

A concept design for a prehistoric garden. The scene is dominated by large, blue, spherical objects that resemble giant eggs or fossilized fruits, some of which are hanging from a large, gnarled tree trunk. A waterfall cascades down a rocky ledge in the center. In the background, there are tall, slender trees and a body of water. In the foreground, a group of people are standing on a path, looking up at the large blue spheres. The overall atmosphere is lush and prehistoric.

W O N T H A G G I

G O N D W A N A G A R D E N

CONCEPT DESIGN
MAY 2023

CJ ARMS

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1.0 INTRODUCTION

1.1

THE NEW WONTHAGGI GONDWANA GARDEN

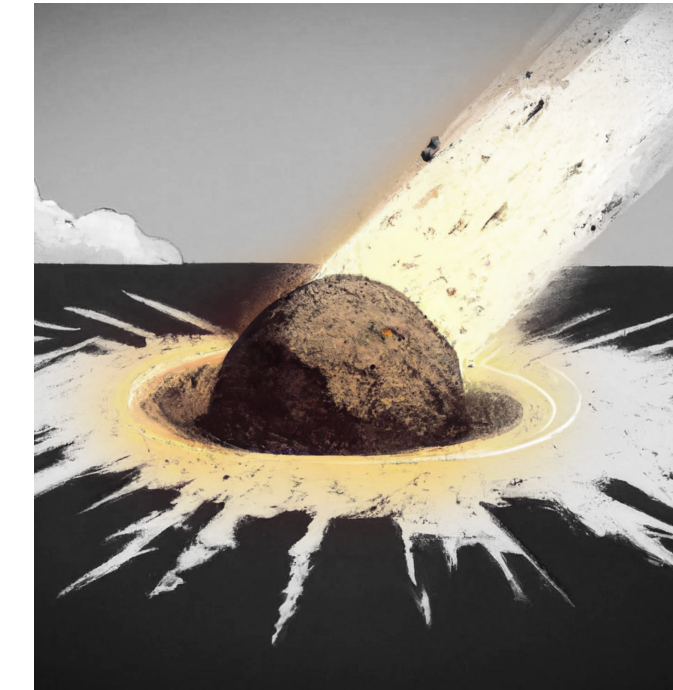
The new Wonthaggi Gondwana Garden will be one of 6 nodes of the proposed Bass Coast Dinosaurs Trail (BCDT). The Gondwana Garden's focus is the prehistoric landscapes and environment that the polar dinosaurs of Victoria inhabited 125 million years ago (mya).

Combining deep botanical knowledge with the latest audio-visual technology, the Garden will communicate paleohistory and science and excite the senses.

It will be a wonder-filled and compelling place to stimulate imaginations and blur the lines of the space-time continuum.

Enhancing Bass Coast tourism by creating a destination, the Gondwana Garden will elevate the "What once was" to the forefront of the mind, and pique curiosity for treasures buried beneath the surface.

This report presents the developed Concept Design for the new Wonthaggi Gondwana Garden.

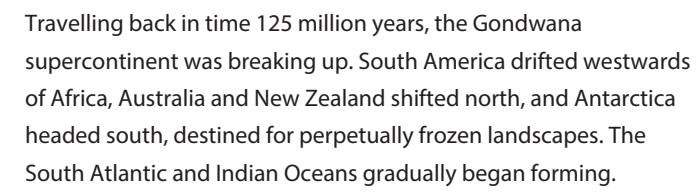


SITE LOCATION - IN THE HEART OF WONTHAGGI

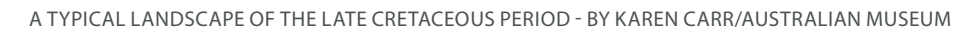
*A wild and
wonder-filled
exhibition of the
landscape and
environment of
GONDWANA*

WHAT IS GONDWANA?

All land floats like a raft on the fluid molten core that lies deep below the surface and so, by around 400 million years ago (mya), with tectonic plate upheavals, Pangea had split in two. The two great land masses that formed were the giant Southern continent of Gondwana, and Laurasia to the north. For the next 100 million years, Gondwana remained as a single land mass. Eventually, it too began separating and floating apart, because land masses continually move, about as fast as fingernails grow.



The Wonthaggi Gondwana Garden takes you on a journey from the beginning of Gondwana to its separation into diverse continents and islands. Combining extensive botanical knowledge with creative signposting, including state-of-the-art audio-visual technology, visitors are immersed in the story of how life evolved from the beginning of time (Primordial 'soup') into diverse forests, birds, and animals that made it their home.



1.3

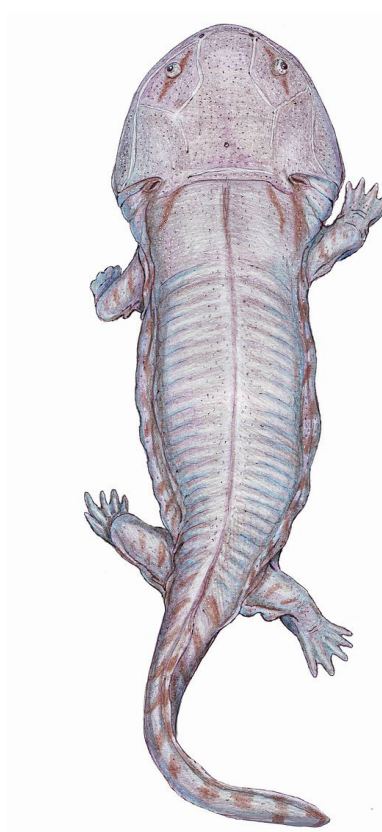
POLAR DINOSAURS OF THE BASS COAST

DINOSAURS IN VICTORIA CONNECTION

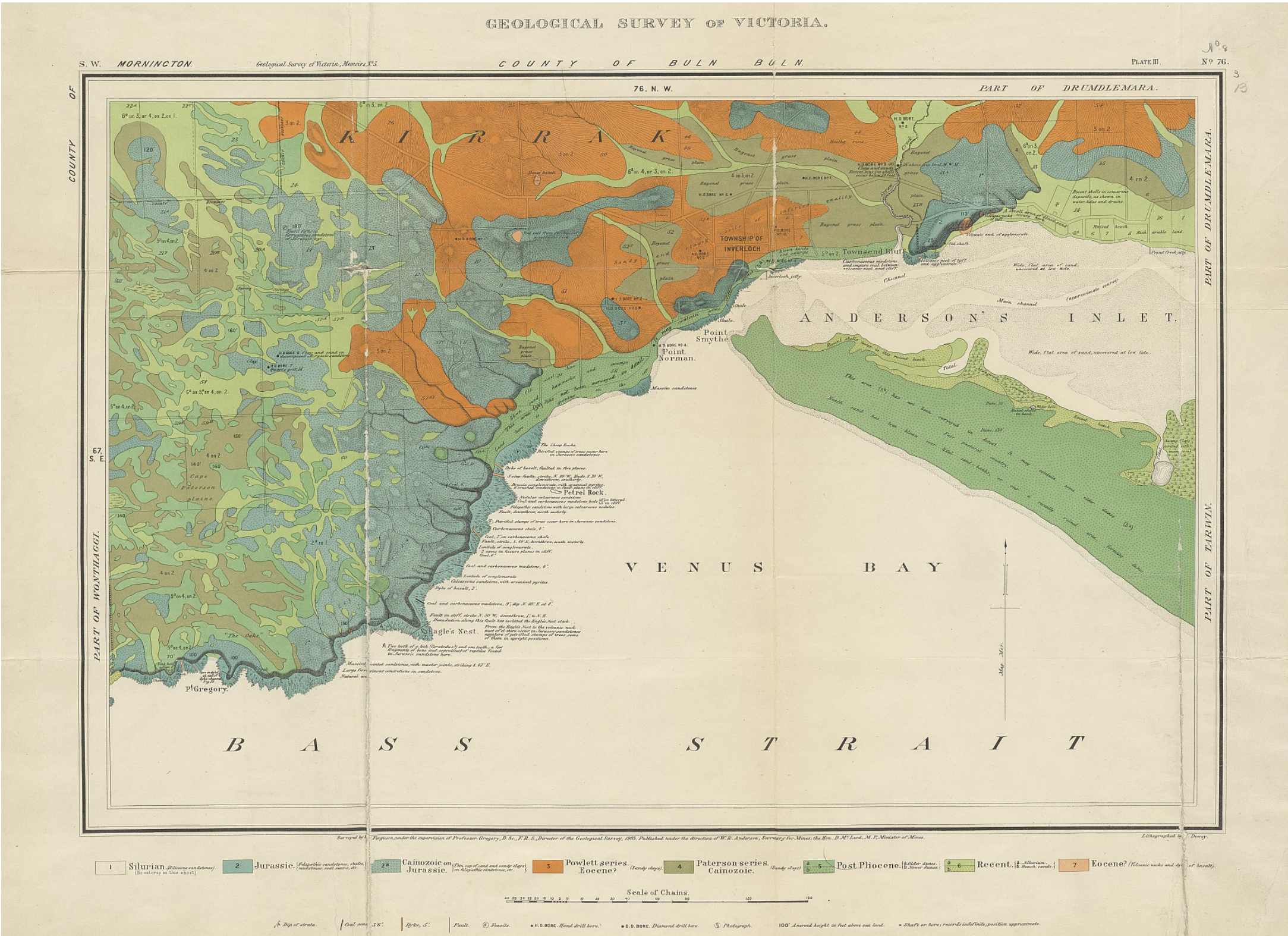
On the 7th of May 1903, the first ever specimen of a dinosaur was discovered in Australia. It was an isolated claw of a small carnivorous dinosaur, and was found by geologist William Hamilton Ferguson at Eagles Nest, near Inverloch. Ferguson produced an exquisitely coloured geological map, upon which he indicated the exact location of where the fossil claw had been found.

Three quarters of a century were to pass before the map was put to use, and the original discovery was successfully followed up. On that visit aspiring palaeontologists John Long & Tim Flannery found a fossilised bone in a pebble, demonstrating that Ferguson's discovery was not a fluke.

And so began a systematic search for dinosaurs along the shore platforms of Victoria's coastline.



STEREOSPONDYLI - DMITRY BOGDANOV



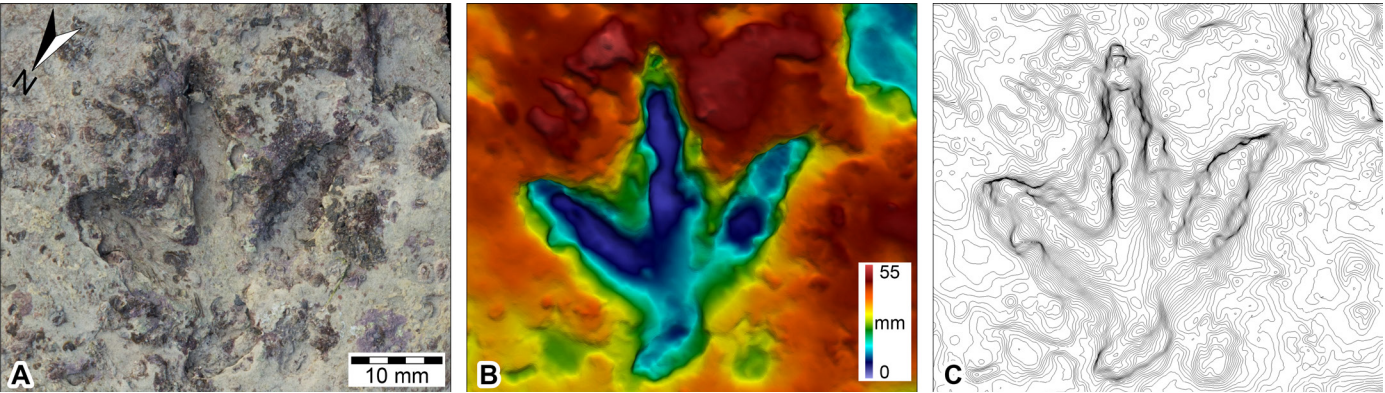
WILLIAM HAMILTON FERGUSON'S GEOLOGICAL MAP 1906

“He who calls what has vanished back again into being, enjoys a bliss like that of creating”.

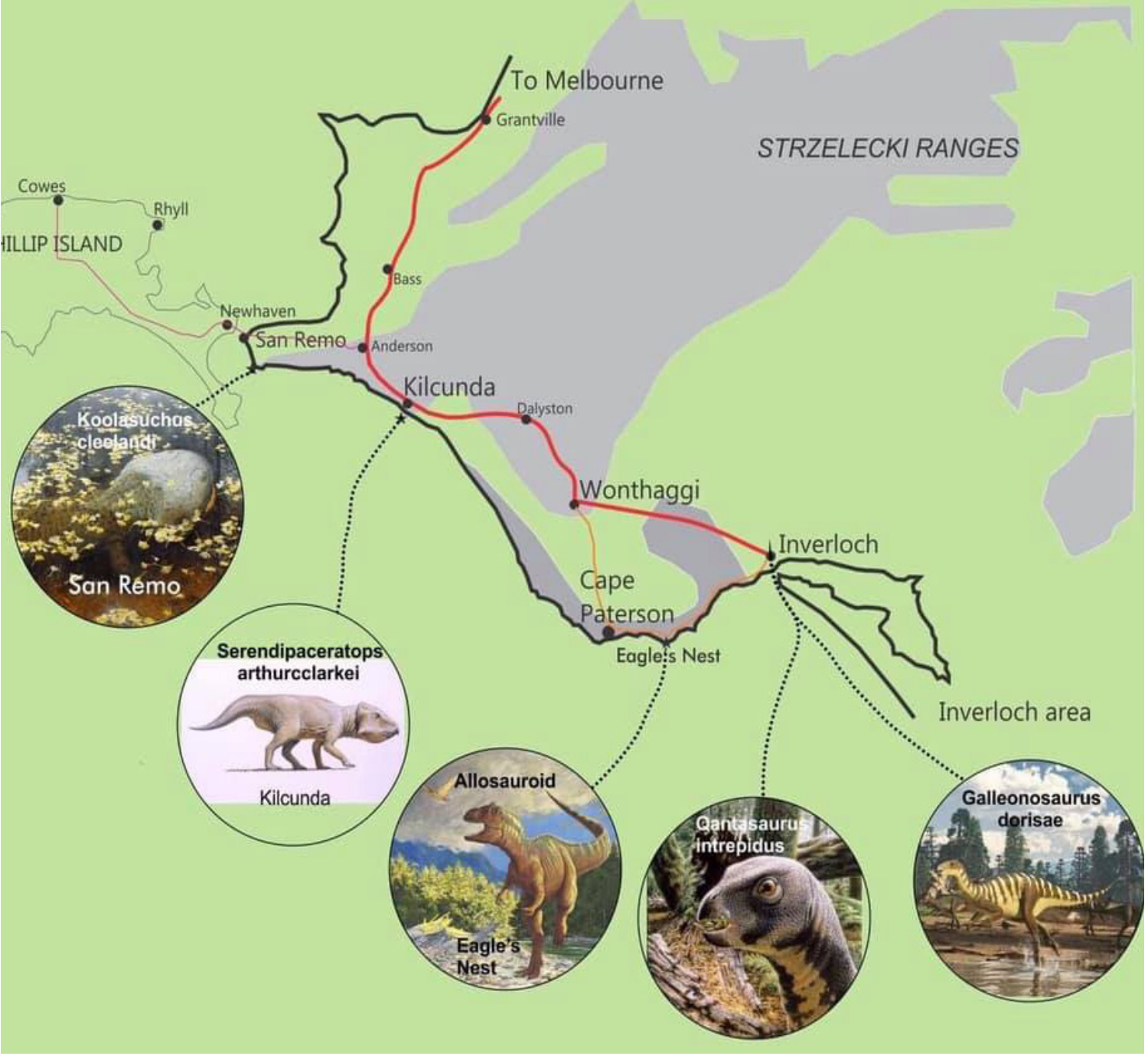
— Barthold Georg Niebuhr (in: Tom Rich & Pat Vickers-Rich, 2020. Dinosaurs of Darkness: In Search of the Lost Polar World.)



QUANTASSAURUS INTREPIDUS - ZEV LANDES 2023



DIGITAL MAPPING DINOSAUR PRINTS - ANTHONY ROMILIO - BROOME W.A. - GOOLARABOOLOO



BASS COAST DINOSAURS TRAIL - KEY FOSSIL SITES



2.0 THE PURPOSE

INCITE
WONDER

2.1
THE PURPOSE

Dinosaurs once roamed through the place now known as Wonthaggi, and the site and town lie above the coal seams that are fossilised vegetation of Gondwanan forests .

The Wonthaggi node of the Dinosaurs Trail focuses on prehistoric landscapes, the environment that the polar dinosaurs inhabited, and the significance of the vegetation and climate of the era.

Visiting the Wonthaggi Gondwana Garden will be an immersive experience in more ways than one:

- 1. Immersion in the rich and diverse botanical displays, from the tallest tree to the tiniest slime mould.
- 2. Immersed in pre-history, through elegantly crafted visual displays of scientific theory and understanding.

The Wonthaggi Gondwana Garden aligns with the Bass Coast Shire’s cultural goals and planning framework to focus on:

- Dinosaur significance
- Community connection and cultural diversity
- Cultural Heritage
- Environmental values
- Coal formation
- Stimulate creativity
- Enrich aesthetic experiences
- Provide new knowledge and insight
- Facilitate sense of belonging through shared heritage

YALLOCK-BULLUK MARINE AND COASTAL PARK (YBMCP)

The Yallock-Bulluk Marine and Coastal Park (YBMCP) has been created under the Victorian National Parks Act (1975). It combines and consolidates existing parks and reserves along 40 km of the Bass Coast between San Remo and Inverloch. The YBMCP aims to improve public accessibility and community engagement, facilitate Care for Country, enhance the landscape and waterscape values of the coast, and support tourism and the visitor economy.

An overlay of the new Bass Coast Marine and YBMCP will be the Dinosaurs Trail (the Trail). The Trail will be punctuated with dinosaur interpretation nodes to celebrate the various fossil dig sites and the unique creatures, geology, and community associated with the polar dinosaur fossil discoveries along the Bass Coast.

Six key visitor nodes are proposed for the Trail between San Remo and Inverloch. Each node will play to the context of the site and its individual strengths. Each will be unique in character and aspiration, providing different but complementary experiences of the Trail’s overall narrative:

“An experience of dinosaur discovery, learning and creativity. A journey that links together history, community, culture, and environment.”



