2013 ringbarking of the historic River Red Gum known as the Separation Tree, which ultimately led to its death in 2015.

A more widespread threat to the Gardens is the ongoing risk of climate change, with RBGV at the forefront of botanic gardens landscape succession planning. The *Landscape Succession Strategy Melbourne Gardens 2016–36* provides for the transition of the landscape to one more suited to future climate predictions, while still maintaining the important Guilfoylian character and quality of the Gardens.

3.5

HISTORY OF MELBOURNE OBSERVATORY

Midway through Mueller's tenure as Director, and while the Botanic Gardens was at the height of its early development, the Melbourne Observatory moved from its original site at Williamstown to a new location up the hill from the Gardens, on the southern boundary of Government House. The Observatory, together with the Botanic Gardens, was part of a number of scientific institutions essential to a new colony. As a southern hemisphere outpost, the Observatory could contribute to broader scientific knowledge and mapping of the skies, but of equal importance was its role in the smooth operation of Melbourne's daily life.

The Melbourne Observatory acted as the centre for all scientific measurement in the colony. As well as including astronomical equipment, it coordinated meteorological observation stations, recorded tides, terrestrial magnetism and seismic activity, published tide charts and weather forecasts, maintained standard weights and measures; and established the grid of fixed markers used in the survey of Victoria and beyond. Its principal function however was the keeping and dissemination of accurate time, essential for safe ship navigation.

The original site at Williamstown was found to be unsuitable so an alternative site was proposed within the Domain. This dissatisfied Mueller who had plans to make the entire Domain an extension of the Botanic Gardens. In a ploy to keep the Observatory out of his way, Mueller proposed excising an area of land from Government House Reserve. This backfired when the plan was enthusiastically supported by Governor Barkly, and construction of the Melbourne Observatory occurred between 1861 and 1863, overseen by the Observatory's first Director, Robert Ellery.

Melbourne Observatory became fully operational in June 1863, when the transfer of staff and equipment from Williamstown was completed. The Observatory continued to grow and for nearly 80 years carried out important scientific research, and provided scientific data essential to industries—ranging from shipping to farming, business, exploration and politics. Over this time, it was associated with several prominent scientists such as astronomer's Robert Ellery, Piertro Baracchi and Joseph Baldwin.

The 1874 Transit of Venus lead to the installation of the Photoheliograph (1873) and South Equatorial instruments (1874), part of a concerted, world-wide project that yielded information new to science. The Photoheliograph is thought to be the only surviving example from a world-wide

Great Melbourne Telescope House with roof retracted, c.1875
Image courtesy of Melbourne Observatory Collection, Museums Victoria

set of instruments constructed for the purpose of observing the Transit, and potentially the world's oldest operating astronomical camera.

In 1869 Melbourne Observatory acquired the most significant of its telescopes, the Thomas and Grubb built Great Melbourne Telescope, which for 30 years was the largest fully steerable telescope in the world. The installation of the telescope in 1869 was met with much public excitement and scientific expectation, however discoveries were limited due to a combination of complex scientific commissions, budget cuts, problems publishing findings, and tarnishing and flexure of the mirrors. Despite these problems it continued to be operated by dedicated observers until 1892.[36] In 1875 Sir George Biddell Airy, the Astronomer Royal, concluded that "*the Melbourne Observatory had produced the best catalogue of stars of the Southern hemisphere ever published*." [37]

In 1889 a new building was constructed to house the double telescope Astrograph, installed as part of a massive international *Carte du Ciel* (Astrographic) scientific project to observe and catalogue the entire sky. Over the next 25 years the sky was systematically photographed by the Astrograph, and in 1900 the painstaking measurement and cataloguing of the plates commenced[38]. By 1930 only three volumes, of the eventual five, required for the Melbourne Observatory to complete its work had been published[39], and the cataloguing of the final plates was eventually completed elsewhere when the Observatory closed in 1945.

The work of the Melbourne Observatory was not limited to astronomical observations. The first official weather forecast in Australia was issued from the Observatory by Robert Ellery in 1881, and tidal predictions for Port Phillip Bay calculated from 1857 to the Observatory's closure in 1945. In 1857 the Observatory became home to the Victoria Geodetic survey, established to precisely locate latitude and longitude for cadastral surveying. The Observatory also played a vital role in the exploration of Antarctica in the early 20th century, by providing the basis for magnetic surveys and time signals used to determine the location of Mawson's base camp[40]. It was also known for its pioneering employment from 1898 to the early 1930s of a team of women as civil service employees to do technical and mathematical work, an innovation that helped empower women in Victoria and Australia.

In 1932, with the Great Depression rife, a Commonwealth decision was made to close many of the State observatories and rationalise their functions into Perth and Mount Stromlo. The Second World War offered the Melbourne Observatory a short-lived stay, being used by the National Time Service and hosting an army branch dedicated to growing herbs for military and pharmaceutical purposes.[41] In 1945, however, the Melbourne Observatory was finally closed, the Great Melbourne Telescope sold to Mount Stromlo[42], and the temporary reservation of the site for observatory purposes was revoked. After this time the Great Melbourne Telescope continued its scientific work in Canberra with great success, until much of it was destroyed in the devastating bushfires of January 2003.

From a landscape perspective, the Melbourne Observatory site has had continuous management input from the adjacent Botanic Gardens, with Ellery going so far as to (unsuccessfully at that time) propose in the 1880s that the Botanic Gardens take over responsibility for the Observatory grounds.[43] Although Mueller originally opposed the construction of the Observatory on the site and had to modify his plans for the Domain to accommodate it, [44] he was later instrumentally involved in the early planting.

In its earliest days suppression of dust from the neighbouring St Kilda Road, which interfered with equipment and observations, was the primary concern of Government Astronomer Robert Ellery, and Mueller consequently provided a "*rapid-growing W. Australian* Eucalyptus calophylla *(Marri) and of eligible elegant pines for the purpose*"[45]. Ellery continued to expand the shrubbery and planting,

Main Observatory Building and landscaping, c.1908
Image courtesy of State Library of Victoria *The Melbourne Observatory*

frequently calling for more planting to suppress the dust, and continuing to work with Guilfoyle after Mueller's dismissal.

Prior to 1876, access to the Melbourne Observatory was from north-east, but with the construction of Government House this was re-orientated, and the entrance drive from Birdwood Avenue established, forming a cul-de-sac around the Main Observatory Building. As a result, the grounds were heavily disturbed, and Ellery requested that the new Director of the Botanic Gardens, William Guilfoyle, include the re-landscaping of the Observatory into his wider plans for the Gardens and the Domain. This occurred in 1877–78, with Guilfoyle overseeing the re-establishment planting and layout of the drives[46].

It was not until 1889, 27 years after Mueller's above mentioned letter, that Ellery was satisfied with the landscaping; the extent of which is visible in an 1885 plan of the site. This plan, initialled PB, shows a direct, utilitarian path system, garden beds stylistically typical of Guilfoyle, and dense perimeter planting. Around 1900, however, the new Government Astronomer, Pietro Baracchi, was less concerned with dust suppression and arranged for the removal of several trees which were interfering with views of "*celestial objects at low altitudes*"[47].

In 1978, the land was re-reserved as a site for Public Park, Gardens and Herbarium and in 1992 the land was formally transferred to the management of the RBGV Board. In 1999 a significant redevelopment took place. Known as Observatory Gate this work cost $2.9 million and included a new entrance to Melbourne Gardens, an entry forecourt and a new building housing a café, the Gardens Shop and Visitor Centre. As part of this work (and due to irreparable damage and asbestos concerns) the Zeiss House, owned by John Monash, was removed from the site.

From 1936 to the current day, the Astronomical Society of Victoria (ASV) has had a presence on the site, and from its closure in 1945 it has worked with Museums Victoria and RBGV in its ambition to re-open the buildings to the public and conduct astronomical demonstrations and night sky tours. This function continues, and with the support of Museums Victoria, ASV volunteers are reconstructing the Great Melbourne Telescope, which was badly damaged in the 2003 Canberra bushfires. Pending funding, the return of the Great Melbourne Telescope to its original home at Melbourne Gardens is planned to occur in 2023–2025, with the Gardens receiving Commonwealth heritage funding in 2017 and 2018 to commence restoration of the building and reactivation of the retractable roof.

3.6

HISTORY OF THE NATIONAL HERBARIUM OF VICTORIA

The National Herbarium of Victoria was commenced by Ferdinand Mueller on his appointment as Government Botanist in 1853. While always physically connected to Melbourne Gardens, it was under separate administration for a period of 50 years.

As Government Botanist, Mueller was employed specifically by Governor La Trobe to undertake a scientific survey of the native flora and to create a publicly owned herbarium collection— the first public herbarium collection in the country and the first appointment to such a role. Prior to this, all specimens (including those from Cook's and Flinders' voyages) had been sent to European herbaria. While several people before Mueller, such as Allan Cunningham at Sydney, had held the role of Government Botanist, their brief had been to collect specimens for British herbaria, and not, as was Mueller's case, to create a public record to remain in the colony.

In 1860 the first Herbarium Building was completed in what is now Kings Domain South. Referred to by Mueller as the "Botanical Museum" the bluestone building was to the rear of the current day public toilets, near the Shrine of Remembrance. The rest of the year was spent fitting out the building, and

The newly constructed National Herbarium of Victoria Building, c.1934
Image courtesy of State Library of Victoria *National Herbarium, Royal Botanic Gardens, Melbourne*

the herbarium collection was moved in January 1861. Almost immediately Mueller recognised that the building was too small, but it was not until 1883–84 that the building was substantially extended. An iron annex was added to accommodate the material of the Sonder herbarium, which Mueller, after 22 years of lobbying, had finally convinced the Victorian Government to purchase.

In 1896 Mueller died in office and George Luehmann succeeded him as Acting Curator. At his death the herbarium contained nearly one million specimens. In the December of that year the herbarium was officially named the National Herbarium of Victoria, and a third wing of the building was added three years later in 1899.

When Mueller was dismissed as Botanic Gardens Director in 1873, the administration of the herbarium was separated from that of the Gardens. In 1892 Guilfoyle went so far as to open his own Museum of Economic Botany and Plant Products inside F Gate. It was not until 1923, when the Government Botanist William Laidlaw was appointed Acting Director of the Botanic Gardens, that the administration was again combined.

In 1934, a new Herbarium building was constructed inside F Gate, a gift from philanthropist Sir Macpherson Robertson in celebration of Victoria's centenary. In 1935 Guilfoyle's herbarium, maintained by the Botanic Gardens, was amalgamated with the National Herbarium collection and the specimens and library transferred from Mueller's herbarium in the Domain to the new building. The original building in the Domain was eventually demolished (date unknown).

In 1988 the Herbarium was again space restricted, and a circular annex and basement was added to cater for the growing collection as part of Australia's bicentenary works. The extension required the layout of Western Lawn to be modified and was funded by the R.E. Ross Trust. By 2007, RBGV again identified issues with Herbarium overcrowding. Ten years later these space constraints had reached critical levels, with irreplaceable scientific specimens being stacked on top of shelves[48], stored on tables and filling all sundry spaces in the Herbarium[49]. This lack of proper storage facilities led to irreparable damage to the specimens through a series of pest infestations in the non-secured collection. As a result, the *Royal Botanic Gardens Victoria Corporate Plan 2014-2019* prioritised planning and securing funds for a new herbarium building. This resulted in the investment in 2019 of $5 million by the Victorian Government to not only plan and design a secure vault for the State Botanical Collection beneath Western Lawn, but to use this project to engage Victorians more deeply with the collections, programs and activities of RBGV.

4 Melbourne Gardens Today

The Melbourne Gardens sit in the heart of the city
Image courtesy of The City of Melbourne

Today the Melbourne Gardens sit as a sanctuary in the city, a treasured green refuge enjoyed by generations of visitors and supporting diverse ecological systems in the heart of a major urban centre. The following provides a snapshot of the Gardens in 2020, including how it sits in the broader Melbourne and world context. This information provides the background and rationale behind the recommendations made by the Master Plan.

4.1

GARDENS SURROUNDS

Melbourne Gardens sit within the Domain Parklands, contributing to the network of parks and gardens encircling Melbourne and reserved for public use since the 19th century. In addition to the Domain, these include the Fitzroy, Treasury, Flagstaff and Carlton Gardens adjacent to the city grid; Yarra Park in Richmond; Fawkner Park in South Yarra; Albert Park in South Melbourne and Royal Park in Parkville. In most cases this ring forms an open space boundary between the commercial city centre and the residential inner suburbs.

Domain Parklands forms a continuous swathe of over 120 hectares of public open space starting at the southern end of the city grid. Government House, the Sidney Myer Music Bowl, the Shrine of Remembrance and Melbourne Gardens all sit within the Domain and are separately managed. Parkland within the Domain is managed by the City of Melbourne and is comprised of the Alexandra Gardens, Henley Reserve, Queen Victoria Gardens, Kings Domain and Kings Domain South. The Domain Parklands are generally planted in the gardenesque style, with a predominantly European tree canopy, sweeping pathways, decorative planting beds and landscape follies. The exception being the classically derived memorial landscape of the Shrine Reserve.

Melbourne Gardens are at the eastern end of the Domain, approximately two kilometres south-east of Melbourne's CBD, and comprising approximately 30% of the Domain Parklands. The site is bounded by Alexandra Avenue and the Yarra River to the north, the Anderson Street residential area to the east, Birdwood Avenue and Domain Parklands to the south, and Government House to the west. Small fingers of Melbourne Gardens land extend around the northern and southern boundaries of Government House and connect directly to the Kings Domain. Domain Road and a small commercial shopping strip lie approximately 100 metres to the south, separated from the Gardens by Kings Domain South. Two schools, Melbourne Grammar and Melbourne Girls Grammar are next to the Domain. A popular 3.8 kilometre running circuit known as the Tan Track encircles the Gardens and Kings Domain and is used by approximately 4000–6000 visitors every day[50].

Plan of the Melbourne Gardens, 2020

4.2

REACHING MELBOURNE GARDENS

4.2.1 Getting to the Gardens

Melbourne Gardens are easily accessible by vehicle with car parking provided on all road frontages, and bus parking on Anderson Street near A Gate, and on Birdwood Avenue opposite the Shrine. A taxi rank is located on Birdwood Avenue, near the intersection with Domain Road. Trams run regularly along St Kilda Road, however the nearest stop is a 600m walk uphill and is not wheelchair accessible. The shortest accessible route from public transport is 900m along Domain Road and through Kings Domain South to F Gate. The nearest train station is Richmond, an 800m walk from A Gate across Gosch's Paddock. These public transport access shortcomings are addressed through the Development Guidelines documented in this Master Plan, and through advocacy as civic infrastructure is developed outside the RBGV's land. The plan on page 33 illustrates all means of reaching the Gardens today.

In 2017, construction commenced on a new train station – Anzac Station, on the corner of St Kilda and Domain Roads. Once completed this station will be the closest to the Gardens and provide an opportunity to increase accessibility and visitor numbers. Opening of the new station is expected by 2025, together with the return of the tram route along Domain Road and improved bike lanes along St Kilda Road. In the interim, there will be significant disruptions to the tram network and road access along St Kilda Road, although the long-term benefits for Melbourne Gardens are considered to greatly outweigh the short-term reduction in access.

Melbourne Gardens Transport and Access, 2020

4.2.2 Arriving at the Gardens

Melbourne Gardens are accessed by 10 public gates and four staff-only vehicle entrances. Public gates are named alphabetically, starting with A Gate in the north-eastern corner and running clockwise around the Gardens ending with H Gate on the northern boundary. Two gates are individually named: Lych Gate, on land formally part of Government House, and the 1999 addition of O Gate at the Melbourne Observatory. Gate use varies across the site with O Gate, opposite the Shrine of Remembrance and near the Children's Garden, having the greatest use with 483,000 visitors annually, followed by the tour bus accessible A Gate (277,000) and D Gate, the entrance for outdoor cinema, with 196,000 visitors annually.[51]

Historically, the Gardens have been fenced since at least 1862[52] and are open from 7:30am to sunset each day. The Ian Potter Foundation Children's Garden is separately fenced and has its own opening hours which include two months' closure for maintenance each winter and exclusive use for Learning and Participation programs two days a week.

All parts of the Gardens are open to the public except for the Works Yard, car park on the Observatory site, and buildings and their immediate surrounds. There is no charge for admission to the Gardens, however fees are charged for venue bookings and to access services such as public programs.

4.2.3 Navigating the Site

Within the Gardens, movement is generally via a network of broad, gently curving asphalt pathways. These paths, laid out by Guilfoyle, are an essential component of the landscape character

The Garden Explorer improves the Melbourne Gardens' accessibility

and provide an enduring framework for the various landscape elements. Generally, they follow the topography of the site, with some notable exceptions where they plunge down the hill near the Temple of the Winds, and around Hopetoun and Tennyson Lawns. The system creates a series of loops which link all parts of the Gardens and provide numerous ways to traverse the site. There are also open lawns and swathes of garden beds inviting visitors to step off the pathways and wander informally.

In addition to the main path network, a series of secondary paths provide a more intimate experience and greater exposure to the plant collections. These pathways are narrow and frequently gravel surfaced, although in recent years exposed aggregate concrete and steel boardwalks have been used, while some older pathways remain asphalt. Examples of these secondary pathways are the enclosed walks within the Australian Forest Walk, Southern China Collection, and Long Island; the access pathways to the Herb Garden and Perennial Border; and the new steel boardwalk through the Fern Gully.

Guilfoyle's curving path system, while providing a beautiful and flexible means of exploring the site, does not fully lend itself to intuitive wayfinding. The natural topography of the site and constantly looping paths help somewhat, but signage at major junctions is still used to assist wayfinding. Even in more recent developments within the Gardens, especially around the Observatory, many visitors inadvertently end up in staff-only areas due to the confusing hierarchy of the path system.

Pathways are largely free of steps and other obstacles, and several locations provide lay-back kerbs to lawn areas and secondary path junctions. The new fully accessible boardwalk through the Fern Gully has improved access across the site, providing a fully accessible pathway from D Gate to the Ornamental Lake. However, the topography of the site still poses significant challenges for people with impaired mobility, especially around Hopetoun and Tennyson Lawns where paths are steep, and steps are sometimes required.

4.3 VISITATION

Royal Botanic Gardens Victoria commissioned market research in 2018 to understand who visits the Gardens and their reasons for coming. This comprehensive study found that people valued Melbourne Gardens because they were for everyone, a perception based on the Gardens being free to enter, having something for everyone and attracting a diverse range of visitors. The research by external consultants identified six core motivational segments for visitation: Mind and Body (22%); Social Butterflies (19%); Curious Explorers (16%); For the Family and Children (16%); Plant Lovers (14%); and Choosing to Pass Through (14%). This segmentation reinforced the findings of the Melbourne Master Plan public consultation process.

Visitor numbers to the Gardens fluctuate slightly year-on-year, but are increasing, matched by a significant increase in Melbourne's population, especially in the inner city. Visitor numbers are comparable to other major cultural institutions such as Melbourne Zoo and National Gallery of Victoria. By 2023 it is estimated that the Royal Botanic Gardens Victoria will have 3 million visitors per annum spread across the Melbourne and Cranbourne sites[53].

The William Tell Rest House, one of the Gardens' many picturesque follies

4.4
LANDSCAPE CHARACTER

Melbourne Gardens occupies 38.6 hectares on the banks of the Yarra River and is comprised of three historically distinct land parcels: the original 35.4 ha landscape, the 2.5ha Melbourne Observatory site, and a 0.7ha area of Kings Domain added to the Gardens in 1998 and now the site of The Ian Potter Foundation Children's Garden. Dallas Brooks Drive, a gazetted road managed by the City of Melbourne, separates the Original Botanic Gardens from the Melbourne Observatory and Children's Garden.

The overall landscape design of Melbourne Gardens derives much of its qualities from the topography of the site. Occupying a hill on the banks of the Yarra River, the site falls approximately 28 metres from the high points at the Volcano and Observatory to the Central Lake. Another high point exists along the top of a rock escarpment below Temple of the Winds, the original southern bank of the Yarra River. A drainage line to the Yarra sweeps through the centre of the Gardens, providing a natural focus in the Fern Gully and lakes. This sense of serenity, and a secluded, contemplative atmosphere is reinforced by the dense plantation of evergreen trees which surrounds the site and creates a buffer to the city; emphasising the Gardens' inward-looking aspect. Within the Gardens, wider views punctuated by soaring conifers provide a pleasing juxtaposition of greenery against the Melbourne skyline.

4.4.1
Original Botanic Gardens

The layout and character of Melbourne Gardens today owes much to the design and stewardship of William Guilfoyle, who used the natural beauty of the site to create a garden which epitomises the best of the picturesque/gardenesque landscape style.[54] The genius of this design lies in its ability to reconcile the potentially competing functions of a high-level public open space and a scientific institution. By placing the botanical collections within a cohesive and designed setting, Guilfoyle was able to create a unified landscape which met the aesthetic and recreational requirements of a public garden and the scientific obligations of a botanic garden.

> "No necessity exists for allowing botanical correctness and landscape effect to clash in the development of the Melbourne Botanic Gardens. To combine the two... has been my design... I have every confidence that the results will be a garden in which the facility of research and scientific classification will combine with the sterling beauties of the scenery."
> **William Guilfoyle**[55]

Within the Gardens the scenic landscape comprises a series of highly planned views framed by trees and ornamental garden beds, all laid out with a strong sense of balance between the mass and void. The main component of the mass is the plantings, including the remnant and historic trees, decorative garden beds, indigenous vegetation and the living collections, which are complemented by the buildings. Guilfoyle's unified approach to planting design allows this mass to be artfully contrasted against the open void spaces of the paths, lawns and lakes—all of which provide the canvas for displaying the beauty of the plant collections.

The Picturesque/Gardenesque Landscape

The Original Botanic Gardens are a designed landscape in the picturesque/ gardenesque style. These terms relate to popular 18th and 19th century landscape design styles, however the meaning of the terms is often poorly understood. The gardenesque style developed out of the English Picturesque movement, however interpretations of both terms varied across time and continents, and even contemporary understanding was clouded by heavy philosophical discussion. When referring to Original Botanic Gardens, the terms are considered to mean the following:

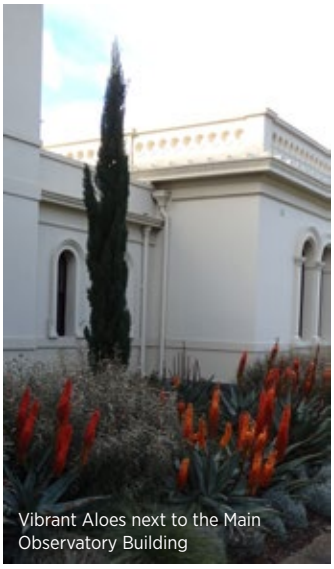
- **Influenced by the work of Lancelot 'Capability' Brown and his English Picturesque landscapes; designed to appear as an idealised view of nature, an idyllic pastoral landscape, punctuated by carefully framed focal points and landscape follies**
- **Influenced by the gardenesque notion of the garden as a work of art, and Kemp's definition of the gardenesque as "*beauty of lines, and general variety. Roundness, smoothness, freedom from angularity, and grace rather than dignity or grandeur*"**
- **Displaying Picturesque notions of the arrangement of the landscape to create a series of artfully composed and framed views or pictures**
- **Displaying Picturesque notions of the artful contrasting of the "sublime" (that which is natural, rough, awe-inspiring and surprising) with the "beautiful" (that which is gentle, smooth and polished)**
- **Displaying gardenesque notions on the arrangement of individual plants and specimen trees in the landscape to optimally display their character**

Specimen trees, including palms, are used throughout this landscape to provide vertical emphasis and horticultural interest. Placement of these trees is critical, as they are positioned to enhance and frame the important views, not to obscure them. Serpentine pathways, typical of the picturesque style, emphasise these view lines by taking visitors on a meandering journey which carefully directs attention and gradually unfolds vistas of the landscape. Meanwhile, island garden beds frame views and encourage visitors to step off the pathways and into the landscape. The overall result is a garden of immense beauty.

Another component of the landscape character is the arboretum style plantings. The art of Guilfoyle's design is that the arboretums do not dominate the landscape, as occurs in the Domain, but rather sit seamlessly within the broader picturesque style. This occurs across Hopetoun, Huntingfield, Eucalypt, and Oak Lawns. In all instances there are strong plant themes that tie the spaces together and prevent the arboretums becoming too diverse.

The natural attributes of the site are further emphasised by the placement and character of the plant collections. Cacti, succulent and arid collections are set among rockeries in the dry, exposed conditions of the higher ground. The sheltered drainage line to the Yarra has become a luxuriant, semi-tropical fern gully. The steep hillside near Government House is home to a woodland arboretum, and the dry ridge line of southern boundary holds a collection of Australian forest specimens which provide shelter for the Gardens. Within these collections garden beds adhere to the best principles of planting design, creating an ever-changing display of colour, texture and botanical richness.

View to Princes Lawn demonstrating the mass and void of the picturesque landscape



Vibrant Aloes next to the Main Observatory Building

Remant indigenous Bursaria woodland on the Melbourne Observatory

4.4.2 Melbourne Observatory

Melbourne Observatory occupies 2.5 hectares at the highest point of the Gardens, opposite the Shrine of Remembrance. There is a long history between the Observatory and Gardens, with successive Directors, including both Mueller and Guilfoyle, being involved in the landscaping around the Observatory. The Observatory closed to official scientific functions in 1945 and since 1992 has been under the management of the Royal Botanic Gardens Victoria, with the area around the Main Observatory building being extensively redeveloped in 1999 in a project called Observatory Gate.

The Melbourne Observatory has an illustrious scientific history and to this day is still used for public night sky viewings. It still contains all the key elements of the 19th century observatory complex including the Main Observatory Building (1861–1902), Great Melbourne Telescope House (1869–1904), Photoheliograph, South Equatorial House and Annexe (1873, 1874–75 and c.1883 respectively), Magnet House (1877), Obelisk for the Meridian Collimating Marker (1885), former Astronomer's Residence (Observatory House, 1889), Astrograph House (1889) and a Caretaker's Gatehouse (Observatory Lodge, 1901–02). The combined network of buildings and instruments in this complex demonstrates the significant technical and scientific achievements of the 19th century and is a living example of 'Marvellous Melbourne'. These buildings, situated in manicured lawns, with wide paved areas and low planting, define the current landscape character of the Observatory. This includes Southern Cross Lawn, a Gardens event space.

Historically, the Melbourne Observatory has always maintained its own distinct landscape character, with early photos of the site and 1885 plan clearly showing a blend of scientific function and tasteful landscaping. The early days of planting for dust suppression have long passed, but the utilitarian path system and tasteful garden beds laid out by Guilfoyle are appropriate historical touchstones. In recent years inappropriate fencing and a staff car park have isolated the Great Melbourne Telescope House from the other Observatory buildings, and garden beds have been limited compared to their historic extent. The Conservation Management Plan has identified the importance of maintaining the unique qualities of the Observatory. From a landscape management perspective, historical precedent suggests increased low-level planting and improved landscape detailing are required to restore it to its traditional character. The Observatory's atmosphere after dark gives a strong sense of what the space once was: a series of open lawns, low, botanically rich garden beds defining the spaces, some enclosure against the Domain, direct pathways, and ornate buildings. Restoring the Observatory to this character would enhance its significance and continue the tradition of Botanic Gardens involvement in the landscaping of the site.

The Observatory Gate project was in response to the site's transfer to the RBGV and as a result opened a significant new entrance to the Gardens. The development included a then award-winning architectural restaurant and Visitor Centre designed by Peter Elliot and a large, herring-bone paved courtyard designed by Landscape Architect Chris Dance with the Glen Dunn sculpture *Neutrino*. Despite its architectural success the area is climatically exposed and does not encourage dwelling. Passive wayfinding into the Gardens is still difficult, complicated by the confusing need to cross Dallas Brooks Drive.

The rear portion of the Melbourne Observatory, adjacent to the Great Melbourne Telescope House, is currently dedicated to staff car parking. This area of approximately 8,800sqm is off-limits to the public, and except for a handful of significant trees, has little botanical interest. The car park is primarily accessed through a driveway next to Gate Lodge, with a secondary entrance from Dallas Brooks Drive at the rear of the Visitor Centre. With the anticipated return of the Great Melbourne Telescope after 2023, there will be an expectation that this area be redeveloped into accessible public open space and landscaped to reflect the historical character discussed above.

4.4.3
The Ian Potter Foundation Children's Garden

The Ian Potter Foundation Children's Garden occupies 0.7ha between the Melbourne Observatory and Dallas Brooks Drive. The site was gifted to the Gardens from the City of Melbourne in 1999 as part of the Observatory development. Its transfer provided an opportunity to connect the Original Botanic Gardens and the Melbourne Observatory, creating the site we know today. The aim of the Children's Garden is to engage with children through their play, fostering a sense of curiosity and discovery, and encouraging creative play and a love of plants. Therefore, the space was designed to be inwardly focused, surrounded by a steel fence and dense planting.

The area has been broken down into a series of small, intimate spaces that are linked through botanically rich plantings. This creates a child-focused sense of scale, where elements are designed to create a feeling of intimacy, wonder and escape from the material world. Walking through the small gateway, the space is enclosed and immediately envelops the child in plants and intricate pathways for exploring in a way which feels safe and inviting. The entire garden is heavily planted except for a small open lawn area and pond. Planting themes are used to define the different areas and include: Bamboo Garden, Snow Gum Gorge, Rainforest Garden, Indigenous Wetland, Flax Tunnel and Tea Tree Tunnel. In addition to the plantings is a general emphasis on nature-based play, rich sensory experience and responding to a child's view of the world. The Children's Garden was opened to the public in 2004, and in many ways has set a benchmark for the way children interact with nature in public gardens, and the design of children's gardens in Australia.

