



Olive Pink Botanic Garden
- The People's Garden
GARDEN DESIGN MASTERPLAN

D17-0003
2nd Edition
16/10/2020

ACKNOWLEDGEMENT

This second edition report is based on the original report prepared by CLOUSTON ASSOCIATES on 21/03/18. The original report was the result of extensive consultation with the board, key stakeholders and Garden Curator Ian Coleman. Appendix B was prepared by Sue Dugdale & Partners. Appendix C was prepared by RLB and Appendix D was prepared by Geoff Miers.

Cover Image:
Entry Sign • Olive Pink Botanic Garden

OLIVE PINK BOTANIC GARDEN - THE PEOPLE'S GARDEN

GARDEN DESIGN MASTERPLAN

SECOND EDITION

Client
OLIVE PINK BOTANIC GARDEN
27 Tuncks Road
Alice Springs, NT 0870

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View over Alice Springs from Tharrarletneme

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Introduction



Walkway to top of Tharrarletneme

INTRODUCTION

The *Garden Design Masterplan 2020* (Masterplan) is a key supporting and companion document of the Olive Pink Botanic Garden Strategic Plan (Developed 2010, Updated 2015). The Strategic Plan establishes a vision for the future of the Botanic Garden; guides the development of the Botanic Garden by providing the strategic framework and enables the Board of Trustees and staff to meet their responsibilities in managing a contemporary botanic garden.

PURPOSE AND INTENT

The purpose of the Garden Design Masterplan is encapsulated in the name – a botanic garden that serves as a memorial to Miss Olive Pink, is an important tourism asset for Central Australia and becomes an important place in the life and culture of the people of Alice Springs.

Activities within the botanic garden are largely set by the widely accepted functions of botanic gardens - *Botanic gardens are cultural institutions holding documented collections of living plants for the purpose of scientific research, conservation, display and education*¹

As well as being the first botanic garden for Australian arid-zone plants, the Botanic Garden history is enriched by the anthropological legacy of Olive Pink. Furthermore, the significance of the Botanic Garden is enhanced in a special way by its location, which incorporates sites of cultural importance to Arrernte people.

The Garden Design Masterplan allows for flexibility, and a unique perspective stemming from Miss Pink's legacy. The botanical focus as a place of excellence for the horticulture of central Australian plants is paramount. Other recreation and social uses of the Botanic Garden arise from this and support the long term viability of the Botanic Garden, but should not detract from the basic purpose.

OBJECTIVES

The Garden Design Masterplan provides the detail by which the intent of the Strategic Plan may be developed and implemented in a way that will ensure the long term viability of the Botanic Garden. Specifically, the Garden Design Masterplan will:

- collect, protect and conserve central Australian plants,
- display and present central Australian plants for public education and enjoyment,
- adopt best practice methods in sustainable horticulture for central Australian plants,
- demonstrate and celebrate the important relationship between people (Arrernte, non-Arrernte and Miss Olive Pink) and the landscape,
- provide training and employment opportunities for Arrernte people that recognise the importance of the site and connect them with their land, and
- establish a Botanic Garden of many functions (recreational, social, cultural and tourism destination accessible to all) that provides opportunities for additional income streams to fund future improvements and enhanced management.

¹ Source: *International Agenda for Botanic Gardens in Conservation*.

Context



View towards Nurses Hill and MacDonnell Ranges beyond

CONTEXT

HISTORY

A brief history of the Botanic Garden is included in the Strategic Plan. The key dates are:

28th September 1955 – Miss Olive Muriel Pink was granted a licence to occupy a half acre of Crown Land on the east bank of the Todd River 'for gardening purposes' until 30th September 1956. At this time Miss Pink campaigned for surrounding land to be set aside in perpetuity as a reserve.

23rd September 1956 – the land was gazetted as the Australian Arid Regions Flora Reserve, with Miss Pink as its first curator

1956 – 1975 – Miss Pink and her Warlpiri assistant gardeners developed the gardens working in drought conditions and within funding constraints.