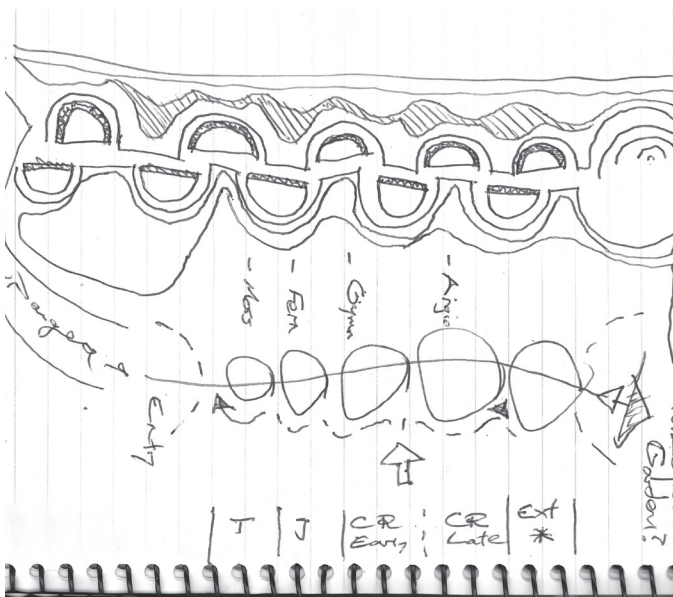
THE GONDWANA GARDEN

The Wonthaggi node of the Dinosaurs Trail is a Gondwana Garden. CJ Arms has developed the Gondwana garden’s design concept through a comprehensive consultative workshop process with clients, community, and project consultants. The concept integrates CJ Arms’ broad range of disciplines, including science, engineering, landscape and horticulture, and creative and architectural design.

The Wonthaggi Gondwana Garden’s design concept is contextualised by research that has unpacked the paleohistorical timeline of the Bass Coast.

It is underpinned by robust site analysis in relation to regional climatic conditions and local topography and ecology. And importantly, the design concept aligns with the overarching themes, goals, and broader aspirations of the Dinosaurs Trail project, the Shire’s cultural goals and planning framework, and the YBMCP.

This is the Gondwana Garden.



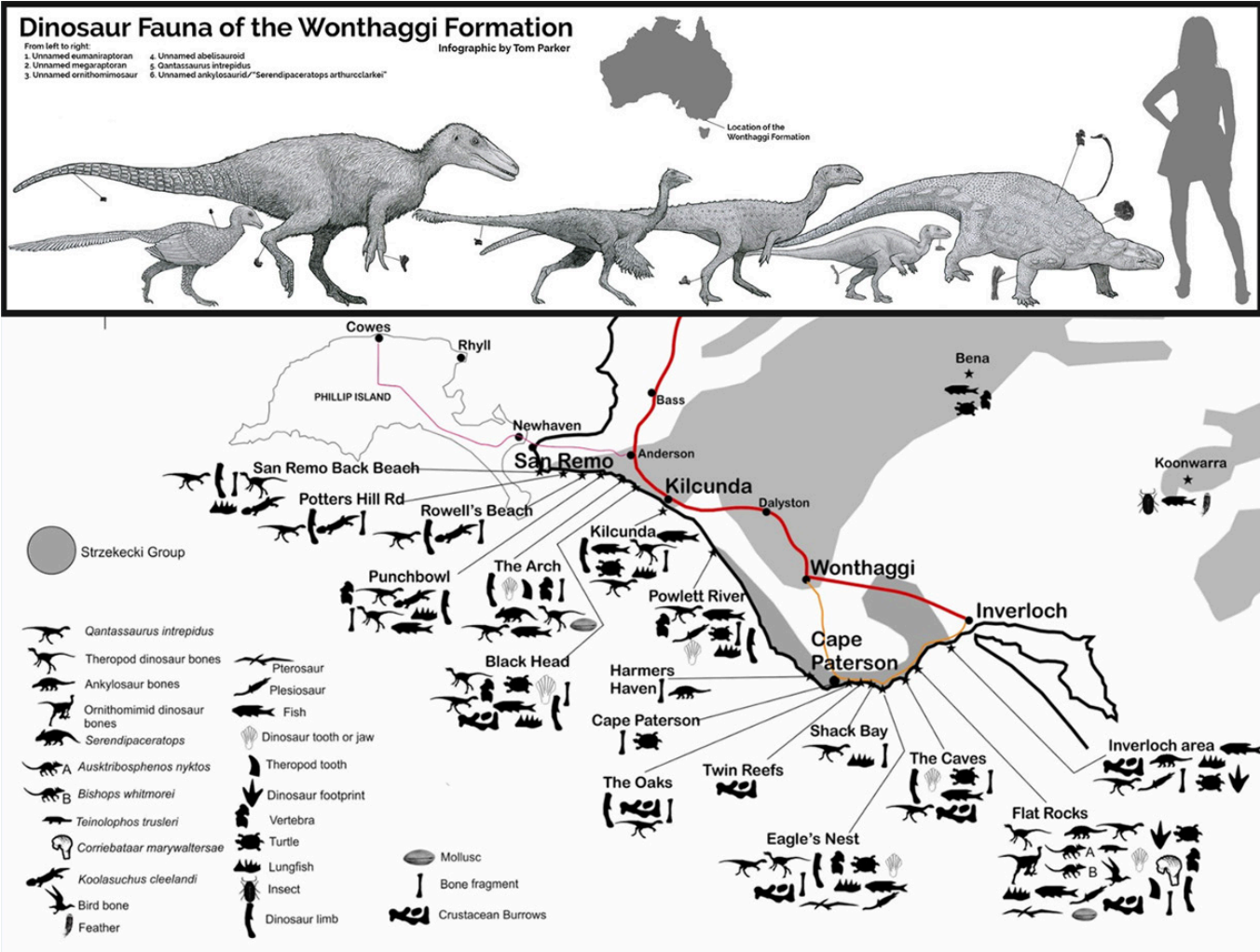
CARE FOR COUNTRY

The word Wonthaggi literally means ‘home’. It references its significance as a ceremonial meeting ground for the Bunurong people and neighbouring clans.

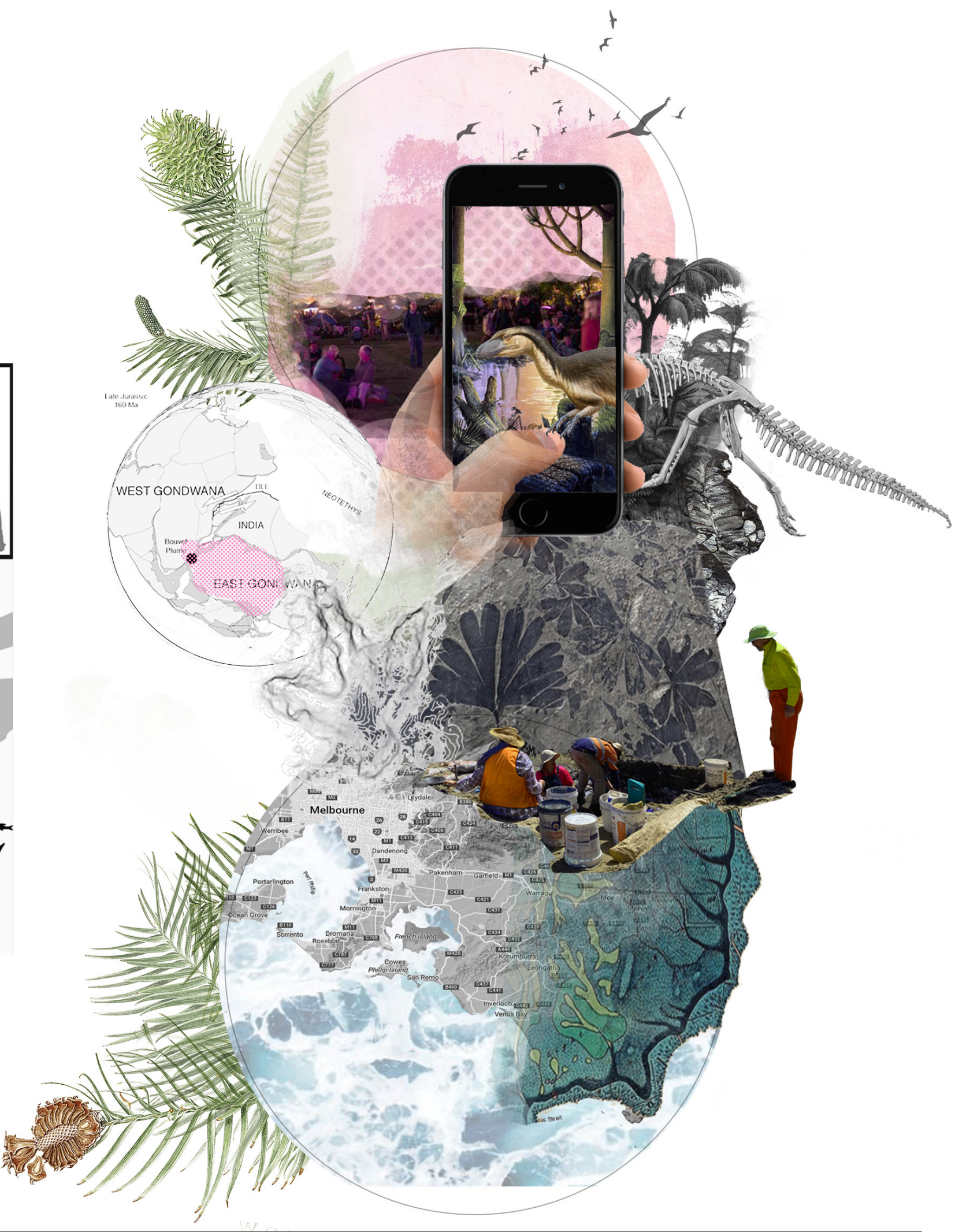
The concept design celebrates the Bunurong and cultural history of Wonthaggi by providing spaces for telling the stories of creation and promoting ongoing reconciliation.

We acknowledge the many thousands of years the Bunurong people have inhabited these lands and Cared for Country. We acknowledge their deep seated connection to this place and to the animals that roam here, many of which shared this space with the dinosaurs during the Gondwana period.

We acknowledge this land was never ceded.



DINOSAURS ON OUR DOORSTEP - BASS COAST OF VICTORIA - (ILLUSTRATION BY DRAGA GELT)





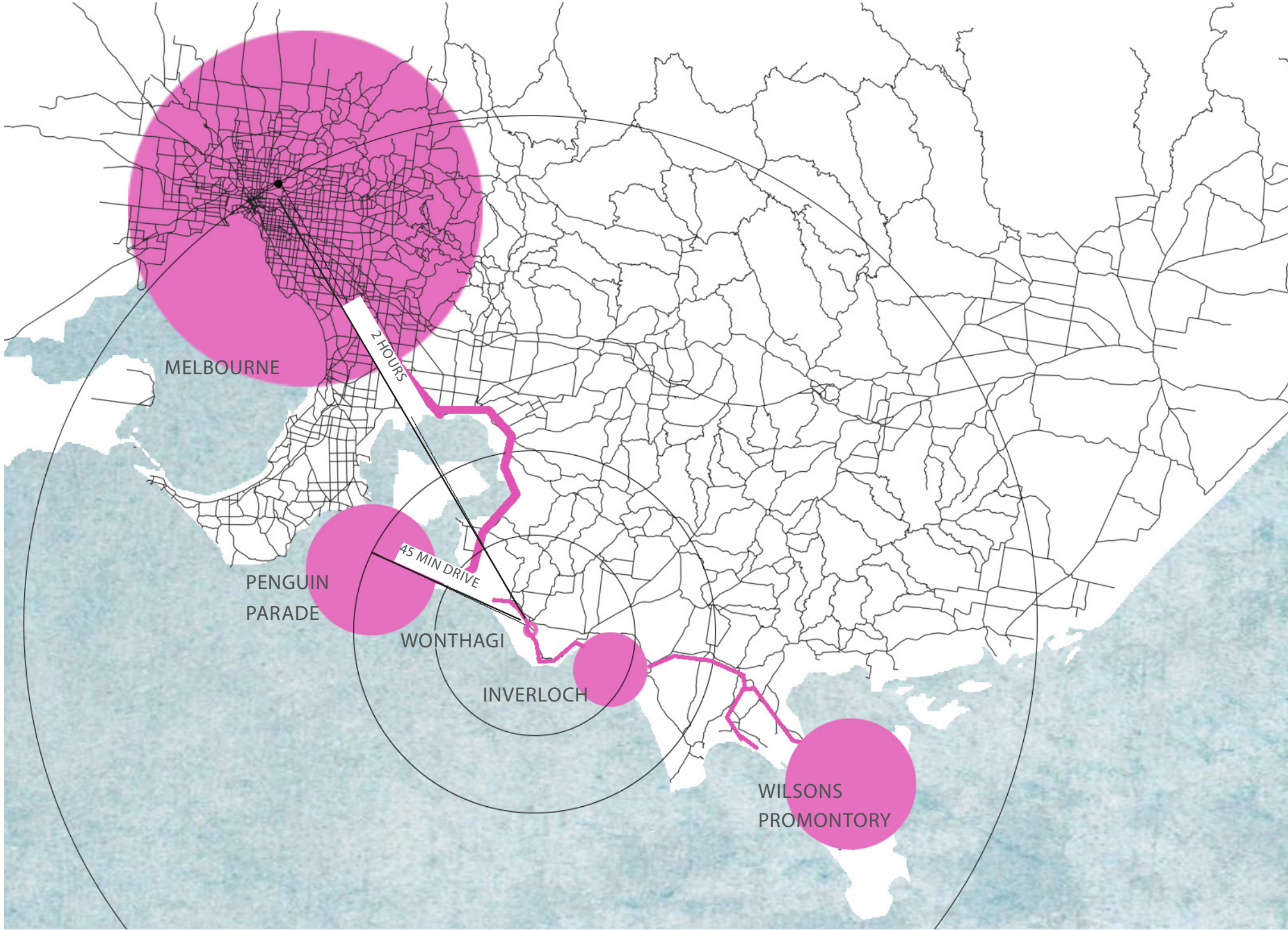
3.0 THE JOURNEY

CONNECTING
PREHISTORIC + POSTHISTORIC

3.1
REGIONAL CONTEXT

ADDING TO THE TOURIST
ATTRACTION OF WONTHAGGI

- Bass Coast and The Gippsland Region have long been a tourist destination from Philip Island to Wilson Promontory, with millions of visitors every year.
- The Gondwana Garden will draw on this audience and entice new audiences with another tourist worthy destination with visitors from far and wide and will encourage longer and repeat visitation, whilst also providing local residents with new experiences and immersive educational opportunities.



REGIONAL CONTEXT

3.2
GONDWANA GARDEN VISITORS

TRAVELLERS

- From Phillip Island penguin parade to a Gondwanaland immersion
- Seasonal bird watchers
- Coastal drives
- Bus tours
- Cultural diversity
- Spending time and reconnecting with loved ones

DINO-ENTHUSIASTS

- From all walks of life – young children to the active retiree
- Paleo-history, geology, evolutionary science
- The curious
- The educated
- A thirst for knowledge and a sense of adventure

KNOWLEDGE SEEKERS

- Education and play
- Junior Dino-hunters
- Science fiction
- Animation
- Active play and exploration
- Gravitate to unique experiences and entertainment

LOCAL ADVENTURERS

- Proudly Bass Coast residents
- Currently reside within 30km (San Remo to Inverloch)
- A place to take visiting family and friends
- From coal mining economy to tourist economy
- Alternative and new experiences that incorporate arts, culture, and science
- Festivals and community events
- Entrepreneurs and business opportunities



3.3
LOCAL CONTEXT

By analysing and understanding our site, a space that is accessible, desirable, and engaging for all can be established, and a **DESTINATION** created.

We ask ourselves, how are people currently moving through and around this space?

Who is the target audience?

What will attract them here and what will they do?

How will people explore and unpack the many layers of information we can embed?

Where are the opportunities to maximise visitation and create an inviting and usable space?

This report explores how we can address these pertinent questions with the Wonthaggi Gondwana Garden contributing to the rich tapestry of Gippsland.



LOCAL CONTEXT OF GONDWANA GARDEN SITE

A COAL MINING HISTORY

Beneath our feet is the The Central Area of the now redundant Wonthaggi Coal mine.

In the damp forests of primordial Gondwanaland, a unique sequence of climatic conditions and tectonic plate movement led to the preservation of plant matter and its conversion into what we now call **COAL**.

The prehistoric forests from the era of our polar dinosaurs were buried in the swamps under layers of peat and millenia of accumulated sediment. Tectonic shifts may have swallowed whole forests and their inhabitants, which, given enough

time, geological forces, and heat, eventually formed coal. Fast forward hundreds of millions of years. Coal geologists and miners have led the way for Bass Coast frontiersmen, as they went in search of resources to fuel the growing population of Victoria.