The Children's Garden is an intensely used space. Annually, it receives around 230,000 visitors,[56] and has become the central hub for a range of Learning and Participation programs, especially for primary schools. The western portion of the site is dedicated to a large vegetable garden, which is open to the public and used extensively for school programs. Adjacent to the Vegetable Garden and opening of Birdwood Avenue is a small Gathering Lawn, which allows groups to assemble before they are separated for different activities. A new Banana Forest and Desert Island were added for the Gardens' 10-year anniversary in 2014, funded by The Ian Potter Foundation, to help alleviate pressure in other areas of the Garden. The Garden must rest over winter in Term 3 each year to allow for rejuvenation and large-scale maintenance.

Bamboo Forest in The Ian Potter Foundation Children's Garden

4.4.4
Built Form

The picturesque landscape is a contrived idealised view of nature, an idyllic pastoral landscape comprising lakes, sweeping lawns and carefully designed pieces of architecture. Buildings are placed as either picturesque follies, creating important view lines, or as complimentary features such as the historic Gate Lodges. A series of follies, carefully located around the Gardens, further shape the view lines, becoming both focal points and destinations. A number of these follies are in the rustic gardenesque style, such as the William Tell, Separation Tree and Fern Gully Rest Houses. Temple of the Winds by contrast is a heroic folly, whose classical proportions and grand position typifies the picturesque style. The location of these structures is important, as they were placed to catch and draw the eye across the landscape. They were often located in prominent positions such as the lake edge where they were originally complimented by the rustic bridges. The follies are critical in defining the Gardens' character and contribute strongly to its picturesque qualities.

Several other rustic features perform similar roles in the landscape and include the historic rockeries, grottos and original bridges. These once acted as picturesque focal points in the landscape, providing the "sublime" natural roughness to complement the "beautiful" landscaped garden beds, lawns and water bodies. Positioning these features was carefully contrived by Guilfoyle who was actively involved in their construction, with their placement in the landscape being particularly repetitive. The grotesque looking rockeries are placed on promontories projecting into the landscape, designed to showcase dramatic plants. They were often used as entrance statements to areas of the Gardens such as the Fern Gully and along Anderson Street. In a different style, artificial rockeries were created around G Gate, H Gate, Temple of the Winds and in the drinking fountain at A Gate, complementing the more traditional rustic rockwork in these areas.

> "In the first place, there must be no uniformity in the construction of the rocks, and the outline arrangement must be broken by gaps and recesses. Bold crags should be formed here and there, and occasional wide shelves; and also fissures should be provided for soil and plants to place amidst a few loose boulders or large fragments inserted in the ground in the neighbourhood of the main rockery, and will greatly add to the appearance of the latter." **William Guilfoyle**[57]

Gardens House nestled comfortably in the landscape with the Perennial Border in the foreground

E Gate Lodge, one of the Gardens' charming 19th century buildings

Complementing the follies, but performing a different role in the landscape, are the historic lodges. These are charmingly designed 19th century buildings, situated in prominent locations at the Gardens' entrances but still nestled comfortably in the landscape, with an open and inviting outlook. These include E and F Gate Lodges and Plant Craft Cottage, and the demolished A Gate and B Gate Lodges. The complex of buildings and structures making up the Melbourne Observatory also demonstrate historic appeal and a high degree of aesthetic merit. At the other end of the spectrum are the utilitarian, mid-20th century lodges, including Eastern and Nursery Lodge, both of which jar with the broader landscape. As a result, both buildings are largely screened from view and public access, except for Eastern Lodge's exposed Anderson Street frontage. Nursery Lodge sits within the Works Yard, which was carefully sited on the higher ground so it could not be looked upon from above. A similar approach was taken in the design of the Green Organics Recycling Centre, which while lower in the landscape is still carefully screened behind mature trees.

Other Gardens structures include the grand former residences of the Director of the Gardens and Government Astronomer (now Gardens House and Observatory House respectively), the Main Observatory Building and the National Herbarium of Victoria. The Herbarium is the most prominent in the landscape, towering above Western Lawn and presenting an imposing Art Deco façade to Birdwood Avenue and F Gate. Similarly, Gardens House sits prominently in the landscape, acting as an important focal point in a similar way to the Gardens' follies. Of similar scale to the former residences but sitting lower in the landscape is the 1975 Terrace Tea Rooms. This building, extended in the 1990s, nestles comfortably in the landscape but does not add to its character in any marked degree. Combined, these buildings contribute to the mass of the landscape and emphasise its inward focus.

4.4.5 Recent Developments

In the 20 years since the first Master Plan several new, modern additions and redevelopments have occurred. These have been in response to pressures including revitalising tired infrastructure, landscape succession planning and meeting modern visitor expectations. They include the Fern Gully Restoration, Guilfoyle's Volcano, Perennial Border, Long Island, Working Wetlands and The Ian Potter Foundation Children's Garden.

These recent projects were designed by the Gardens' Landscape Architect, Andrew Laidlaw, working with horticultural and other RBGV staff. They have all been implemented to display the best of contemporary design and a strong sense of place, inspired by and responding to the Gardens' landscape and visitor needs. Of importance is the way these elements, while clearly contemporary, sit sympathetically within the Guilfoyle design, with the hardscaping being subservient to the display of the plant collections, and the rigorous control between mass and void being carefully maintained. These new developments are an important layer of the landscape character and are among the most popular visitor destinations in Melbourne Gardens[58].

The green curtain frames the landscape and provides unity

4.4.6 Planting Character

The character of Melbourne Gardens is dominated by the picturesque landscape and relies heavily on the tree and shrub layer to provide the necessary green curtain to frame the landscape. This green curtain wraps around and defines the open void spaces and provides critical screening of the site boundaries and works areas. It makes up most of the Gardens' planting and is essential to the ambience and beauty of the site. The green curtain is largely absent on the Observatory site to allow the buildings to maintain the historic, unencumbered site lines essential to the scientific work within. Consequently, the plant and landscape character of the Observatory is very different to the rest of the Gardens, being comprised of lawns and specimen trees, with a limited number of low garden beds.

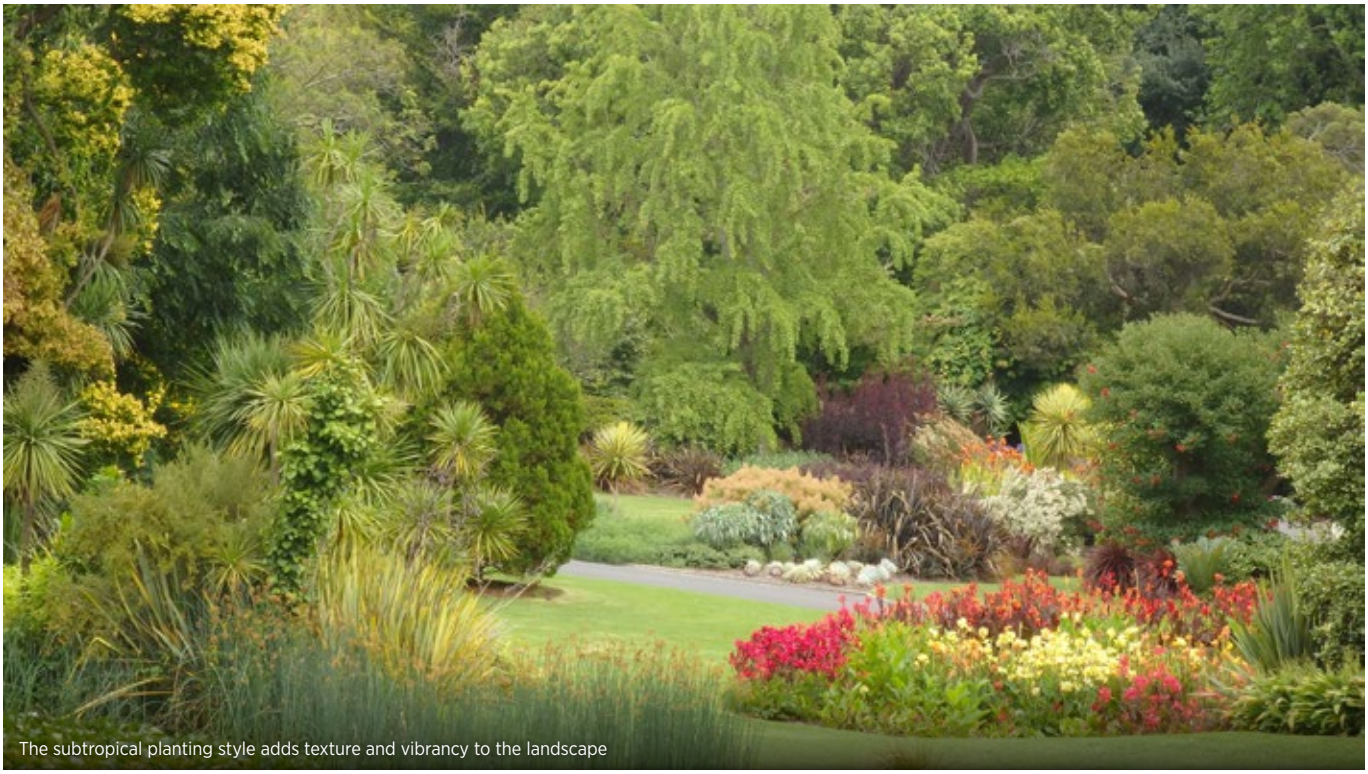
The Gardens' green curtain is augmented by several other planting styles, which while not defining the character of the landscape, are no less important due to the layers and richness they provide. These include the subtropical foliage plants, arid and rockery plantings, indigenous and remnant vegetation and the Fern Gully.

Green curtain

The green curtain (or wallpaper) is the dominant style of planting across Melbourne Gardens, providing the mass that defines and frames views, encloses and reveals spaces, and provides unity across the site. At a distance, other than the occasional projecting palm or strong foliage focal point, the green curtain appears as a single mass, primarily comprised of evergreen trees, shrubs and ground covers. On closer inspection however, the curtain contains significant diversity within its form, with many of the living collections being embedded in this planting. The Southern China, Australian Forest Walk, Southern Africa and New Zealand Collections all form part of the green curtain.

A characteristic of this planting style is that much of the botanical richness and diversity exists only along the beds' outer edges. Internally spaces can be sparse and lacking in diversity, due to overshadowing and root competition. At the outer edges however, the green curtain becomes more nuanced, with ground cover planting punctuated by vertical planting form. More recently some of these foreground areas have been completely renovated including the William Tell Rockery, Magnolia Bed, Perennial Border, pockets of the Australian Forest Walk and Western Lawn. In all these cases the planting is more intricate and detailed, containing decorative plant combinations and climate-matched plants.

Unlike the other planting styles the green curtain is not a deliberately designed style. It has instead evolved from an adherence to picturesque design principles and the practical requirements of maintaining botanical collections in a mature garden. However, within its mass it still contains good planting design. This includes elements of the sub-tropical and arid planting styles, and a general attention to variation, rhythm and overall appearance, punctuated by soaring conifers and protruding palms. The overall effect is one of great botanical richness, but also great composure. Planting is at times striking, but never overwhelming, and the defining atmosphere is one of order and serenity.



The subtropical planting style adds texture and vibrancy to the landscape

Subtropical foliage plants

The subtropical planting style was used effectively by Guilfoyle and continues to contribute to the richness and vibrancy of the Gardens' planting character. The style was popularised in England by William Robinson in the 1860s. He encouraged people to plant bold foliage plants such as palms, tree ferns and bamboos into irregular groupings, and allow them to naturalise throughout a garden. Guilfoyle's interest in the style was likely to be influenced by this prevailing fashion and enhanced by his experience travelling through the South Pacific and working in the sub-tropical Tweed River region.

The use of sub-tropical planting in Melbourne Gardens provides a rich foliage contrast and is often used as a focal point at edges, or as accent plants in garden beds. It also provides highlights within the green curtain's foliage mix, with palms and cordylines diversifying the canopy. Of interest is where these sub-tropical plants such as European Fan Palms (*Chamaerops humilis*) and Senegal Date Palms (*Phoenix reclinata*) were plunged directly into lawn areas. Typically, the foliage contrast comes from leaf shape and size, rather than colour, with bold-textured plants such as Native Ginger (*Alpinia* spp.), Cycads (*Lepidozamia* spp.), Cordylines and Gymea Lilies (*Doryanthes* spp.) providing highlights within garden beds.

The best remaining examples of the subtropical planting style are at the top of Tennyson Lawn, on Princes Lawn, the Cycad Beds, around the entrance to the Green Organics Recycling Centre, and close to the Herb Garden entrance. These arrangements with their dark green, exotic foliage are integral to the character of Melbourne Gardens, representing a strong link to the garden fashions of the day and the influence it had on William Guilfoyle. They are also a defining part of the Gardens' planting character, contributing to the variety and interest that characterises the green curtain.

Eye-catching arid plantings at Guilfoyle's Volcano

Arid and rockery plantings

Another style which contributes to the richness of Melbourne Gardens' plant character is the bold arid and rockery planting. This planting is always associated with picturesque rustic rock work, and is mostly situated on exposed high ground, reinforcing the visual impact of the site's topography. It is also frequently associated with the follies situated around the Gardens. Of note is the planting and rockwork associated with the Temple of the Winds, William Tell Rest House, the embankment and H Gate, as well as the plantings around C Gate which include Guilfoyle's Volcano, the Arid Garden and parts of the California Collection. Smaller examples of this planting are associated with the grottos at A and B Gates, the Touchwood Ruin, and in proximity to Separation Tree and Fern Gully Rest Houses.

The arid and rockery planting style is characterised by large swathes of bold, architectural plant forms such as cacti and succulents; the variety of forms often competing and creating a contrasting appearance, especially along the G Gate embankment and within the Arid Garden. This planting style was more prevalent during William Guilfoyle's time than it is today, diminishing due to an increase in the availability of irrigation water and a change in both micro-climate and fashion, especially since Jessep's time. This style of planting represents a period of garden fashion when botanical curiosities and plants with bizarre form from exotic parts of the world were highly sought after. Crucially, these were often plants that could cope with a harsh environment and lack of water, making them not only fashionable, but highly appropriate for Melbourne's climate. This made them especially suitable not only in Guilfoyle's time, but also today, as the Gardens adapt to the effects of a changing climate.

Native grasses surrounding the remnant *Eucalyptus camaldulensis* known as the Cockatoo Tree

Indigenous and remnant vegetation

Melbourne Gardens contain several pockets of indigenous and remnant vegetation, which while contrasting to the predominant planting character of the place, are an important link to the Gardens' original landscape and make a significant contribution to the landscape character. These pockets of vegetation are split into two groups. The first being comprised of the remnant River Red Gums (*Eucalyptus camaldulensis*) and Yellow Box (*E. melliodora*), the copses of Sweet Bursaria (*Bursaria spinosa*) and Lightwood (*Acacia implexa*) on the Observatory site, and the Swamp Paperbark (*Melaleuca ericifolia*) thickets on Baker Island and around the Lion's Head Tree. The second group is comprised of areas of extensive re-vegetation and re-colonisation, especially on Long Island and around the lake margins.

The indigenous vegetation by its very nature does not have the contrived, designed character of the Gardens' other planted areas. The exception is the 'Ancient Sentinels'. These remnant indigenous River Red Gums are older than the Gardens but were deliberately retained in the early landscape development as they contributed to its picturesque qualities. The character of the indigenous vegetation differs from the green curtain due to its rougher and dryer visual quality and finer texture. These areas are currently unirrigated, and therefore experience more summer seasonal variation than the rest of the landscape.

The lush canopy of Fern Gully

Fern Gully

Fern Gully, lying along a drainage line to the Yarra, is another of the distinctive places created by Guilfoyle. This space is characterised by a dense canopy of evergreen trees and palms creating complete enclosure, so that both the atmosphere and microclimate is different to any other part of the Gardens. Many of the plants are natives, notably Moreton Bay Figs (*Ficus macrophylla*), Kauri (*Agathis* spp.), Bangalow Palm (*Archontophoenix cunninghamiana*), Cordylines, Cabbage Fan Palm (*Livistona australis*) and a wide variety of Australian and New Zealand tree ferns (*Cyathea* spp.). Another significant part of the Fern Gully's plant character is the extensive use of epiphytic plants, such as Bird's Nest Ferns (*Asplenium* spp.) and Dendrobium Orchids, which grow on the trunks of the established trees and reinforce the forest-like inward focus.

Much of Guilfoyle's original understorey, and therefore much of the plant diversity of the Fern Gully, had been lost by the early 2000s due to drought and Grey-headed Flying Foxes. However, this has now been rectified through significant under-planting as part of the Fern Gully Restoration project, with the area now displaying 240 taxa, and again having a botanically rich understorey.

Southern China Collection

4.4.7
Living Collections

A living collection is a group of plants grown for a distinct purpose, usually serving goals such as research, conservation, education or ornamental display. These collections are actively curated as a scientific resource.

One of the principal characteristics that makes Melbourne Gardens distinctive from other botanic gardens is the seamless integration of the living collection into the overall design of the Guilfoyle landscape. This differs greatly from the traditional "systems garden" approach favoured by Mueller, where plants are arranged based on taxonomic classification, or the other common approach of attempting to arrange a series of individual designed plant collections across a site. This unified approach contributes strongly to the international reputation of Melbourne Gardens.

To maintain relevance, the composition of Melbourne Gardens' living collections is reviewed periodically. For example, the New Caledonia Collection was retired in 2012 due to climatic constraints and the difficulty in obtaining plant material, while a stronger emphasis on plant conservation and meeting the targets of the Landscape Succession Strategy was supported through the Australian Rare and Threatened Collection in 2020.

Melbourne Gardens currently holds 23 collections falling under five broad categories: Geographical, Research and Conservation, Taxonomic and Evolutionary, Ecological, and Ornamental and Cultural. For a full list of the Melbourne Gardens' plant collections refer to the box text below or the *Living Collections Strategy 2020–2040*.

Melbourne Gardens Living Collections at 2020

Geographical

- Australian Forest Walk
- New Zealand
- North America Drylands
- Southern Africa
- Southern China

Research and Conservation

- Australian Rare & Threatened Species
- Terrestrial Orchid

Taxonomic and Evolutionary

- Araucariaceae
- Cacti & Succulent
- Camellia
- Corymbia & Eucalyptus
- Cycad
- Palm
- Quercus

Ecological

- Lower Yarra River Habitat

Ornamental and Cultural

- Climate Ready Rose Garden
- Fern Gully
- Gardens House
- Grey Garden
- Guilfoyle's Volcano
- Herb & Medicinal Garden
- The Ian Potter Foundation Children's Garden
- Perennial Border

The Gardens' role as an urban oasis will be increasingly important under future climate scenarios

4.5
CLIMATE AND SOILS

Melbourne has a temperate, warm climate with relatively even rainfall across the year[i]. Rainfall events are generally heavier and less frequent in summer and lighter and more frequent in winter. Long term maximum temperatures vary from 26.0°C in January to 13.5°C in July with mean minimums varying between 14.6°C and 6.0°C. On average, there is only 1.1 frost day per year, with the lowest recorded temperature being -3.4°C in 1982.[59]

Long-term rainfall average, based on 160 years of data, is 648mm per annum. Annual rainfall has shown a steady decrease over time, with the most recent 30-year average being 603mm per annum. This has corresponded with an average increase in mean maximum temperatures of 0.7°C and minimum temperatures of 2.2°C.[ii]

Royal Botanic Gardens Victoria's *Landscape Succession Strategy Melbourne Gardens 2016-36* has identified climate change as the biggest threat to the landscape of the Melbourne Gardens[60]. The report identifies Melbourne's future climate as hotter and drier, with increased probability of extreme weather events such as heatwaves and flooding. Future scenarios predict a decrease of 9% in annual rainfall and increase of 3.1°C in annual mean temperatures.[61] If these scenarios eventuate Melbourne's climate in 2070 could be more akin to present day Dubbo in central New South Wales.[62]

A soil survey of Melbourne Gardens was carried out in September 1992 and is still current, however the Observatory and Children's Garden sites were not included at that time. This survey identified three distinct soil types, with one comprised of two sub-sets: deep and shallow loamy yellow duplex, deep sandy yellow duplex and loamy gradational. Soil types are closely related to parent materials and were found to be relatively undisturbed; excepting increased levels of humus in the topsoil as a result of long-term gardening[63]. Soils are generally acidic, well-structured and suited to horticulture, although natural nutrient levels can be low.

i Köppen climate classification cfb
ii Comparison of Bureau of Meteorology 30 year climate averages between the period 1861-1890 and 1981–2010

A Little Pied Cormorant (*Microcarbo melanoleucos*)

4.6

FAUNA

Melbourne Gardens is a valuable inner-city green space, and one of the few locations in central Melbourne suitable for supporting habitat. As a result, it is home to an array of native birds, mammals, fish and reptiles.

The Gardens' lakes and their margins provide the habitat most akin to the indigenous landscape and are rich in wildlife, with the shrubberies and trees full of resident and transitory birds, and home to Brushtail and Ringtail Possums and native bats.

Over the past 15 years the City of Melbourne's population has grown 250%[64], and it is expected to nearly double again by 2036[65], which places increased pressure on urban greenspace. As such, it is predicted that Melbourne Gardens' role as a place of habitat and ecological diversity will become even more important. Especially as green space and canopy cover is lost from private property development and forecast population pressures.

Animals and birds in the Gardens are very popular with visitors. The eels in the Ornamental Lake are often the centre of attention, especially around the Tea Rooms. Native rats, known as rakali, are periodically sighted around the margins of Ornamental and Nymphaea Lily Lakes, as are the Gardens' two resident Eastern Water Dragons. Brushtail and Ringtail Possums, Black Swans, Australian Wood Ducks, Kookaburras and Purple Swamphens are usually tolerant of visitors, and can sometimes be friendlier than desired. The snags and logs scattered around the wetlands of Long Island attract an array of wildlife, including Eastern Long-necked Turtles, Pied Cormorants and Nankeen Night Herons. More unusual sightings in the Gardens include the Powerful Owl, which regularly roosts near the Fern Gully, Yellow-tailed Black Cockatoos and Pardalotes. Unfortunately, sightings of Superb Fairy-wrens, popular with visitors, have decreased in recent years.

In addition to the native population, several introduced animals are present: birds such as Starlings, Blackbirds and Indian Mynas, as well as rodents and foxes in fluctuating numbers.

Tim Entwisle, The Hon. Lily D'Ambrosio, Minister for Energy, Environment and Climate Change and Minister for Solar Homes, Ken Harrison and RBGV staff celebrate the announcement of new funding for the Gardens, June 2018

4.7

ORGANISATIONAL OVERVIEW

4.7.1
Organisational Structure

Royal Botanic Gardens Board Victoria (the Board) is the statutory authority for the management of Melbourne Gardens under section 16 of the *Royal Botanic Gardens Act 1991*, with the seven members being appointed by the Governor in Council and serving renewable terms of up to four years[66]. In carrying out its functions and powers, the Board represents the Crown and is accountable to the Minister for Energy, Environment and Climate Change. Representation of the Government's interest in the Gardens is through the Department of Environment, Land, Water and Planning (DELWP).

The day-to-day management of the Gardens is overseen by the Director and Chief Executive (the Director) and the Executive Team. The position of Director is appointed by the Board.

Management of the organisation (at publication) is across five divisions or groups: Melbourne Gardens, Cranbourne Gardens, Science, Engagement and Impact, and Corporate Services. Melbourne Gardens are under the direction of the Executive Director Melbourne Gardens who oversees four specialist functional areas: Horticulture, Infrastructure and Facilities, Arboriculture, and Landscape Architecture.

4.7.2
Royal Botanic Gardens Act

The Royal Botanic Gardens Act was passed by Parliament in 1991 (and amended 2017) to establish a Board to oversee the care, protection, management and improvement of the organisation, and to establish the Director and Chief Executive's position. The organisation's objectives under the Act are:

- to conserve, protect and improve the botanic gardens and managed land and their collections of living plants;
- to conserve and enhance the State botanical collection and National Herbarium;
- to provide for the use of the State botanical collection or plants or plant specimens at the botanic gardens or managed land for scientific or reference purposes, consistent with accepted international practice;
- to increase public knowledge and awareness of plants and plant communities;
- to provide for the use of the botanic gardens for education, public enjoyment and tourism;
- to provide for the carrying out of and contribution to research into biodiversity; and the conservation of biodiversity.

Great Melbourne Telescope House and the wider Melbourne Observatory is heritage listed at a State and National level
Image courtesy of State Botanical Collection

4.8
STATUTORY CONTEXT

The following is a summary of the legislative framework and planning controls that apply to the management of Melbourne Gardens. The statutory context of the Gardens is subject to frequent modification, especially in relation to land use planning. (This information was correct at publication. It has been included to provide background information for the Master Plan.) A current planning report can be obtained by searching the planning maps for '100 Birdwood Avenue, Melbourne 3004'. Full text for the zoning and overlays can be obtained from the City of Melbourne or planning maps online. Full text for State and Federal legislation can be obtained from the relevant government websites.

The following provides an outline of the implications of each of the planning controls. The original text should be referred to when making decisions, such as whether a permit is required.

4.8.1
National Heritage Listing

The National Heritage List is a Federal level list of "*natural, historic and Indigenous places of outstanding significance to the nation*." The list is administrated by the Australian Heritage Council, a division of the Federal Department of Sustainability, Environment, Water, Population and Communities. It was established in 2004 under the *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999*. Upon establishment it replaced previous Federal listings including the Register of the National Estate.

In early 2018 the Melbourne Observatory was given National Heritage Listing as part of the broader 'Melbourne's Domain Parkland and Memorial Precinct'. This was the result of a 2017 'emergency' listing of St Kilda Road and environs in response to concerns about the removal of St Kilda Road elm trees during works for Melbourne's Metro Rail Project.

4.8.2
Victorian Heritage Register

Melbourne Gardens is included on the Victorian Heritage Register under three separate registrations: the Royal Botanic Gardens (H1459), Melbourne Observatory (H1087) and Domain Parklands (H2304). The extent of these registrations reflects the cultural and historic differences between the three parcels of land now under the joint management of the RBGV. The Victorian Heritage Register is covered by the *Heritage Act 2017* and is administered by Heritage Victoria, which is the authority responsible for permits and enforcement.

The primary registration for Melbourne Gardens is H1459, covering the traditional Royal Botanic Gardens Melbourne. As part of this registration, an exemption (with specific exclusions for relocation of the Lakeview Rest House and A Gate works and path changes) has been granted for "*all works in accordance with the Royal Botanic Gardens Melbourne Master Plan (1998)* [sic] *and also subsequent revisions of the Master Plan or its equivalent as endorsed by the Executive Director*"[67]. The Master Plan has been developed in consultation with Heritage Victoria with the intention of gaining a similar level of exemptions.

During any permit or exemption application, the Conservation Management Plan is likely to be a guiding document for Heritage Victoria. The Statement of Significance for Melbourne Gardens and Melbourne Observatory sites were updated in the Conservation Management Plan (2018), and the RBGV are working with the Heritage Council of Victoria to revise the Victorian Heritage Register to reflect the new Statements of Significance.

4.8.3 Aboriginal Heritage Act 2006

Sites within the Gardens with the potential to be Aboriginal places are protected under the *Aboriginal Heritage Act 2006* and its 2016 amendment. The Act provides guidelines to assist land managers to identify which places are most likely to be Aboriginal Places. For example, all areas within 200m of a current or previous waterway have this potential and are therefore designated to be areas of "Aboriginal Cultural Heritage Sensitivity" under the Act. Regardless of the designation of any site, there is a legal obligation under the Act for the land manager to protect all Aboriginal artefacts which may be found, and to put measures in place to prevent damage to yet unrecorded artefacts.

The majority of Melbourne Gardens has been designated as an area of Aboriginal Cultural Heritage Sensitivity due to its proximity to the Yarra River. However, the RBGV Aboriginal Heritage Values document, produced in consultation with the Traditional Owners, recommends that given the topography and location of the Gardens, and their relatively undisturbed nature, that the entire site be considered culturally sensitive and be managed accordingly. The mechanism for doing this under the Act is through the production and implementation of a Cultural Heritage Management Plan (CHMP), developed in consultation with the Traditional Owners. The production of a site-wide CHMP is a recommendation of the Master Plan.

4.8.4 Yarra River Protection (Willip-gin Birrarung Murron) Act 2017

In 2017, and as a recommendation of the *Yarra River Action Plan*, the State Government passed the *Yarra River Protection (Willip-gin Birrarung Murron) Act 2017* to identify and protect the Yarra River and the public land it flows through as "one living, integrated natural entity"[68]. The Act recognises the role of the Wurundjeri Woiwurrung people as the custodians of the river and the lands through which it flows, and is the first Act in Victoria to use the language of the Traditional Owners in its title and text. The Act establishes a new statutory body, the Birrarung Council, to provide a voice for the Yarra River. The Yarra Strategic Plan, currently being developed by Melbourne Water, is also a requirement of the Act.

4.8.5 City of Melbourne Planning Scheme: Zoning

Land within Melbourne Gardens is covered by two planning zones under the *Planning and Environment Act 1987*. The main portion of the Gardens is zoned as Public Park and Recreation (PPRZ with no specified schedules), and the Melbourne Observatory and Gardens House zoned as Public Use Zone–Other Public Use (PUZ7). It should be noted that there are anomalies between the historic boundaries and the extent of these planning controls. The two zonings are similar in intent, with the Public Park and Recreation Zoning being the most prescriptive.

Under the Public Use Zone, a permit is required to subdivide land, but no other works are listed as requiring a permit. The schedule to the zone does not affect any RBGV controlled land.