1975 following Miss Pink's death – the NT Government assumed control and set about fulfilling her vision of a public area for the appreciation of native flora.

7th February 1985 – re-opened to the public as the Olive Pink Flora Reserve

1995 – The Garden was listed on the National Estate

1996 – re-named Olive Pink Botanic Garden

2009 – The Garden was included in the Northern Territory Heritage Register

SIGNIFICANCE

Miss Pink worked in an honorary capacity for over 20 years to achieve her vision of:

"... forty-nine acres of ground on which to preserve and grow, native trees, shrubs and flowers – as a 'soul-feeding' antidote to the restless rush and materialism of what 'modern living' entails for so many in this isolated town ."

The Olive Pink Botanic Garden is a unique and significant regional, arid-zone botanic garden. Tharrarletneme, the northern ridge of the Garden, known as Annie Meyers Hill is a registered Sacred Site of great significance to the Arrernte people.

The Botanic Garden also holds significance for local residents as a place of enjoyment for the whole community, and attracts national and international visitors. There are differing layers of visitor experience in the Botanic Garden and people interact and respond in differing ways to these layers.

The Botanic Garden contributes to the conservation of the flora of central Australia, provides opportunities for people to learn about arid-zone plants, horticulture, landscapes and conservation, and encourages respect for the Olive Pink Botanic Garden and its

² Letter from OMP to H.C. Coombs, August 1974; in Marcus, J (1991) "Yours Truly Olive M Pink" p4

CONTEXT (CONT.)

heritage, both that of its Aboriginal Custodians and of Miss Pink.

The Botanic Garden is a place which can inspire people to appreciate the natural world and to enjoy its atmosphere and peace. It has the capacity to attract artistic people and trigger creativity. The Botanic Garden is a place of special ambience and of safety, a quiet reflective place for recreation and relaxation. It has a wonderful location beside the Todd River and adjoining the Alice Springs CBD.

REVIEW OF ALICE SPRINGS BOTANIC GARDENS – DR ROBERT BODEN, MARCH 2005

This review was of both the Olive Pink Botanic Garden and the Desert Park. Its aims were to report on the current role, functions and activities conducted by the respective institutions and recommend strategic directions that ensures clear and distinct roles for each, ensure they complement and support each other, minimise areas of duplication, maximise visitor and resident appeal, and maximise benefit to the advancement of botanic knowledge, conservation, education and recreation for visitors and residents.

Key conclusions arising from the Boden report:

- The Botanic Garden is a fine example of a regional botanic garden, is a valuable resource for quiet relaxation, a place of learning and serves an important conservation role. It is important this role is maintained.
- Engage a landscape architect to work with the board, staff and horticulturists to develop a landscape master plan to support the overall botanical and horticultural aspects of the garden while enhancing the sense of arrival.
- The 'Olive Pink factor' gives the Botanic Garden something unique and long lasting.
- The Botanic Garden has an important place within the Alice Springs community.

The key challenge identified was adequate funding for Botanic Garden development, management and staff resources.

FUNDING OF OLIVE PINK BOTANIC GARDEN

The Olive Pink Botanic Garden has struggled with low funding levels from the outset, a struggle that continues today. The Botanic Garden relies on significant volunteer hours, in-kind support and occasional grants to augment the minimal funding currently received from NT Government. The Garden receives only \$200,000/ annum in operating funds from NT Government. By comparison, George Brown Darwin Botanic Garden receives over \$2mill/ annum and the Alice Springs Desert Park receives around \$1.5mill/ annum and charges \$36 entry fee, while the Australian Arid Lands Botanic Garden in Port Augusta receives \$550k, plus significant council resources and still struggles. These botanic gardens have also received regular large development grants; the Olive Pink Botanic Garden has not.