In Wonthaggi, the coal seams, interspersed with layers of mudstone and sandstone, have sustained generations of families. Carbon-rich coal has, of course, made an enormous contribution to climate change (currently a third of global energy-related CO₂ emissions), but it was essential to industries of the time and our technological progression. Coal mining in Wonthaggi has since been decommissioned, but it is the heritage upon which the township was built. The mining industry enabled the development of other primary industries – logging and grazing – and has supported local Bass Coast

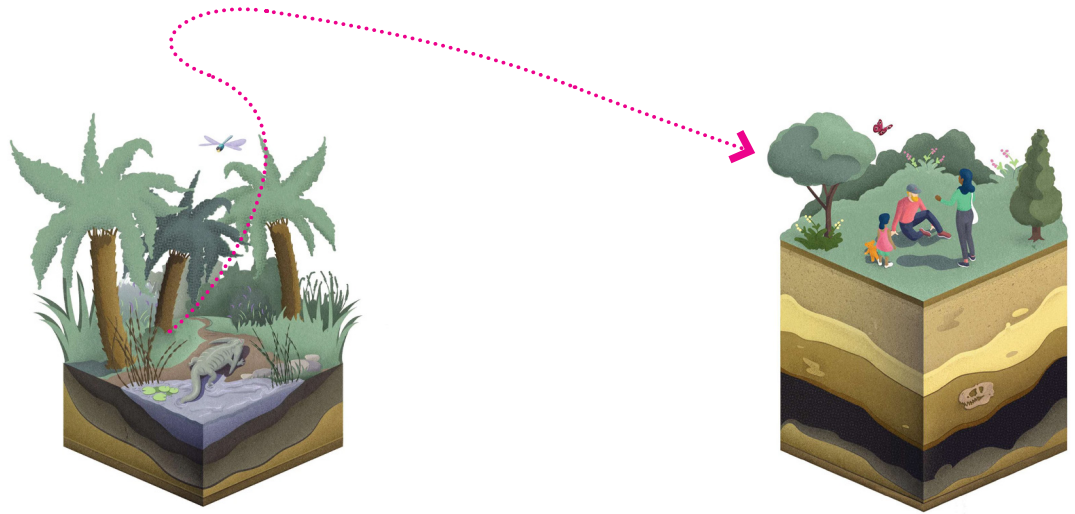
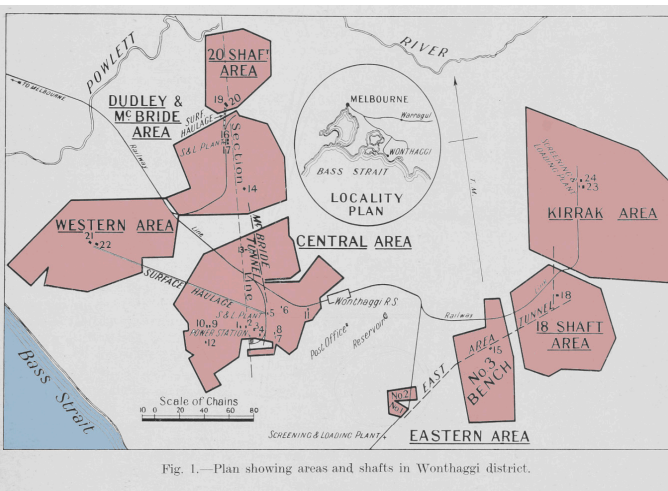


Figure 3.17 'The Bass River Saw Mills, Queensferry, Western Port.' by Fred Kruger, published in the *Illustrated Australian News*, 21 February 1877. (Source: State Library Victoria, Accession No. IAN21/02/77/20)



MINING & GEOLOGICAL JOURNAL JANUARY 1940

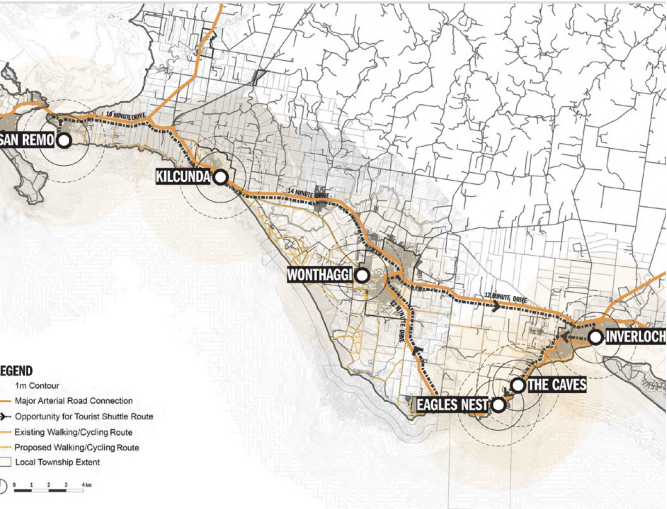
MOVEMENT NETWORK & ACCESS

Visitors can access the park from several different directions:

- by foot or bicycle along the Wonthaggi Rail Trail
- by car coming in along South Dudley Road
- a short walk from Wonthaggi Town Centre

There is a choice of 2 arterial roads into Wonthaggi whether you are coming in from the west (Melbourne or San Remo) or the east (Inverloch). The Site is easily accessible from either direction.

Guide Park to the south of the site includes a car park and coach parking. The site is serviced by local and regional buses, and the Wonthaggi Bus Interchange is a 10-minute walk away. In addition there is parking nearby at Wonthaggi Wetlands, Equestrian Centre, Wonthaggi shops and in the Town Centre.



BCDT MASTERPLAN - HASSEL- 2021

CLIMATE

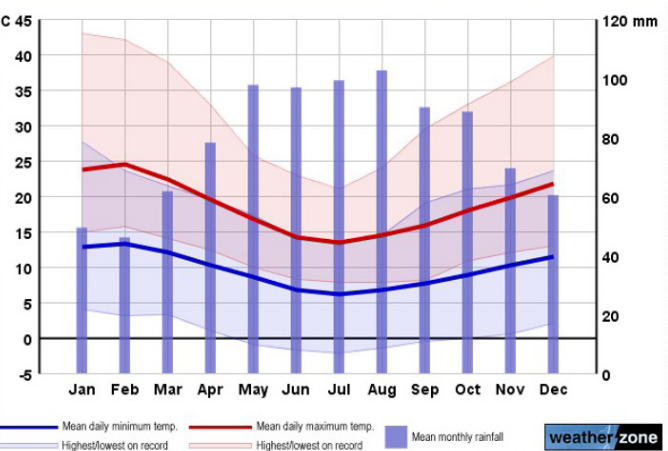
The region experiences mild to warm summers, with average maximum temperatures of 25°C. Winters near along Bass Coast are relatively mild, with average daytime temperatures of 15°C.

A changing climate means that the local environment is already experiencing warmer weather and less rain. Temperatures are predicted to continue to climb.

Rainfall patterns will pose challenges for water supply and as rain days become fewer, soaking rain events become much less frequent. When it does rain, rainfall patterns are trending towards much higher intensity leading to an increased risk of severe flooding.

Compounding the globally changing climate is urban heat, exacerbated by expanses of roofs, pavements, roads, and carparks; built urban geometries that do not consider shade; widespread tree removal; and lack of vegetation and canopy cover.

Escalating temperatures, combined with a drier environment, mean that consideration must be given to appropriate planting palettes that can be supported over the longer term. Consideration should be given to a likely future climate similar to the current day climate of places to the north.



AVERAGE MONTHLY LOCAL CLIMATE (RAINFALL & TEMP)

3.4

HABITAT AND BIODIVERSITY

ECOLOGY

- Celebrate the co-evolution of ancient species
- Consider habitat and corridors to secure their future

Many of Australia's native flora and fauna, whether avian, reptilian, or mammalian, have ancestral origins extending back to the Gondwana era. These species illustrate a direct link to the existing Bass Coast ecosystems and highlight a distinction between the extinction of the dinosaurs and the surviving ecology.

As of March 2021, with the addition of an extra 13 species listed as extinct under the EPBC Act 1999, the number of endemic Australian species that have become extinct since Australia's colonisation in 1788 now totals 100. The actual number of extinctions is likely to be far more than those recognised in formal lists. We believe one of the roles of the Gondwana Gardens is to celebrate and nurture these surviving ecologies.

AMBASSADOR SPECIES

Thinking about the fragility of Australia's ecosystems, can we pay homage to the resilience of nature and the past evolution of Gondwanaland species to create a modern-day garden that facilitates the ongoing protection of our surviving indigenous flora and fauna?

The concept of Ambassador species is used to inform planting palettes, water regimes, and land management practices that will nurture and protect local flora and fauna, create habitat, and promote biodiversity. Ambassador species have been chosen from the broad taxonomic classes of reptile, mammal, bird, invertebrate, amphibian. They have been selected as they have relevance to the indigenous ecosystems of Bass Coast and because their ancestry dates back to Gondwana.

The ancestral link between Gondwanaland species and the flora and fauna of today has been demonstrated through fossil records. Palaeontologists have discovered fossils of the same or closely related plants and animals in Australia, New Zealand, Chile, Argentina, South Africa, Antarctica, Madagascar, India, and the Arabian Peninsula.



CORRIDORS OF GREEN SPACE & ECOSYSTEMS IN PROXIMITY TO GONDWANA GARDEN SITE

3.5

ECOLOGY AMBASSADORS - BASS COAST GONDWANA DESCENDANTS

ODONATA- 300 MYA

The now extinct Giant Dragonfly, *Petalura gigantea*, or South-eastern Petaltail, had a 75 cm wingspan. Fossil records date back to the Late Carboniferous period (300 mya) and they remained in existence throughout the Gondwana era. During the Carboniferous period there was a massive influx in global oxygen levels, and this allowed many invertebrate species to get to huge sizes.

Fast forward to today and the Giant Dragonfly's descendants have become a lot smaller. Larval dragonflies (nymphs) eat small insects, especially flies. Their colouring and marking provide excellent camouflage, which assists with stalking prey. They spend part of their life cycle in water and, in their mobile flying (adult) stage, live near water, perching on rocks, branches, and the stalks of riparian reeds.



LACE MONITOR- 90 MYA

Goannas evolved in the northern hemisphere about 90 million years ago. They moved south into Africa and Australia during the Miocene epoch, around 15 mya. Today there are 27 extant species of goanna in Australia, most of them carnivorous.

They have an important place in Australian history and culture. Traditionally they are hunted and eaten, and they commonly feature in Aboriginal Dreamtime stories.

Goannas are predators and scavengers and play a key role in the natural ecosystem. They maintain population numbers of smaller prey and help manage disease by removing carcasses.

Population numbers are declining due to land clearing, habitat degradation, removal of habitat features such as fallen timber, and feral and invasive predators such as foxes and cats.



AVIAN DINOSAURS

The Yellow-tailed Black Cockatoo (*Zanda funereal*) is one of Australia's 6 black cockatoo species. It is a large bird (65 cm in length) native to the south-east of Australia.

These striking birds are relatively adaptable to urban life. This adaptation and resilience is enabling them to survive despite widespread land clearing. Nonetheless, their population numbers are still in decline.

Yellow-tailed Black Cockatoos forage in bushland on a range of native plants, including Banksia and Hakea seeds. As they increasingly inhabit urbanised areas, they are often seen foraging on introduced pines in farm shelter belts, parks, and golf courses.



ECHIDNA - 50 MYA

The echidna is a solitary, primitive mammal, which when attacked, will burrow into the ground or curl into a ball using its spines as defence.

Its spines are actually long, tough, hollow hair follicles. As well as being covered in spines, echidnas are also covered in shorter fur for warmth. The echidna is the only other living egg-laying mammal species apart from the platypus.

The echidna uses its very sensitive nose to search for food, and its long sticky tongue to catch ants, worms, and other insects. Breeding season is May-September.

Although long-beaked echidnas are at high risk of extinction (80% population decline in the past 50 years), the short-beaked echidna is well-protected in Australia.



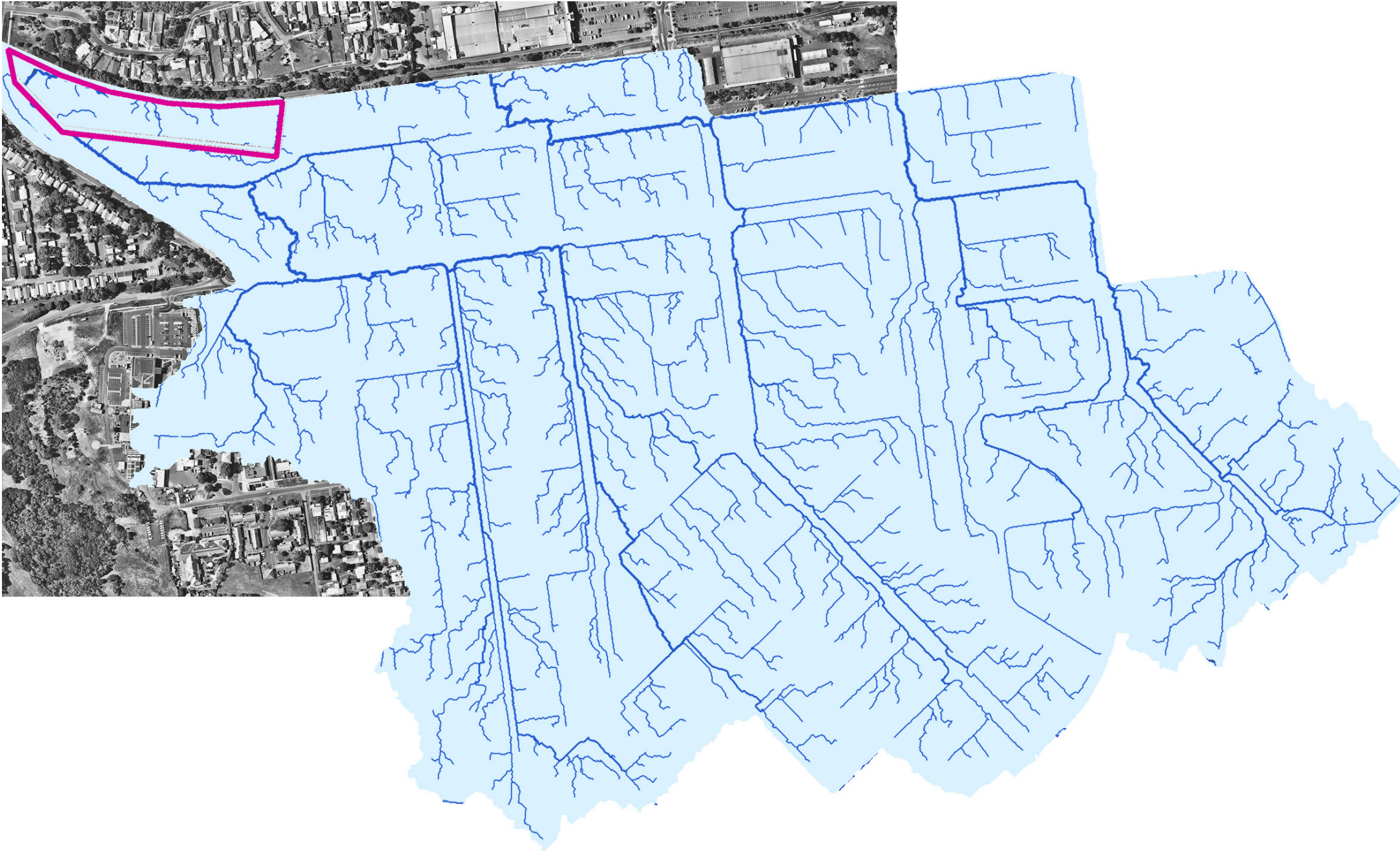
3.6

THE WATER STORY

Escalating temperatures, combined with a drier environment mean that consideration should be given to the creation of a water-sensitive garden.

A water-sensitive garden will enable the conservation of our precious water resources while, at the same time, fostering lush green garden spaces with healthy and well-maintained vegetation.

Capitalising on the broader water catchments and maximising opportunities for rainwater capture and reuse will also underpin the creation of ponds and wetlands as functional and aesthetic features of the gardens.



A 100 HECTARE CATCHMENT PASSES DIRECTLY THROUGH THE SITE, REPRESENTING HUGE OPPORTUNITIES FOR CREATING A WATER-SENSITIVE GARDEN

WATER SENSITIVE GARDENS

One of the earliest theories of the evolution of life uses the theory of a Primordial Molecular Soup. Others have referred to it as RNA World.

What we are sure of is, without water, life on our planet would never have begun.

A Water-Sensitive Gondwana Garden will enable:

- Links and references to ocean dinosaurs, e.g. Plesiosaur
- Water harvesting for irrigation
- Lush and healthy vegetation across the site
- Opportunities for sensory and seasonal play
- Koolasuchus Lake – including sculptures

NEW WETLANDS

The site has two stormwater drainage easements. They run along the northern and southern boundaries, respectively.

The northern drain is fed by a relatively small water catchment and does not have a direct outlet. Water is subject to pooling in a shallow depression at the northwestern end of the site. Essentially, a small informal wetland has formed here.

With this knowledge and some clever engineering, we can harness and enhance the natural site topography to create a wetter environment – one that emulates the swampy, damp environment normally associated with the Gondwana era.

New wetlands will:

- Support new vegetation
- Enable connection to the Wonthaggi Wetlands Reserve
- Provide dimension & interest from Day 1
- Provide valuable aquatic habitat for native fish, amphibian, and invertebrate species
- Help to improve stormwater quality



A NEW ORNAMENTAL LAKE

The site's southern stormwater drain is significantly deeper than the northern drain. It flows in a westerly direction, with water exiting the drain via a culvert which then runs under the main road to the broader floodplain on the other side.

Preliminary catchment analysis has revealed a water catchment of approximately 100 ha feeding the site's stormwater drains. The broader catchments represent access to multiple times more water than falls directly on the site and a portion of this runoff has potential to be funnelled through purpose-built water features and harnessed for use in the new gardens.

There is significant opportunity at the downstream end of the site to create a new ornamental lake. As well as providing a delightful and appealing water feature for picnic, play, and respite, a new lake can capture and store water for landscape irrigation.

Tipping our hat to the Victorian State Dinosaur Emblem, we have coined the new ornamental lake Koolasuchus's Swamp. The type of watery habitat in the new lake and wetlands would be perfect for Koolasuchus cleelandii if it were still alive today.

Just imagine!



SWALES AND BIOFILTRATION

By using biofiltration elements that are planted out with native vegetation, rainfall runoff from the landscape will be filtered and slowed to ensure that it doesn't reach the new lake untreated.

As water is captured in swale elements, the vegetation promotes passive irrigation. By employing the use of passive irrigation and infiltration techniques across the site, stormwater infiltration can be maximised so that it is more effectively absorbed into the landscape.

This approach will not only help with managing risks of flooding and waterlogging, but this approach, combined with the integration of riparian planting and floating island wetlands, will help remove stormwater-borne pollutants.

In addition to providing treatment, promoting a lush green healthy garden, a well-considered stormwater management strategy will provide critical habitat, enhance biodiversity, and maximise ecological values.



3.7

THE SITE ANALYSIS

By analysing and understanding our site, a space that is accessible, desirable, and engaging for all can be established, and a DESTINATION created.

SITE CONDITIONS & TOPOGRAPHY

The 1.75 ha parcel of land is long and narrow. It is not a precise rectangle but the shorter sides are approximately 60 m long and the long edges around 300 m. It is bounded by a drainage easement (shallow channel) along its northern edge abutting 300m of the Bass Coast Rail Trail.

The site is relatively flat. There is minimal surface fall over the property, average around 1% from east to west.

The property is essentially cleared of native vegetation. It is undermined by a series of abandoned mine shafts and tunnels.

The site is effectively excised in two longitudinally by an in-ground National Broadband Network (NBN) mains and easement.

MOVEMENT NETWORK & ACCESS

The site can be accessed from several different directions and entry points, including the Bass Coast Rail Trail.

The site is constrained at its western edge by one of only two arterial roads into Wonthaggi, South Dudley Road. This is a busy road with fast moving traffic and as such does limit accessibility. On the other hand, the site's proximity to South Dudley Road provides opportunities to siphon passersby into the Gondwanaland experience that will be created. Signposting will be a key consideration.