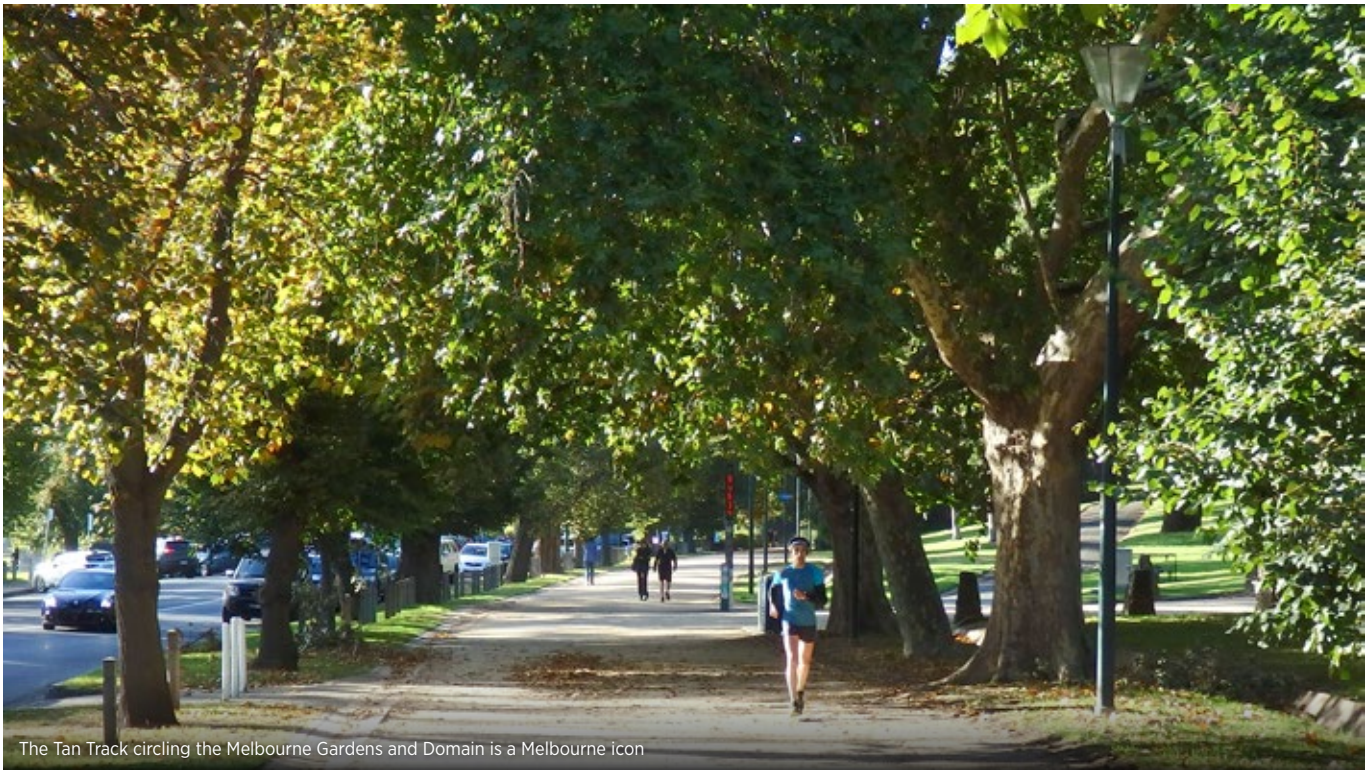
The Public Park and Recreation Zone has a specific exemption from permit requirements for works carried out by or on behalf of the public land manager, which includes RBGV. This means that RBGV does not require a permit for works.

4.8.6 City of Melbourne Planning Scheme: Overlays

The only Overlays that apply to Melbourne Gardens are three Heritage Overlays, written to reflect the State registration and a City Link Project Overlay (CLPO) crossing the site at H Gate.

The City Link Project Overlay has the intention of providing for the smooth construction and operation of the City Link roads. The area within RBGV controlled land is covered by the overlay due to its proximity to the below ground Domain Tunnel and is not near any visible toll roads. Under the CLPO a permit or permission from the Minister is required for outdoor "Advertising Signage". As Melbourne Gardens is not near visible City Link Roads, there should not be any valid objections if a permit for advertising signage was ever sought.

The Heritage Overlays covering Melbourne Gardens (HO396, HO402 and HO398) reflect the three Victorian Heritage Register listings for the place. Under the Heritage Overlay no permit is required "*to develop a heritage place which is included on the Victorian Heritage Register*" because a permit will instead be required from Heritage Victoria. As a result of this exemption the Heritage Overlays do not have any impact on the management of the Gardens.



The Tan Track circling the Melbourne Gardens and Domain is a Melbourne icon

4.8.7 City of Melbourne Design and Development Overlay Schedule 15

Design and Development Overlays relate to design and built form and have the flexibility to respond to site specific requirements. Melbourne Gardens' landscape is protected from intrusive development on surrounding land by schedule 15 to the Design and Development Overlay, which specifically relates to the protection of Melbourne Gardens. Schedule 15 has the following design objectives:

- To preserve the landscape qualities and amenity of the Royal Botanic Gardens and to foster vegetation growth in the Gardens
- To ensure that the enjoyment of the Royal Botanic Gardens is not diminished by overshadowing or visual intrusion from any new buildings or works
- To minimise detrimental wind impacts on the Royal Botanic Gardens
- To ensure that any new development or redevelopment is compatible with the existing scale and character of buildings in the area
- To protect the residential amenity of the area.

Under the Overlay any permit application is required to demonstrate that it achieves each of the design objectives. A maximum building height of 12 metres also applies. Design Development Overlay only applies to private land on the Gardens' eastern and southern boundaries and to the Domain Road corridor west of Hope Street. It does not cover either Melbourne Gardens or Domain Parklands but provides for its protection in a way which supports the aims of the Master Plan.

4.8.8 Other Legislative Controls

The following State and Federal Government legislation also govern the work undertaken by RBGV. The following are particularly relevant to management of the landscape:

- *Environment Protection and Biodiversity Conservation Act 1999* (Federal)
- *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Federal)
- *Building Act 1993* (Federal)
- *Disability Discrimination Act 1992* (Federal)
- *Flora and Fauna Guarantee Act 1988* (State)
- *Environment Protection Act 1970* (State).

The Federal *Disability Discrimination Act 1992* is of particular interest as it has significant implications for the supply of equitable access into and around the Gardens and its buildings.

4.8.9 Non-Statutory Registrations

The National Trust Victoria, a community based, non-governmental organisation, maintains a register of heritage sites, including significant trees. National Trust listing does not come with any statutory authority, although it is a professional assessment and carries significant weight with the public. Of most relevance to Melbourne Gardens is the National Trust's Register of Significant Trees, which includes 32 (living) trees or groups within Melbourne Gardens. This gives Melbourne Gardens one of the highest concentrations of significant trees in the State.

Aerial view of the Melbourne Gardens looking across the Arid and Drylands Precinct to the city

4.9
DOCUMENTS AND POLICIES

Current operations at RBGV are guided by several internal planning and external policy documents. The following documents and policies have direct implications for the Master Plan, and will become reference documents as the Master Plan is implemented.

4.9.1
Vision, Mission and Values

As the organisation's key strategic statements, the vision, mission and values guided Master Plan development. However, at time of publication, a new Corporate Plan is underway, with some pending realignment of aims and objectives.

Our Vision: Life is sustained and enriched by plants

Our vision is a flourishing community and healthy planet, sustained and enriched by plants. Through iconic landscapes, horticultural excellence and scientific eminence we will make an enduring contribution to this vision.

Plants, along with fungi and algae, are fundamental to life on Earth. They provide the air we breathe, the food we eat, many of the medicines that heal us, and habitat and shelter for our planet's wildlife. They give our lives meaning and inspiration.

We prosper and our planet benefits when we understand, appreciate and protect plants for their life-giving qualities. The actions we all take should be based on our knowledge and respect for plants.

Our Mission: Safeguarding plants for the wellbeing of people and the planet

Our Values:

Creative
We are inventive and enthusiastic

Open
We make time to listen, learn and be clear

Brave
We have the courage to change things

Remarkable
We leave a lasting impression.

4.9.2
Corporate Plan

The most recent *Royal Botanic Gardens Victoria Corporate Plan 2014-2019* sets out the priorities and performance indicators for the organisation over a specific period. That Corporate Plan includes the following four themes:

1. Discovery and sharing knowledge
2. Inspiring plant learning
3. Creating special places
4. Towards a sustainable future.

Each theme was supported by long-term strategies for action and measurement over the life of the plan. A new Corporate Plan is in development.

4.9.3
Landscape Succession Strategy

The *Landscape Succession Strategy Melbourne Gardens 2016-36* provides a framework to protect Melbourne Gardens and adapt the landscape to the likely impacts of future climate change, dwindling water supplies, ageing plant populations and plant health threats. Central to this document is the need to conserve the Gardens' character while adapting to change. To do this the document identified five key strategies with associated actions:

1. Actively manage and transition Melbourne Gardens landscape and plant collections
2. Establish a mixed-age selection of plants composed of a high diversity of taxa
3. Maximise sustainable water use and supply security
4. Maximise the benefits of the green space and built environment through landscape design
5. Improve understanding of the impacts of climate change on botanical landscapes.

The Landscape Succession Strategy is a key driver of the Master Plan and its listed actions are reflected in Master Plan recommendations.

4.9.4
Consolidated Engagement and Impact Strategy

The *Consolidated Engagement and Impact Strategy 2017–2020* sets growth and participation targets for the Gardens in alignment with Biodiversity 2037, City of Melbourne plans for a resilient city, the *Visitor Economy Strategy 2020* and other related policies in Health, Education, Aboriginal representation and Creative Industries. The Strategy describes major actions for the organisation in fulfilling its vision and mission for increased and deepened engagement with individuals, families, international visitors and local communities. The strategy provides detailed targets, actions, functional area plans, desired impact, outcomes and success measures for this goal area.

4.9.5
Conservation Management Plan

In preparation for the Master Plan, a Conservation Management Plan (CMP) for the Melbourne Gardens and Melbourne Observatory sites was commissioned in 2015 and completed in 2018. The CMP identifies the heritage significance of the Gardens (including the Observatory and Herbarium) and provides conservation policies to protect this significance. It also provides a valuable record of the history and heritage fabric of the place.

CMPs are limited in scope, and only address the heritage conservation requirements of the site, and not the wider operational and landscape needs of the Master Plan. The CMP provides actions to conserve the heritage fabric of the Gardens, while allowing for change, recognising that "*the continual evolution of this landscape is accepted, and expected to continue over time.*"[69] As such, the policies and actions identified by the CMP are reflected in the Master Plan recommendations.

The full *Conservation Management Plan: Melbourne Gardens and Melbourne Observatory, Royal Botanic Gardens Victoria*, is extensive, over 600 pages across five volumes. The Policies included in this document are yet to be considered by the Board.

4.9.6
Aboriginal Heritage Values

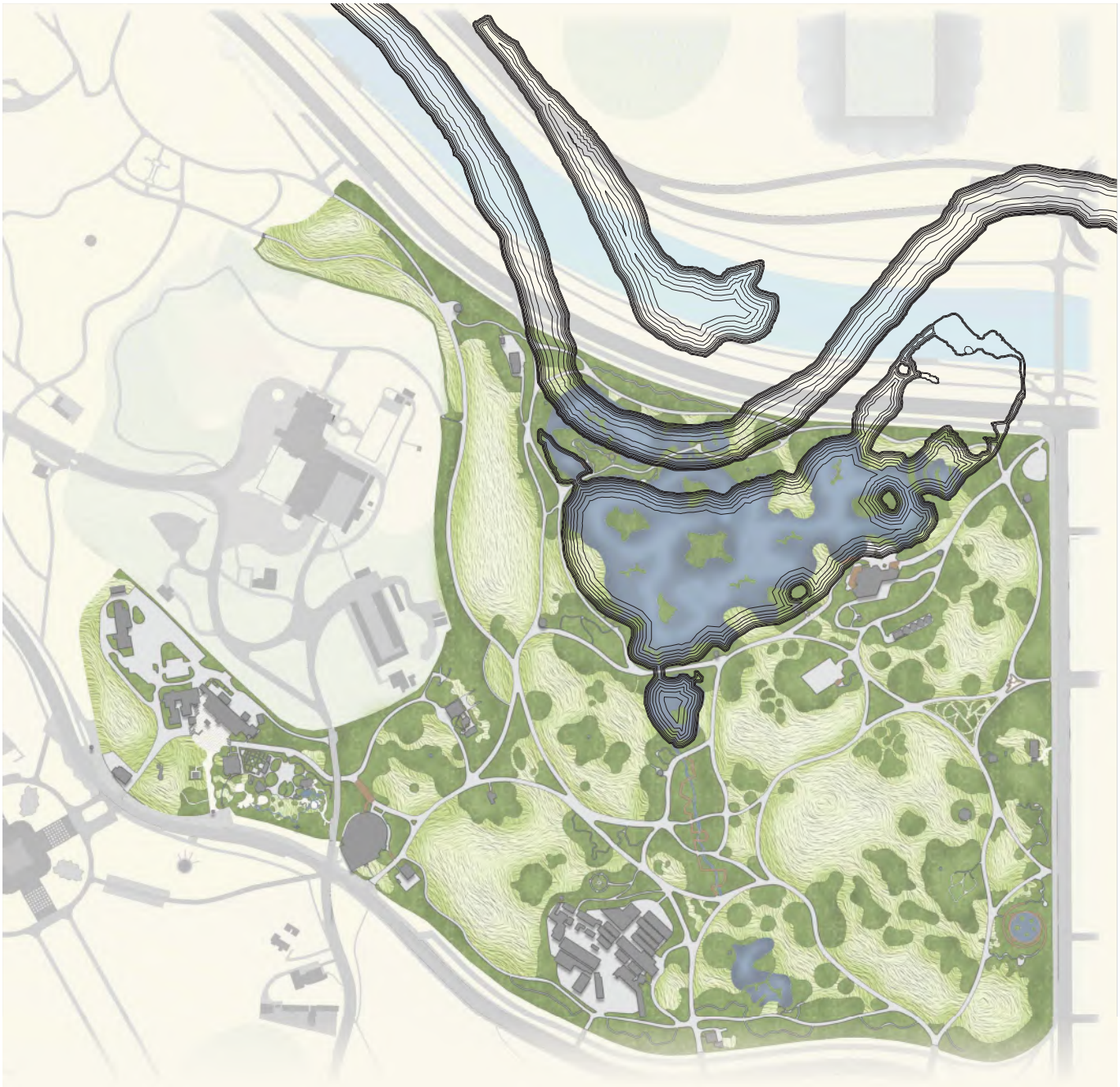
A principal recommendation of the CMP was to undertake further work to understand the tangible and intangible cultural heritage values of the descendants of the Woiwurrung and Boonwurrung peoples—the Traditional Owners of the land that is now Melbourne Gardens. This work was recognised as being a priority and crucial to the Master Plan, and was therefore commissioned and completed in 2017 by Context Pty Ltd. The resulting document provides a

The Melbourne Observatory is home to many historic telescopes

comprehensive and valuable history of Melbourne Gardens and its associated values to the Traditional Owners.

The nature of the Aboriginal Heritage Values document is such that it needs to be considered in its entirety and underpins both the Master Plan and future development work in the Gardens. In addition to Master Plan outcomes, it also identifies opportunities for RBGV engagement, interpretation, Learning and Participation programs and strategic management, although living and intangible culture were out of scope of the report. Recommendations and outcomes specific to the development of the Master Plan include:

- Identifying Aboriginal pre-contact heritage through the preparation of a Cultural Heritage Management Plan
- Recognising and reading the indigenous landscape and acknowledging its value to the Traditional Owners
- Understanding and acknowledging the importance of the original river (*Birrarung*) and lagoon (*Tromgin*) and recognising it in the Birrarung Gate development
- Exploring the possibility of creating a ceremonial space in the Gardens
- Using the important view lines to tell the stories of the place
- Interpreting the many seasons of the Kulin Nation
- Working collaboratively and proactively with the Traditional Owners
- Working collaboratively with surrounding land managers to allow the indigenous landscape to be read as a whole.



The Ornamental Lake and original course of Birrarung (the Yarra), as per the 1894 Melbourne Metropolitan Board of Works survey plans.
The original landscape, including the river can be seen in the Gardens today, and are of importance to the Traditional Owners

Majestic specimens on Oak Lawn

4.9.7 Living Collections Strategy

The Melbourne Gardens *Living Collections Strategy 2020–2040* guides the selection, curation and management of the Melbourne Gardens' living collections and is reviewed on a five-yearly basis. The new Strategy has been developed collaboratively with the Master Plan. The Strategy provides themes and criteria for assessing collections and identifies current collections which are under threat. It also provides a list of potential future collections.

The main driver in the future management of the living collections is responding to climate change and implementing the Landscape Succession Strategy. This will result in collections which focus on plants suited to Melbourne's climate and soil conditions, rather than applying historical practices which significantly alter the growing conditions to suit the plant "*as a result, greater emphasis will be placed on developing collection holdings that contain flora from temperature and rainfall niches that are comparable to Melbourne's future climate conditions, while still maintaining the style and character of the landscape*"[70].

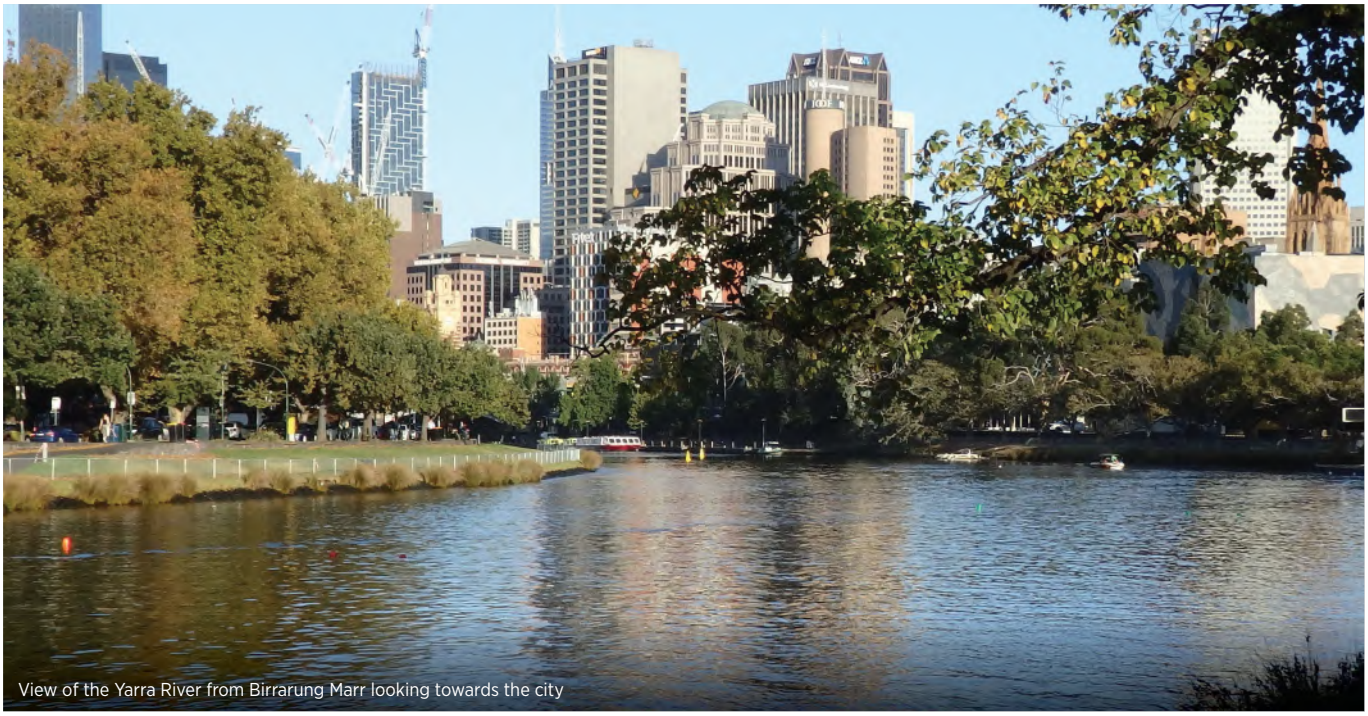
4.9.8 Tree Strategy

The Tree Strategy is currently under review and builds on the *Strategic Tree Plan 2009–18* to guide the management and succession of the trees at the Melbourne and Cranbourne Gardens. These include recommendations to protect existing trees, reduce risk, build climate resilience and implement the Master Plan and Landscape Succession Strategy—guarding the long-term health of the tree canopy and protecting the living collections.
The management of the tree canopy at Melbourne Gardens is a proactive process, overseen by the Manager Arboriculture. Tree removal and planting decisions are made in consultation with the Executive Director Melbourne Gardens and Landscape Architect with consideration for Landscape Succession, living collections management, heritage, the Master Plan and Tree Strategy. This approach ensures that the canopy is always managed in accordance with best practice.

4.9.9 Nature and Science Precinct Conceptual Building Master Plan

Design of the built form elements of the Nature and Science Precinct required expert architectural input, and Kerstin Thompson Architects was appointed in 2018 to produce the *Nature and Science Precinct Conceptual Building Master Plan*. This document tested previously identified options for siting the Herbarium, eventually developing a concept which concealed the laboratories and work spaces in a series of underground vaults, converted the 1934 building into a public gallery and visitor centre, and created a new pedestrian plaza and Children's Garden entrance along the Dallas Brooks Drive alignment. It also provided preliminary studies for the Lakeside Conservatory and transformation of the current Visitor Centre and restaurant into a new Learning and Participation Centre. The conceptual work of Kerstin Thompson Architects is incorporated into the Master Plan and has significantly informed planning and advocacy for the Precinct project.

With $5 million funding from the Victorian Government for a feasibility and design study in 2019, John Wardle Architects was appointed as principal architects to progress the concept plan to detailed schematic design and staging. Kerstin Thompson Architects was appointed to design the Staff Accommodation project. Laidlaw & Laidlaw Design was appointed as project landscape architects, and ASPECT Studios as place makers for the Precinct. Extensive work has been completed on the design of the underground vault and associated scientific laboratories, and for the increased public use of the existing National Herbarium of Victoria building. Further options for the Nature and Science Precinct program as a whole will be considered over future years, with new concepts and proposals released for public reference and comment.



View of the Yarra River from Birrarung Marr looking towards the city

4.9.10 Domain Parklands Master Plan

A strong driver to produce the Master Plan was the concurrent development of the City of Melbourne's Domain Parklands Master Plan, which was completed in early 2019. Relevant to Melbourne Gardens are the recommendations made concerning: road narrowing and closures, changes to private vehicle and bus parking arrangements, the pedestrian link to Anzac Station, potential for a new roundabout at F Gate, wayfinding through the Domain, and a potential tree top walk starting at the rear of the Sidney Myer Music Bowl and ending near Lych Gate.

The development of both Master Plans informed each other, with extensive consultation between the two design teams. As a result, the work of the City of Melbourne and RBGV is ongoing and collaborative, allowing each organisation to support the aims of the other and strengthening the relationship into the future.

4.9.11 Yarra River Plans

Over the three-year development of the Master Plan, significant changes occurred at a State Government level about the management and care of the Yarra River. In 2017 the *Yarra River Action Plan (Wilip-gin Birrarung murron)* was released, leading to passing the new *Yarra River Protection (Willip-gin Birrarung Murron) Act 2017* and the ongoing development of the *Yarra River Action Plan* by Melbourne Water. Both documents allow for the protection of the Yarra River and its surrounding parklands, giving it statutory protection as an entity and recognising the intrinsic connection of the Traditional Owners to the river, and their role in its custodianship and care. Importantly for RBGV, the document and Act recognise the Yarra, and the hundreds of parcels of public land surrounding it, as a single entity. The aims of these documents and the Act mirror those of RBGV and there is likely to be significant collaboration with the newly established Birrarung Council as the Master Plan is implemented.

4.9.12 State Government Policies

Royal Botanic Gardens Victoria and this Master Plan support delivery of the wider aims of the State Government, particularly in relation to *Protecting Victoria's Environment: Biodiversity 2037* and *Victoria's Climate Change Adaption Plan 2017–2020*.

Biodiversity 2037 outlines a Victorian Government plan to stop the decline in native species and encourage Victorians to value and act for nature. The work of RBGV supports this work through the provision of evidenced-based data on species management, building climate resilience, excellence in water management and harnessing world-class environmental tourism. The Climate Change Adaption Plan recognises the current effects of climate change and outlines strategies to allow Victoria to adapt. Again, the work of RBGV supports this, especially concerning evidence-based decision making, and through the work of the Landscape Succession, and Engagement and Impact strategies.

4.9.13 Global Strategy for Plant Conservation 2011–2020

Australia is a signatory to the international Convention on Biological Diversity, and by extension the adopted *Global Strategy for Plant Conservation 2011–2020*. The strategy looks at plant conservation at all levels, genetic diversity, plant species and their associated ecosystems. The work of RBGV and its Herbarium is fundamental to the understanding of plants and work required to conserve them. The Master Plan recommendations assist this strategy by making recommendations which support and care for the living collections and State Botanical Collection.

5 Development Guidelines

Rose Pavilion

Development Guidelines are not limited to any one part of the Gardens. Instead they provide recommended solutions to identified problems that affect the management of the whole site and have implications across functional work groups.

The need to find balanced solutions to often opposing demands on the landscape is the focus. For example, balancing the demand for engagement activity with pressure on the landscape, and the need to recognise the indigenous landscape alongside maintenance of the 19th century picturesque Gardens.

The Development Guidelines strive to address these challenges. By working collaboratively across work groups, they endeavour to create a landscape that preserves what is important, while providing a world-class experience, and lifelong learning for visitors.

5.1

HERITAGE

Heritage is embedded in our landscape, from the Country of the Traditional Owners to the landscapes of Mueller, Guilfoyle and successive designers. This heritage is living—embracing and protecting the past while allowing for change. It recognises all aspects of the Gardens' heritage, expanding beyond the traditional post-1835 approach. The Development Guidelines celebrate all aspects of this cultural heritage while keeping the Gardens relevant and contemporary.

Key Objectives

- Increase the recognition of the Traditional Owners in the landscape, their values and connection to Country
- Conserve the value of the European heritage of the site and complement it through sensitive contemporary design
- Promote the Gardens' heritage to increase its international profile

Challenges

The history of Melbourne Gardens is deeply valued by visitors and staff. The European heritage is well documented and protected by inclusion on the Victorian Heritage Register and National Heritage List (for the Melbourne Observatory), and by the implementation of the Conservation Management Plan (2018).

The Aboriginal heritage values of the site have been recognised more recently, particularly those of the peoples of the Kulin Nation. In 2017, the Gardens commissioned a report *Aboriginal Heritage Values: Melbourne Gardens* which provides a clear direction and recommended actions. This report includes extensive background and suggests many ways to recognise the long relationship of the Traditional Owners with the site.

The opportunity exists for the Gardens to further harness its heritage values and consider recognition through further heritage listing. The Gardens have a good relationship with the Australian Heritage Council concerning works on the site. Existing State heritage registration adds a complex planning layer to projects but has been simplified by permit exemptions. Meanwhile, external registration does not always protect the Gardens against the damaging effects of incremental change. The recently completed Conservation Management Plan further clarifies and consolidates the Gardens' history, while staff knowledge and education is also critical to protect its heritage.

Actions

1. Recognise the Aboriginal Heritage Values of the site

- Engage with the Traditional Owners and qualified consultants to develop a site-wide Cultural Heritage Management Plan (CHMP), preferably as a joint project with neighbouring land managers
- Develop the Birrarung Gate and Long Island precinct to interpret the Aboriginal values of the place and indigenous landscape
- Reflect the Aboriginal history of the site in naming practices
- Develop or expand a living collection which explores plants of significance to the Traditional Owners including celebration of the many seasons
- Engage with the Traditional Owners in the design and development of new projects where Aboriginal values are present or represented
- Work with the Traditional Owners to develop an interpretation program to recognise connections to Country and the landscape
- Work with the City of Melbourne, Shrine of Remembrance and Government House to interpret the wider landscape, including as a part of a Nature and Science Precinct
- Where appropriate include intangible heritage as a layer in design and interpretation.