The Boden Report recommended a staffing level of 5 as a minimum. Current funding levels barely covers 2 full-time staff plus utilities. The Garden requires a commensurate level of funding that recognises the important role of the Garden in the social and cultural life of the people of Alice Springs and its untapped tourism potential.



Artwork • Olive Pink Botanic Garden

CONTEXT



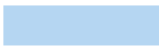



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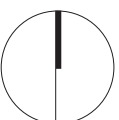


Olive Pink
Botanic Garden
Alice Springs

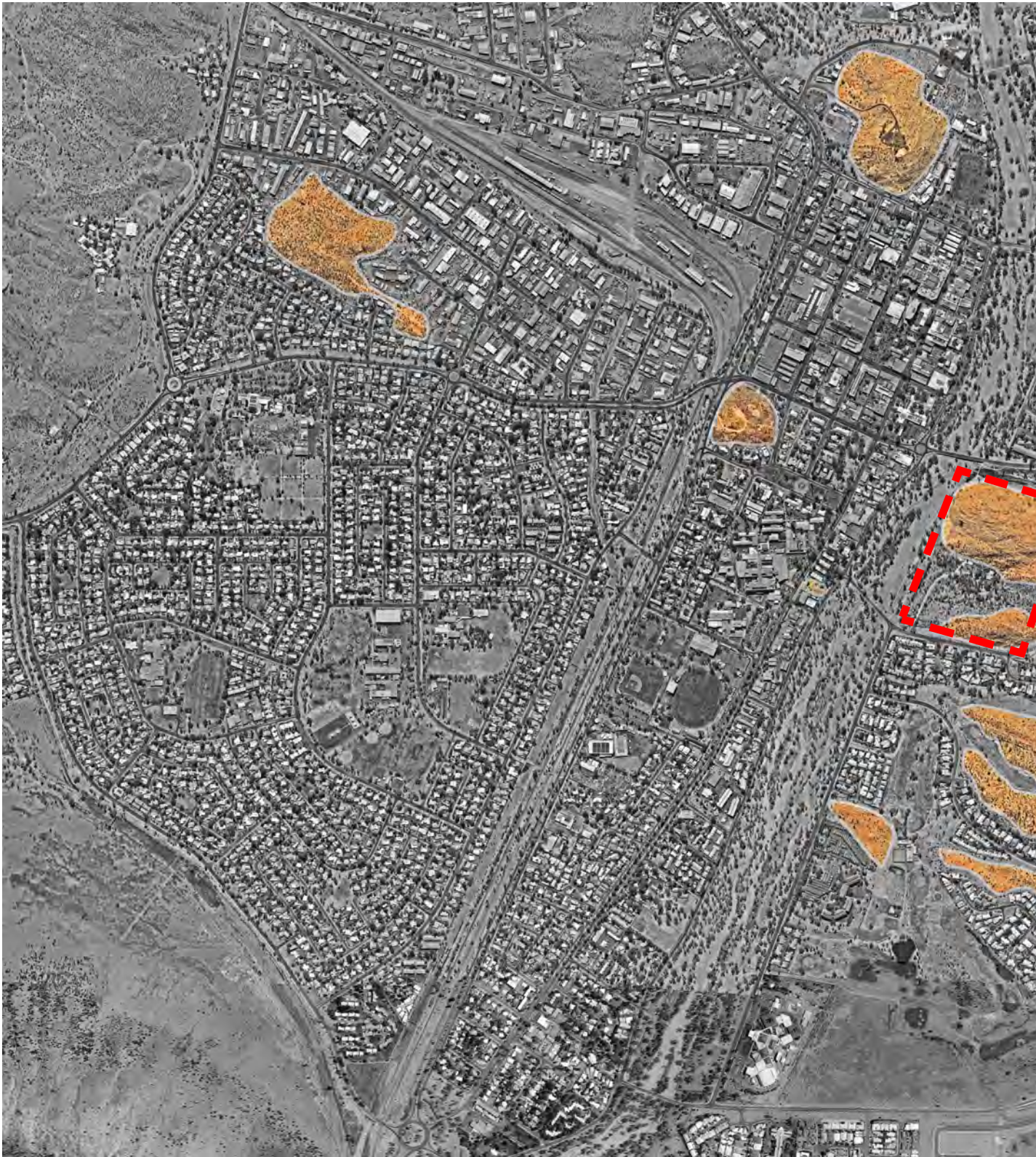


LEGEND

-  Todd River
-  Stuart Highway
-  Larapinta Drive
-  Bike Path



RIDGE/HILLS - CATERPILLAR DREAMING




Olive Pink Botanic Garden
27 Tuncks Road
ALICE SPRINGS NT 0870



LEGEND

— — — Olive Pink Botanic Garden

 Important Arrente sites



Issues and Opportunities



Artwork • Olive Pink Botanic Garden

ISSUES AND OPPORTUNITIES

In preparing the Garden Design Masterplan, extensive site investigations were undertaken as well as meetings with the Board, volunteers and staff. Further background reading and desktop research provided the basis for a good understanding of the current issues and opportunities facing the Botanic Garden. These are summarised below and illustrated on the accompanying plans.

ISSUE	OPPORTUNITY/ RESPONSE
<i>Role of Botanic Garden</i>	
<p>As identified in the Master Plan and reinforced in the Boden Report, the Olive Pink Botanic Garden has a very important role as a botanic garden and as a valuable community resource. It is widely recognised as an excellent arid-zone botanic garden which displays the plants of central Australia and actively contributes to their conservation through horticulture and community education. Its major strengths include:</p> <ul style="list-style-type: none"> • It is a great place to relax • It enjoys strong community support, and • It is recognised as enriching the social and cultural life for residents and visitors 	<p>The Garden Design Masterplan will maintain pre-eminence of the botanic garden functions and the quality of a natural area for the community within Alice Springs. Improved accessibility for all sections of the community is important so everyone can enjoy the benefits of visiting the Garden.</p>