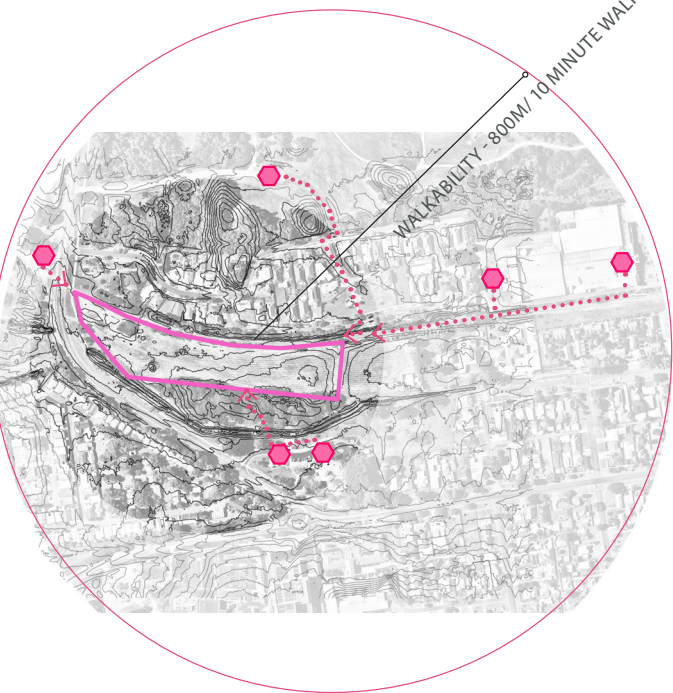
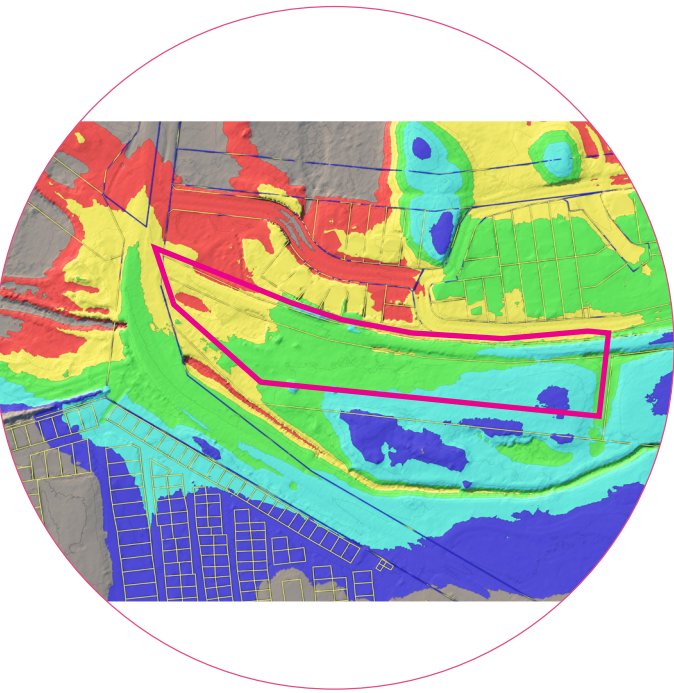
The site is constrained by stormwater drainage easements along both its north and the south edges. The southern drain is especially deep and currently impassable, so opportunities and locations for crossings must be included to allow access from Guide Park.

VEGETATION & GREEN LINKS

The property is essentially cleared of native vegetation and covered in a mix of pasture and native grasses. Currently, maintenance comprises routine slashing and mowing.

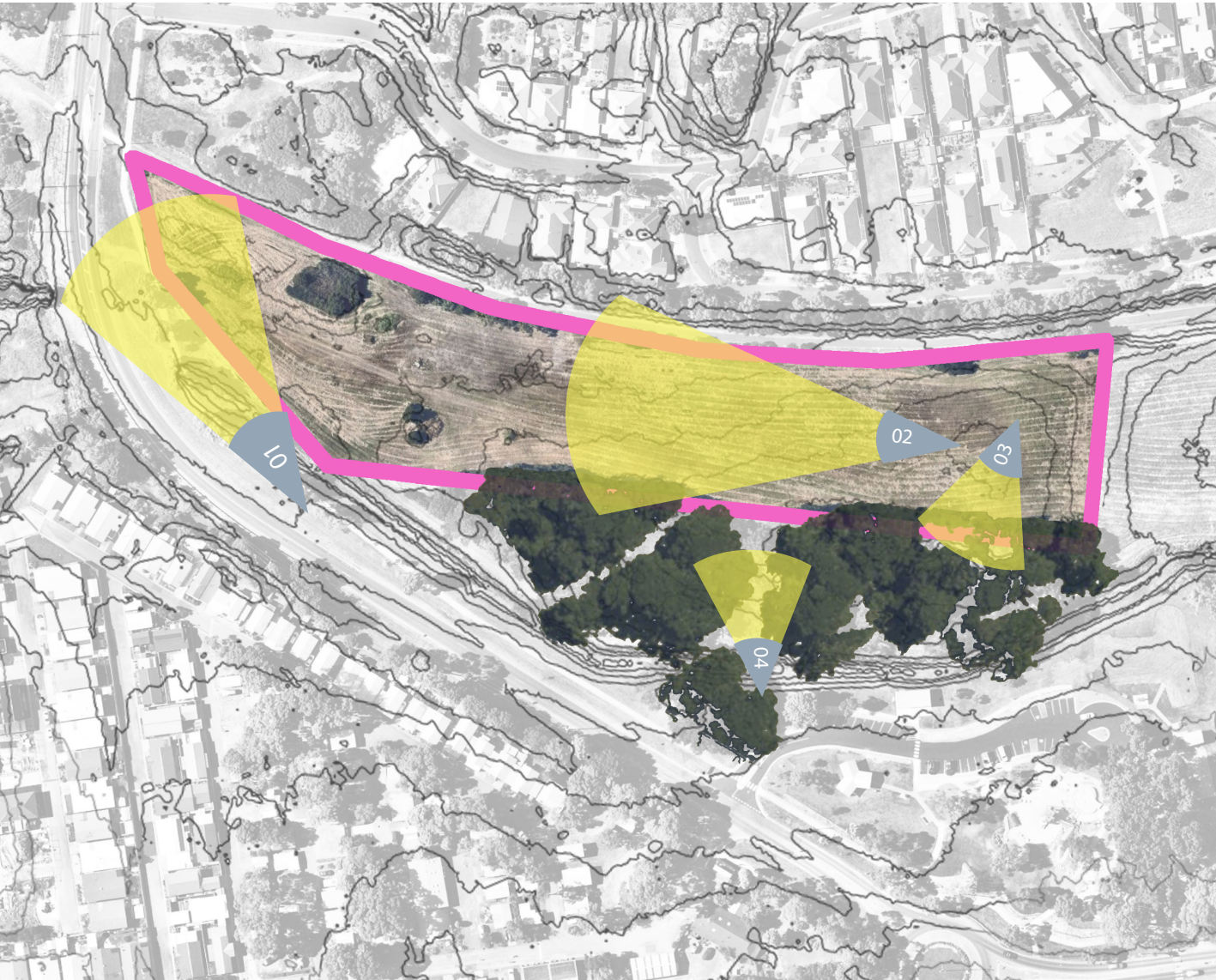
There is a mature stand of conifer trees outside the southern edge of the site, and some less mature, smaller trees along its northern edge. There is a scattering of naturally re-seeded heathland shrubs and rushes, mainly in the damp low lying depression at the north-west corner.

Knowledge of the high value trees and existing vegetation on the site will help inform a landscape design that is fully integrated with the surrounding development and local ecologies. A key objective of the project will be to unlock the biodiversity and habitat opportunities that connect with the surround ecological hotspots – coastal and marine ecologies, bird migration route, and the Wonthaggi wetlands



THE SITE ANALYSIS

EXISTING SITE CHARACTER



IMPORTANT VIEWS



01 VIEW OF THE SITE FROM SOUTH DUDLEY ROAD



02 VIEW OF THE SITE FROM THE EAST END



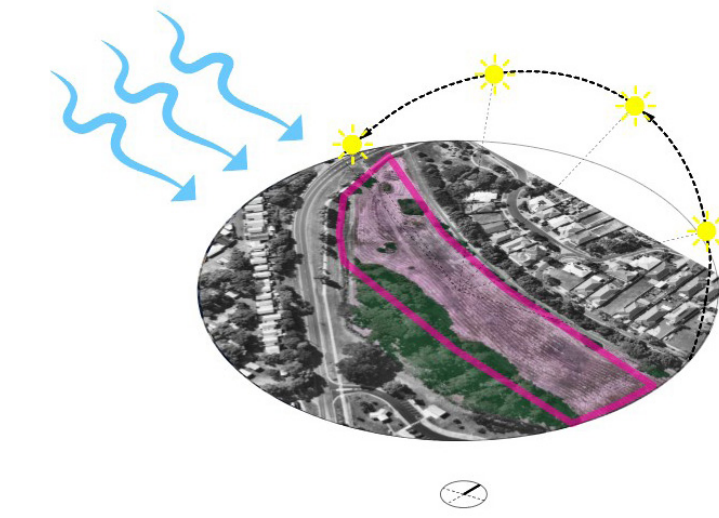
03 VIEW OF THE EXISTING PINE GROVE



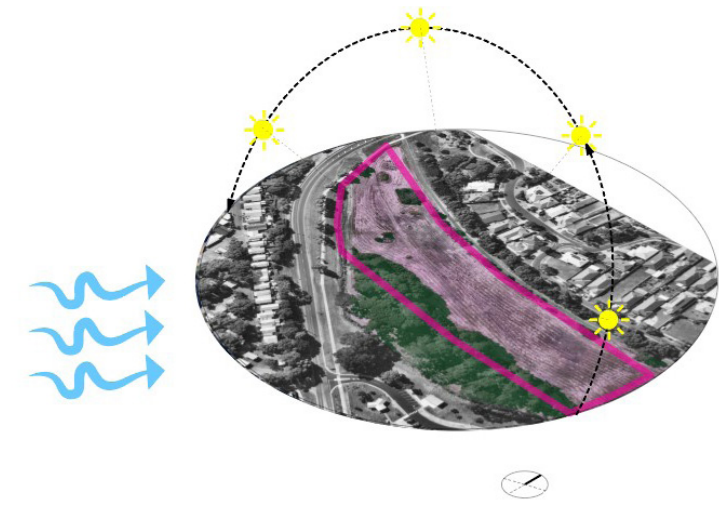
04 VIEW INSIDE THE EXISTING PINE GROVE

THE SITE ANALYSIS

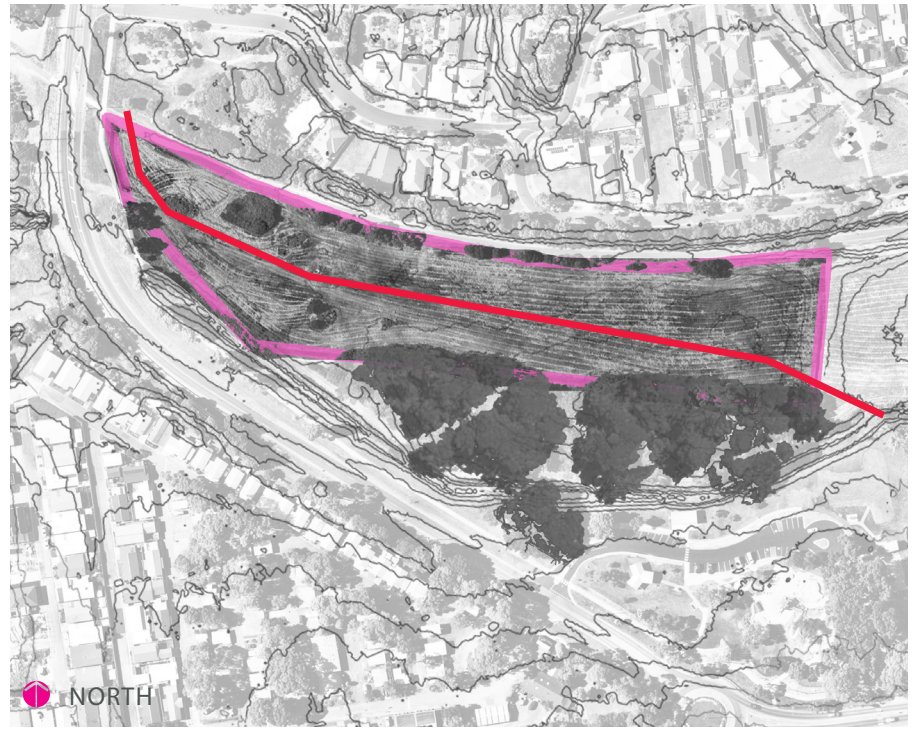
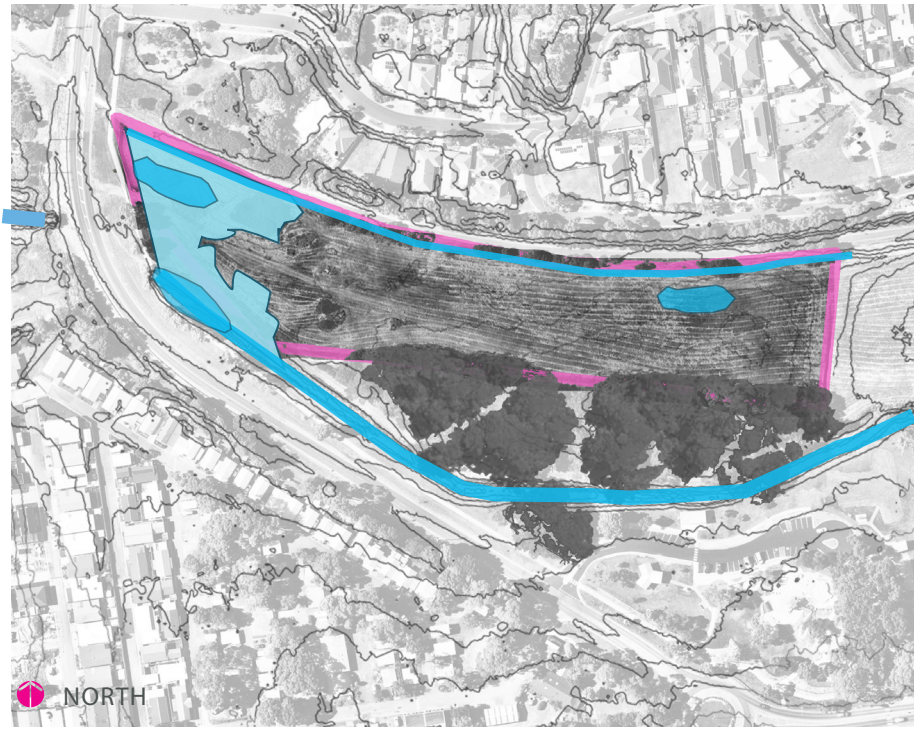
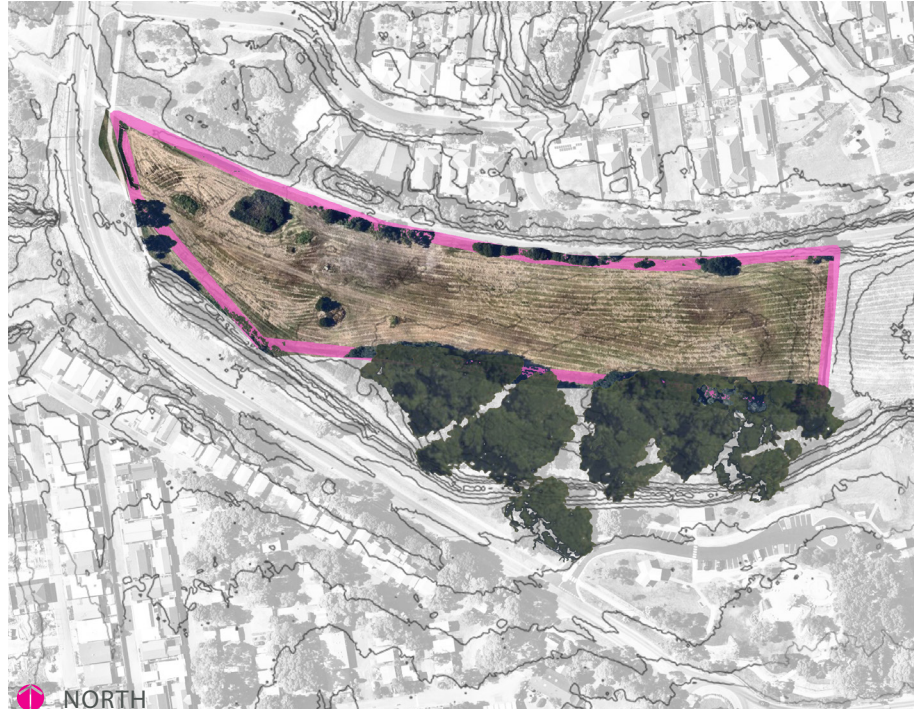
KEY CONSTRAINTS AND OPPORTUNITIES



WINTER SOLAR AND WIND STUDY



SUMMER SOLAR AND WIND STUDY



3.8 OPPORTUNITIES

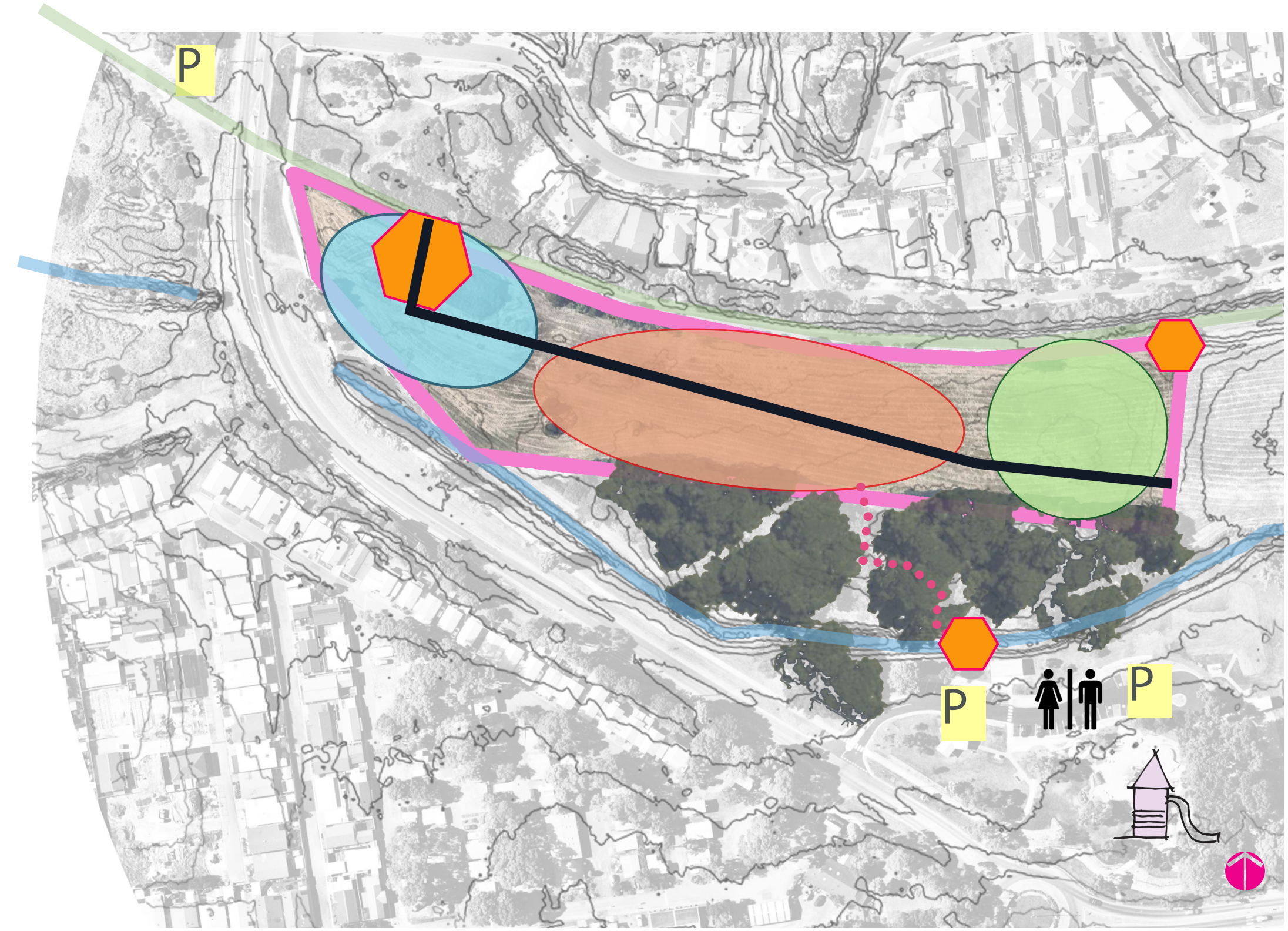
The site's location plays a key role in regional wildlife connections and community links.