Bush foods at Melbourne Gardens

2. Manage Melbourne Gardens in accordance with the Conservation Management Plan

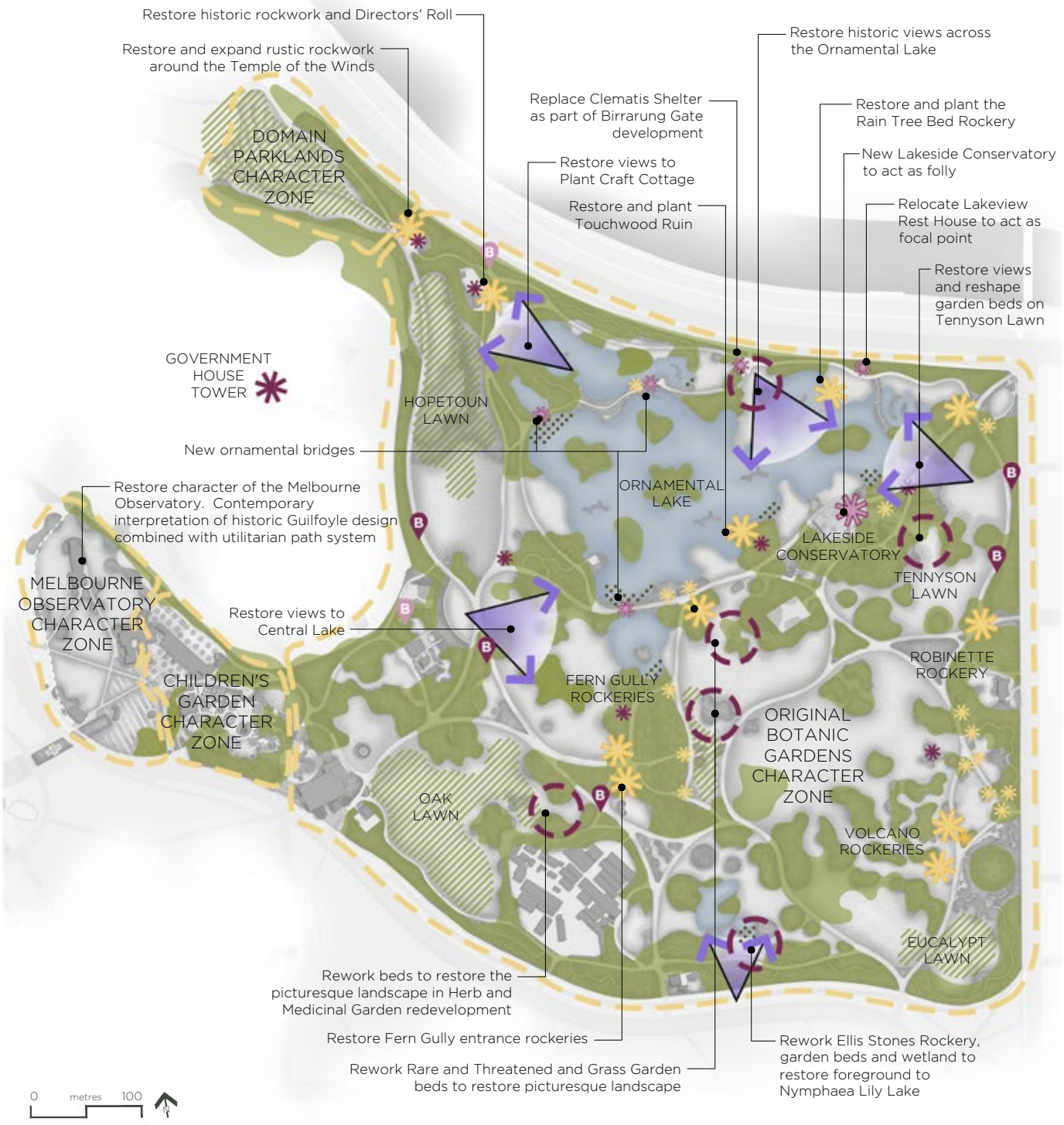
- Develop an implementation plan, for approval by the Board, of the Conservation Management Plan (CMP) policies and actions
- Use the cultural heritage values defined in the CMP, and its policies (Chapter 7, Volume 1), Statements of Significance and individual assessments to guide all use, management and development decisions
- Use the Guilfoyle 1909 plan to define the aesthetic significance of the landscape and retain all landscape features from that time
- Based on the CMP, develop all site maps locating elements of significance and incorporate these details into the Gardens' mapping database
- Give priority to the retention and conservation of elements identified as 'Outstanding' in the CMP and manage any proposed changes in accordance with CMP policies
- Retain and conserve elements identified as 'Significant' in the CMP and manage any proposed changes in accordance with the CMP policies
- Where possible, retain and conserve elements identified as 'Contributory' in the CMP and manage any proposed changes in accordance with the CMP policies
- Recognise and define the character differences between the landscape of the Original Botanic Gardens and the Melbourne Observatory, including installing interpretation to clearly identify the Melbourne Observatory
- Replace Significant or Outstanding trees with a species with the same values as the original where the original species in the same location is not acceptable.

3. Recognise the place for sensitive contemporary design in Melbourne Gardens

- Recognise the living nature of the Gardens' history, and the need to embrace change to develop the social, aesthetic and scientific value of the site
- Continue to support good contemporary design that respects and enhances the Guilfoyle landscape
- Continue to maintain the landscape and plant collections as the drivers of the built form.

The Tecoma Rest House, seen here in its original form, has recently been restored, guided by the Conservation Management Plan
Image courtesy of State Library of Victoria *Rotunda Band Stand, Royal Botanic Gardens, Melbourne*

LANDSCAPE CHARACTER PLAN



LEGEND

- Existing picturesque folly focal point
- New picturesque folly focal point
- Major / minor rustic rockery focal point
- Historic bower / arch with improved detailing
- Historic bower placed back into landscape (currently in storage or inappropriately placed)
- Historic view to be restored
- Guilfoyle picturesque 'mass'
- Guilfoyle picturesque 'void'
- Guilfoyle picturesque 'arboretum'
- Wetland reduction to restore open water void

5.2

LANDSCAPE

The picturesque landscape designed by William Guilfoyle inspires a sense of wellbeing and is integral to the heritage, beauty and popularity of the Gardens. One of the most important roles of the Master Plan is to protect the precious landscape while allowing for change. The Development Guidelines for the landscape aim to define and protect what is important, while allowing the scientific and practical functions of the Gardens to occur.

Key Objectives

- **Conserve the landscape character and plant diversity of Melbourne Gardens at all times**
- **Provide high quality-built form which complements the landscape and has exemplar sustainability standards**
- **Provide high quality water treatment and habitat while conserving the picturesque landscape**
- **Provide for the safe and efficient movement of vehicles and materials around the Gardens**

5.2.1 Landscape Character

Challenges

One of the fundamental roles of the Master Plan is to define and conserve the character of Melbourne Gardens and protect it against inappropriate development. All new buildings and major landscape developments need to respond to the Gardens' unique character and sense of place, respecting the picturesque and original traditions. All built components must be sensitive to scale and balance, becoming an integral part of the landscape. Recommendations made in the Master Plan aim to improve this important balance.

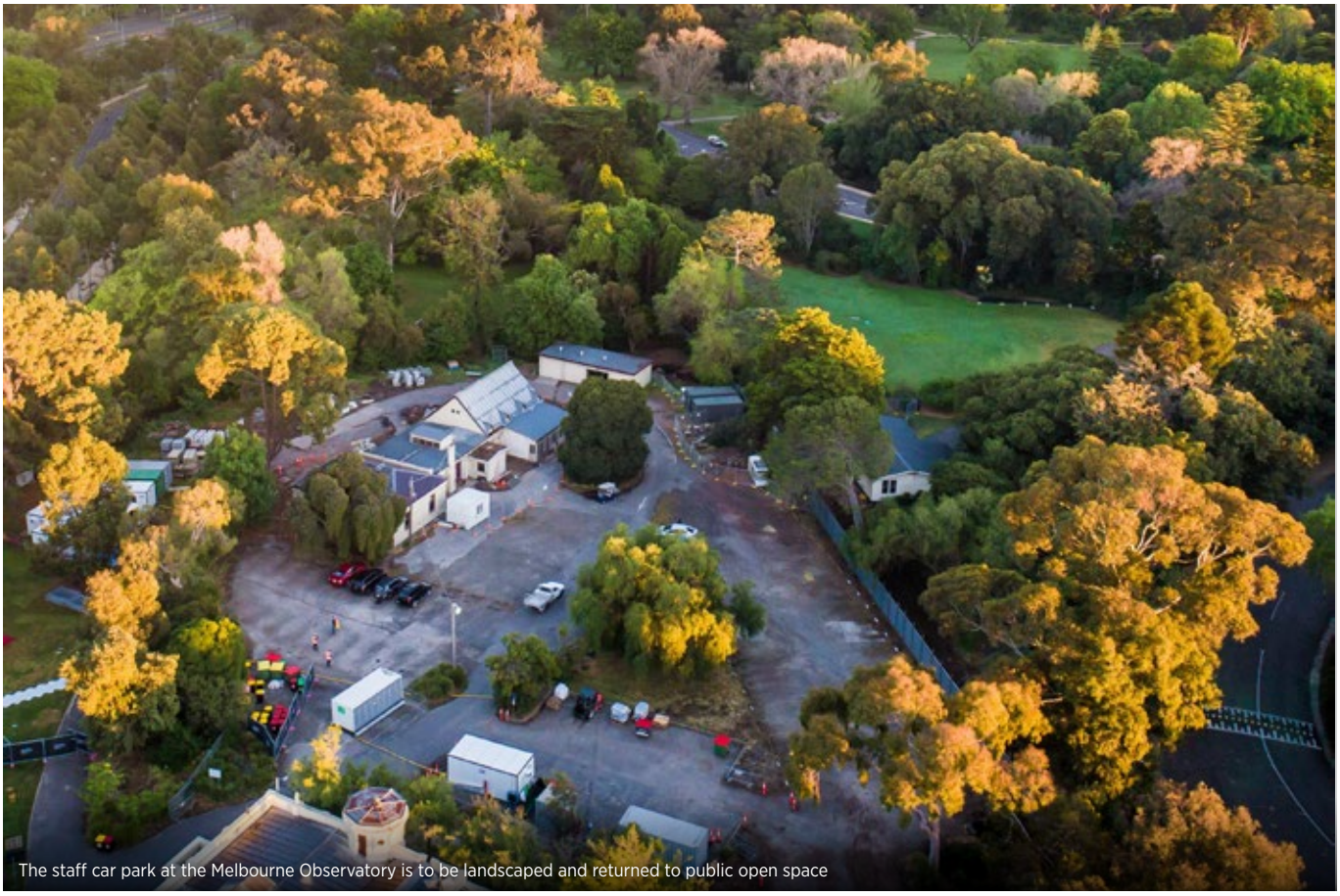
Melbourne Gardens has a strong and unifying landscape character described in detail in Section 4.4. The landscape is a contrived view of nature, predominantly created in the picturesque/gardenesque style with sympathetic modern additions, but this character can be easily eroded. Past encroachments include the mass planting of rhododendrons and azaleas in the 1940s, the replacement of ornamental buildings and structures in the 1960s and the Herbarium extension in 1988. Smaller, incremental changes have also diluted the character, including garden bed creep, inappropriate tree planting in view lines and, more recently, vigorous wetland planting. In some situations, unsympathetic additions such as the Herb Garden and the Ellis Stones Rockery have also come at the expense of Guilfoyle's picturesque design.

In the 1960s several decorative Victorian buildings and rustic follies were replaced by utilitarian structures. These included Eel and Long Island bridges, the Clematis Shelter and lodges at A Gate and B Gate. Today the bridges in particular lack character and sit prosaically in the landscape with little definition from the main path system and little sense of crossing the water.

Actions

1. Conserve Guilfoyle's picturesque landscape as described in Section 4.4.1 and the *Landscape Character Plan* (page 62)

- Conserve the picturesque Guilfoyle landscape as described in Section 4.4 within the Original Botanic Gardens Character Zone
- Restore significant view lines across the Gardens in accordance with the *Landscape Character Plan* (page 62) and recommendations made in the Conservation Management Plan
- Restore and maintain important lawn void space by removing and planting lawn specimen trees with respect for the significant view lines and void spaces described in the *Landscape Character Plan* (page 62)
- Respect the Guilfoyle mass and void as generally shown in the *Landscape Character Plan* (page 62) and interpret with an intimate knowledge of the physical landscape and its picturesque principles
- Place built form sensitively in the landscape with respect to the challenges described above and Section 4.4.4
- Develop detailed concept plans for new landscape projects as detailed in Chapter 6, Future Developments
- Restore and reshape garden beds, lawn areas and key focal points to restore the Guilfoyle mass and void in accordance with the *Landscape Character Plan* (page 62)
- Address narrow, shaded lawn areas by reshaping beds
- Gradually install steel edging to all garden beds as budgets allow or new projects are implemented
- Replace Eel Bridge and Long Island bridges with new picturesque structures. Each bridge must be designed as a focal point in the landscape while meeting all functional requirements (see Section 6.13, and *Landscape Character Plan*, page 62)
- Repair the historic rockeries and restore them as picturesque focal points for displaying feature plants (see Section 6.16, and *Landscape Character Plan*, page 62)
- Relocate Lakeview Rest House from its current position behind the Tea Rooms to the Northern Border opposite the Rain Tree Bed
- Replace Clematis Shelter with a contemporary landscape folly as part of the Birrarung Gate development (see Section 6.15)
- Restore lost historic bowers to the landscape in accordance with the *Landscape Character Plan*, page 62.
- Make bowers more inviting by cladding seats with timber and adding paving and plant detailing.



The staff car park at the Melbourne Observatory is to be landscaped and returned to public open space

2. Restore the landscape character of the Melbourne Observatory in accordance with Section 4.4.2, *Melbourne Observatory* (page 37)

- Conserve and enhance the Melbourne Observatory Character Zone as distinctly different from the Original Botanic Gardens, and the general Domain Parklands character
- Remove the staff car park and fences to re-establish a connection between the Great Melbourne Telescope House and other Melbourne Observatory buildings
- Establish a contemporary landscape treatment which interprets the historic character of low, picturesque style planting beds, botanical richness, open lawns and utilitarian paths
- Maintain the historic buildings as the dominant visual features in the landscape
- Interpret the historic boundary between the Melbourne Observatory and the Domain using landscape treatment and shrub beds, providing enclosure while allowing passive observation and movement from the Domain
- Strengthen the landscape interpretation of the Meridian line and remove visual clutter
- Limit tall tree planting to site boundaries outside telescope view lines
- Minimise the impact of new artificial light on the Melbourne Observatory
- Work with astronomical experts, including Museums Victoria, during detailed design.

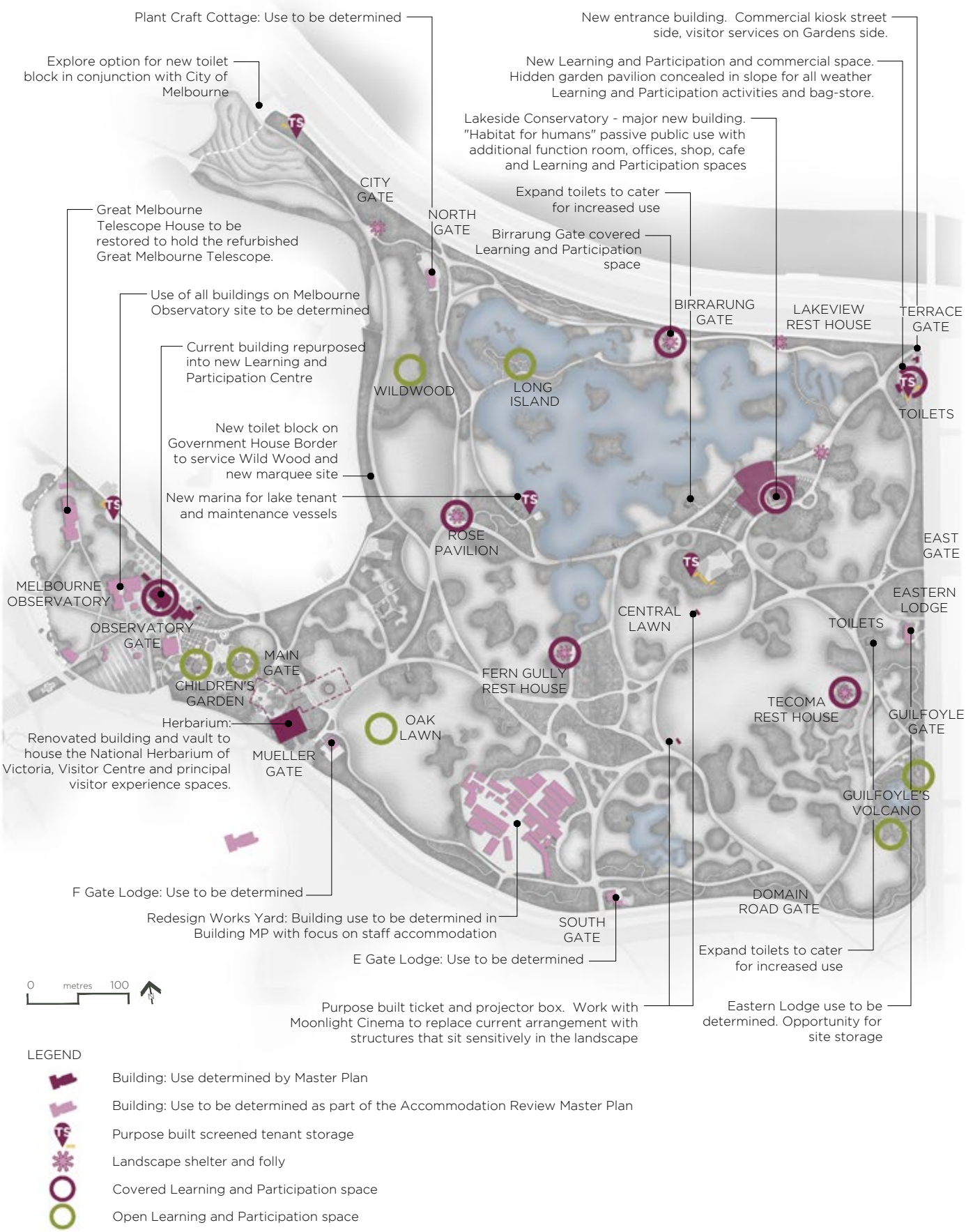
3. Preserve the remaining character zones described on the *Landscape Character Plan* (page 62)

- Maintain the Domain Parklands Character Zone as an open arboretum as described in Section 4.4.1
- Maintain the Children's Garden Character Zone in accordance with the description in Section 4.4.3

4. Conserve the planting character of the Gardens as described in Sections 4.4.6 and 4.4.7 (page 41-46), and use this to guide the implementation of the Landscape Succession Strategy

- Develop design intent and planting character statements for all garden beds
- Create more highlights of ornamental planting with colour and textural contrast at focal points in the landscape
- Increase plant detailing at all entrances
- Continue to improve the planting design detail where the green curtain lacks understorey.

BUILT FORM AND LEARNING AND PARTICIPATION PLAN



The landscape around Plant Craft Cottage is to be reinvigorated

5.2.2 Built Form

Challenges

Buildings in Melbourne Gardens are placed as either picturesque follies, creating important view lines, or as complementary features such as the historic Gate Lodges. It is important that all new buildings sit sympathetically in the landscape and are of outstanding architectural merit.

The accommodation of new built form in the landscape will be a significant challenge for Melbourne Gardens over the next 20 years. There are challenges in the management and use of our current buildings, particularly around the Melbourne Observatory, but there is an identified need for the construction of several major new buildings. Most important is a new National Herbarium of Victoria building (Section 6.1) with a new Lakeside Conservatory also desired to strengthen the RBGV's work as a world-leading botanic garden (Section 6.6). The return of the Great Melbourne Telescope, while occurring within an existing heritage building, will change the dynamic and visitor experience of the Melbourne Observatory site, which currently lacks effective amenity for visitors. The Observatory and Herbarium will form key components of the Gardens' new Nature and Science Precinct development.

Actions

1. Assess the capacity of the Gardens current and planned suite of buildings to accommodate future requirements and commence planning to address any shortfall

- Repurpose the existing National Herbarium building and Visitor Centre in line with the new plan for the Nature and Science Precinct
- Conduct an assessment of remaining built form including the Gate Lodges, Eastern Lodge, Plant Craft Cottage, Works Yard and Observatory buildings, and develop an Accommodation Review Master Plan to address accommodation requirements for staff, programs, engagement ventures and the Friends and Volunteers.

2. Design all new buildings and structures to take into account the landscape with consideration for the Landscape Character Zone in which they sit

- Design new buildings to be exemplar models of whole of life cycle sustainability, including embodied energy, inputs, running costs and maintenance
- Design all new built form to take into account the landscape character descriptions (provided in the Challenges above), in Section 4.4 and project descriptions in Chapter 6.

3. Develop all small-scale buildings to sit sensitively in the landscape and improve useability

- Design the hard landscaping of all new projects to be subservient to the display of the plant collections
- Develop a standard architectural detail for screened, inbuilt tenant storage to be sensitively located within the landscape in accordance with the *Built Form and Learning and Participation Plan*, page 65

- Develop landscape design concepts for each of the historic lodges to accommodate any new functional and back-of-house requirements following confirmation of their long-term use
- Rework the landscape around Plant Craft Cottage to improve accessibility, remove unsafe elements and improve the design integrity of the area
- Rework the back-of-house landscaping of Gate Lodge to fit more comfortably within the open Observatory landscape
- Incorporate F Gate Lodge with the wider Nature and Science Precinct landscaping
- Maintain a level of architectural consistency between the building at Terrace Gate (A), event ticketing and projector boxes, and the information pod.

5.2.3 Public Art in the Landscape

Challenges

Public gardens are often under pressure to become repositories for artworks, in particular sculpture. In recent years there have been a small number of permanent sculptural pieces installed in Melbourne Gardens including the von Mueller bust, Guilfoyle sculpture, Neutrino and the Magic Pudding.

While ephemeral or temporary art has a deserved place in this landscape, permanent pieces of art must be considered more carefully. As a botanic garden designed in the picturesque style, permanent artworks must demonstrate restraint to a reasonable degree.

Actions

1. Improve partnerships with other public art institutions

- Carefully review requests for permanent or major temporary art works through the Gardens' Programming and Audience Development group.

2. Support appropriate art installation across the site

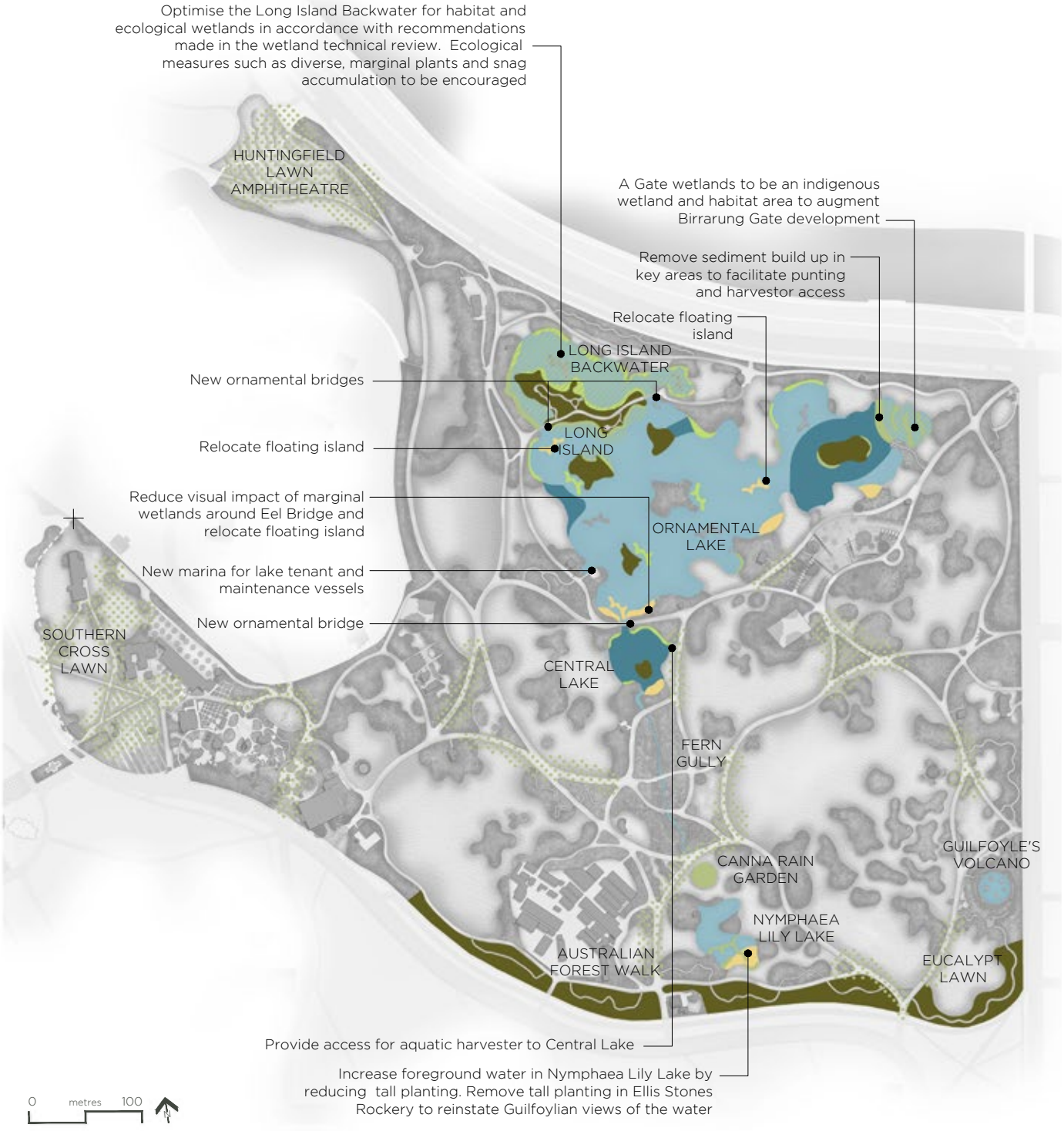
- Where appropriate include artists in the design and construction of new landscape projects
- Encourage ephemeral art projects such as performance, exhibitions or temporary sculptural works that contribute to meeting the Gardens' objectives
- Do not install permanent art pieces unless they serve a wider landscape purpose and/or are integral to Melbourne Gardens' picturesque landscape
- Assess and locate ephemeral works with consideration to the sensitivity analysis described in the *Landscape Sensitivity Plan*, page 76-77.

3. As historic and significant trees are lost develop them as 'fallen giants' art projects

- Develop location plans and briefs for the use of timber from individual trees which have already been lost, and work with artists and furniture makers to sculpt them to interpret their stories
- Interpret the deceased Separation Tree as a fallen giant, using the original tree and site to create something which reflects the tree's life and significance, acknowledging the significant Aboriginal and European history associated with this tree
- Ensure all timber from significant trees is retained and stored appropriately.

The Magic Pudding sculpture in the Children's Garden is one of the few pieces of public art in the landscape

LAKE SYSTEM AND ENVIRONMENT PLAN



LEGEND

- Lakes and water bodies
- Areas to be targeted for dredging and sediment removal
- Locations suitable for marginal wetland planting for water treatment
- Reduce wetland planting to restore views
- Ecological wetland areas (seasonal draw down, indigenous planting and snag accumulation)
- Areas suitable for sub-storey habitat creation (leaf litter, fallen giants, leaf litter accumulation etc.)
- Increase shade trees over paths while maintaining important view lines

5.2.4
Lake System

Challenges

Melbourne Gardens has three main ornamental water bodies: Ornamental Lake, Central Lake and Nymphaea Lily Lake. As picturesque features, the lakes were designed to be broad, sweeping planes of still water, providing scale and balance to the Gardens. They are vital natural water bodies, providing habitat for native fauna close to the CBD. They were also central to the lives of the local Aboriginal people, being important hunting and collecting grounds around a natural lagoon known as "Tromgin". A tension exists between providing a balance between this healthy habitat and the picturesque effect of the Guilfoyle landscape.

The last decade has seen the implementation of the Working Wetlands project. Water is collected from surrounding streets and treated by continual circulation through constructed wetlands, floating treatment wetlands and a rain garden. These measures are an engineered solution and have been highly successful, reducing algal blooms and eliminating excessive summer draw down and unsightly exposed mudflats. In some cases however, the new treatment wetlands have come at the expense of the lakes' picturesque view lines. Some of the views across the lakes have been lost due to dense aquatic planting that has naturalised and dominated sections of the water bodies. These have proven challenging to manage, with a need to reduce their extent in certain areas.

In the future there will be increased demand for the Ornamental Lake to act as a storage reservoir as the Sustainable Irrigation Project is implemented and the Gardens secure a long-term supply of non-potable irrigation water.

Actions

1. Refine appropriate locations for wetlands

- A site-wide technical review of the current wetland treatment system to determine options for maintaining water quality while implementing Master Plan recommendations concerning the distribution of wetland plantings
- Where water quality and quantity can be sustained, restore significant view lines and open water in lakes by reducing planting and floating wetlands in accordance with the *Landscape Character Plan*, page 62
- Maintain the balance in wetland planting by establishing any new areas of planting in accordance with *Lake System and Environment Plan*, page 68
- Allow habitat creation and snag accumulation in the Long Island Backwater and A Gate Wetlands.

Where appropriate the wood of 'fallen giants' is to be kept in the landscape, either for habitat or re-purposed by artists

Marginal wetlands and floating islands on the Ornamental Lake

2. Increase storage and draw down capacity of the lake system

- A feasibility study to determine the technical and cost implications of large-scale dredging of the lake, with the intent of commencing a staged process of sediment removal
- Targeted dredging to maintain open channels for punting and remove build up around key lake margins (e.g. Picnic Point) and drainage lines (e.g. Dog Flat) with reference to the *Lake System and Environment Plan*, page 68
- Maintain the Ornamental Lake's optimum water level at 70–90%.

3. Incorporate species selection into wetland management

- Plant indigenous species in areas around Long Island, the Backwater and the indigenous promontory, avoiding tall species that block view lines
- Plant suitable exotic species around the Tea Rooms/Lakeside Conservatory and in Central and Nymphaea Lily Lake, including control mechanisms to limit spread.