<i>Historic Legacy and Cultural Heritage</i>	
<p>The legacy of Miss Olive Pink and the connections with Arrernte people adds a special quality. This is a significant strength and opportunity. As identified by Boden, the Olive Pink factor gives the Botanic Garden something unique and long-lasting with a hint of mystique. Her anthropological work is significant.</p> <p>Areas of the Botanic Garden are culturally significant to Arrernte people. Tharrarletneme (Annie Meyers Hill) is a key site and there are other areas of significance.</p>	<p>The development of the Olive Pink Centre will be a major attraction for visitors and a centre of education and research. In time her records and anthropological studies should be relocated and stored here, forming the basis for ongoing education, research and study.</p> <p>Arrernte people will play a key role in the nature of the development, the construction and the ongoing maintenance of areas and features of importance to them. Training and employment outcomes are central to this.</p>
<i>Land Area and Adjoining Areas</i>	
<p>The Botanic Garden is relatively small and constrained. The Todd River runs along the entire western boundary and is a natural river environment. On the eastern side there are areas of ranges, vehicle access as well as the old water tank which has been previously offered to the Botanic Garden.</p>	<p>The Todd River is a logical extension of the Botanic Garden and would strengthen the links to the CBD and tourist precinct. The water tank and associated areas are potential assets and provide increased flexibility and future options for the Botanic Garden.</p>
<i>The Collection</i>	
<p>The Collection has suffered for many years through lack of funding to strengthen and extend the diversity and overall presentation of the horticultural content. Resources for record keeping have been limited.</p>	<p>The Garden Design Masterplan will provide a detailed layout that works with the existing plantings as appropriate, site conditions and the overall visitor experience to deliver a strategic approach to long-term extension and upgrade of The Collection.</p>

ISSUES AND OPPORTUNITIES (CONT.)