There is enormous potential here to:

- Invite people to the new Gondwana Garden from all directions and all walks of life by connecting formal and informal trail networks and capitalising on proximity to existing hubs.
- Build a destination that meets the Shire's cultural and tourism objectives.
- Create opportunities for play, quiet reflection, and communing with nature.

LEGEND

- SITE BOUNDARY
- MAIN PATHWAY THROUGH SITE
- BASS COAST RAIL TRAIL
- EXISTING CREEK
- • • TREE TOP WALK
- WATER DETENTION PONDS AND WETLANDS OPPORTUNITY
- AREA MOST SUITABLE FOR VIEWING DIGITAL PROJECTIONS
- CENTAL AREA (FLAT, DRY, SHELTERED FROM NOISE) SUITABLE FOR VARIETY OF ACTIVITIES
- ◈ SITE ENTRANCE POINTS
- EXISTING PLAYGROUND
- P EXISTING PARKING
- EXISTING PUBLIC TOILETS



TECHNOLOGY

The Gondwana Garden’s digital experience will be a powerful tool people can access ahead of their visit to the Garden, use while at the garden for wayfinding and information, and to continue their experience after they leave.

The tech spine like the dinosaur spine provides the base for the entire system, it contains the digital twin, the database of information and a central repository for managing visitor and park information. The digital experiences branch from the spine like the content map of a website and virtual experiences (both VR & AR) interpretive displays incorporating body tracking responding to your movement, signage and wayfinding (adaptive digital displays that show YOUR journey) when you approach a platform for digital artists to base their work on customisable light shows or projection displays.

The data collected here can be used to analyse the performance of the site, tailor experiences to what is popular and assist in the development of marketing strategies and planning of future exhibitions. With the right technology here, anything is possible, and the technology needs to be adaptable as new hardware and software are developed and made available.

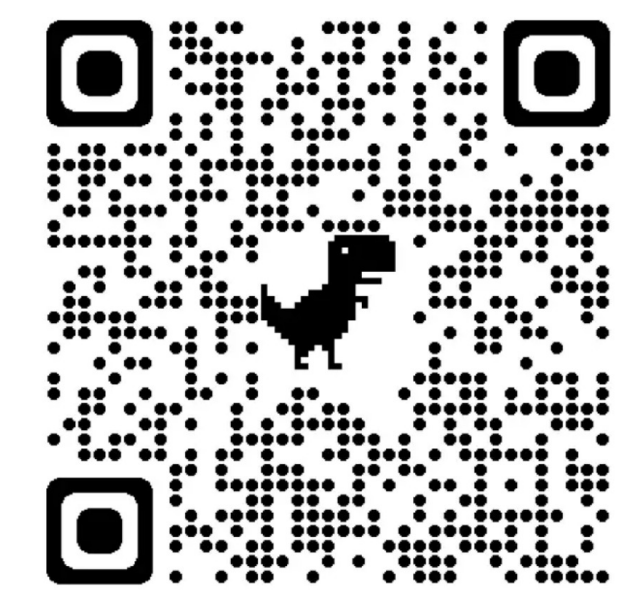


OFFSITE PRE-VISIT PREPARATION

The web platform lays out the site, the experiences and the layers of opportunity for your visit. Like a digital guidebook. This is essentially a choose-your-own-adventure moment where you can undertake a casual walk through with a high-level overview of the gardens, themes, rooms, and open spaces. You may choose to undertake a virtual reality visit using the online digital twin platform. Alternatively, you might be a repeat visitor wondering about another layer of experience:

- It could be a journey through time understanding the evolution of life from the primordial swamp to the mass extinction event, or
- A botanical journey focusing on the gardens, the trees and vegetation and learning more about the landscape of our pre-historic Gondwana Gardens, or
- Explore the ecology and biodiversity story of the site that focusses on the different ecological zones in and around the Gondwana Gardens, or
- Start your own research project, learning about the science of the dinosaurs, what they ate, how they lived and imagine how they might live today.

These journeys are not only relevant to the Gondwana Gardens, but they also apply to the entire Bass Coast Dinosaur Trail.



ARRIVAL AND WAYFINDING

Once you have planned your visit (or even if you have not) you can arrive for a guided tour of the site – this could be an audio tour or an augmented reality tour using your smartphone. As you navigate the site you will get real-time reactive feedback about your location in the Gondwana Garden and these can be tailored based on your specific interest or it can be more general in nature. There could be triggered speakers providing an auditory backdrop to your journey through the site – this could also be played on your digital or mobile device – or it could be a pre-recorded guided tour of the design based on a theme of your preference.

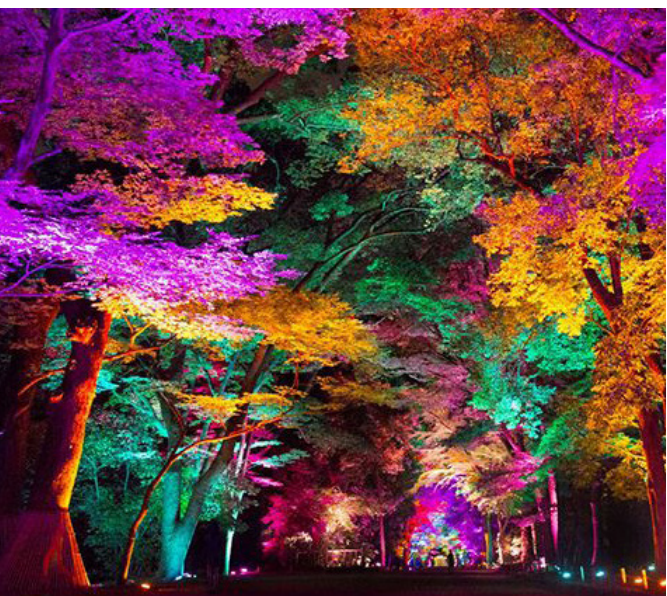


ON SITE EXPERIENCE

If you are visiting for a walk, picnic or for some quiet respite in nature your experience can be slow and relaxing, or you may be visiting for a special event or exhibition such as:

- An evening projection show onto the natural screens at The Crater (digitally ticketed audio),
- A guided star-gazing tour on a beautiful clear night (web/XR),
- An exhibition of traditional cultural values – storytelling, creation, nature (digitally ticketed or free web/XR),
- A presentation on the Bass Coast dinosaurs, a palaeontological discussion (from a stage in The Crater),
- An art exhibition curated in either digital or physical forms,
- A ticketed event staged at The Crater (this is a hireable venue).

Along your journey you can track items you are interested in and feed them back into the web platform – to plan a deeper dive into the topics that interest you.



POST-VISIT EXPERIENCE

After your visit the web platform allows you to continue your journey. Whether you have tracked or marked items of interest along the way and want to learn more about them in a deep dive, or you are discussing the visit with friends or family and want to remember what you saw you can return digitally or plan your next visit.



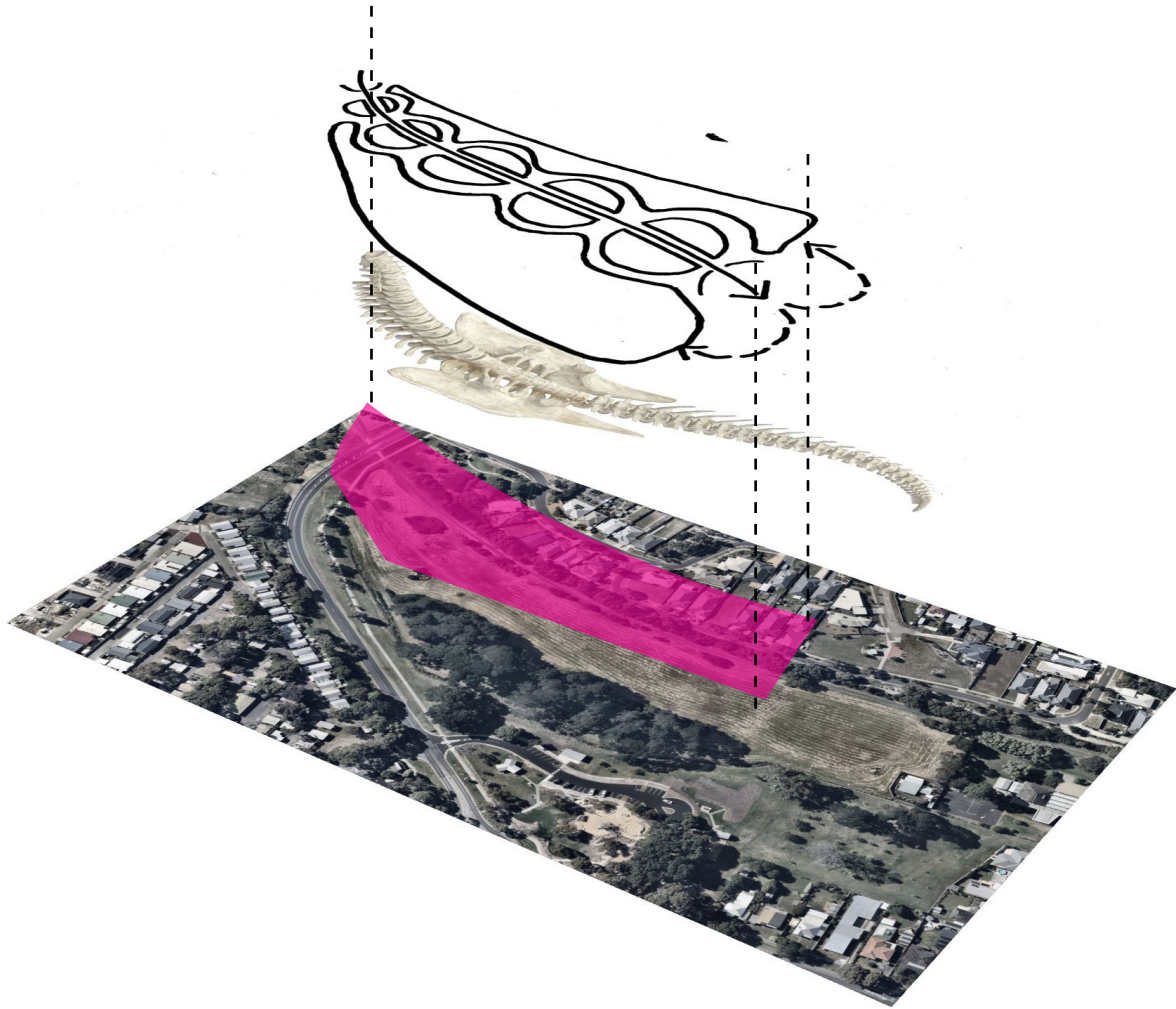
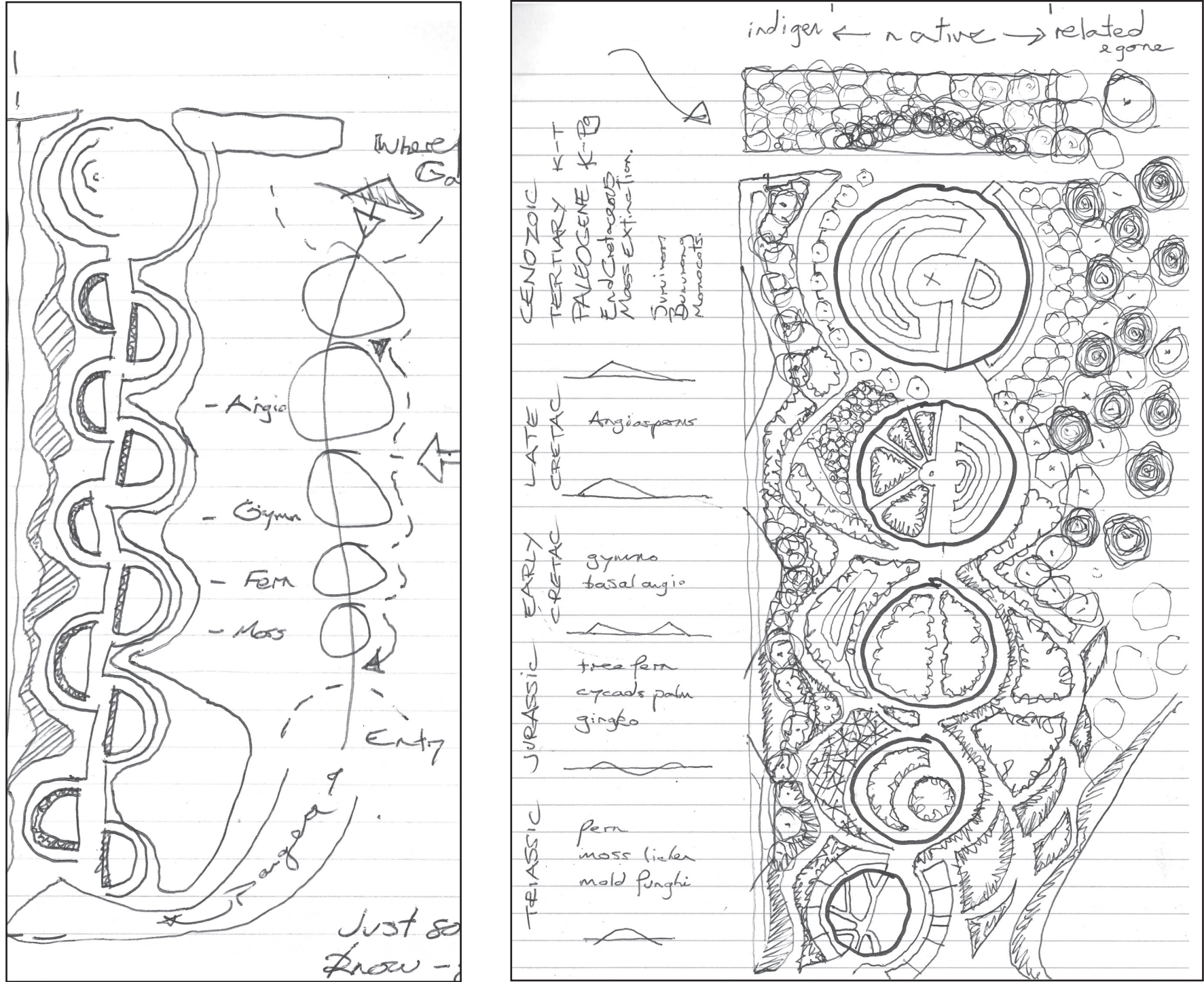


4.0 DESIGN RESPONSE

4.1 DESIGN THEMES



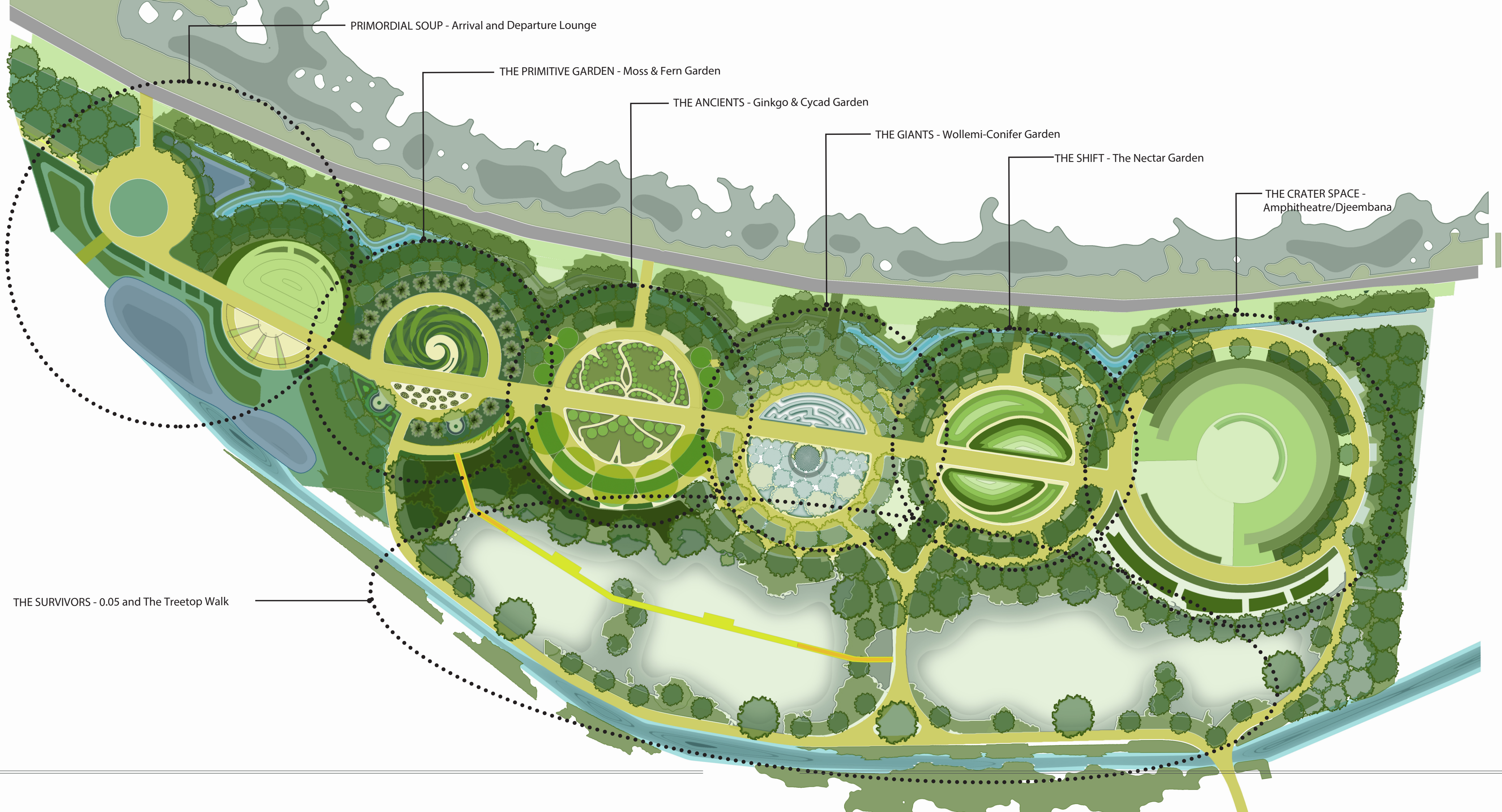
4.2
EARLY CONCEPTS



4.3
CONCEPT



MASTERPLAN



4.5
PLANTING PALETTE - SITE WIDE

THE EVOLUTION OF PLANTS

The garden rooms and planting palette are made up of species from different stages of plant evolution.