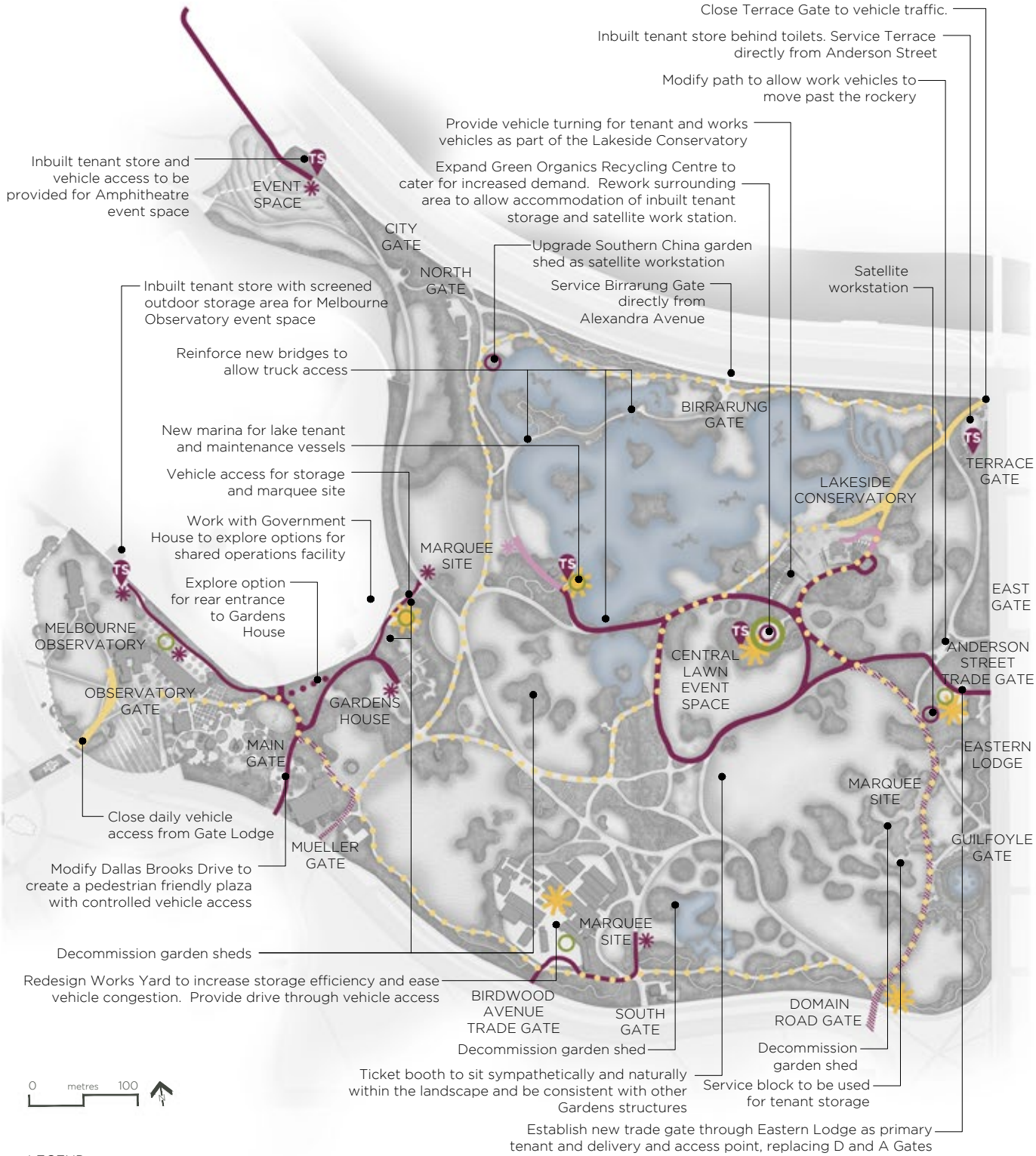
4. Create access routes for the aquatic harvester

- Develop plan and implement new access point for the aquatic harvester at Central Lake.

5. Develop boat/harvester storage facility and Marina

- Expand current harvester/boat storage area to cater for Gardens' maintenance and tenant needs.

STORAGE AND VEHICLE MOVEMENT PLAN



Salvaging timber from a 'fallen giant'

5.2.5 Vehicle Movement and Site Storage

Challenges

Guilfoyle's wide, sweeping path network was originally designed for pedestrian use only. However, as the range of activities offered within the Gardens grows, there has been increasing pressure to accommodate more vehicle access and storage space. Some vehicles are required for Gardens' maintenance including the Gardens' truck, utility, gators, buggies and the arboriculture truck. The Garden Explorer started operating in the Gardens in 2014 and provides important access across the site. Other vehicles using the paths belong to contractors carrying out works, or to service onsite partners such as food and beverage providers and event organisers.

This increased vehicle movement has generated safety concerns, particularly as they enter and exit the site at A Gate, Melbourne Observatory and along Dallas Brooks Drive. There is a continual risk of damage to the plants, especially the large trees, and to the Gardens' ageing infrastructure. The congestion also reduces the efficiency of staff, as they rely on vehicles to transport materials and equipment around the site but frequently have their path blocked. This is especially problematic when maintenance vehicles are needed in areas frequented by onsite partners. Other areas of congestion occur where vehicles enter and exit the Works Yard. All this leads to reducing the tranquillity of the site and negatively impacting visitor experience.

The difficulty of vehicle movement is worsened by the need for adequate storage on site. Melbourne Gardens is in short supply of storage space, which may reduce further with proposed changes at the Melbourne Observatory end of the Nature and Science Precinct. Storage is required for bulk garden and construction materials, green waste, general waste, storage of hardware and furnishings and for temporary storage for onsite partners. Ready access to storage areas can have considerable impact on the efficiency of Gardens' staff and contractors. Increasing storage areas will provide the opportunity to strengthen the Gardens' biosecurity and sustainability protocols by expanding recycling on site.

Actions

1. Streamline the transfer and storage of materials and waste across the site

- Develop a strategic plan to manage storage and green waste across the Gardens incorporating the Works Yard, Green Organics Recycling Centre, Gardens House northern corner, Eastern Lodge, the Lake service marina and other sites as appropriate with reference to the *Storage and Vehicle Movement Plan*, page 71
- Redevelop the Works Yard to improve storage and vehicle movement, possibly in conjunction with the development of staff office accommodation and horticultural infrastructure options
- Expand the Green Organics Recycling Centre to cater for increased demand and allow the construction of screened tenant storage and a satellite works space in the vicinity

- Consolidate satellite garden sheds, providing permeant tool outstations at the Green Organics Recycling Yard, Southern China shed and Eastern Lodge toilets; and removing, or repurposing other sheds with reference to the *Storage and Vehicle Movement Plan*, page 71
- Work with Government House to explore the option for a shared operations and storage area within the grounds of Government House
- Provide temporary green waste holding bays in strategic positions around the Gardens with reference to the *Storage and Vehicle Movement Plan*, page 71
- Expand the green waste system to include soil recycling, space permitting
- Develop an integrated strategic plan for improving the Gardens' collection, recycling and treatment of general waste, including from events and onsite partners, with the eventual aim of recycling or composting all appropriate materials
- Provide purpose-built tenant storage with reference to the *Storage and Vehicle Movement Plan*, page 71.

2. Redevelop the Works Yard to improve workplace efficiency and increase storage

- Develop a new plan for the Works Yard which holistically looks at building and works area layout to maximise the use of the space, and create an efficient centre for cross-site operations
- Increase efficiency in vehicle movement and parking, including providing a drive in, drive out access roadway
- Appropriately locate the fuelling stations and vehicle wash down areas to ease access
- Provide vehicle wash down facilities in the Works Yard and direct all contractor vehicles through this area to strengthen biosecurity controls
- Increase efficiencies in staff accommodation including assessing the use of the current buildings, consideration of the removal of non-heritage structures, and construction of new, fit for purpose buildings.

3. Rationalise the movement of vehicles through the site

- Identify and mark access pathways for delivery, tenant and contractor vehicles with reference to the *Storage and Vehicle Movement Plan*, page 71. Reinforce asphalt and maintain suitable vegetation clearance along these paths
- Develop the new Birrarung Gate entrance to accommodate small vehicle access
- Incorporate the access to Government House into the Nature and Science Precinct to accommodate vehicle access
- Explore options to close vehicle access through the Gate Lodge entrance at the Melbourne Observatory
- Close Terrace Gate (A) to all vehicles, creating an alternative second Trade Gate via Eastern Lodge
- Restrict hours of access for tenant and delivery vehicles to reinforce pedestrian priority.

4. Provide vehicle layoff areas

- Provide a series of reinforced turf layoff areas in appropriate locations along the narrow Northern Border and Southern Border paths, and elsewhere as required along the Garden Explorer route
- Utilise the paved 'pop-up' parking spaces in high profile areas as parking bays for the information pod with reference to the *Landscape Sensitivity Plan*, page 76-77.

Mowing lawns with the Ornamental Lake and Government House Tower in the background

5.2.6 Landscape Infrastructure

Challenges

The integrity and consistency of landscape infrastructure has regularly been maintained through consultation with the Landscape Architect, which has prevented detrimental incremental change. Establishing a series of approved landscape details would assist long-term planning and ease the heritage approvals process.

A considerable amount of infrastructure exists for the necessary operation of the Gardens. These include roadways, fences, gates, furnishings and services such as power, water, sewerage, telecommunications and stormwater. In particular, the Gardens' stormwater system is not adequate due to age and root infestation, and backflow during high rain events is common. Boundary fences shared with Government House have been replaced in the last few years, but others are in disrepair and present a poor first impression. Other problem areas include pathway surfaces and garden bed edges, with issues such as gravel erosion, roots lifting asphalt, and garden bed creep. Determining appropriate materials for use across the site allows heritage, landscape aesthetic, maintenance and cost to be considered in an integrated way.

Actions

1. Create a new palette of landscape furnishings

- Develop appropriate specifications for the full range of landscape furnishings including fixed and moveable benches, drinking fountains, bollards, lights, boundary fences, tree guards, steel edging, edging hoops, handrails and bins
- Where appropriate, develop consistent, project specific details for individual precincts (previous examples include Fern Gully and Guilfoyle's Volcano).

2. Develop and rationalise landscape details for the different pathway types across the site

- Maintain major pathways as asphalt and gradually upgrade across the site, reinforcing sections intended for delivery and contractor vehicles
- Develop a specification for new concrete kerbs and drainage grates with a lay back design to improve landscape amenity, increase accessibility and reduce stormwater flow
- Develop specifications for minor pathways to be a mix of cement stabilised gravel, exposed aggregate concrete and mild steel decking consistent with existing details
- Use a combination of engineered timber decking and permeable paving details to accommodate tree roots where they are causing paving disturbance. Where needed this may be combined with slight realignment of paths.

3. Adhere to best practice in the design and construction of sustainable infrastructure

- Design new infrastructure to be exemplary examples of whole of life cycle sustainability, including embodied energy, inputs, running costs and maintenance
- Manage infrastructure priorities in accordance with the Gardens' Asset Management Accountability Framework.

Restored terracotta drainage and asphalt path with new lay back concrete kerb near Fern Gully

Playing with autumn leaves on Oak Lawn

5.3

PEOPLE

The Melbourne Gardens are for people, a place of sanctuary against the backdrop of an expanding global city. It is essential that people can access and enjoy the landscape in a variety of ways, whether for recreation, connecting with nature, to attend cultural events, or as a place of public learning and science. The development guidelines look at providing sensitive solutions to meeting some of the diverse contemporary human demands on the landscape.

Key Objectives

- Support more events and engagement opportunities within the Gardens
- Provide the facilities to allow high quality programming during all weather
- Reflect history and place in the naming of Gardens' features
- Reduce the need for visitors and staff to use private vehicles by making alternative options more accessible
- Provide an accessible and inclusive landscape experience for all users

5.3.1
Events and Visitor Engagement

Challenges

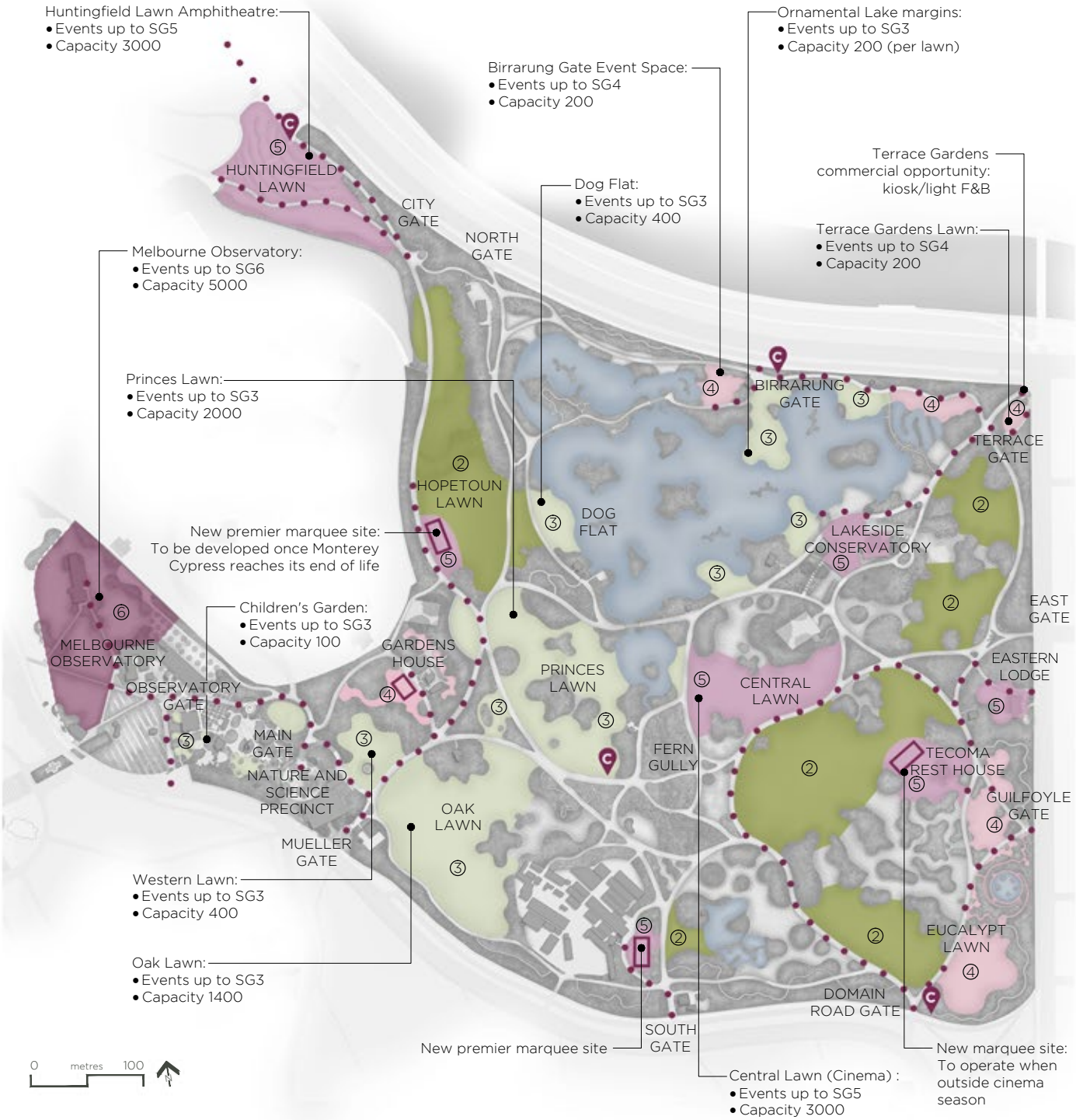
Royal Botanic Gardens Victoria offers unique public programs for all ages, at varying levels of scale and audience size, as outlined in the *Consolidated Engagement and Impact Strategy 2017–2020*. Public and group and family-based programming adds to the richness of Melbourne's cultural life by welcoming new audiences to the Gardens, many of whom would not otherwise experience the site and its stories. Nature-based experiences are the core of the public programs as well as events.

Some major events can at times conflict with the landscape values when they impact on the Gardens and its users. RBGV manages these impacts closely with on-site partners to achieve the best outcomes for visitors and the landscape. There is a need for a balanced approach, and for the Master Plan to provide serviced spaces for events while minimising landscape impact. Ideally, activities which have a higher impact on the landscape should be located near the site's boundaries, while low impact activities can occur almost anywhere within the Gardens. The merits of each event should be taken into account and its location appropriately determined.

There is a long history of marquees being used in the Gardens. Dog Flat has been long used for this purpose but is poorly serviced and interferes with major vistas. Meanwhile, storage for tenants such as Moonlight Cinema needs to be addressed so that shipping containers are not obstructing any one of the Gardens' premier lawns and major views. The prospect of increasing commercial opportunities also exists in terms of pop-ups and new operations at the Terrace Gate (A) and elsewhere.

Table: Landscape Sensitivity grades

LANDSCAPE SENSITIVITY PLAN



LEGEND

- General Landscape: Sensitivity grade 1
- Sensitivity grade 2 or under
- Sensitivity grade 3 or under
- Sensitivity grade 4 or under
- Sensitivity grade 5 or under
- Sensitivity grade 6 or under
- Accessible pathway suitable for night time use
- Marquee/built form permitted
- Flexible pop-up commercial and visitor information pod spaces

Actions

1. Increase the number of event and engagement spaces within the Gardens, while reducing or mitigating their impact on the Gardens' landscapes

- Locate events and engagement activities in accordance with the *Landscape Sensitivity Plan*, page 77 and Table, page 76, using the Corporate Plan as a means of assessing relevance to the Gardens experience
- Exception may be made for events of outstanding merit and that support RBGV's objectives
- Time events with consideration for their impact on the landscape and users, especially in relation to restricting visitor access, soil damage during winter months and impact on night time irrigation
- Whenever possible, ensure after hours events are designed so that view lines are not blocked during regular visitor hours
- Continue to maintain Melbourne Observatory as a space for public performance and engagement, with similar level of activity, installing screened tenant storage, three phase power access and serviceable pathways to reduce the impact of events
- Work with the City of Melbourne to develop a contoured, fully serviced performance space on Huntingfield Lawn
- Eventually remove marquees from Dog Flat and develop new, fully serviced marquee lawn sites in accordance with the *Landscape Sensitivity Plan*, page 76-77
- Expand the Eastern Lodge Toilets, A Gate and Touchwood Bed Toilets to cater for increased demand
- Provide new toilets on the Government House border to service Wildwood and the new marquee site
- Provide three phase power, potable water and vehicle access to all marquee sites and areas with a sensitivity grade of four or higher
- Provide accessible pathways, access to toilets and lighting to all marquee sites and areas with a sensitivity grade of four or higher in accordance with the *Landscape Sensitivity Plan*, page 76-77.

2. Expand the Gardens' commercial opportunities

- Develop a feasibility study to assess the case for a commercial food and beverage facility at Terrace Gate (A)
- Develop a series of flat, serviceable spaces for shared use by appropriate pop-up commercial ventures (e.g. beverage carts, ticket sales) and the visitor information pod in accordance with the *Landscape Sensitivity Plan*, page 76-77
- Dependent upon the outcome of the new Accommodation Review Master Plan and Nature and Science Precinct staging, develop business cases for use of other Gardens' buildings as appropriate
- Consider new retail options and food and beverage facilities at both the Lakeside Conservatory and Nature and Science Precinct.

'Fire Gardens' by Compagnie Carabosse with Melbourne International Arts Festival transformed the Gardens into an illuminated wonderland
Image courtesy of Jasmine Macut

3. Increase the Gardens' engagement by capturing new audiences

- Develop options for a community meeting space, including potentially within the Lakeside Conservatory
- Cater appropriately for culturally and linguistically diverse audiences
- Create a series of paved photo points at highlight locations within gardens and provide visual (all language) signage to more effectively engage visitors and discourage trampling of garden beds
- Develop new landscape projects which actively engage older children, teenagers and young adults
- Develop options for a Visitor Centre at the Nature and Science Precinct and a Visitor Centre outreach post at Terrace Gate (A).

5.3.2 Learning and Participation

Challenges

Melbourne Gardens has a long history of delivering high quality Learning and Participation programs aligned with the Victorian schools' curriculum. These programs are delivered to all age groups from kindergarten up to VCE and are centred on the Children's Garden and Oak Lawn. The delivery of Learning and Participation programs requires a specific set of facilities, including space to assemble and securely store school bags and easy access to bus parking and toilets.

Learning and Participation programs are currently limited by having no dedicated all-weather facility. Providing a protected space for up to 100 children would increase bookings and serviceability by allowing the Gardens to guarantee that programs are delivered, whatever the weather. There is also a desire to spread the programs across the Gardens, alleviating pressure on the Children's Garden and Oak Lawn and enabling children to engage more deeply with other parts of the landscape.

Actions

1. Provide secured storage near assembly points

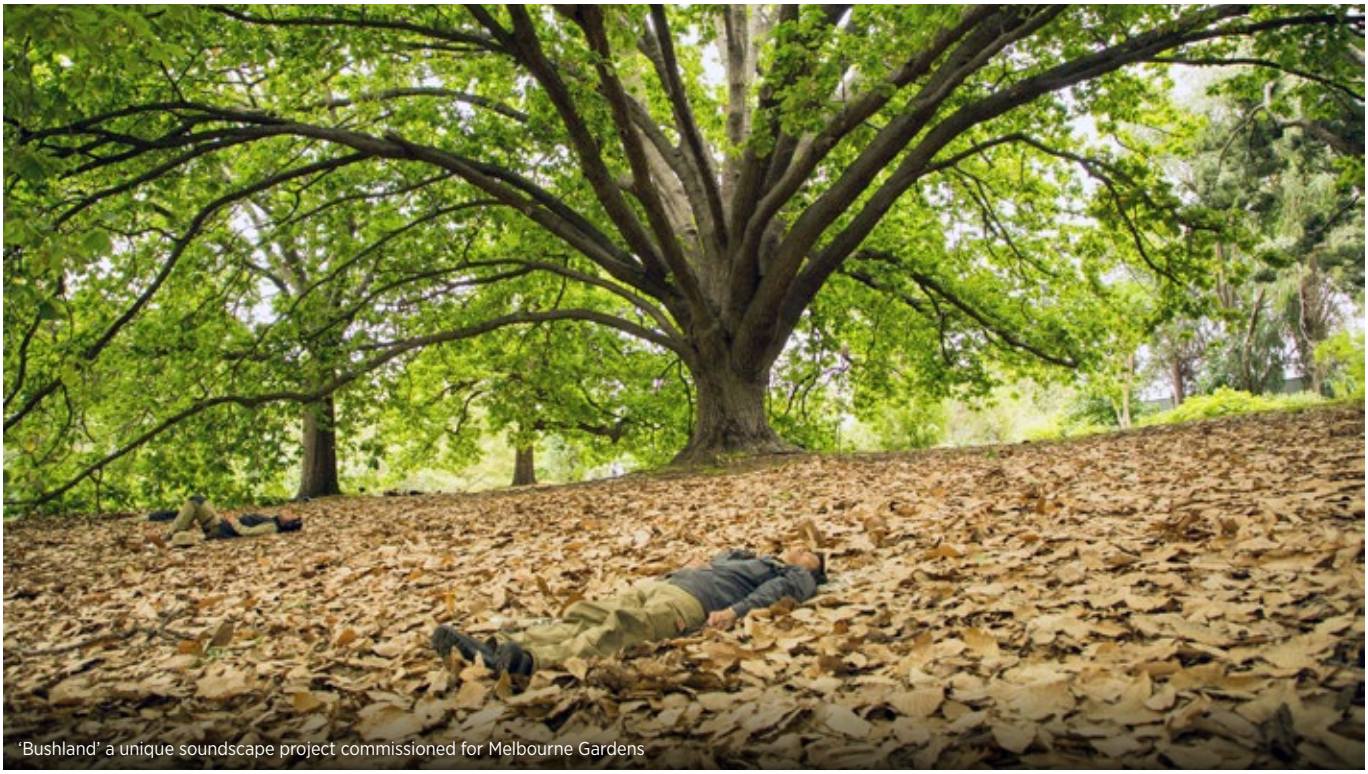
- Provide lockable, weather protected rooms to store school bags and sets of wet weather gear for activities at the Nature and Science Precinct
- Provide lockable, weather protected rooms at activity areas such as Terrace Gate (A).

2. Provide an all-weather Learning and Participation space

- In line with an agreed Nature and Science Precinct Plan, modify the current Visitor Centre or an alternative to provide an all-weather Learning and Participation space for up to 100 children.

3. Provide a series of Learning and Participation spaces across the Gardens for use by individual classes (up to 30 people)

- Develop a new gathering space on Terrace Gardens Lawn as a meeting point for Learning and Participation activities in the northern Gardens
- Create a new gathering space associated with the Sensory Garden development
- Develop a new gathering space associated with the Wild Wood on Hopetoun Lawn
- Include an all-weather space in place of the Clematis Shelter
- Utilise the existing Long Island and Guilfoyle's Volcano gathering spaces for Learning and Participation programs.



'Bushland' a unique soundscape project commissioned for Melbourne Gardens

Observatory Gate has a name which assists wayfinding

5.3.3 Naming conventions

Challenges

Individual names are used across Melbourne Gardens to differentiate spaces from large precincts, such as the Ornamental Lake, to individual garden beds, landscape features, gates and follies. This naming system aids management and wayfinding, but in many cases, names are organic, having become tied to places over time without strong historic or landscape links. There is also a decided bias towards Victorian era sensibilities in the naming. Dog Flat, Ornamental Lake and the Director's Tunnel are examples of names without good context. The gates too are problematic, and except for Observatory Gate and the whimsically named Lych Gate, are neither memorable, nor geographically relevant. The opportunity now exists to consider renaming some of these places, giving greater acknowledgement to the Traditional Owners and individuals who strongly contributed to the development to the Gardens, while also assisting with wayfinding.

Note: The nomenclature proposed in this section should be considered as indicative only. All changes to names will be considered in light of a Royal Botanic Gardens Victoria Naming Rights Policy, yet to be considered by the Board.

Actions

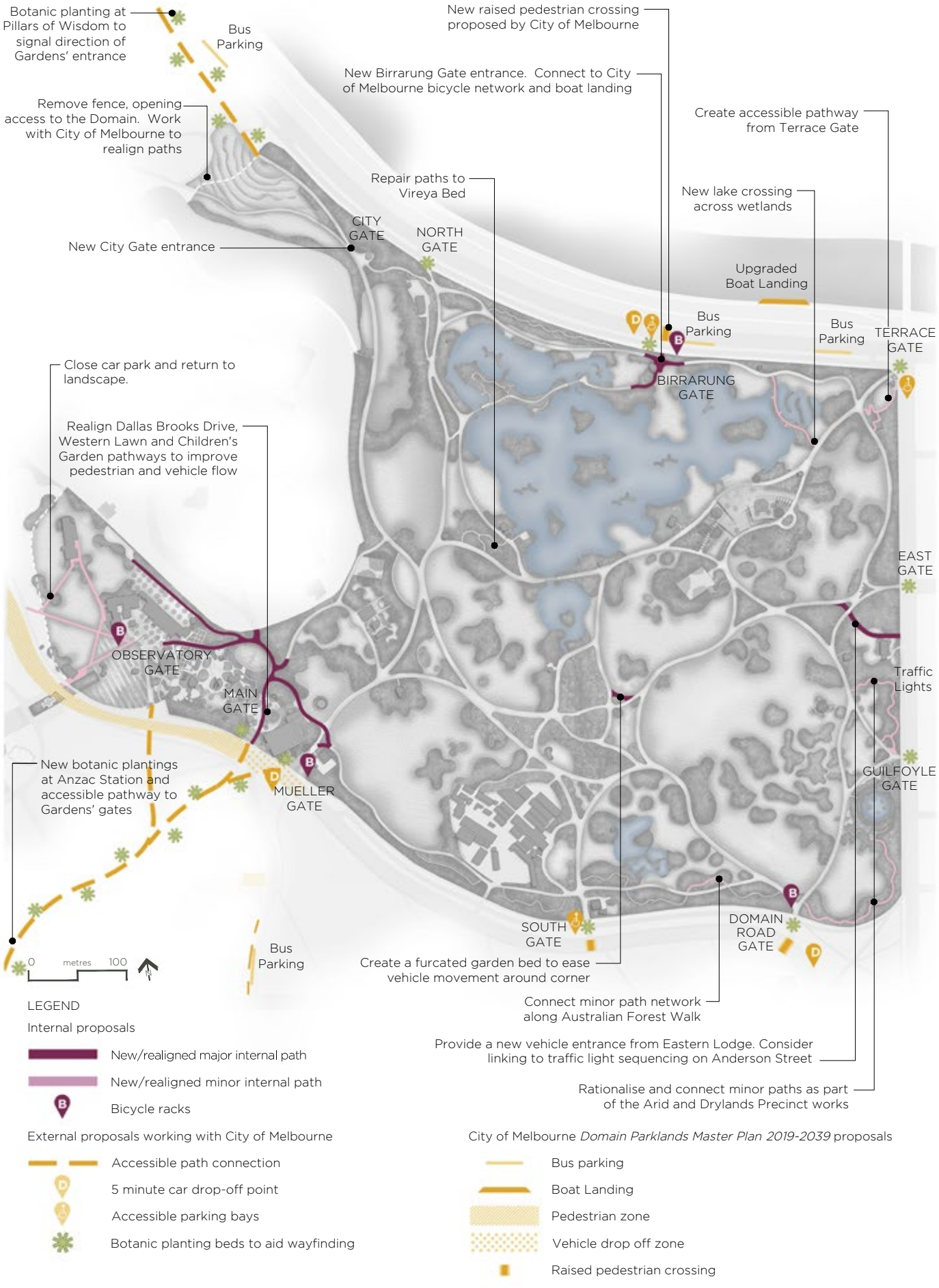
1. Rename landscape features with tenuous historic or place connections

- Rename landscape features whose names do not reflect the Gardens' history or have contemporary resonance
- Where there is a strong Aboriginal place name for Gardens' features these should be considered, with options for places having both European and Aboriginal names
- Names could reflect the Aboriginal history of the site, with any such names chosen by the Traditional Owners
- Names could reflect individuals who strongly contributed to the development of the Gardens
- Revert to historic place names for the Bowers (Arbours).