ISSUE	OPPORTUNITY/ RESPONSE
<i>Visitor Experience</i>	
The entry experience is underwhelming and the Botanic Garden does not present well. The dusty entry drive and extensive carpark occupies a prominent location on the site and creates conflicts with pedestrians.	A new, highly visible entry that announces the Botanic Garden is required to provide good pedestrian and cyclist entry. The vehicle entry and parking needs to be relocated and the overall presentation of the entry upgraded.
There is a diversity of paths of which few would be Disability Discrimination Act compliant. There is no logical hierarchy of routes for visitors to follow.	The plan will upgrade some paths and introduce new paths to be fully compliant and link key attractions and activities within the Botanic Garden.
The walk to the top of Tharrarletneme (Annie Meyers Hill) is in poor condition and many people are unable to access this spectacular, elevated viewpoint. This is a key site and of great importance to Arrernte people.	The hills are the 'heros' and improved walkways will provide excellent visitor experiences and great views. Arrernte people will be key players in the design, construction, interpretation and ongoing management of these areas – training, education and employment.
Links to the Todd River Walkway are poor.	The new main entry and an upgraded secondary entrance will improve the overall visibility and profile of the Botanic Garden.
Apart from the Café, there is a lack of visitor amenities and areas that attract families and promote longer and repeat visits.	A new play area that is attractive for children, and hence families, would assist. This could include a low water use water play option and nature play options. The area could demonstrate native grass alternatives to irrigated lawns.
Interpretation, information and orientation – signage lacks cohesion. No use of new technologies	Not part of the Garden Design Masterplan. The unfunded Interpretation and Information Plan does address use of new technology.
The Botanic Garden is not well set up for events and activities, high-time use, education and research. This limits opportunities for generating income and hence further development of The Collection and visitor infrastructure. Basic services (water, toilets), built facilities and adequate lighting are lacking.	The Garden Design Masterplan should allocate spaces and buildings for new events and functions, supported by a business case. Services and infrastructure upgrades are discussed under Existing Infrastructure.
Interpretation and experiences that build on the Aboriginal culture are lacking. This could provide an additional unique aspect for the Botanic Garden along with the Miss Pink factor.	In the field interpretation that reinforces messages at the Visitor Centre and Olive Pink Centre, along with programmed activities with input from Arrernte people.

ISSUES AND OPPORTUNITIES (CONT.)

ISSUE	OPPORTUNITY/ RESPONSE
<p>The Collection is not well ordered or presented. The gardens are more like a walk through the bush (which is OK). There should be more of a sense of a botanic garden with a purpose.</p>	<p>The Garden Design Masterplan should provide the basis for a more ordered and considered presentation of The Collection. This would be supported by improved walks and interpretation.</p>
<p><i>Environmental Considerations</i></p>	
<p>Topography and soils – the distinct topography of the site is a real asset. The two hills are special and provide excellent viewpoints. The lower flats are generally suitable for The Collection, although an area of alkaline saline soils does pose limitations. The flats are a natural collection point for water and nutrients. The edge to the Todd River provides another environment that has great potential for extending the reach of the Garden.</p>	<p>The Garden Design Masterplan should provide for walks that make the most of the excellent viewpoints as well as ensuring the best areas of soil are available for The Collection. The alkaline soils can be improved with ongoing water harvesting and through the irrigation/ fertigation system that utilises soluble fertilisers as well as dosing to adjust the pH and leach out salts.</p>
<p>Water and drainage – water is everything in the desert. Within the gardens, there are numerous issues related to erosion, while at the same time much water is lost from the site.</p>	<p>The current actions to hold and slow down water across the site are to be re-emphasised in the Garden Design Masterplan. Using walk tracks, contour banks and permeable barriers within the landscape will promote water infiltration. Maintaining the quality and effectiveness of the irrigation system is essential.</p>
<p><i>Environmental Risks</i></p>	
<p>Weeds – the main weed within the Botanic Garden is Buffel Grass. As well as being aggressive and able to compete against native plants, it poses a significant fire risk when dense growth develops after rain.</p>	<p>There is a requirement for an ongoing program of Buffel Grass control. The priority would be the immediate catchment of the area of flats, including the hill slopes.</p>
<p>Euros – while the small population of Black-footed Rock Wallabies are a valuable asset to the Garden, the large Euro population effectively destroys most attempts to develop a showcase Botanic Garden with presentation gardens and diversity of plant material.</p>	<p>A new boundary fence that restricts Euro numbers is critical to deliver the other Botanic Garden proposals. A dedicated Euro viewing area can be incorporated into the design. The design of the fence can and should allow free access by Black-footed Rock Wallabies while restricting the Euro population.</p>
<p>Fire poses a risk to The Collection and infrastructure. Despite firebreaks, fire risk is present on the northern, eastern and western boundaries and is exacerbated by dense Buffel Grass growth.</p>	<p>In addition to control of Buffel Grass, the Botanic Garden management should work with adjoining landowners to improve fire protection, continue to maintain the firebreaks and ensure good access.</p>