The first garden room showcases the descendents of the first land plants - mosses, lichen, fungi & ferns. The garden progresses with the evolution of ginkgo & cycads, before the emergence of the ancient conifer garden and finally the celebration of the first flowering plants.

The range of species will be drawn from both the continents and islands that once combined to make Gondwana Land with also a dominance of those species that have evolved within the Bass Coast and Gippsland Bio Region.

GONDWANA GARDEN ROOMS-

- Primordial Swamp
- Primitive Garden
- Fern Garden
- Cycad Ginkgo Garden
- Conifer Garden
- Nectar Garden
- Crater Space
- Point Zero Five Garden



THE PRIMITIVE GARDEN - GIPPSLAND FUNGI MOSS & LICHEN



ANCIENT CONIFER GARDEN



FERN GARDEN - GIPPSLAND FERNS



NECTAR GARDEN - FLOWERING PLANTS - ANCIENT FAMILIES



GINKGO & CYCAD GARDEN



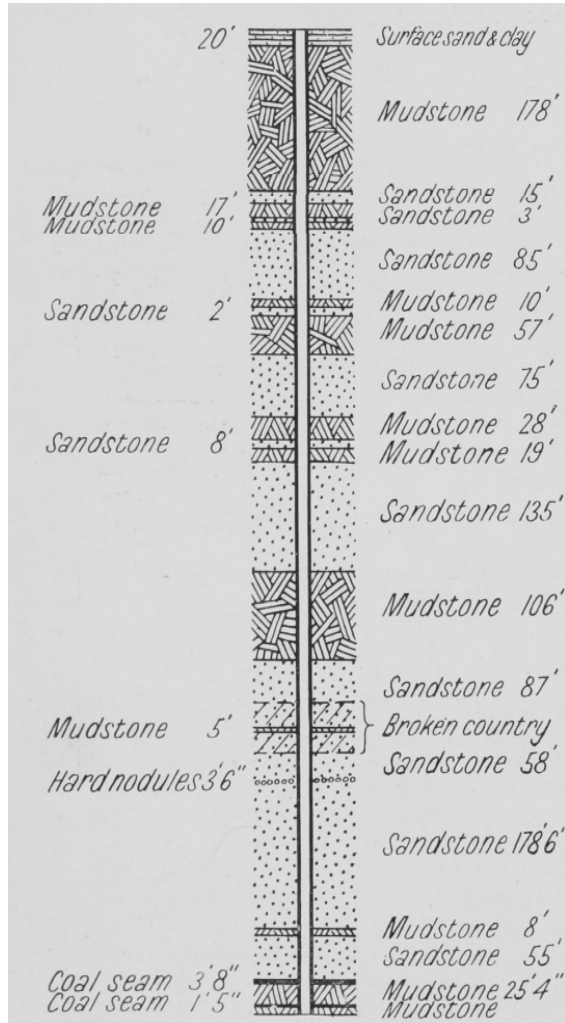
POINT ZERO FIVE GARDEN - BASS COAST GONDWANAN DESCENDENTS

4.6
HARDSCAPE PALETTE - SITE WIDE

LOCAL GEOLOGY AS MATERIALITY

The hardscape palette reflects the vast array of Bass Coast's geology. The parent rocks that we stand upon encase the fossils of vegetation, coal and fauna of the Dinosaurs Trail.

The materiality reflects ancient and recent volcanos, the tectonic plates of Gondwana, the fault lines, weathering and more. It is these elements that will be utilised in pathways, feature rocks, garden mulches and hard surface treatment.



WONTHAGGI COAL SEAM GEOLOGY



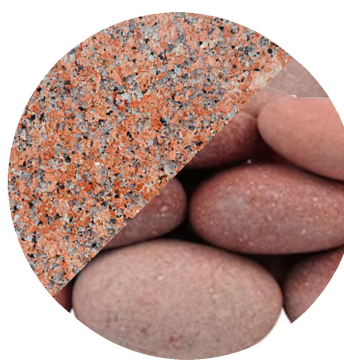
Granitic sands & gravels
Paths



Black coal
Feature mulch in garden beds
Cycad & Ginkgo garden



Volcanic basalt
Feature mulch in garden beds
Paving accent feature



Pink granite
Feature mulch in garden beds
Paving accent feature



White quartz
Feature mulch in garden beds
Paving accent feature



Sandstones
Feature mulch
Paving accent feature



Mudstones
Feature mulch
Paving accent feature



Brown coal
Soil amelioration for garden beds



Marls



Rammed earth
Feature walls



Coreten
Raised beds & edging



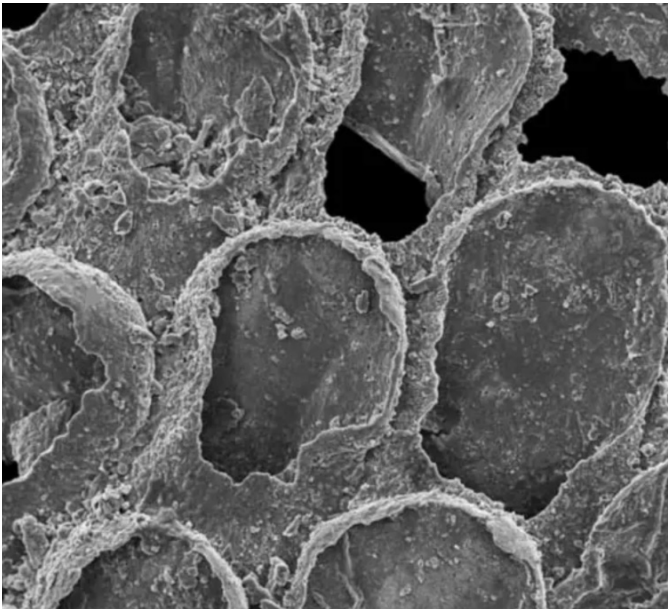
Mulch

4.7
EXTINCT - GONDO GONE - FOSSIL SCULPTURES - SITE WIDE

'Gondo Gone' refers to the extinct species that can only be suggested in the Gondwana Garden by either digital or sculptural representation. The digital scope allows for the literal reference to Gondwanan fossils to tell the story of progressions in paleontology and the botanical story they unvail.

The sculptural representation of extinct species is 'artist impression' that could be replicated with similar botanical imprints or free form sculptural elements.

The digital representations could be almost immediate once the garden opens and updated as new science is revealed. The sculptural representation could be incremental dependent upon available funding. The sculptural element could also be progressive with the awarding of biennial / triennial commissions or sculptural competitions.



SWAMP MOSS FOSSIL



FERN FOSSIL



GINKGO FOSSIL



CYCAD FOSSIL

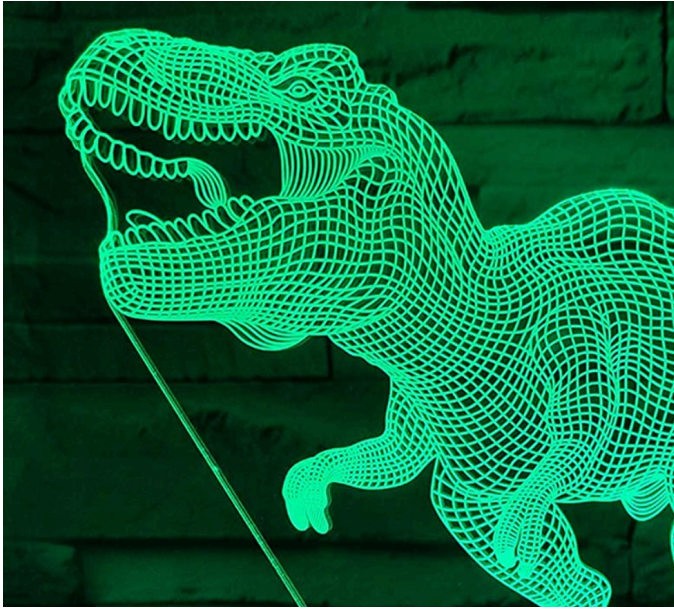


CONIFER FOSSIL



FLOWER FOSSIL

4.8
EXTINCT - GONDO GONE - ART, SCULPTURE & DIGITAL EXHIBITIONS - SITE WIDE



DINOSAUR SCULPTURES - GOODREAM LAMP



VELOCIRAPTOR - MICHAEL TURNER



WORLD OF DINOSAURS - GROSSPOESNA



DEINONYCHUS V STRUTHIOMIMUS - NELSON MANISCALCO



METALLIC DINOSAUR - TOMAS DUARTE



SAUROPODOMORPHS - ARGENTINA



T-REX TAG - RICHARD ORLINSKI



LOPHORHYNCHON - JAMES EMERY



5.0 THE GARDENS

Gondwana Garden

Re The GOAL Pay attention. Be astonished. Tell about it.

*Re the Science, a reasonable probability is the only certainty
We are forever adding to our knowledge of the world,
but to do any good it must be shared - by the people.*

*Gondwana Botanical Garden **

Gondwana Bunurong Garden

Gondwana Bushtucker Garden

Gondwana Gone Garden - virtual digital, or real replicated - sculptural

Gondadino Garden (dead) - fossilised

Gondwana Geology Garden (buried) - petrified, coal, sedimentary, tectonic, volcanic

** Botanical - FLORA*

Aust, NZ, Sth American/African, Indian, Tibetan, Arabian, Madagascan GARDEN

PANGEAN pre-Gondwana Geneology Garden (One World) -

Conifer Cycad Ferns Aquatic Lichen Funghi Garden

Araucaria, Dacrydium, Podocarp, Phyllocladus, Protoaceae Garden

FAUNA

An Odonata Garden, A wasp to bee Garden, An ornithological Garden,

A 1000ppm CO₂ garden

A carbon footprint 5% reduction per year Garden.

A sea level plus 220m & minus 120m Garden.

5.1
CHARACTER AREAS -
AN OVERVIEW



5.2
PRIMORDIAL SWAMP (PRIMORDIAL ‘SOUP’)

ARRIVAL DEPARTURE LOUNGE

Wominjeka. Welcome to the Wonthaggi Gondwana Garden.

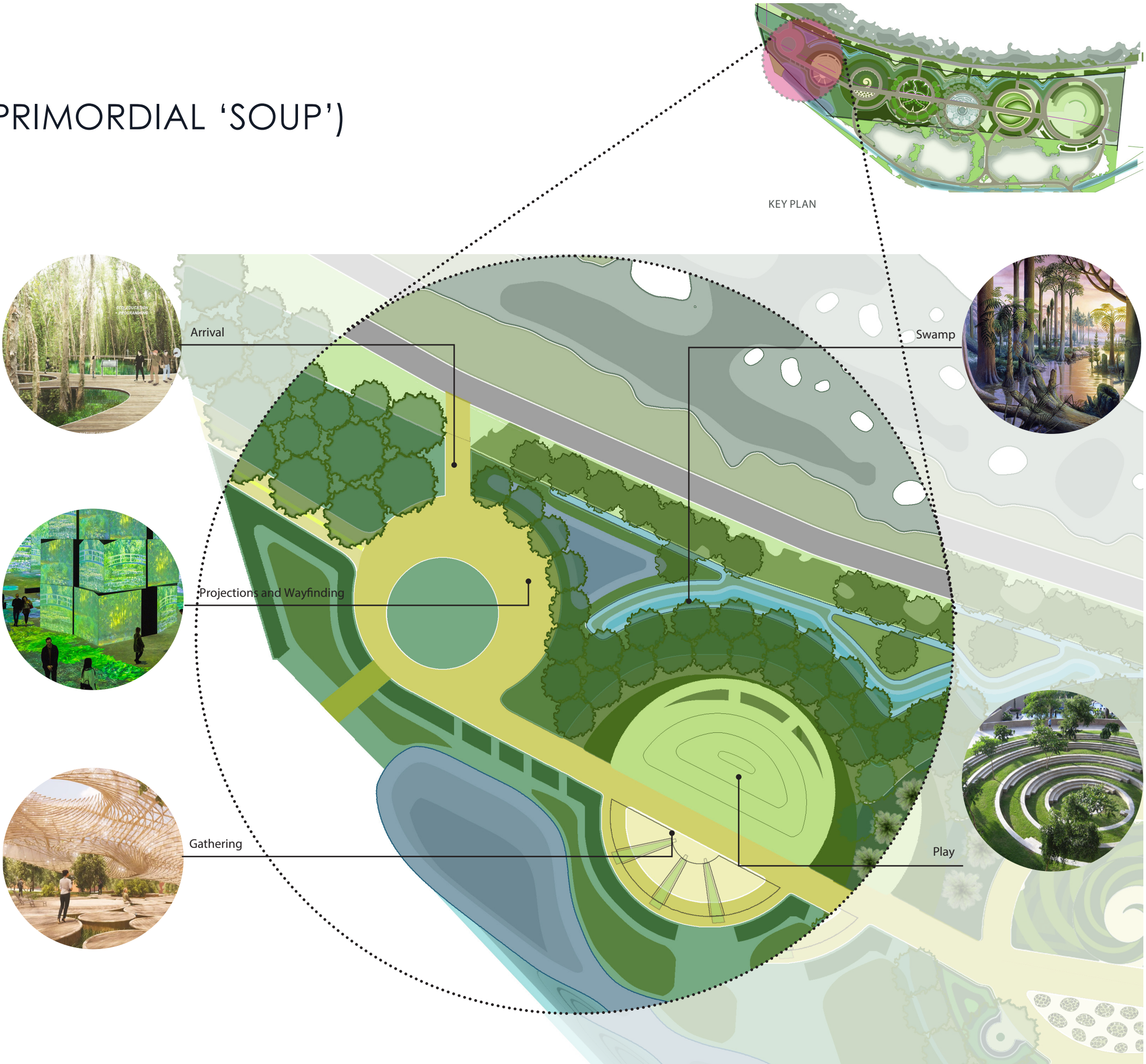
The Garden will take you on a botanical journey, from the very beginning of life in the primordial swamp (‘soup’), to the age of dinosaur extinction 65.5 mya.

It is a wild and wonder-filled place for a first-hand experience of Victoria’s unique and diverse polar dinosaurs. The Garden is filled with ancient trees and plant life just the same as the dinosaurs ate. Dino bushtucker! Just imagine! Enjoy a picnic, explore the ancient conifer forest, lie back for some stargazing, or enjoy the evening’s audio-visual sound and light show. You can choose your own adventure. Come back again and again and discover something new every time.

The Garden’s Arrival-Departure Lounge is the place to meet and gather before journeying through the Gondwana Garden and starting an adventure. This open space is a welcome plaza. It is shaded with plenty of places to sit and wait for your friends to arrive. While the space includes elements of shade, seating and shelter, it intentionally includes sufficient open space and flat areas to suit community and curatorial outcomes.

Here there is a large interactive display board, which maps out the Gardens, and allows you to select your journey and the stories and key moments that you would like to experience. It is QR code activated, and will map out your journey and load a guided audio tour for you. This is a technology friendly place, where you can log in using your phone. Or perhaps choose to leave your phone in your pocket and enjoy this place in quiet conversation.

Okay, so let’s head off. Along the central pathway you will see the swamp at your left and the lake to your right. These represent the era when life on earth first began. This is the ‘Primordial Soup’, from which all terrestrial plant life emerged.



5.3
PRIMORDIAL SWAMP - RIPARIAN & AQUATIC PLANT PALETTE



CAREX APPRESSA



JUNCUS PALLIDUS



BAUMEA RUBIGINOSA



BLECHNUM MINUS



CAREX FASCICULARIS



FICINIA NODOSA



PATERSONIA OCCIDENTALIS



TRIGLOCHIN PROCEURUM



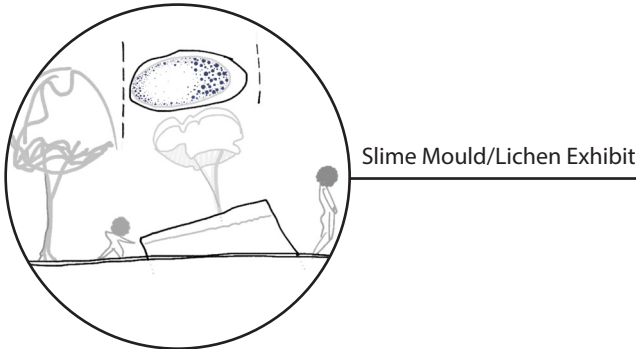
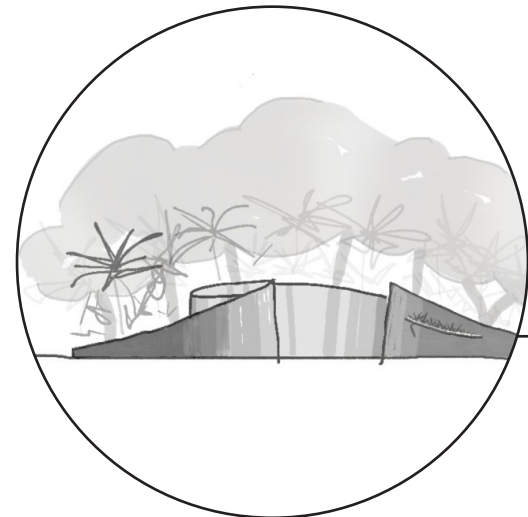
VIEW FROM THE ARRIVAL LOUNGE LOOKING EAST



VIEW OF THE SHELTER

5.4 THE PRIMITIVE GARDEN - MOSS & FERNS

Entering the next garden room, you are immersed in a strange and wonderful place. It is cool and damp and all around are the most primitive of plants – plants that have survived many hundreds of millions of years and which are still around today. Here we encounter mosses, lichens, fungi, and slime moulds. We also encounter the stunning fern garden. All of these plants evolved long before trees and even longer before flowering plants.



5.5 THE PRIMITIVE GARDEN - MOSS, CLUBMOSS, LICHEN, SLIME MOULD & FUNGI

CRYPTOGAMAE

From out of the Primordial Molecular Soup came the very first life on earth. One of the first stops on our journey is a space we dedicate to CRYPTOGRAMAE.

The name Cryptogamae (from kruptós 'hidden', and gaméō 'to marry') translates to 'hidden reproduction' and the fact that no seed is produced. Cryptogams represent the non-seed bearing plants, and include algae, fungi, slime moulds, lichens, liverworts, mosses, and hornworts.

They are hugely mysterious and there is still so much about them to be researched and better understood. What we do know though is their very important role from an evolutionary point of view. They are analogous to the amphibians of the plant world – they hold ancient characteristics linking them both to terrestrial plants and to their prehistoric ancestors.