2. Rename the Gates

- Improve wayfinding by naming the Gardens' gates, as has happened with Observatory Gate, which will retain its current name. Naming is to occur through a formal process, possibly reflecting the new names introduced in the Master Plan as follows:
  - A Gate: Terrace Gate
  - B Gate: East Gate
  - C Gate: Guilfoyle Gate
  - D Gate: Domain Road Gate
  - E Gate: South Gate
  - F Gate: Mueller Gate
  - H Gate: North Gate.
- Create three new gates as follows:
  - Main Gate
  - Birrarung Gate
  - City Gate.

REACHING AND NAVIGATING THE SITE PLAN



Trams along St Kilda Road connect the Gardens to the city centre and Flinders Street Station
Image Courtesy of Liamdavies / CC BY-SA

5.3.4 Reaching the Gardens

Challenges

Melbourne Gardens are centrally located, close to the CBD, but for such an inner-city place are surprisingly difficult to access using public transport. The hilltop location which makes the Gardens so beautiful also makes them a challenge to reach. Important entrances are at the highest points, which are a considerable walk from the tram services along St Kilda Road and the trains at Flinders Street and Richmond Stations. This will continue until the opening of Anzac Station and the return of the tram route along Domain Road, expected around 2025. However, access from the station over the steep hill will still need to be addressed, especially for those with reduced mobility.

The Gardens are well serviced by on street car parking, with a mix of short-term, half-day and full-day paid parking around its boundaries. Traffic studies by the City of Melbourne indicate that most users of the surrounding roads and parking spaces are not visiting either the Gardens or Domain, but are instead passing through, or are city workers taking advantage of the relatively inexpensive all-day parking. As such, it has plans to reduce speed limits, alter parking times and pedestrianise some roads. On balance this will be positive for the Gardens and is expected to aid patronage.

For staff, an extensive, free car park is provided at the Melbourne Observatory site, shared by the Friends, Volunteers and onsite partners. This space will be lost in the next few years as the Great Melbourne Telescope is reinstated and the Observatory car park is returned to public open space.

Actions

1. Make public transport more accessible

- Work with the City of Melbourne and the Shrine of Remembrance to provide accessible pathways from St Kilda Road and Anzac Station to Melbourne Gardens
- Support the City of Melbourne in working with Parks Victoria to upgrade the river landing at Birrarung Gate
- Work with the Melbourne Metro Rail Authority and City of Melbourne to give Melbourne Gardens a visual presence at Anzac Station and guide foot traffic along a direct route to the Nature and Science Precinct
- Work with the City of Melbourne to improve directional signage and intuitive wayfinding to and from the CBD and public transport
- Support the City of Melbourne to investigate options for public transport along Birdwood Avenue
- Work with the City of Melbourne to direct tour bus drop off areas to Birrarung Gate as well as Terrace Gate (A).

2. Reduce the reliance on private vehicles to reach the Gardens

- Close the private car park on the Observatory site and return to public open space
- Provide bicycle racks at Main Gate, Domain Road Gate (D) and Birrarung Gate and connect to the City of Melbourne's Alexandra Avenue major bicycle route
- Work with the City of Melbourne to provide car drop off areas at Mueller Gate (F), Domain Road Gate (D) and Birrarung Gate
- Work with the City of Melbourne to provide parking permits for staff and onsite partners where required.

3. Make accessing the Gardens easier for visitors with impaired mobility

- Work with the City of Melbourne to provide accessible parking bays at South Gate (E) and Birrarung Gate to complement those already provided at the Nature and Science Precinct and Domain Road Gate (D).

5.3.5
Navigating the Site

Challenges

Guilfoyle's broad network of curving paths provide a beautiful and flexible means of exploring the Gardens and are an integral part of the picturesque landscape experience. However, the continuously looping pathways do not always lend themselves to intuitive wayfinding. From a landscape perspective this is mostly desirable, creating a sense of immersion and a dynamic experience of the site where no two journeys are the same.

The range of signage in the Gardens is generally good and has recently been augmented by new precinct signs. Map boards at entrances and major path junctions assist with wayfinding and include map brochures for greater flexibility. Overall, the signage compensates for much of the complexity in the path system. However, many visitors still become disorientated when moving through the site. Many visitors entering through the Observatory have difficulty in locating the historic part of the Gardens, often ending up in the staff car park, Dallas Brooks Drive, or Gardens House. The Master Plan and design of the Nature and Science Precinct need to address these issues, along with the lack of entrances along Alexandra Avenue.

Actions

1. Modify confusing pathways to aid wayfinding, including consideration of the following options

- Remove vehicle access from Melbourne Observatory and pedestrianise the landscape, creating a series of direct pathways with visually obvious connections to the Shrine, city centre and the rest of Melbourne Gardens
- Redesign of the Dallas Brooks Drive extension to Government House to improve pedestrian safety and access
- Create a visually unifying pathway or promenade from Melbourne Observatory, through the Nature and Science Precinct and towards Western Lawn and the Centre for Gardens Leadership, removing current areas of confusion
- Create a new entrance along the Northern Border between Terrace (A) and North (H) Gates to improve access to the Yarra River
- Improve entrance identity and naming in accordance with Section 6.12, *Entrances*.

2. Create a connected secondary path system

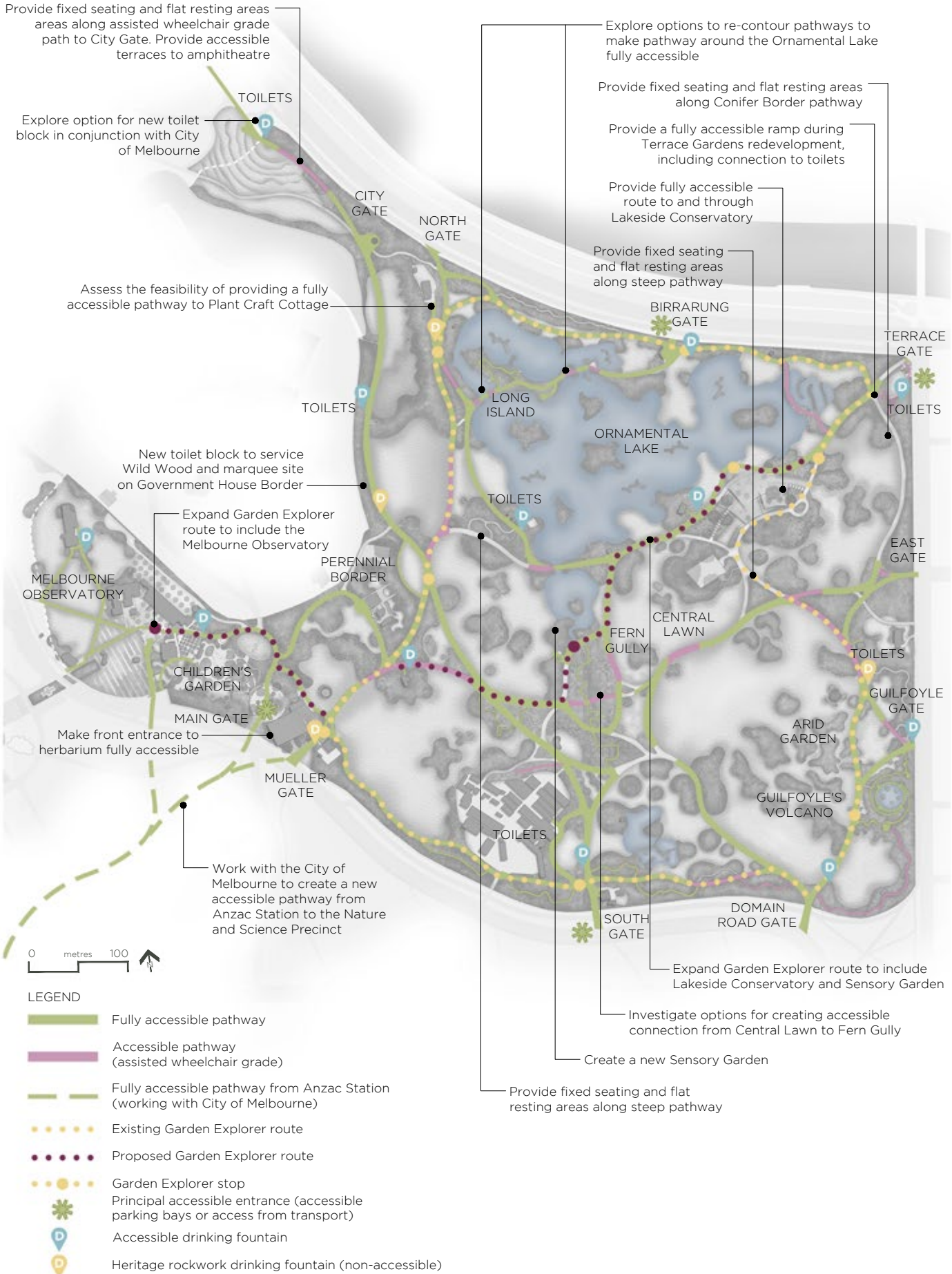
- Create new secondary paths in accordance with the *Reaching and Navigating the Site Plan*, page 81, to make sense of the existing minor paths, improve accessibility and create an alternative way of experiencing the Gardens and collections.

3. Address further problems in wayfinding through signage and interpretation

- Develop and implement a Melbourne Gardens Interpretation Master Plan
- Develop self-guided walks and interpretive journeys to accommodate the various ways people experience the landscape
- Explore the use of existing and emergent technologies to assist non-English speaking visitors to navigate the site and to provide deeper and richer interpretation experiences for all visitors.

New signs mark the Gardens' living collections

ACCESSIBILITY PLAN



5.3.6 Accessibility

Challenges

Royal Botanic Gardens Victoria has a strategic and ongoing commitment to providing equitable access to all people. The organisation is also committed to searching out invisible barriers of access and inclusion, such as those experienced by low socio-economic or disadvantaged families, children, immigrants and schools, and those with hidden disability. This approach applies equally for anyone who engages with the Gardens, whether as a visitor, staff member, onsite partner, contractor or volunteer.

As a statutory authority, RBGV is bound by several Acts of Parliament and a framework of state and federal policies that ensure equal opportunity is provided to all. Of particular relevance are the *Commonwealth Disability Discrimination Act 1992* and *Victorian Disability Act 2006* in addition to Equal Employment Opportunity provisions for employees. With an ageing population and the further impacts of climate change, the need to provide a welcoming and inclusive landscape will only grow.

In Melbourne Gardens many of the historic paths were laid out along existing contour lines to reduce their gradient. While much of the site is accessible, as a heritage landscape, there are constraints for providing full physical access to all parts of the Gardens. While the Building Code of Australia classifies landscapes as a 'Class 10 Building', meaning there is no requirement to provide access, State Government and DELWP policy, together with the Board approved *RBGV Diversity and Inclusion Plan,* demonstrate a full commitment to an accessible, inclusive and dignified landscape experience for all. RBGV therefore aims for best practice in accessibility wherever possible.

Recent projects have improved accessibility and navigation within the Gardens, especially the Fern Gully boardwalk, which creates a crucial accessible link in a north-south direction across the Gardens. The introduction of the Garden Explorer, a popular electric people mover, has greatly increased accessibility around the site, though access to several areas can still be difficult due to steep pathways.

Additional seating, more drinking fountains, creation of direct routes and customer journey maps, tactile markers, improved site interpretation and signage in languages other than English, provision of sheltered environments for when weather conditions are challenging, all make for a landscape experience that is welcoming, accessible and inclusive for everyone.

Map boards assist visitors to find their way around the Gardens

New landscape projects such as the rejuvenation of Fern Gully have increased accessibility across the site

Actions

1. Make all public buildings fully accessible

- Provide equitable, dignified access fully compliant with the Building Code of Australia to all public buildings
- Provide a fully compliant pathway from a Gardens' gate to each publicly accessible building
- Explore whether making Plant Craft Cottage fully accessible would result in "undue hardship" due to its difficult location. Provide buggy access if full accessibility is not deemed possible.

2. Provide universal access to all major Gardens' features

- Provide "assisted wheelchair grade" (max 1:14) access to all major Gardens features in accordance with the *Accessibility Plan*, page 84
- Provide accessible connecting pathways running north-south, east-west and around the Ornamental Lake to facilitate access.

3. Make areas of the landscape without universal access more user friendly

- Provide signage indicating the most direct accessible route where slopes preclude universal access
- Provide fixed seats and regular landings along steep major access paths in accordance with the *Accessibility Plan*, page 84
- Provide handrails to all flights of stairs
- Gradually replace concrete kerbs with layback kerbs
- Provide more accessible drinking fountains (including bottle refills and dog bowls) across the landscape in accordance with the *Accessibility Plan*, page 84
- Expand the Garden Explorer service to include Melbourne Observatory, Lakeside Conservatory and Sensory Garden
- Work with the City of Melbourne to provide an accessible connection from Anzac Station
- Work with the City of Melbourne to increase the number of accessible parking bays at Gardens' entrances in accordance with the *Reaching and Navigating the Site Plan*, page 81
- Provide detailed accessibility information on RBGV website to aid trip planning.

4. Provide inclusive experiences for visitors with sensory impairments

- Create a new, fully accessible Sensory Garden near the Fern Gully
- Maintain some areas of the Gardens as places for withdrawal and escape.

Botanists and Horticulturists studying the Titan Arum (*Amorphophallus titanum*)

5.4

SCIENCE, HORTICULTURE AND ENVIRONMENT

Melbourne Gardens are also a scientific institution, a living laboratory supporting the research work of botanists, horticulturists, academics, students and the wider public. The landscapes are a living repository for plants and animals, both a scientific resource and an important ecological green space, to be guarded against the impact of a growing city and climate change. Intimately connected to these landscapes is the State Botanical Collection, held within the National Herbarium of Victoria. The development guidelines for science, horticulture and environment supports this scientific work, and protects the landscape and associated infrastructure as a premier scientific resource.

Key Objectives

- Provide a landscape which supports scientific research, plant conservation and the maintenance of biodiversity
- Manage the Gardens so that the landscape character and living collections are seamless
- Support the implementation of the Landscape Succession Strategy to address climate change
- Increase plant diversity in the landscape
- Recognise the importance of habitat in the Gardens
- Optimise tree health across the Gardens

5.4.1 Landscape Succession and Environment

Challenges

One of Melbourne Gardens' key strategic documents is the Landscape Succession Strategy. This document has positioned RBGV as a global leader in its sector for adapting landscape environments to the increasing threat of climate change, and seeks to build resilience in the landscape and living collections while maintaining the character of the Gardens through to 2090. Together, the Master Plan and Landscape Succession Strategy will be instrumental in guiding the development of the Gardens' living collections over the next 20 years.

Targets for the Landscape Succession Strategy cover species composition, plant diversity, securing a sustainable supply of irrigation water, increasing visitor comfort and research. Several specific actions arising from these targets are reflected in the Master Plan.

As an extension of the Landscape Succession Strategy, Melbourne Gardens values its role as an urban greenspace, providing beneficial impacts on biodiversity, healthy urban habitat and wellbeing. Along with the State Botanical Collection and associated scientific programs, RBGV contributes to a broad range of conservation, health and biodiversity initiatives in Victoria and more broadly. The City of Melbourne predicts a population rise in Docklands and the CBD of 250% by 2036, placing even greater pressure on RBGV's city landscape to be a cool refuge for animals, birds and people. Increasingly, horticultural, health and social/behavioural research is demonstrating the valuable and tangible benefits gardens, parks and other green spaces provide. This is not only in terms of the physical and mental wellbeing inspired by contact with nature, but also the potential for these spaces to address the detrimental health impacts that come from being in cities, for example pollution offset and the urban heat island effect.

In addition to caring for its visitors and the wider city, Melbourne Gardens is an important wildlife refuge, especially its lakes and water bodies. They are also home to around 140 species of native fungi and lichens, as well as numerous algae and other microorganisms, with species new to science having been identified in the Gardens. It is important that the Gardens embrace the role it plays in caring for not only plants, but the health and wellbeing of people and wildlife in the city.

Actions

1. Support Melbourne Gardens to transition to 100% sustainable water supply

- Upgrade infrastructure to connect the Melbourne Observatory and Children's Garden to the Sustainable Irrigation Project
- Continue to maintain some non-irrigated garden beds such as Long Island and the Volcano
- Maintain a balance between irrigated and non-irrigated areas as a means of cooling the Gardens
- Sensitively locate and accommodate any infrastructure necessary for the Sustainable Irrigation Project.

2. Provide quality habitat for wildlife, invertebrates and indigenous flora

- Retain fallen tree material and understorey litter as habitat in appropriate areas in accordance with the *Lake System and Environment Plan*, page 68
- Manage light levels and preserve the Gardens as a predominantly 'dark site' refuge, while maintaining safety for visitors during night-time events
- Restore rockeries to increase the number of free-standing water bodies for frog habitat
- Consider practices to promote hollows and the provision of natural nesting boxes in large, old trees.

3. Improve the landscape's ability to provide a safe, comfortable environment for visitors, especially during hot weather

- Increase shade in exposed locations through tree planting in accordance with the *Lake System and Environment Plan*, page 68 taking care not to block important view lines and maintain landscape character
- Increase access to drinking water across the landscape in accordance with the *Accessibility Plan*, page 84
- Improve visitor amenity at the Melbourne Observatory by planting shrubs and small trees to mitigate the impacts of temperature, glare and wind
- Capitalise on the Gardens' microclimates to provide a balance between moderate and low water use plants, including lawn areas, as a means of cooling the Gardens
- Develop opportunities such as the Nature and Science Precinct and the Lakeside Conservatory as places to promote visitor wellbeing and access to nature during any weather
- Maintain the dense boundary plantings in most areas to reduce vehicle pollution in the Gardens
- Work with the City of Melbourne in the development of the City Arboretum in the Domain Parklands.

4. Increase the Gardens' capacity to support scientific research

- Collaborate with Science to accommodate research projects across the Gardens.

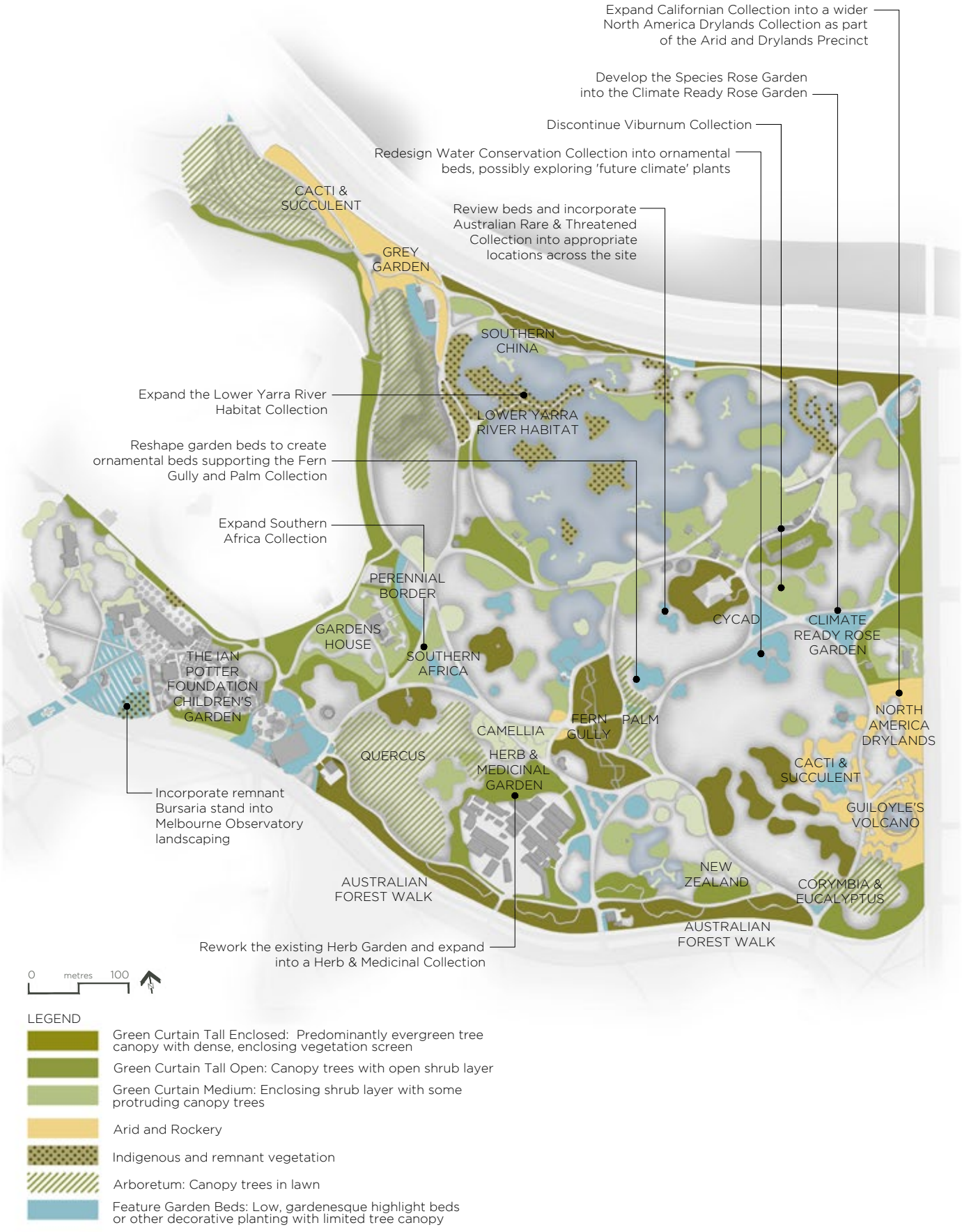
5.4.2 Living Collections

Challenges

Melbourne Gardens currently supports 23 living collections, groups of plants with a specific theme such as scientific significance or conservation that are actively curated by a qualified horticulturist with reference to the scientific programs and State Botanical Collection. The accuracy and frequency of record keeping on each collection is an essential feature of the work undertaken in botanic gardens. Collections may be found in either consolidated areas or dispersed across the whole site. Unlike many botanic gardens, the collections in Melbourne Gardens are skilfully nestled in the picturesque landscape.

Each living collection has its own management plan, while the Living Collections Strategy provides the overall direction for all collections. Historically, collections have been developed opportunistically, often reflecting individual staff interests. Now they are actively managed and, in most cases, aligned with the strategic goals of the organisation, including the Landscape Succession Strategy.

PLANTING CHARACTER PLAN



Living collections are constantly evolving galleries, responding to changes in climate, management and research priorities. Placement of many collections has historic precedence, and it is rare these collections would ever be moved or removed. However, it is expected that there will be significant change to the detail of collections' plantings over the next 20 years, as the species composition of the Gardens is transitioned through implementation of its response to climate change through the Landscape Succession Strategy and other new organisational strategies for sustainability. Retirement of a collection does not mean that valuable plant material is lost or disregarded. Plants of value will be retained within the Gardens as part of the general collection, or where struggling climatically, material will be relocated to other botanic gardens with more appropriate conditions, such as the Dandenong Ranges. When a new collection is formed, or an existing collection expanded, it is important that the Master Plan provides landscape character guidance to direct its placement within the landscape. The challenge is to find a suitable microclimate without compromising landscape character.

Actions

1. Place all living collections to maintain a seamless relationship with the landscape character of the Gardens

- Update all individual Living Collection Management Plans to include design intent statements and planting character information
- Maximise opportunities for living collections to support national and international conservation efforts
- Develop new collections with consideration for the Landscape Succession Strategy, Living Collections Strategy and other new RBGV sustainability initiatives
- Sensitively place new and expanded collections within the landscape, respecting the Gardens' picturesque landscape and planting character described in Section 4.4 Landscape Character, *Landscape Character Plan*, page 62 and *Planting Character Plan*, page 89.

2. Work with the Living Collections Strategy to develop new and assess existing collections

- Make all decisions in relation to the creation, expansion or retirement of collections using the Living Collections Strategy's criteria and evaluation framework and aligned with RBGV's corporate strategy and objectives
- When retiring a collection, maintain all scientifically important genetic material, either within the Gardens or relocated to more climatically suitable botanic gardens
- Expand the Southern Africa Collection within the existing location
- Expand and rename the California Collection to include a wider geographical area (North America Drylands)
- Build on existing collections to develop an Australian Rare and Threatened Collection
- Rework the existing Herb Garden and expand into a Herb and Medicinal Collection in accordance with Guilfoyle's original intent
- Expand the Lower Yarra River Habitat Collection to include plants of significance to the Traditional Owners

The Fields cacti and succulent collection in the nursery, awaiting planting in the new Arid Garden

- Retire the Viburnum, Water Conservation, and Grass and Bamboo Collections, with distribution of any important material to other botanic gardens or similarly secure repositories
- Transition the Species Rose Collection to a 'Climate Ready' Ornamental Rose Collection, focusing on heat and disease tolerant taxa
- Create a new Arid and Drylands Precinct centred around Guilfoyle Gate (C) incorporating the Arid and Eucalypt Collections and the expanded California Collection
- Explore the appropriateness of developing other collections such as Northern African, Mexican and South American Collections
- Develop collections to support the new Lakeside Conservatory and review opportunities for a Tropical Flora Collection.

3. Use the living collections as a means of increasing diversity in the landscape

- Support the target of the Landscape Succession Strategy in achieving plant diversity equal or greater than 8,400 distinct taxa with over 35% wild provenance-sourced plants
- Work with RBGV's scientists to develop collections to facilitate their work, particularly to foster plant science, conservation and biodiversity
- Create an area for the public display of the Terrestrial Orchid Collection within the Lakeside Conservatory
- Investigate the usefulness of providing a quarantine centre in conjunction with the new Conservatory.

5.4.3 Tree Canopy

Challenges

The botanically rich and diverse collection of trees is integral to the landscape character of Melbourne Gardens. In common with many Victorian gardens, the tree canopy is mostly mature and needs to be carefully managed into the future. Considerable tree planting has taken place since the 2008 Strategic Tree Plan, but the large-scale senescence predicted in the Plan has commenced, with several significant losses in recent years. This has implications for carbon sequestration, as the oldest trees are the greatest drawers of carbon. While there are some management options, over-applying resources to retain trees beyond their useful life is rarely appropriate. Existing climate change is hastening some tree loss, and inevitably the skyline and character of the Gardens will continue to evolve over the life of the Master Plan.

There is a need for new tree planting to support the implementation of the Landscape Succession Strategy. This will move away from the traditional cool climate species composition, to one better matched to predicted future climates. For long-lived species, such as trees, this approach is especially important and provides a valuable research and climate study tool due to the Gardens' meticulous record keeping. This can be done without compromising the landscape character. Of greater potential impact on the landscape is the placement of specimen trees in lawns, and great care needs to be taken so that new tree plantings do not impede views or shade out significant garden beds. This is especially important with any commemorative plantings as they often demand prominent locations and removal requires sensitive handling.

As a botanical landscape there is an understanding that the trees in Melbourne Gardens need to be protected, however, more knowledge about the level of care required when working around them is required. In particular, the extent of a tree's root system (often 2–3 times the size of the canopy), and susceptibility to compaction and root loss is very poorly understood.

Actions

1. Manage the senescing tree canopy

- Actively plan for mature tree losses by selecting and planting trees that support the Gardens' landscape succession and species diversity goals
- Consider active removal of trees with limited value to increase plant diversity and support the implementation of the Landscape Succession Strategy
- Consider alternative tree management techniques for signature heritage trees including the indigenous 'Ancient Sentinels'
- Update the Tree Strategy to include policies for the management of 'Significant' and 'Outstanding' heritage trees including identifying appropriate replacement species when like-for-like is not appropriate
- Wherever possible retain the wood from significant trees within the landscape as habitat, art or furniture as recommended in Section 5.2.