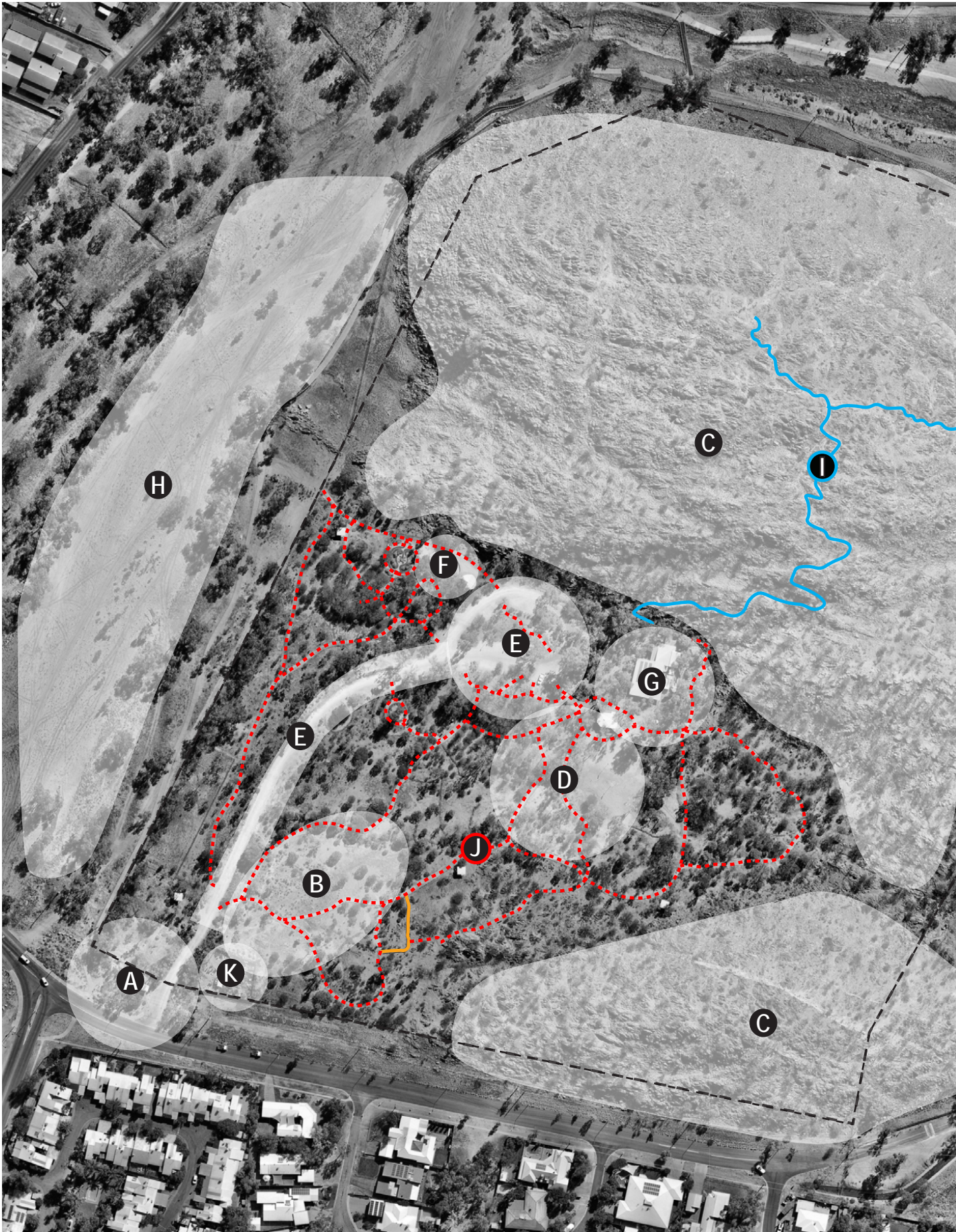
ISSUES AND OPPORTUNITIES (CONT.)