Describing slime mould in 1868, biologist Thomas Huxley asked: "Is this a plant, or is it an animal? Is it both or is it neither?"

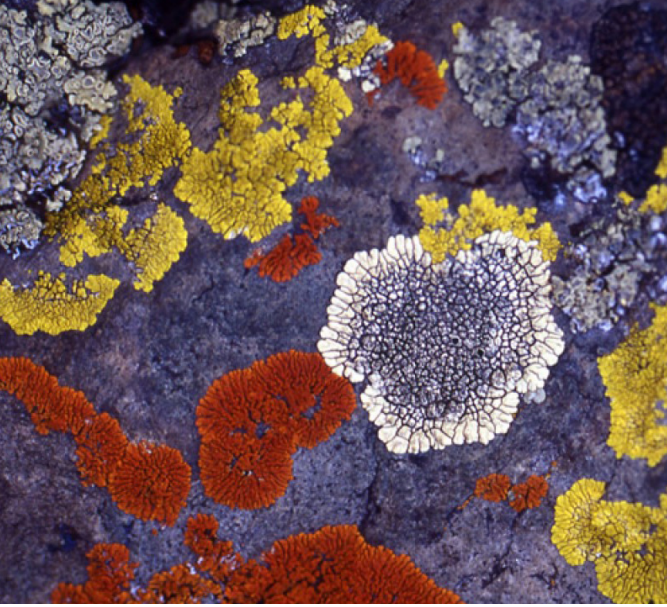
Today, we still don't really know.

General characteristics of these species:

- Occur in damp and shaded areas
- Ubiquitous opportunistic organisms found the world over
- Lack a vascular system (xylem, phloem)
- Ancient and archaic, representing the first life on earth



EPIPHYTE - HYMENOPHYLLUM CUPRESSIFORME



LICHEN



FUNGI - OMPHALOTUS NIDIFORMIS



SLIME MOLD



LIVERWORT



LICHEN

5.6

THE PRIMITIVE GARDEN - FERNS

THE FERNERY

Ferns are older than dinosaurs and were the first true (vascular) plant to evolve. They existed on earth long before cone-bearing or flowering plants evolved, and their current fossil record dates back 400 million years.

These were the first source of 'dinosaur-bushtucker' and underpinned the food chain that allowed the dinosaurs to thrive.

Today, ferns are an incredibly diverse group of plants. The new Wonthaggi Gondwana Garden will celebrate this diversity and connection to prehistory with a dedicated fern garden.

Rich, lush, shaded, damp, the swamp-like fernery and moss garden represents the quintessential Dinosaur stomping ground.



CYATHEA COOPERI



CYATHEA X MARCESCENS – SKIRTED TREE-FERN



DICKSONIA ANTARCTICA – SOFT TREE FERN



BLECHNUM WATTsii



BLECHNUM CARTILAGINEUM



MICROSORUM PUSTULATUM



VIEW FROM THE FERN GARDEN LOOKING WEST

5.7 THE ANCIENTS - GINKGO & CYCAD GARDEN

GINKGO & CYCAD GARDEN

The next garden room represents the Triassic/Jurassic period. This is the era when trees were evolving, and so this garden room celebrates this with the Ginkgo-Cycad garden. The trees here are the very same trees the dinosaurs of the period were eating. Not distant cousins but the very same trees. Ginkgo is the oldest living tree species in the world. Wow!

Charles Darwin coined the term 'living fossil' in regard to the Ginkgo tree.

The garden is laid out in the form of the recognisable Ginkgo leaf fossil, and you are invited to stay and soak it all in. Take a slow walk around this garden and imagine walking with the dinosaurs. If you have brought your technology, you could be listening to the growls and snuffles of the dinosaurs of this era.

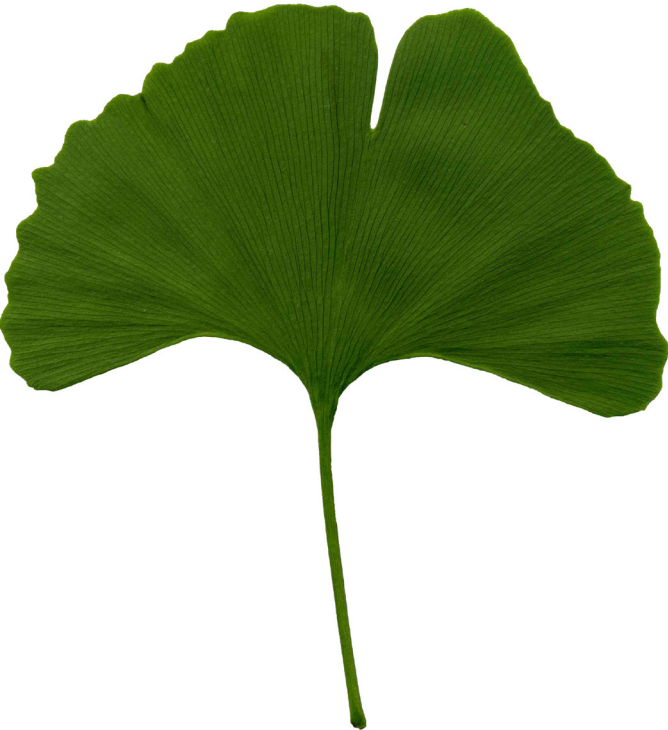


5.7

GINKGO-CYCAD GARDEN

As early land plants evolved, Cycad and Ginkgo species began to dominate the landscape. They are the oldest living representatives of the Gymnosperms – the first seed-bearing plants. The fossils of these plants are the predominant source of the coal, oil, and gas seams of the Gippsland region. Whilst once there were more than fifty species of Ginkgo, only one survives today. It is precious and still highly endangered but has survived through 'horticultural intervention'.

There are more than seventy species of Cycad in Australia (Bowenia, Cycas, Lepidozamia, and Macrozamia). Many of these are becoming increasingly rare and vulnerable to extinction.



GINKGO BILOBA
ENDANGERED



LIVISTONA AUSTRALIS



ZAMIA FURFURACEA



RHOPALOSTYLIS SAPIDA



MACROZAMIA COMMUNIS



XANTHORRHOEA AUSTRALIS

5.8

THE GIANTS - WOLLEMI CONIFER GARDEN

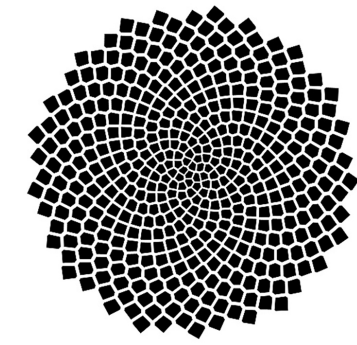
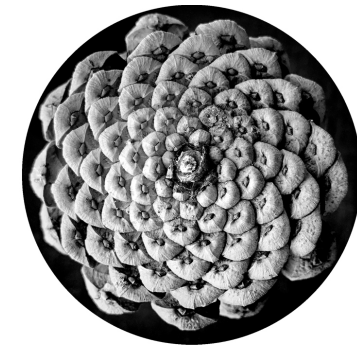
WOLLEMI-CONIFER GARDEN

The next garden along the journey is the garden of The Giants. Here you will find the Wollemi Pine, thought to be long extinct but rediscovered only decades ago and now being conserved in gardens all around the world.

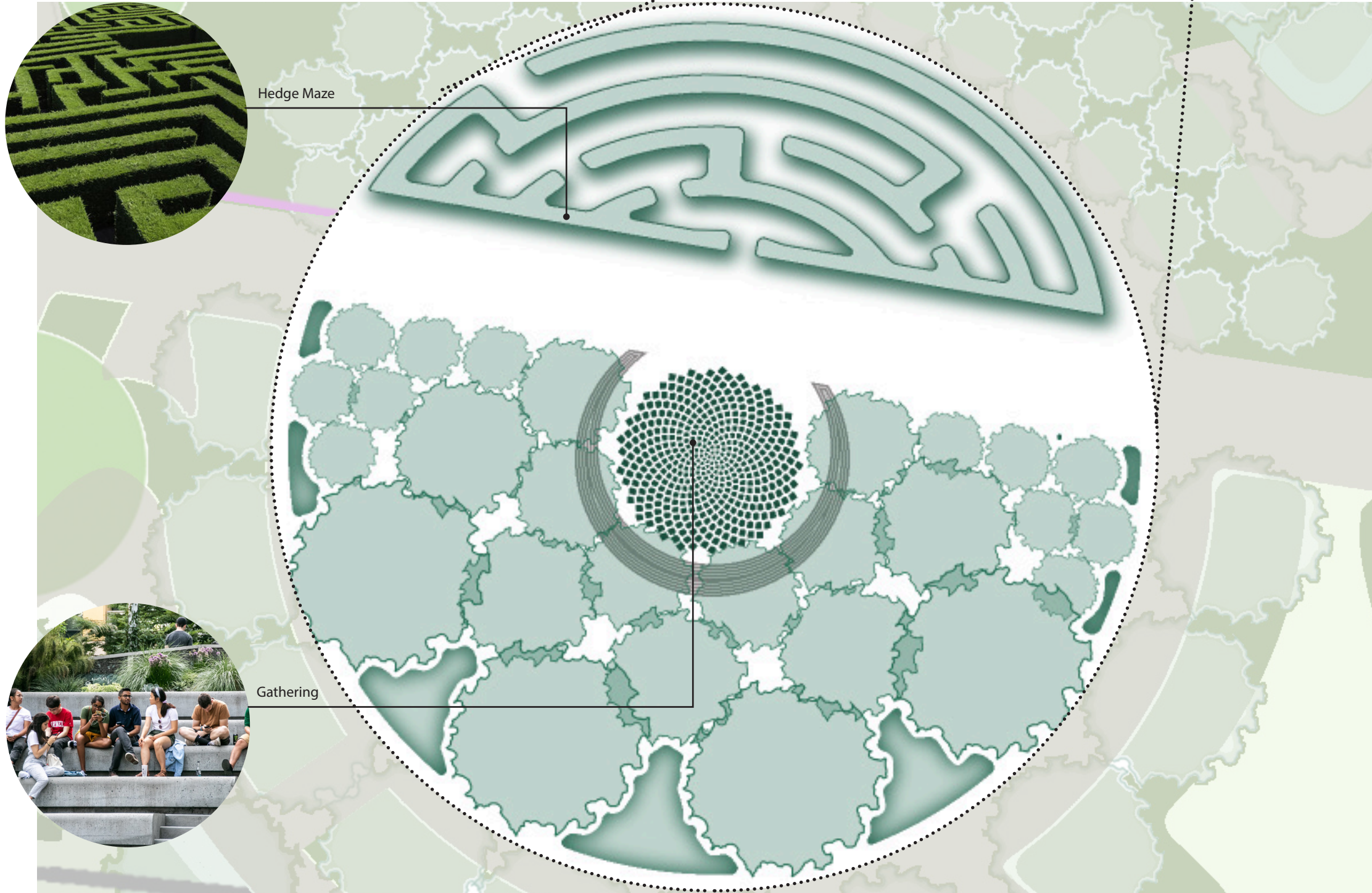
Some endangered species of Gondwana-origin require assisted migration and ongoing horticultural cultivation measures to secure their survival over the longer term.

Species that are unlikely to have on-going viability in wild landscapes and which benefit from horticultural intervention in botanical gardens and private homes include the Ginkgo, Wollemi, Metasequoia, and Monkey Puzzle trees.

Coniferous trees are slow-growing and long lived. Your children and grandchildren will be able to visit this place in the future, and see the very same trees that you see today. Sit for a while if you can and enjoy the aromas of the conifer species.



CONIFER - SPIRAL SEED CONE PATTERN



KEY PLAN

WOLLEMI-CONIFER

The extraordinary and life affirming tale of the Wollemi Pine, once thought extinct for over 70 million years, yet rediscovered in 1994, serves as a 'hero' species of the Gymnosperm conifer garden.

The Wollemi is highly vulnerable and 'insurance' specimens have been distributed worldwide to help secure their survival. This vulnerability is shared with hundreds of other conifer species of Gondwanan origin, and many of these are also suited to thrive in the Wonthaggi micro-climate. Collectively, these gymnosperm species were the dominant giants of the Gondwana forests.

Many surviving Gondwana species are categorised as being Vulnerable (V), Endangered (E), Critically Endangered (CE) at risk of becoming extinct and so will require assisted migration measures as 'insurance specimens'. Many are large specimens suitable for large park environs. These include a range of Australasian Gymnosperms: Agathis, Araucaria, Callitris, Halocarpus, Podocarps.



ARAUCARIA ARAUCARIA - MONKEY PUZZLE E



ARAUCARIA BIDWILLII - BUNYA BUNYA



ARAUCARIA COLUMNARIS - COOK PINE



ARAUCARIA HETEROPHYLLA - NORFOLK ISL PINE V



WOLLEMIA NOBILIS - WOLLEMI PINE CE



PODOCARPUS-HENKELII - YELLOWWOOD E

5.9

THE SHIFT - THE NECTAR GARDEN

THE SHIFT

Further into your time travelling journey you will encounter 'The Shift'. This garden room celebrates two shifts - tectonic shift and the other the shift to emergence and gradual dominance of flowering plants

The split mounds of this garden room are faced with the geological layers of time - from volcanic rock, the 126-million-year-old coal upon which Wonthaggi was built, to sedimentary rock, and the plants that it supports. The mounds are split like the many fault lines you can see along the Bass Coast.

Here you will experience the Coal Garden which celebrates coal and the coal mining history of Wonthaggi. There are opportunities in this garden to use coal as garden mulch and to feature it in sculptural ways. And mixed through the soil, the recalcitrant carbon in coal dust will help support plant health by amending soil carbon and improving the soil's water holding capacity.



Graphic Display



THE EVOLUTION OF FLOWERING PLANTS

With each new paleontological study, the further back in time the ancestral origins of life are pushed. In many ways scientific knowledge is in constant flux and under continual revision.

A case in point are the flowering plants (Angiosperms) whose origin has gradually been moved from the mid-Cretaceous, as favoured until just recently, to the Jurassic, then the Triassic and now possibly even into the Permian, implying an origin for flowering plants that stretches well beyond 290 million years.

The emergence of the first flowering species heralded the beginning of a new era of plants that would go on to dominate the planet. Their origins began on the Gondwana landmass and as continental drift progressed and climatic variation ensued, related species began to hybridise to become their own unique floral forms. The flowering families of Gondwanan origin are subsequently found throughout Australia, New Zealand, India, Sri Lanka, Arabia, Southern Africa, Madagascar, and South America.

The Nectar garden celebrates the Early flowering plants, with a strong focus on the Proteaceae.

Which came first, a flower or a bee?

The shrubs and trees in this garden acknowledge the evolution of bees from the wasp clade, and the co-evolution of flowering plants with bees.

“When the wasp eventually evolved to feed its offspring purely on pollen, it had become the first bee.”

With the first flowers, wasps adapted to become pollen, nectar and propolis harvesting bees. Before bees, the cross-pollination of plants depended on wind dispersal, a very inefficient and wasteful system. Plants could now use less resources on seed production. This is co-evolution at its finest.

The newly formed pollinating partnership between plants and bees, would go on to allow flowering plants to dominate all the bioregions of the world.



ALLOXYLON FLAMMEUM



BANKSIA VICTORIAE



HAKEA LAURINA



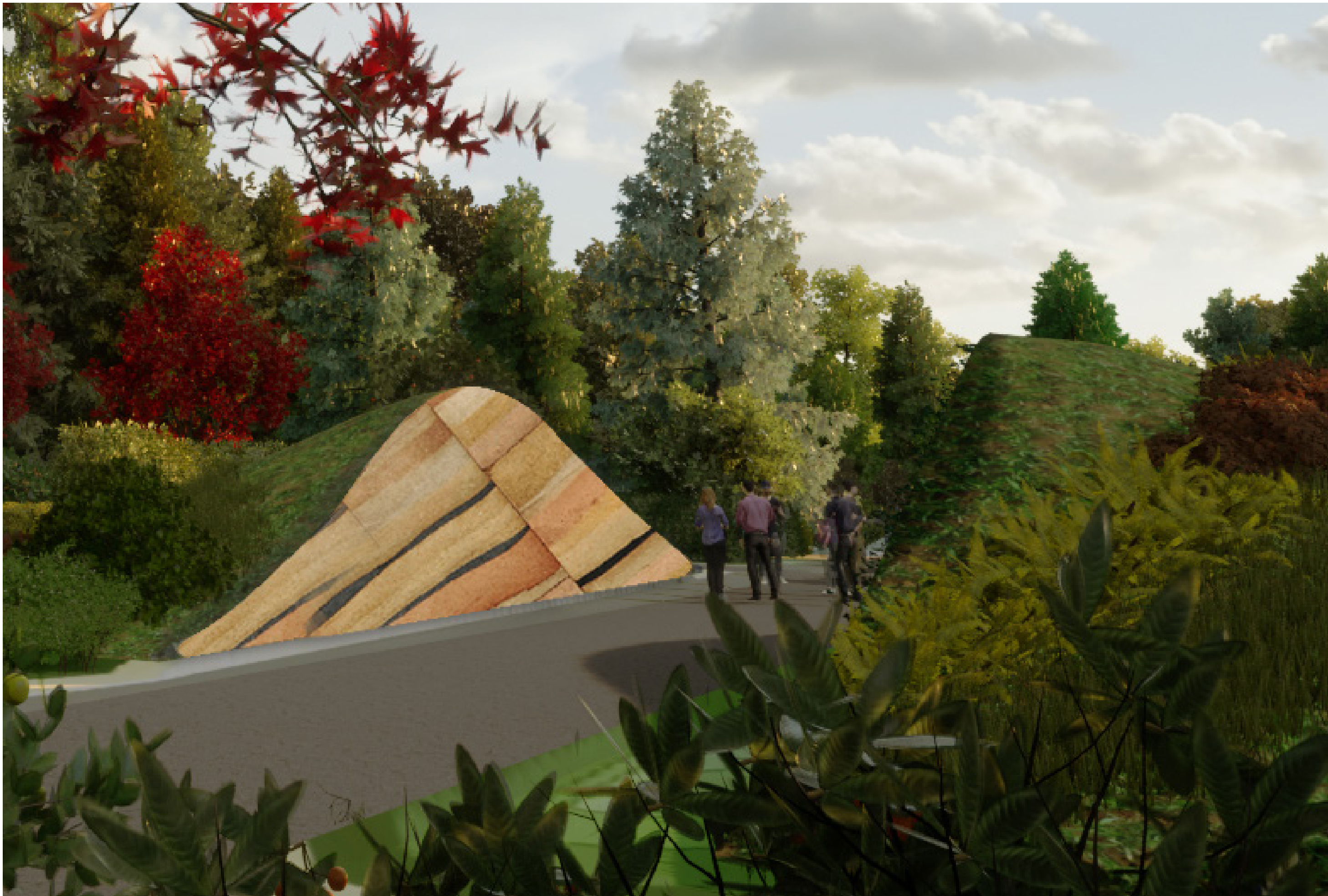
MACADAMIA INTEGRIFOLIA



PROTEA CYNAROIDES



TELOPEA SPECIOSISSIMA



VIEW OF 'THE SHIFT' - RAMMED EARTH WALL REVEALING THE GEOLOGICAL STRATAS OF THE BASS COAST



CONCEPT SKETCH OF THE SHIFT - RAMMED EARTH WALL SHOWCASING LOCAL GEOLOGY

5.10
THE CRATER SPACE - DJEEMBANA GATHERING PLACE

DJEEMBANA - GATHERING PLACE

This garden represents the Cretaceous Extinction Event & the end of the Dinosaur era. Leaving the Nectar Garden, we encounter 'The Crater Space'.