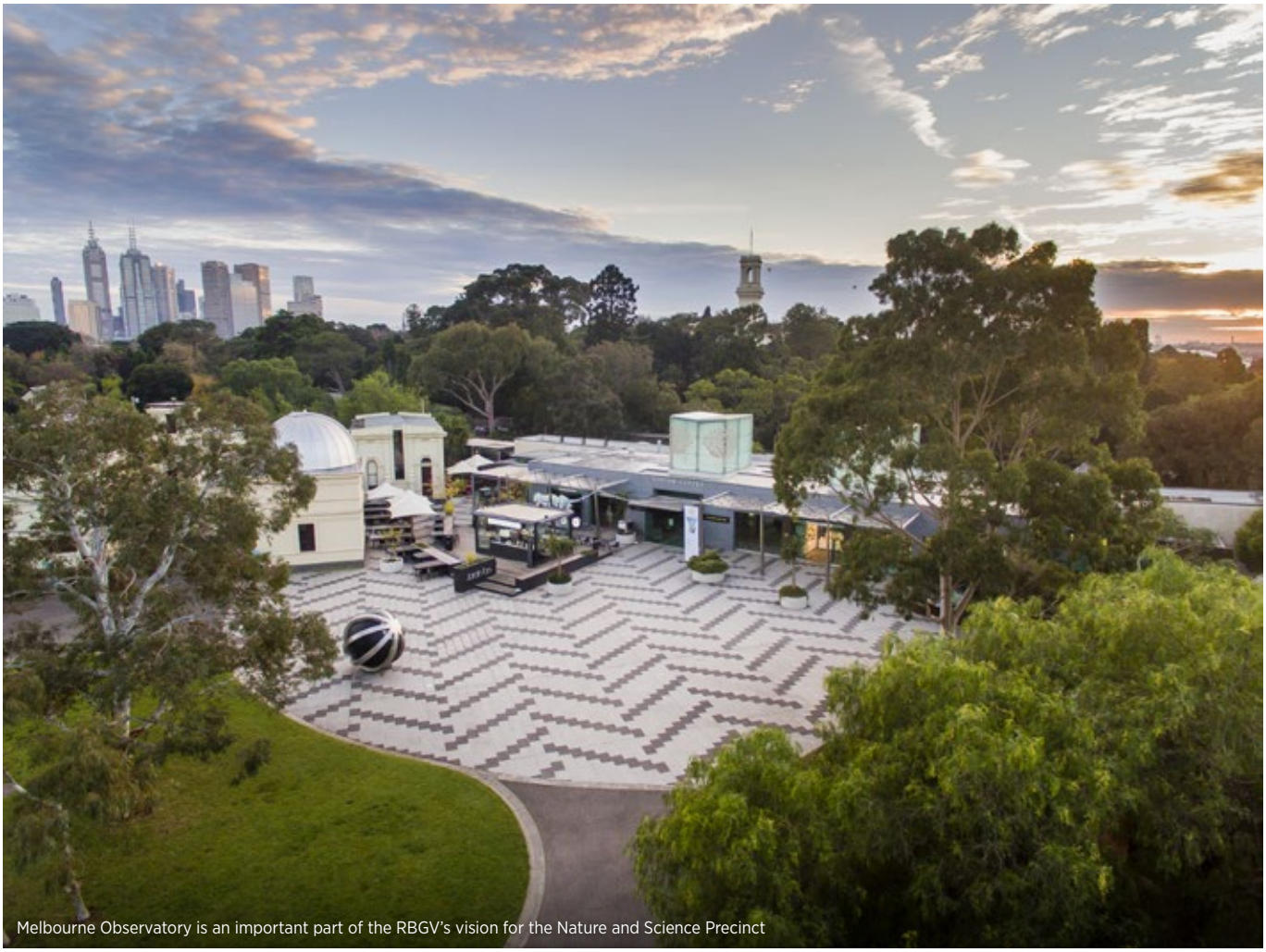
2. Protect trees during construction works and events

- Carry out all construction and infrastructure work in accordance with the Australian Standard and industry best practice through early and continued consultation with the Arboriculture team
- Embed clear tree protection requirements in all works' contracts and onsite partner agreements
- Develop new projects with consideration for the management of existing trees and their failure potential.

3. Develop a formal policy to manage requests for commemorative tree plantings

- Develop a list of pre-approved locations and taxa suitable for commemorative plantings and only plant in accordance with these specifications.
- Where possible, explore alternative ways to commemorate visiting dignitaries other than specimen lawn plantings.

6 Future Developments



Melbourne Observatory is an important part of the RBGV's vision for the Nature and Science Precinct

A series of new developments are proposed for Melbourne Gardens, allowing it to respond to existing and emerging challenges, and to remain relevant to visitors' expectations for social and scientific impact and public open space. Each project is providing a solution to an identified problem or opportunity, in most cases meeting a range of needs with a single project. In contrast to the Development Guidelines (Chapter 5), these projects are site specific, adding new or renewed built form within the historic landscape.

6.1

NATURE AND SCIENCE PRECINCT

Design Statement

Royal Botanic Gardens Victoria have a vision to create a new Nature and Science Precinct for Melbourne. This will join the Arts and Culture, and Sports and Entertainment Precincts as Melbourne's third major destination by the Yarra River. Central to this vision is the construction of a new herbarium to hold the State Botanical Collection, the revitalisation of the Melbourne Observatory and the creation of a unified visitor experience.

The vision for the Nature and Science Precinct is being guided by the Board, RBGV Corporate Plan, local and State Government policies, the Consolidated Engagement and Impact Strategy, and a strong requirement to safeguard the State Botanical Collection and engage the public with its treasures. Conceptual design of the herbarium and Nature and Science Precinct buildings was prepared by Kerstin Thompson Architects (KTA) working with RBGV in parallel with the Master Plan. The intention is to integrate the heritage and contemporary functions of this part of Melbourne Gardens, incorporating the National Herbarium of Victoria, Melbourne Observatory and The Ian Potter Foundation Children's Garden in a holistic, visitor-focused landscape that will transform the Gardens.

The RBGV's vision for the Nature and Science Precinct

As RBGV's most critical and complex infrastructure project, the highest priority of the Master Plan is the Nature and Science Precinct, with the protection of the State Botanical Collections as its foundation. The potential loss and degradation of this irreplaceable Collection has been identified as an 'Extreme' risk by the Board. A new underground structure for the storage and study of the State Botanical Collection will allow the existing National Herbarium of Victoria building to be re-purposed, removing the 1988 extension and revealing the original 1934 Art Deco structure. The heritage building and its surrounds will include new public spaces and access to elements of the State Botanical Collection, such as its rich botanical library. A visitor engagement space, and café that could open onto Western and Oak Lawns are also proposed. The storage vault, curation spaces, laboratories and offices will be below ground in a double-winged basement. Natural light and amenity, including viewing of the collection space, will be provided by light wells and/or courtyards, some of which will be accessible.

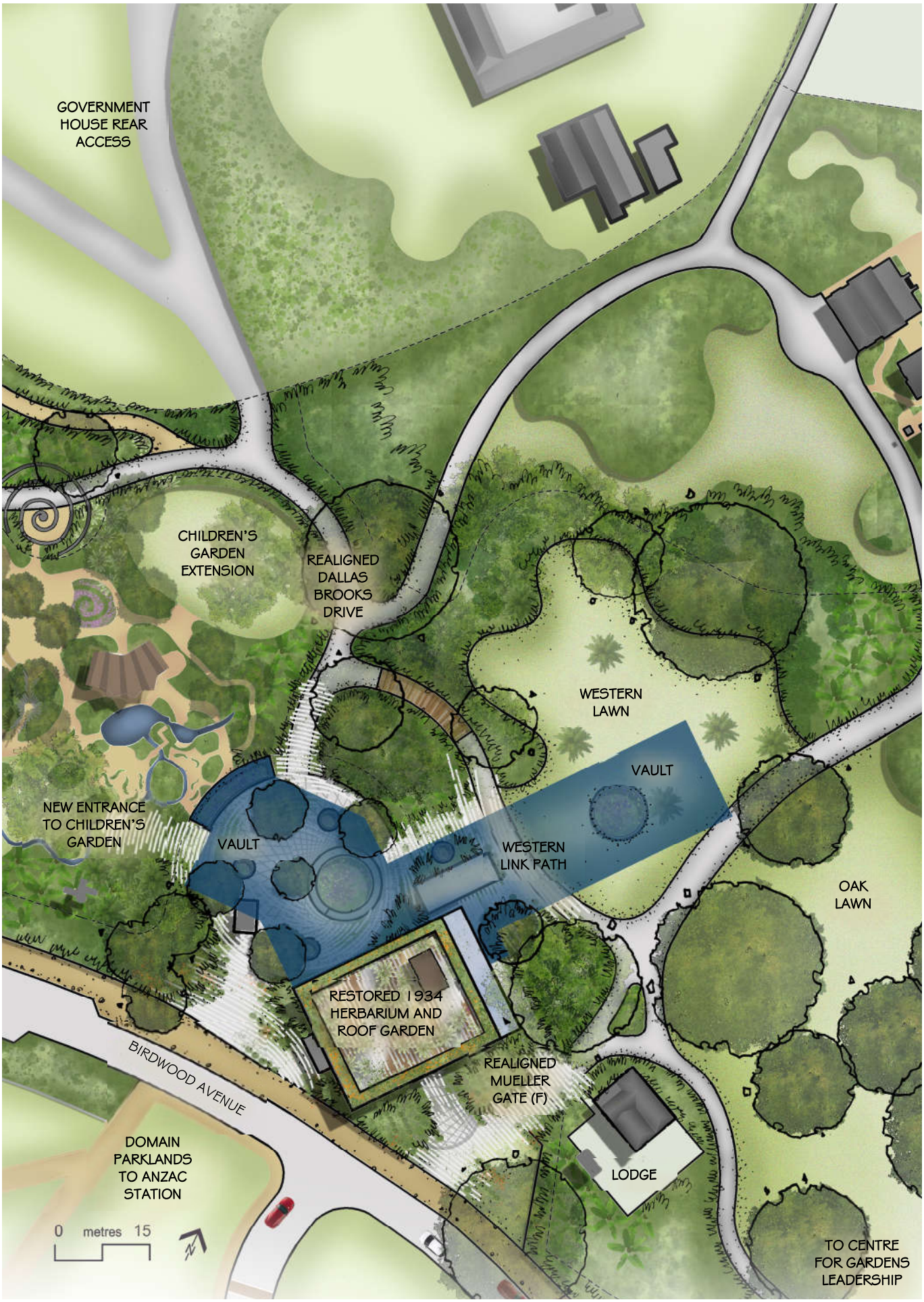
The new Nature and Science Precinct will include new pathways and meeting areas in the Dallas Brooks Drive area in front of the Herbarium, possibly as the forecourt to the Nature and Science Precinct. This gently shaded area will create a new and botanically rich entrance to the Gardens. The space will also draw visitors into Melbourne Gardens, inviting them to explore the Children's Garden, Melbourne Observatory and the rest of Melbourne Gardens, or enjoy the new experiences in the 1934 Herbarium building.

There is a strong organisational commitment to open and activate previously closed buildings and green space for public programs and deepen connection with nature. This will include providing gallery and exhibition space and improving food and beverage options. Dedicated learning spaces will offer the opportunity for local communities and schools to engage with nature, horticulture and citizen science initiatives, including urban biodiversity and conservation. There is also a growing demand to activate the Precinct at night. Dunlop Plaza could be softened and shaded by small trees, low planting, and extending the existing Vegetable Garden, reducing the current paving and creating a welcoming entrance.

Melbourne Observatory will be restored to public access, with the removal of the car park and roadways and the re-instatement of open lawns and low planting; restoring its historic character of combined scientific function and ornamental landscaping. The new landscape will be simple parkland, interpreting the Observatory's unique history and providing a fitting setting for the restored Great Melbourne Telescope House and other historic Observatory buildings, which will continue to celebrate the observational sciences.

The following outlines a broad vision for the Nature and Science Precinct. The detail around implementation and staging will be subject to further technical and design resolution, developed in consultation with the Board.

NATURE AND SCIENCE PRECINCT HERBARIUM LANDSCAPING








Major Elements

National Herbarium of Victoria

- Create an underground vault area to house the State Botanical Collection including herbarium research functions
- Include natural-light and viewing opportunities, offices and spaces for research, preparation, decontamination and curation of specimens
- Demolish the 1988 extension and re-purpose the original 1934 building for increased public use and library
- Display a visually rich, botanically diverse plant palette as an appropriate entrance to Melbourne Gardens.

Arrival Experience

- Provide a series of arrival points for Melbourne Gardens, encouraging equal movement into the Children's Garden, Melbourne Observatory and the Original Botanic Gardens
- Develop a whole-of-precinct set of placemaking principles to assist in building a shared design narrative
- Create new entrances and visitor engagement spaces, including potentially Visitor Centre, Gardens' Shop, restaurant and kiosk
- Develop an interpretative space suitable for curated exhibitions, display and interpretation of the State Botanical Collection
- Consider realigning Dallas Brooks Drive to reduce its visual impact and maintain it as an alternative Government House access route, otherwise closing it to traffic within Gardens' opening hours
- Slow vehicle movement by creating a plaza rich with planting and a pedestrian focused paving treatment that includes traffic calming mechanisms, such as bollards or barriers
- Create high impact courtyard landscape with strong botanical themes
- Design sensitively to protect the Gardens' significant trees
- Create a new, sensitively scaled entrance to The Ian Potter Foundation Children's Garden
- Realign the Gardens' fence to the rear of the plaza, allowing day and night use of the space while securing the Gardens.

Images courtesy of: top left Serpentine Gallery / Walter Herfst, bottom left Sweco Architects / Jan Raeber, bottom centre Andrea Cochran Landscape Architecture / Marion Brenner, bottom right Davies White Landscape Architects and www.davieswhite.co.uk

Western Lawn, Mueller Gate Entrance and Centre for Gardens Leadership

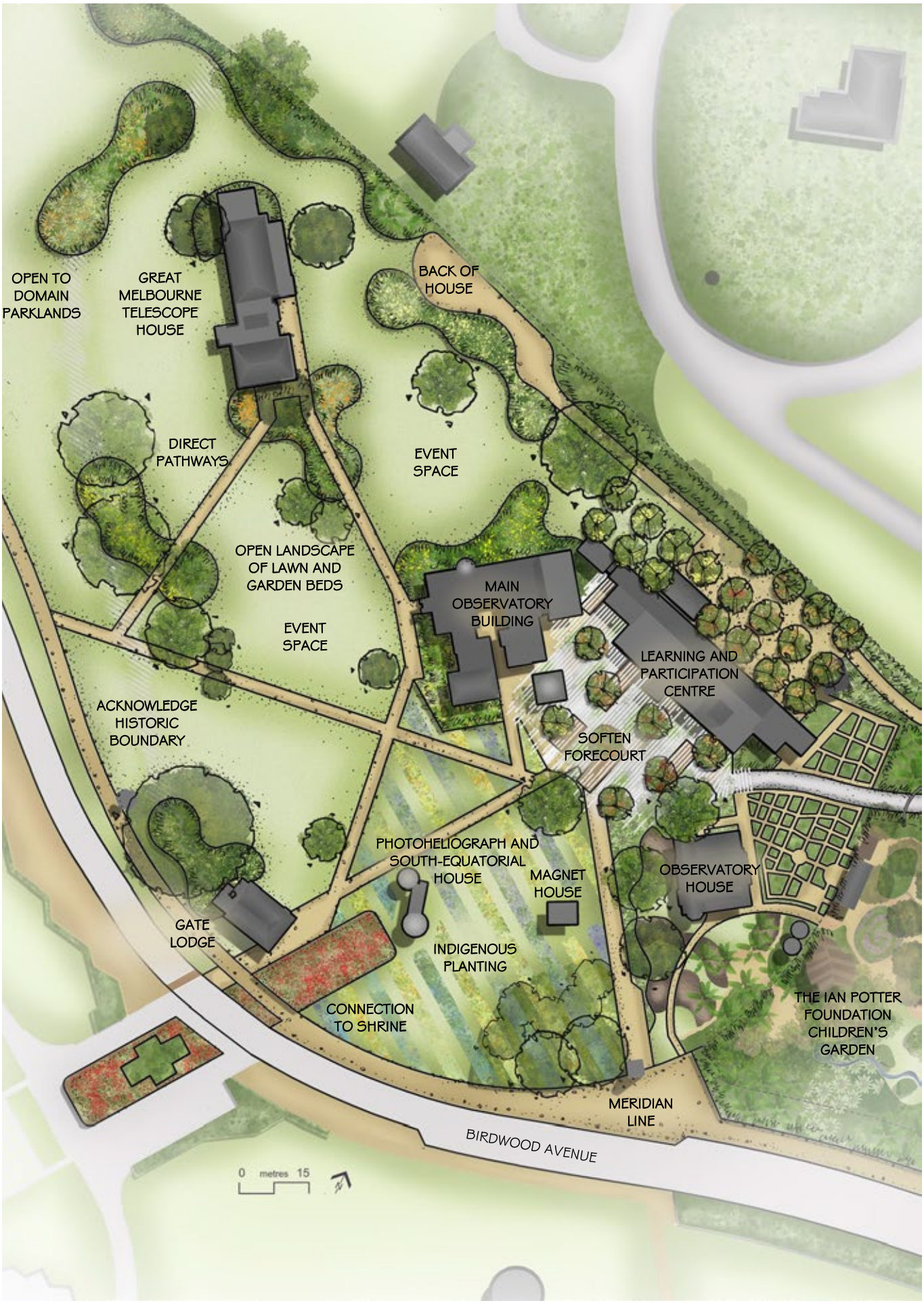
- Connect the Herbarium to Western and Oak Lawns, potentially through a new café overlooking the Gardens, with strong connections to the landscape
- Rename F Gate, Mueller Gate in honour of Baron Ferdinand von Mueller with planting, which reflects his work and that of the Herbarium
- Maintain Western Lawn as a significant void space and iconic entrance point to the Original Botanic Gardens
- Realign Mueller Gate (F) to its original location to provide a more welcoming and connected Herbarium building and restore the historic alignment
- Provide a level of architectural consistency between Mueller Gate (F) entrance and the arrival experience along Dallas Brooks Drive
- Transition staff from the existing retrofitted buildings and other inadequate office space to productive and creative spaces
- Consider integrating staff office accommodation with the Works Yard (Centre for Gardens Leadership) to facilitate improvements to cross-team collaboration and communication.

Learning and Participation Centre, Observatory House gardens and The Ian Potter Foundation Children's Garden

- Expand the Gardens' capacity to deliver high quality programs by providing a dedicated, all-weather Learning and Participation spaces in the re-purposed Visitor Centre, shop and restaurant building
- Create an area with a contemporary design and focus on urban conservation, biodiversity and interactive learning
- Strengthen the historic view line to the Meridian Collimating Marker and remove visual clutter
- Soften the Dunlop Plaza space with small trees, decked seats and low gardens, making the space more comfortable and inviting, and reducing heat banking
- Link the Melbourne Observatory and Children's Garden to the rest of Melbourne Gardens through placemaking principles and intuitive wayfinding
- Create connections between the Children's Garden, the Learning and Participation Centre and an expansion of the Vegetable Garden
- Expand and develop the Children's Garden to continue the existing character and purpose of the garden, creating a wonderous plant space which reflects a child's view of the world
- Use a palette of ornamental plants which provide biodiversity benefits with strong foliage and striking floral displays.

Images courtesy of: top left Kerstin Thompson Architects, bottom centre Peter Bennetts photographer / Harrison and White with Archier as architects and Openwork Landscape Architects, bottom right Bertie Pavlidis

NATURE AND SCIENCE PRECINCT MELBOURNE OBSERVATORY LANDSCAPING





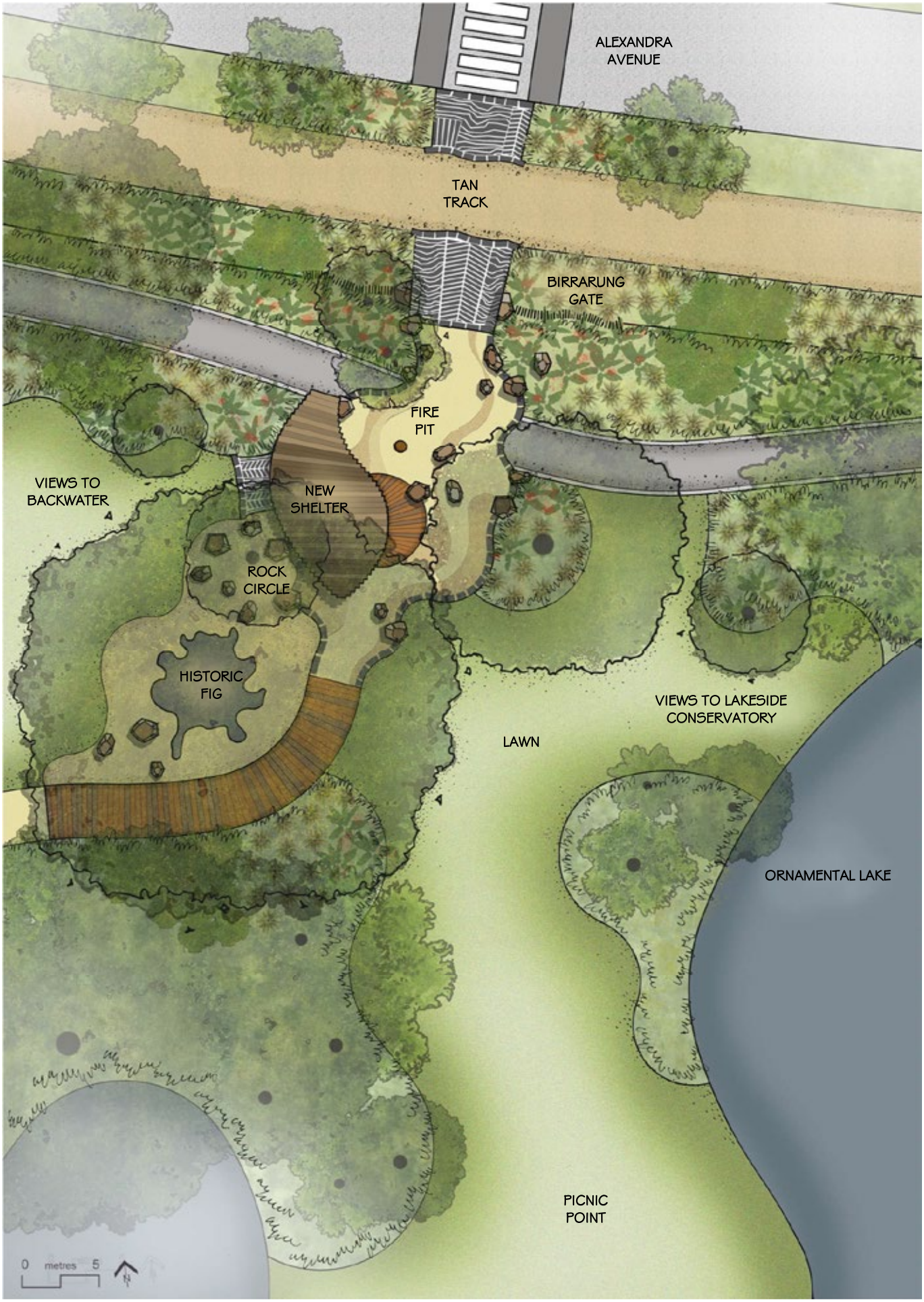



Melbourne Observatory

- Restore the Melbourne Observatory to public open space, removing the car park, roadways and dividing fence and providing vistas to and from the Domain Parklands
- Increase public access to Melbourne Observatory buildings, including the Great Melbourne Telescope
- Create an open landscape with botanically rich, low island planting beds and straight link paths surrounded by lawns with its own unique character
- Continue its function as a Gardens' event space with a fully serviced open lawn area, including inbuilt storage areas and vehicle access
- Reduce paving and hard surfaces to prevent heat banking
- Re-work the path system and garden beds to create a strong landscape connection across Birdwood Avenue to the Shrine of Remembrance
- Provide ornamental landscape plantings which showcase the indigenous plants of Melbourne and the Western Plains
- Where possible, control light levels across the site through sensitive design and management while offering appropriate lighting for people to safely navigate the site at night.

Images courtesy of: top left Andrea Cochran Landscape Architecture / Marion Brenner

BIRRARUNG GATE



6.2

BIRRARUNG GATE

Design statement

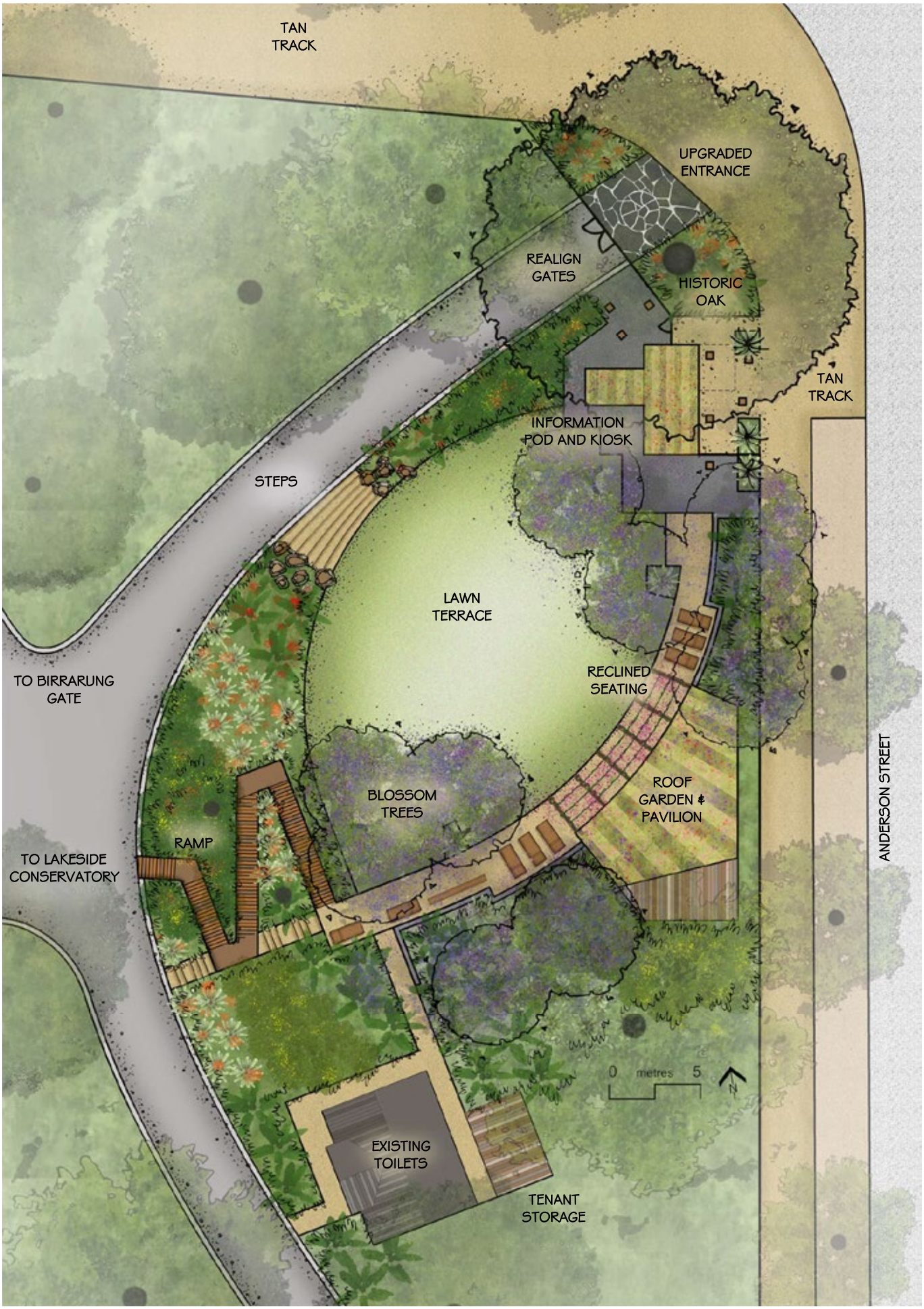
A new gate will be created along the northern border, located where the Birrarung (the Yarra River) once flowed through the Gardens. The landscape will begin outside the gates, creating a distinct change in character, drawing people into the Gardens to catch a glimpse of the new Lakeside Conservatory across the Ornamental Lake. This will become a major new entrance to Melbourne Gardens, celebrating the indigenous landscape: its plants, animals, landform and people. The design will use materials, structure and patterning to communicate the Aboriginal stories about Country which are deeply embedded in the history of the place.

Major elements

- Work with the Traditional Owners in the design of the space
- Highlight the seasons recognised by Traditional Owners
- Provide a seamless connection to Long Island with views to the Backwater
- Use natural materials such as sawn basalt, weathered hardwood and flamed timbers
- Replace Clematis Shelter with a new shelter, becoming a place for Welcome and Acknowledgement of Country ceremonies
- Continue landscaping across the Tan Track, connecting to the nearby boat landing, bike trails and bus parking
- Guide visitors through the Gardens and across the Ornamental Lake to the new Lakeside Conservatory
- Focus on Victorian and indigenous plants while retaining existing canopy trees.

Images courtesy of: top left Kerstin Thompson Architects, top right Phillip Withers Landscape Design / Amelia Stanwix

TERRACE GARDENS



6.3

TERRACE GARDENS

Design statement

The corner of Anderson Street and Alexandra Avenue inside Terrace (A) Gate is to be redeveloped into a new welcoming arrival space for the Gardens, with a focus on health and wellbeing, and better connectivity for users of the Tan Track. The design will remove vehicles from the area and provide a stronger focus on pedestrian access and plant detail. The existing grand oak tree will be revealed to the Tan Track and there will be a strong focus on seasonal planting. A new terrace will blur the edges between the Tan Track and the Gardens, creating a meeting place with views across the Gardens and access to shaded seating and shelter.

Major elements

- Realign the entrance gates to improve the Tan Track/Gardens interface
- Rename A Gate entrance, Terrace Gate
- Remove all vehicles from the precinct, creating a safer pedestrian environment
- Create a green-roofed kiosk opening to both the Tan Track and Gardens
- Provide a small visitor services pod as part of the built form
- Provide a new lawn terrace, open to the public but with the opportunity for appropriate scheduled activities
- Create a green lawn, roofed garden pavilion suitable for programmed Learning and Participation programs and bookable small events
- Provide sensitively designed permanent storage facilities for onsite partners
- Provide an accessible pathway from the entrance gates into the Gardens, connecting Anderson Street bus parking to the Lakeside Conservatory and toilet facilities
- Create a rejuvenating space with reclined seating nestled in bold, seasonal planting displays.