This is a large open space representing the Cretaceous Extinction Event – formed by a giant meteor crashing to earth and which heralds the end of the mega-dinosaurs, 65.5 million years ago.

In and around The Crater Space you can sit and picnic in the sun, lie back and relax on the slopes, or kick a ball with your friends. The Crater is also a place for stargazing, it will cater for special events, and will be the place where special night-time projection shows are held. From the rim of the crater, you will be able to look back to the other end of the Gondwana Garden where you first began your journey. And don't forget to watch out for the special events, there will be art exhibitions both real and virtual, cultural storytelling including augmented realities, and light and projection shows.

This is our Djeembana - gathering place.

- Amphitheatre - events & performances
- AV projection – onto tree canopies

In the spring of 65.5 million years ago the age of the dinosaurs and the Cretaceous period definitively ended. The meteor that impacted earth eliminated over one thousand species of non-avian dinosaurs and 75% of all other fauna species.

What was left after this & five other extinction events was 0.5% of species that had existed. This 0.5% is what present day flora and fauna have evolved from.

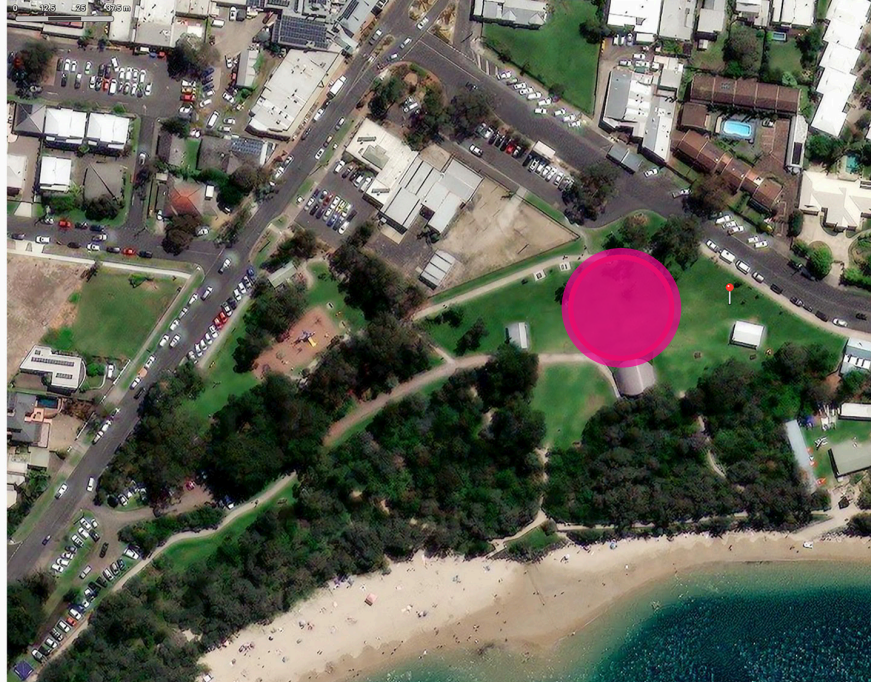
The Cretaceous extinction event and its aftermath destroyed so much of Earth's vegetation. After some time, forests began to recover and new habitats were created, making way for new evolutionary niches.



VIEW FROM THE CRATER TOP LOOKING SOUTH



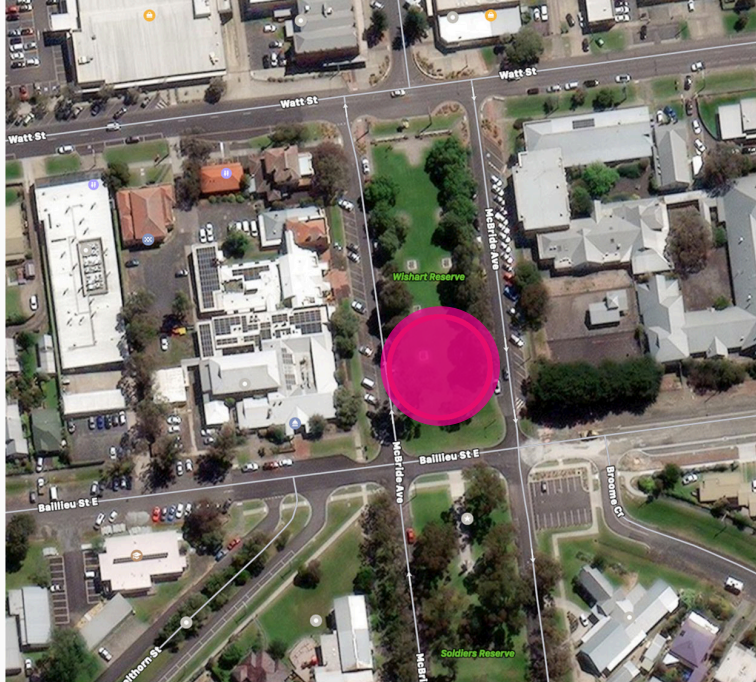
VIEW FROM THE CRATER TOP LOOKING SOUTH



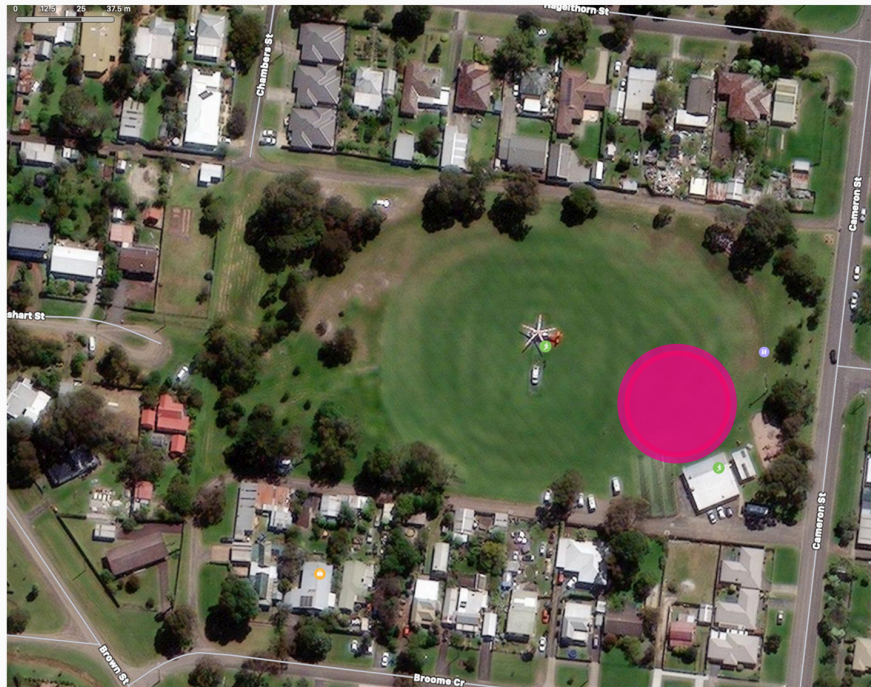
The Glade - Inverloch



Inverloch Recreation Reserve



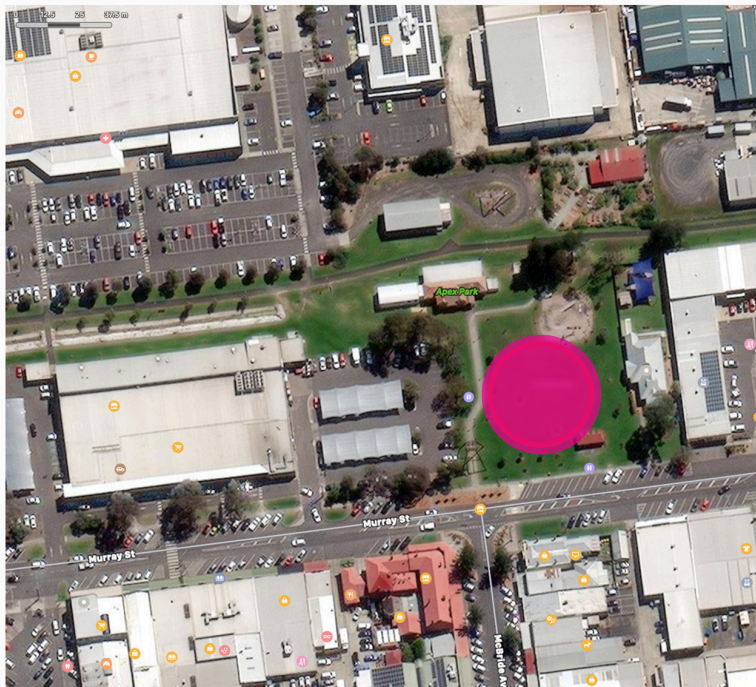
Wonthaggi Wishart Reserve



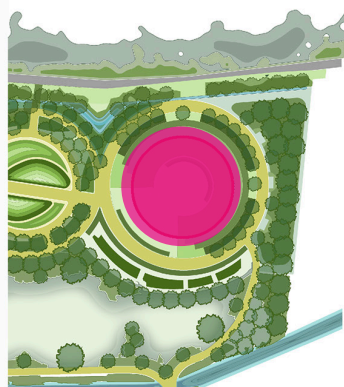
Wonthaggi Workmens Cricket Club



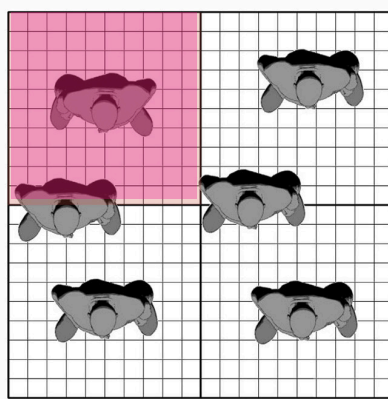
Wonthaggi Bowls Club



Wonthaggi Apex Park



Crater Space (Internal)
1,000 m²
x 1.5 people/m
= 1,500 person capacity



Density of 1.5 people per
1 square metre ground

THE CRATER SPACE - SIZE COMPARISON WITH OTHER BASS COAST GREEN SPACES & OUTDOOR VENUES

5.11
POINT ZERO FIVE GARDEN - PARTING OF GONDWANA WAY

RETURN JOURNEY NORTH AND SOUTH

The return journey offers several different options as you make your way back:

1. RETURN JOURNEY NORTH- THE INDIGENOUS GARDENS

Go north through the indigenous vegetation of Wonthaggi & Bass Coast that has adapted from Gondwana ancestry. Explore the web of new paths amongst a vegetated ecological corridor, which is sustained by a water swale. Here insects and biodiversity are rich and dense, there is food for nature with flowering plants blooming all year round, and there are several small and intimate garden spaces and rest stops along the way.

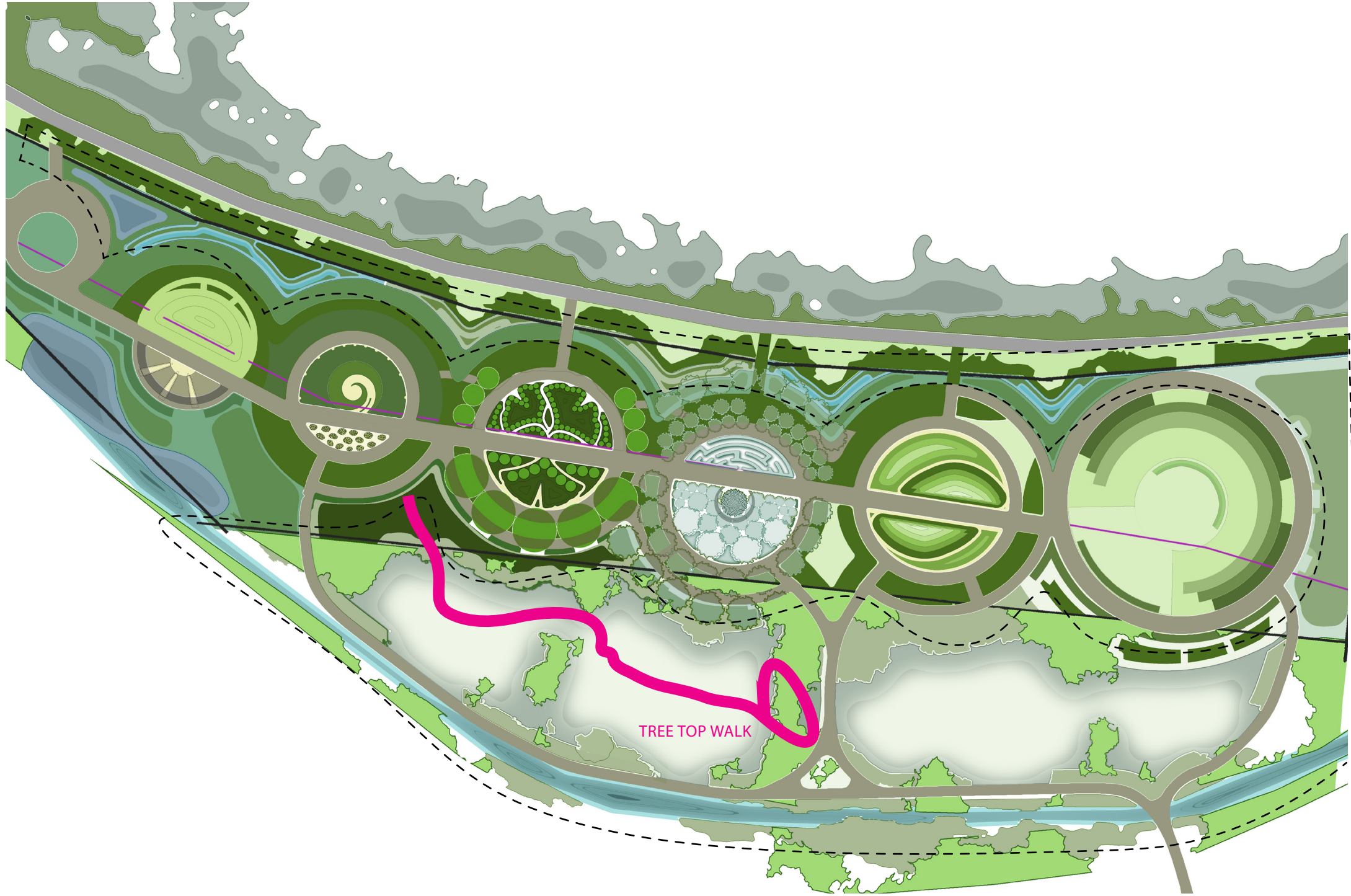
As you meander through, see how many rock displays with fossils you can find! Not only dinosaur fossils, but also the remains of ancient plants from the dinosaurs trail.

2. RETURN JOURNEY SOUTH- GONDWANAN REUNION GARDENS

Or you may choose to take the return journey to the south and the sibling islands and continents reunited through this forest. A collection of species from elsewhere in Australia, New Zealand, South America, Southern Africa, Arabia and Madagascar. The forest of related species demonstrates how we know that these land masses were once joined and these present species can be tracked back to their Gondwanan ancestors. These species tell the tale of what Gondwana once was.

Walk through the forest or choose to have a very different encounter with these magnificent trees by taking the tree top walk.

We have journeyed through time by immersing ourselves in the botanical displays of the Wonthaggi Gondwana Garden. Come back again some time and experience it from a completely different perspective. Uncover the layers one by one and see what more there is to discover. Experience how it feels on a cold dark winter's night, in the heat of summer, during flowering spring, or leaf-fall autumn.



TREETOP WALK THROUGH THE ANCIENT CONIFERS & PINES OF GONDWANA

POINT ZERO FIVE GARDEN - PARTING OF GONDWANA WAY

RETURN JOURNEY TO THE PRIMORDIAL POND – THE GONDWANA REUNION OF SIBLING ISLANDS AND CONTINENTS

The Cretaceous mass extinction event is the most recent of five mass extinctions. The totalled result of these 5 extinction events has culminated in the loss of 99.95% of species that have ever inhabited this planet.

The 5 mass extinction events include the Permian-Triassic extinction event 252 million years ago, and the cataclysm known as the Triassic-Jurassic extinction event 201 million years ago. The culmination of these repeated catastrophes is that less than 1% of all species that ever lived on earth are still around today.

The 0.05% survival rate that we live amongst and are custodians for illustrates the sense of wonder and the amazing story the Gondwana Garden represents. It also serves as a stark reminder of our responsibility to care for and nurture our fragile environment. The planting palette will include a proportion of rare, vulnerable and endangered species.

Take it as a call to action to reverse some of the current trajectory of this, the Anthropocene, else we might end up back in the primordial soup.



EUCALYPTUS KITSONIANA - BASS COAST
THREATENED



AGATHIS AUSTRALIS - NZ
THREATENED



EUCALYPTUS STRZELECKI - BASS COAST
VULNERABLE



AGATHIS ATROPURPUREA - N.E. QUEENSLAND
THREATENED



MONOTOCA GLAUCA - BASS COAST
RARE



ARAUCARIA LUXURIANS - NEW CALODONIA
THREATENED



THE POINT ZERO FIVE GARDEN - INDIGENOUS BASS COAST VEGETATION

Dean Kemp 1	Robert McManaway 1	Michael O'Sullivan 1	James Rossiter 1	Simon Taverley 1
Greg Kendall 1	David Marcollo 1	Andrew McEneaney 2	Andrew Rowe 1	Nancy Trevalhalla 1
Sandra Kerrard 1	Chale Marie 1	Derrick O'Brien 1	Andrew Ruffin 1	Constance Trumble 1
David Kennedy 1	Wesley Marks 1	Graeme O'Brien 2	James Rule 2	Terese Tice 1
Carly Kerr 2	Michael McManack 2	Peter O'Donnell 1	Rose Ruffin 1	Helen Tompkins 10

[illegible]

THE DINOSAUR DREAMING PROJECT - 1,000 TREES DEDICATED TO 1,000 VOLUNTEERS

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A group of researchers in orange safety vests and hats are working on a rocky beach, likely conducting a field study or excavation. They are surrounded by equipment, bags, and a small table. The ocean is visible in the background.

The Wonthaggi Gondwana Garden is dedicated to the flourishing of science in community and the active conservation of global plant diversity.



AND THE JOURNEY BEGINS....

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