Images courtesy of: top left Kerstin Thompson Architects, top right The Wanderbug (www.thewanderbug.com), bottom left Blanca Begert, courtesty of Brooklyn Botanic Garden, bottom centre Café Cultor, bottom right © 2015 Anita Ng

ARID AND DRYLANDS PRECINCT






6.4

ARID AND DRYLANDS PRECINCT

Design statement

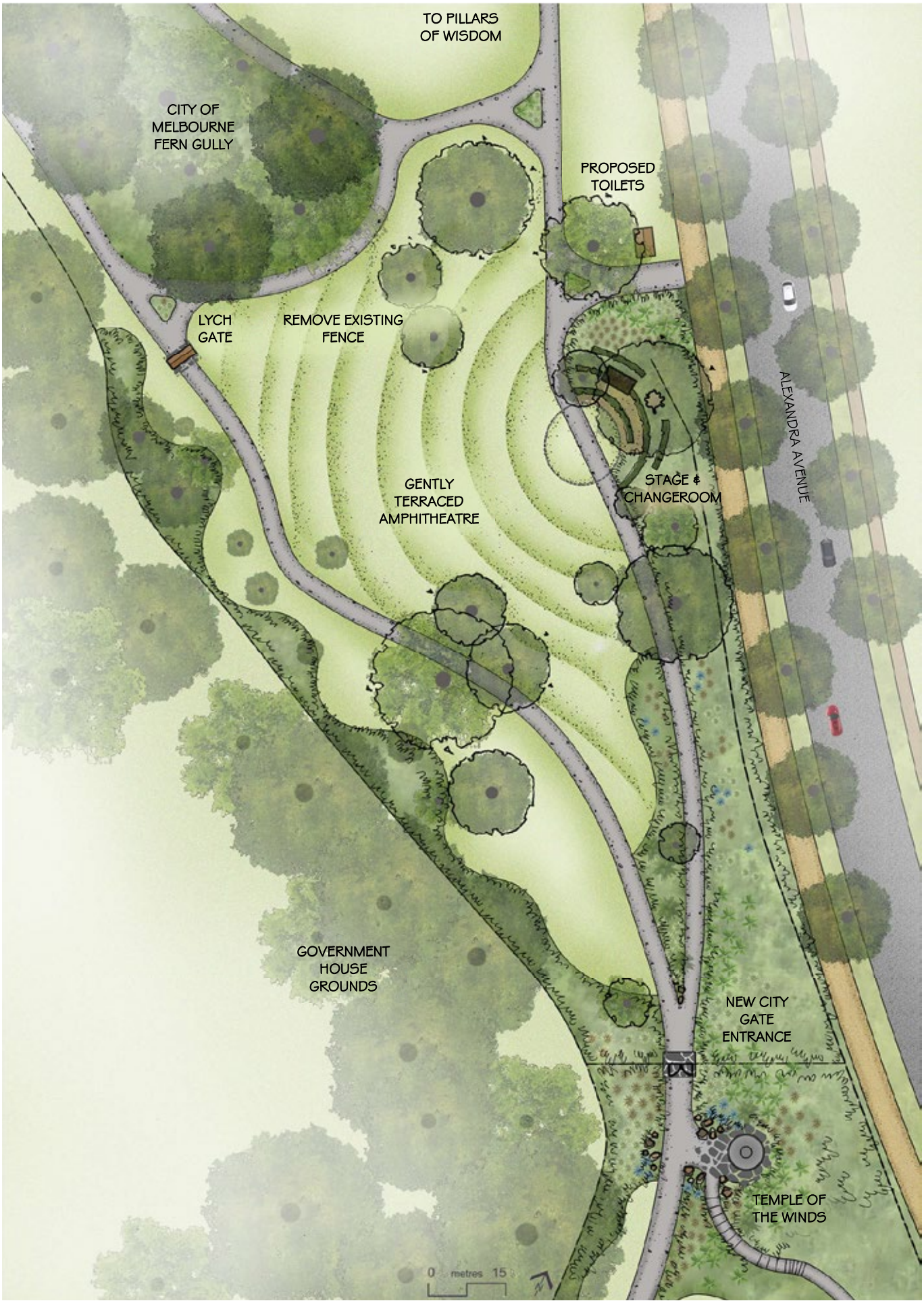
The area around Guilfoyle (C) and Domain Road (D) Gates, including Guilfoyle's Volcano, Arid Garden, California Collection and Eucalypt Lawn will be developed into a broader Arid and Drylands Precinct. The new design will begin outside Guilfoyle Gate (C), creating an evocative arid and drylands planting theme that will continue throughout the area. This focus is consistent with the RBGV's Landscape Succession Strategy and expands on the success of the Volcano development completed in 2010. The centrepiece of the new development will be the redesign of the Arid Garden, where there will be a spotlight on form, colour and the Fields cacti and succulent collection.

Major elements

- Redesign and rebuild the Arid Garden to better integrate into the overall Guilfoyle landscape, and to improve display and interpretation of the cacti and succulent collection
- Rename C Gate entrance, Guilfoyle Gate and D Gate entrance, Domain Road Gate
- Beautify the entrance at Guilfoyle Gate (C) and strengthen the Gardens' presence on Anderson Street
- Refocus the California Collection garden to showcase plants from the North America Drylands and rejuvenate the path system, providing views across the landscape
- Extend the Australian Forest Walk around the Eucalypt Lawn, including the minor pathway to meet Guilfoyle's Volcano
- Refocus the planting design into dry forest species around the Eucalypt Lawn
- Create a serviced marquee space near the Tecoma Rest House
- Restore the historic Nareeb Gates at Domain Road Gate (D)
- Expand rockwork throughout the area consistent with Guilfoyle's vision.

Images courtesy of: top left Jardin Etnobotanico de Oaxaca, centre bottom Brett Britchard

HUNTINGFIELD LAWN AMPHITHEATRE








6.5

HUNTINGFIELD LAWN AMPHITHEATRE

Design statement

The existing Huntingfield Lawn will be gently profiled to become an open-air performance space. The existing Gardens boundary fence will be removed creating a seamless connection to the surrounding Domain Parklands. This allows the existing contouring to inform the design, creating a natural amphitheatre suitable for small boutique performances. A new entrance with an arid planting theme will sit adjacent to the Temple of the Winds, reflecting Guilfoyle's original vision.

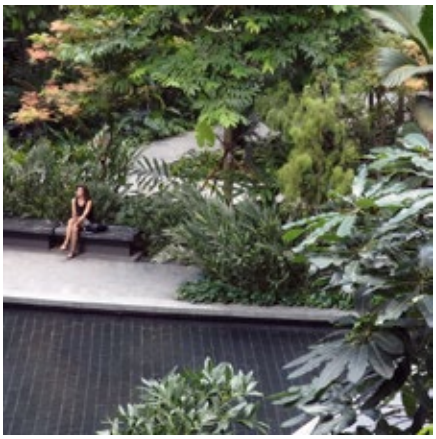
Major elements

- Relocate the existing boundary fence and gates and create a new City Gate entrance at the Temple of the Winds, assisting with wayfinding and orientation
- Trial the use of the site as a performance space
- Create a gently contoured lawn area and stage by building up existing levels, forming a space for passive use and providing an area suitable for ticketed events
- Provide screened dressing room and storage for performance
- Strengthen the Gardens' connection to the Domain and visibility from the Tan Track
- Improve planting along the Government House boundary to define the space
- Use clear trunked shade trees in lawn areas, strengthening the existing landscape character
- Explore the opportunity for a shared toilet facility with the City of Melbourne
- Explore options for the realignment of the fence in consultation with Heritage Victoria.

Images courtesy of: bottom centre Image courtesy of State Library of Victoria, *Temple of the winds. Botanical Gardens*. Melbourne, bottom left Kim Wilkie





6.6

LAKESIDE CONSERVATORY

Design statement

A new Conservatory is planned by the Ornamental Lake to provide a place for plants and people to meet. This could be a space where people come, regardless of the weather, to meet, work, rest or play in an environment which is brimming with plants. As a working theme, 'habitat for humans' would provide a plant experience that is unique and inspiring. The Lakeside Conservatory should be a world-class, green exemplar conservatory that nestles comfortably within the picturesque Guilfoylian landscape with plant collections that support the science and research of the organisation, and the health and wellbeing of visitors to Melbourne Gardens.

Major elements to be considered

- Replace the ageing Terrace Tea Rooms, and create a new destination meeting place for Melbourne
- Site sensitively within the picturesque landscape on the edge of the Ornamental Lake
- Sensitively work with the existing topography to create a series of terraces nestled into the hill
- Create an immersive plant experience where visitors can sense the intricacies and abundant richness of plants
- Explore further the concept of a series of controlled climate 'pods' that will support the living collections and curation work of the Gardens
- Provide a meeting place for the whole community, including a restaurant, meeting and conference rooms, event spaces and visitor amenity
- Re-establish the lake edge, lawns and adjoining pathways to reflect Guilfoyle's vision
- Provide back-of-house entry and exit points including nursery facilities for seasonal displays.

Images courtesy of: bottom centre Kelli Wong






6.7

SENSORY GARDEN

Design statement

Adjacent to the recently renovated Fern Gully Rest House, a new Sensory Garden has been designed as the final stage of the Fern Gully Restoration Project. The garden will take visitors through a series of immersive plant experiences that are designed to stimulate their senses. Views, beauty, colour, sound, scent, textures and the form of plants will all be exploited to create a remarkable sensory experience. An accessible pathway will be provided and the opportunity for people to take off their shoes and find a place of quiet solitude.

Major elements

- Design for visitors with special needs, creating a range of spaces to support people with physical, mental and cognitive limitations
- Create a deliberate, contemplative and slow-moving journey through a series of immersive plant experiences including a bamboo forest, lotus garden, and giant Colocasia garden
- Provide a range of seating opportunities, including community rock seats, hanging nets and a lotus jetty
- Include an accessible pathway through the space, with a simple bridge to cross the Fern Gully creek
- Use the Fern Gully Rest House to provide a gathering space and sheltered seating.






6.8

WILD WOOD

Design statement

The northern reaches of Hopetoun Lawn will be subtly developed to create the Wild Wood. Nestled under a group of giant oaks, this secluded and wilder area is the perfect place for children and their families to engage in nature-based play, easing pressure on the Children's Garden. Cubby building, mud play and scrambling will be the main activities and the Learning and Participation team will be able to use the space for Bush Kinder activities.

Major elements

- Provide bush kinder and nature play as an extension of current Learning and Participation programs
- Provide unstructured, immersive play for a range of ages
- Minimise built form and provide definition for the existing space
- Incorporate a log trail and rough pathways
- Provide access to 'found materials' on site
- Create a small treehouse discreetly built into the oaks
- Provide small-scale seating areas.

6.9

CREATIVE SEATING

Design statement

Several sites in the Gardens including the Sensory Garden, Vireya bed, Tennyson Lawn, Australian Bed and the Mounds offer the opportunity for alternatives to the traditional seating provided by benches around the Gardens. The success of the Bird's Nest swing in the Fern Gully, and the planned hanging nets in the Sensory Garden are examples which appeal to a different demographic and encourage canopy gazing, forest bathing, or simply provide a 'hang out' space for young people and those with different accessibility needs.

Major elements

- Develop designs for alternative seating including hanging nets, gentle swings and chaise lounge style seating
- Assess and trial potential new locations for seating
- Provide seats in a range of sizes, catering to couples, small groups and families
- Select sites which are easily accessible and will protect existing plants
- Create mulch pathways around the seats to provide access and reduce compaction.

6.10

HERB AND MEDICINAL GARDEN

Design statement

A new Herb and Medicinal Garden is to replace the existing Herb Garden at the eastern end of the Oak Lawn, the site of Guilfoyle's 1881 Medicinal Garden. The new design will be a contemporary interpretation of a medicinal garden, seamlessly integrated into the picturesque landscape. The space will be designed for use by the Learning and Participation team, with good access to shaded seating and working spaces.

Major elements

- Explore the contemporary relationship between biosciences, agriculture, food and habitat
- Replace the 1985 Herb Garden, which sits awkwardly in the Guilfoyle landscape
- Provide working space and facilities for Learning and Participation programs
- Include an all-abilities access path through the space.

6.11

NYMPHAEA LILY LAKE

Design statement

The area adjacent to Nymphaea Lily Lake, including the Ellis Stones Rockery and lower portion of the New Zealand Collection, is to be sensitively redesigned to improve views of the lake and reinstate the lawn sweep reflected in Guilfoyle's original vision. Significant elements of the original rockery, constructed in 1969, will be retained, but the taller vegetation and large *Phormium* spp. that block the view will be replaced with lawn, providing foreground and scale to the lake.

Major elements

- Remove tall plantings from the Ellis Stones Rockery
- Reshape the lawn areas to be more sympathetic to Guilfoyle's original plan
- Manage the vegetation in the constructed wetlands to increase the foreground open water when viewed from the Australian Forest Walk
- Sensitively reshape garden beds at the western end of the New Zealand Bed, and eastern end of the New Caledonia Bed to reinstate the mass and void
- Remove gravel pathways.

6.12

ENTRANCES

Design statement

The Gardens' entrances are to be renamed and gradually upgraded, assisting with wayfinding and reflecting their position as entrances to a world-class botanic garden. The historic fabric will be maintained and improved, while a new range of materials and landscape details will replace the existing surfaces and signage. Wherever possible the planting and landscape detailing will start outside the Gardens and involve consultation with the appropriate external stakeholders.

Major elements

- Establish three new gates: Main Gate, City Gate and Birrarung Gate
- Develop a hierarchy in the gate system to assist with wayfinding
- Select design themes for each entrance in response to the microclimate and area's broader themes
- Repair the fabric of the historic gates and fences at each entrance, commencing with the Nareeb Gates at Domain Road Gate (D) entrance
- Give consideration, were appropriate, to developing new decorative gates
- Develop strongly themed, high visual-impact planting around all primary entrances
- Remove G Gate and Lych Gate and replace them with a new City Gate located near the Temple of the Winds while retaining the historic fabric at Lych Gate.

6.13

ORNAMENTAL BRIDGES

Design statement

The Eel Bridge and the two bridges at each end of Long Island will be reinstated as picturesque landscape features; becoming focal points to be glimpsed across an expanse of water, and places to pause and view the landscape. The design of each bridge will draw inspiration from the landscape with its materials, scale and form, reflecting its place within the Gardens.

Major elements

- Design each of the bridges as contemporary follies, taking inspiration from historic forms but designed as a contemporary, artistic feature
- Create a sense of transition, emphasising the views from the bridges and a feeling of crossing the water
- Work with the Traditional Owners to rename the Long Island bridges to reflect the Birrarung Gate precinct
- Design all bridges for the appropriate vehicle loads and sizes and to be fully accessible.

6.14

THE ISLANDS

Design opportunity

The six islands in the Gardens—Guerard, Fountain, Dallachy, Baker and Ridout Islands in the Ornamental Lake and Sayce Island in Central Lake—all need varying degrees of work. Guerard, Sayce, Dallachy and Baker have been renovated, but require further plant detailing, which will be undertaken gradually. However, Fountain and Ridout Islands require clear design intent statements and more immediate work to manage a range of issues.

Major elements

- Improve the island landscapes by addressing weed issues and improving planting detail
- Rejuvenate Fountain Island as an indigenous landscape and habitat zone similar to Baker Island
- Maintain Baker Island as an indigenous landscape and habitat zone, a visual extension of the Long Island and Backwater landscape
- Rejuvenate Ridout Island as an 'exotic' habitat zone
- Develop Dallachy Island as an informal gathering space by re-activating the existing decking and facilitating boat access
- Continue to develop Guerard Island as a planted focal point with strong foliage and colour detail
- Continue to develop Sayce Island as a planted focal point with strong foliage and colour detail and increased foreground planting.

Images courtesy of: top State Library of Victoria, *Pretty Spot in Botanical Gardens, Melbourne*, bottom two images Punting on the Lake

6.15

REST HOUSES AND FOLLIES

Design statement

In recent years Fern Gully, William Tell, Separation Tree and Tecoma Rest Houses have been restored, complementing the earlier restoration of the Rose Pavilion and Temple of the Winds. Work to the remaining Gardens shelters will enhance their role as picturesque garden follies. The Clematis Shelter will be replaced as part of the Birrarung Gate redesign and Lakeview Rest House will be relocated to an appropriate location on the Northern Border.

Major elements

- Replace the non-heritage Clematis Shelter with a contemporary, architect-designed shelter as part of the Birrarung Gate design
- Relocate Lakeview Rest House to a location along the eastern end of Northern Border, reinstating its view across the Ornamental Lake
- Reconstruct the landscape around the Temple of the Winds to better reflect Guilfoyle's original design intent
- Repair the podium of the Temple of the Winds and develop a long-term maintenance plan for care of the structure
- Repair the Rose Pavilion and develop a long-term maintenance plan for its care.

6.16

PICTURESQUE ROCKERIES AND RUINS

Design statement

The Gardens' historic rockeries and ruins are important picturesque focal points and are to be restored and replanted. The outstanding Robinette Rockery at East Gate (B) is to be renovated as a picturesque feature and fitting entrance statement. Rockeries at Temple of the Winds, Fern Gully, William Tell Rest House and Five Ways have recently been restored. However, many are still in disrepair or smothered by plants. These are to be refurbished and replanted including the Bluff Rockery and Directors' Roll.

Major elements

- Restore the Robinette Rockery to showcase bold foliage plants in keeping with Guilfoyle's vision
- Commission an engineering assessment of the Bluff Rockery rockwork and Directors' Roll and develop a plan for their restoration and long-term maintenance
- Allow enough space on the Directors' Roll for the next 20 years of Directors
- Share the story of the river escarpment, working with Traditional Owners in the display and interpretation
- Reinstate small-scale plant ledges and refine irrigation
- Repair and restore all damaged rockwork and ruins, including the Touchwood Ruin, Rain Tree Bed Ruin and rockeries opposite William Tell Rest House, at Terrace Gate (A), Fern Gully entrances and Guilfoyle Gate (C) (see *Landscape Character Plan*, page 62
- Reinstate water holding areas within rockeries to provide habitat for small vertebrates, especially frogs
- Restore the original purpose of the rockeries as a setting for high-impact planting, with crannies tastefully adorned with a mix of prostrate, and foliage plants.


Huntingfield Lawn Amphitheatre
Temple of the Winds
North Gate (H)
City Gate
Directors' Roll
Plant Craft Cottage
Birrarung Gate
Lakeview Rest House
Long Island
Bridge
Terrace Gardens
Terrace Gate (A)
Rain Tree Bed Ruin
Wild Wood
Bridge
Dallachy Island
Lake Crossing
Guerard Island
Baker Island
Fountain Island
Lakeside Conservatory
Touchwood Ruin
Ridout Island
Rose Pavilion
Bridge
Robinette Rockery
East Gate (B)
Sayce Island
Gardens House
Sensory Garden
Melbourne Observatory
Observatory Gate (O)
Nature and Science Precinct
North America Drylands
The Ian Potter Foundation Children's Garden
Main Gate
National Herbarium of Victoria
Tecoma Rest House
Arid and Drylands Precinct
Herb and Medicinal Garden
Arid Garden
Mueller Gate (F)
F Gate Lodge
Guilfoyle's Volcano
Centre for Gardens Leadership
Nymphaea Lily Lake
Eucalypt Lawn
E Gate Lodge
South Gate (E)
Domain Road Gate (D)
0 metres 100

7 Implementation and Priorities

Fern Gully

The *Melbourne Gardens Master Plan 2020–2040* outlines a broad and agreed vision for Melbourne Gardens, developed in consultation with stakeholders and the public. Each project proposal will require further design and technical resolution, and consultation with stakeholders before indicative costings can be produced, and the project funded, documented and eventually completed.

7.1

CONSIDERING NEW PROPOSALS

As the Master Plan spans a 20-year period, it is likely that new proposals will be made which were not foreseen as part of the original Master Plan. These proposals may not necessarily be inappropriate. For example, the opportunity for The Ian Potter Foundation Children's Garden was presented after completion of the 1997 Master Plan but the project was a perfect fit for the organisation and Melbourne Gardens. Equally, new projects outlined in this document will be subject to further feasibility and planning studies, leading to changes in scope and design. If these changes are significant, RBGV will seek further comment and feedback on those revised projects.

Due to the rigor of the Master Plan process, when determining the appropriateness of any new proposal not already planned for the following will need to be considered:

- Is the project compatible with the long-term vision and strategy of the organisation as a whole?
- Is it compatible with the recommendations of this Master Plan?
- Does it speak to the aims of the Development Guidelines and Design Principles?
- Is it compatible with industry best practice?
- Can the proposal be addressed within the framework of another planned Master Plan project?

Contractors work with Gardens' staff to relocate an advanced *Dracaena*

7.2

REVIEW

The Master Plan outlines an ambitious vision for Melbourne Gardens from 2020 to 2040. While the direction of the Plan should be ongoing, RBGV envisages a review after 10 years (2030). This will allow the impact of yet to be completed projects such as Anzac Station and the Nature and Science Precinct to be considered, and any new challenges and opportunities embraced.

7.3

PRIORITIES

The following is a prioritised list of works recommended in the Master Plan. The Master Plan expresses a long-term vision for the Gardens, and works will need to be staged in order to gradually achieve its aims. In the past, priority has been given to critical infrastructure and works necessary for the operation of the Gardens, and then to the projects that provide greatest community benefit in a cascading priority. Priorities are set by the Board, guided by the purposes for which the Gardens were established, government policy, and corporate plans and strategies. This list of priorities will be subject to change, especially if unexpected opportunities arise, allowing the fast tracking of particular projects.

7.3.1
Priorities Arising from Development Guidelines

The following provides a prioritised action list arising from the Development Guidelines (Chapter 5). Actions arising from the Future Developments (Chapter 6) are provided in a second table below.

Action	Planning Document	Short 0-5 years	Medium 6-10 years	Long 11-20 years
Heritage				
Cultural Heritage Management Plan				
Interpretation program around connections to Country				
Implementation plan for the Conservation Management Plan				
Develop site maps based on the CMP				
Reflect Aboriginal history in place names		ongoing	ongoing	ongoing
With neighbouring land managers, interpret Aboriginal values of the wider landscape		ongoing	ongoing	ongoing
Recognise and interpret the separate landscape of the Melbourne Observatory				
Landscape Character				
Design intent and planting character statements for all garden beds				
Restore and reshape garden beds		ongoing	ongoing	ongoing
Install steel edging to garden beds		ongoing	ongoing	ongoing
New gardenesque highlight beds		ongoing	ongoing	ongoing
Improve understorey detailing		ongoing	ongoing	ongoing
Increased plant detailing at entrances		ongoing	ongoing	ongoing
Restore and replant rockeries		ongoing	ongoing	ongoing
Restore significant view lines				
Restore Melbourne Observatory landscape				
Strengthen the interpretation of the Meridian line				
Restore bowers and add landscape detailing				
Restore bridges as ornamental follies				
Built Form				
Accommodation Review Master Plan				
Landscape design concepts for Lodges				
New cinema ticket booth and projector box				
New toilets at Government House Border				
New toilets at Huntingfield Lawn (with City of Melbourne)				
Expand Eastern Lodge Toilets				
Expand Touchwood Bed Toilets				
Expand A Gate Toilets				
Refurbishment of Plant Craft Cottage landscape				
Public Art in the Landscape				
Develop plans and briefs for “fallen giants”				
Separation Tree art project				

Renovation of the historic Tecoma Rest House

Action	Planning Document	Short 0-5 years	Medium 6-10 years	Long 11-20 years
Lake System				
Technical review of wetland treatment system				
Feasibility study for lake dredging and sediment removal				
Restore open water view lines and relocate floating islands			ongoing	
Targeted dredging and sediment removal			ongoing	
Access point for harvester to Central Lake				
Vehicle Movement and Site Storage				
Strategic plan for site storage and green waste management				
Strategic plan for waste management and recycling				
Provide inbuilt tenant storage			ongoing	
Consolidate satellite garden sheds			ongoing	
Install reinforced turf layoff bays			ongoing	
Install paved spaces as parking bays for the pod and onsite partners			ongoing	
Temporary green waste holding bays				
Contractor and tenant roadway upgrade and marking				
Implement controlled hours of access				
Rationalise vehicle movement and entry points				
New Anderson Street Trade Gate				
Provide vehicle washdown facilities in the Works Yard				
Develop boat/harvester storage facility and Marina				
Redevelop the Works Yard				
Expand the Green Organics Recycling Centre and provide tenant storage				

Installing the epiphyte ropes in the Fern Gully Wellbeing Gardens

Action	Planning Document	Short 0-5 years	Medium 6-10 years	Long 11-20 years
Modify path at East Gate (B) to improve vehicle access				
Modify path at Palm Lawn to improve vehicle access				
Shared operations with Government House				
Soil recycling				
Landscape Infrastructure				
Develop standard furniture designs and specifications				
Develop standard specifications for minor pathway surface treatments				
Upgrade asphalt pathways		ongoing		
Install layback curbs		ongoing		
Repair terracotta spoon drains		ongoing		
Infrastructure upgrades: fences, furniture, drainage, lighting, power, water, irrigation and others		ongoing		
Install decks over tree roots		ongoing		
Events and Visitor Engagement				
Develop business cases for new commercial opportunities				
Upgrade services to event sites (water, power, vehicle access, accessible pathways, lighting)		ongoing		
Paved photo points		ongoing		
New marquee site at Eastern Lawn				
New marquee site at Glasshouse Lawn				
New marquee site at top of Hopetoun Lawn				
Cease use of Dog Flat for marquees				

Action	Planning Document	Short 0-5 years	Medium 6-10 years	Long 11-20 years
Naming Conventions				
Work with Traditional Owners to develop name strategies				
Rename features with tenuous name origins		ongoing		
Rename gates				
Reaching the Gardens				
Bicycle racks		ongoing		
Accessible parking bays (with City of Melbourne)				
Dropoff vehicle bays (with City of Melbourne)				
Relocate bus parking and drop off (with City of Melbourne)				
Directional signage and improved wayfinding from CBD (with City of Melbourne)				
Botanical planting outside entrances (with City of Melbourne)				
Botanical planting at Pillars of Wisdom (with City of Melbourne)				
Accessible pathway from Anzac Station and St Kilda Road				
Visual presence at Anzac Station and along access path				
Support City of Melbourne to upgrade boat landing				
Support City of Melbourne in exploring options for public transport along Birdwood Avenue				
Navigating the Site				
Interpretation Master Plan				
Develop self-guided walks and interpretive journeys		ongoing		
Use technology to improve wayfinding and interpretation		ongoing		
Improve intuitive wayfinding, especially around the NSP				
New lake crossing at Terrace Gate (A) wetland				
Improve secondary path system		ongoing		
Accessibility				
Accessibility information on website				
Upgrade access to public buildings				
Review options for access to Plant Craft Cottage				
New accessible connections across the landscape		ongoing		
Fixed seats and landings on steep paths		ongoing		
Provide handrails to all flights of stairs		ongoing		
Increase access to drinking water		ongoing		
Signage showing direct routes		ongoing		
Garden Explorer route expansion		ongoing		
Landscape Succession and Environment				
Increased tree planting for shade in exposed locations		ongoing		
Restore rockeries to increase free-standing water bodies		ongoing		
Promote habitat creation in veteran trees		ongoing		
Support City of Melbourne in the development of the City Arboretum		ongoing		
Connect the Melbourne Observatory and Children's Gardens to the Sustainable Irrigation Project				
Increase planting for micro-climate mitigation on Melbourne Observatory				

The Aquatic Harvester clearing vegetation from the Ornamental Lake

Action	Planning Document	Short 0-5 years	Medium 6-10 years	Long 11-20 years
Living Collections				
Update Collections Management Plans to include design intent statements				
Update Tree Strategy to provide policies around heritage trees				
Develop a formal policy to guide commemorative tree requests				
Develop a pre-planned list for commemorative tree plantings				
Develop alternatives to specimen lawn trees for commemoration				
Retire the Viburnum, and Grass and Bamboo Collections				
Expand the Southern Africa Collection				
Expand and rename the California Collection to become North America Drylands Collection				
Expand the Herb Garden Collection into a Herb and Medicinal Collection				
Redesign the Water Conservation Collection into ornamental beds				
Develop the Australian Rare and Threatened Collection				
Transition the species Rose Collection into a 'Climate Ready' Rose Collection				
Expand Lower River Habitat Collection to include plants of significance to Traditional Owners				
Redesign the triangle beds				
Reshape garden beds near Palm Lawn				
Explore options for Northern African, Mexican and South American Collections				

Horticulturists planting the Fern Gully Wellbeing Gardens, 2019

7.3.2
Priorities Arising from Future Developments

The following provides a prioritised action list arising from the Future Developments (Chapter 6).

Project	Short 0-5 years	Medium 6-10 years	Long 11-20 years
Nature and Science Precinct			
National Herbarium of Victoria and vault with re-opened 1934 building			
Melbourne Observatory and Great Melbourne Telescope House re-opened to public			
Centre for Gardens Leadership			
New Learning and Participation spaces			
The Ian Potter Foundation Children's Garden expansion			
Reworked pathways and entrances			
Expanded Visitor Centre and visitor engagement spaces			
Birrarung Gate			
Terrace Gardens			

Project	Short 0-5 years	Medium 6-10 years	Long 11-20 years
Arid and Drylands Precinct			
Arid Garden			
North America Drylands			
Guilfoyle Gate (C)			
Connection to Australian Forest Walk			
Domain Road Gate (D) and Nareeb Gates			
Huntingfield Lawn Amphitheatre			
City Gate and Temple of the Winds landscaping			
Amphitheatre			
Toilets with City of Melbourne			
Lakeside Conservatory			
Sensory Garden			
Wild Wood			
Creative Seating			
Herb and Medicinal Garden			
Nymphaea Lily Lake (including Ellis Stones Rockery)			
Entrances (remaining)			
East Gate (B)			
South Gate (E)			
North Gate (H)			
Ornamental Bridges			
Eel Bridge			
Long Island Bridges			
The Islands			
Fountain Island rejuvenation			
Ridout Island rejuvenation			
Dallachy Island reactivation			
Guerard Island planting			
Sayce Island planting			
Rest Houses and Follies			
Relocate Lakeview Rest House			
Repair Temple of the Winds podium			
Repair the Rose Pavilion			
Picturesque Rockeries and Ruins			
Robinette Rockery			
Fern Gully entrance rockeries			
Guilfoyle Gate (C) Rockery			
Bluff Rockery and Directors' Roll			
Touchwood Ruin			
Terrace Gate (A) Rockery			
Rain Tree Bed Ruin			
William Tell Rest House Rockery			

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