ISSUE	OPPORTUNITY/ RESPONSE
Flooding of the Todd River extends into the Gardens and this can cause problems for buildings, infrastructure and the Collection.	Any buildings within the flood zone should be built with an elevated floor level to avoid flooding and damage. Infrastructure in this zone should be designed accordingly. The Collection reflects these natural systems and has an inherent resilience.
Localised erosion arising from storm events can damage paths as well as resulting in loss of soil that compromises the overall function and presentation of the Garden.	Path construction and Garden works should control and contain water and have water and soil conservation as key design elements.
<i>Existing Infrastructure</i>	
The single-phase electrical infrastructure has recently been replaced with three-phase electricity.	This greatly enhances the Garden's capacity to hold events and introduce night time activities.
Lighting is limited and restricts options for night time use.	A key infrastructure item required is lighting the main walkways to support events and night time use.
Toilets – the quality and toilet numbers restrict uses on site. There currently are no Accessible toilets.	The Garden Design Masterplan should include provision for new Accessible and compliant toilets.
Staff facilities and general storage are limited.	The Garden Design Masterplan should include provision for: <ul style="list-style-type: none"> • suitable staff offices and facilities, • adequate and convenient storage hidden from public view,
Much of the furniture and structures on site is old and in need of replacement.	The Garden Design Masterplan will establish a palette of new furniture (design, materials and colour) that create a distinctive character and reinforces the Garden as a destination.
<i>Safety and Security</i>	
Security to buildings and other infrastructure is critical to reduce damage, insurance costs and disruptions.	Recent upgrades and new technologies have improved security however intrusions via poorly secured boundaries remain a problem.
The boundary fence is easily and regularly breached; the eastern boundary is severely dilapidated resulting in on-going breaches and significant security risks.	The boundary fence needs replacing to protect infrastructure, the collection, EPBC Listed plants and animals, and the sacred site. The addition of a fence-line security warning system would be beneficial.

ISSUES AND OPPORTUNITIES (CONT.)

ISSUE	OPPORTUNITY/ RESPONSE
There is limited walkway lighting.	Further lighting will support night time functions and events and allow safer movement on site.
<i>Compliance and Regulations</i>	
Building compliance - detailed building audit is likely to identify a number of shortfalls regarding compliance that have arisen as various uses and functions have changed.	All new buildings and any refurbishment works will proceed in accordance with the Building Code of Australia and relevant standards.
DDA compliant access and toilets – the existing toilets are not DDA compliant.	New toilets will be DDA compliant. Consideration to uni-sex toilets for staff can be a cost effective way of meeting building requirements.
As a visitor attraction, it is desirable to have all facilities and the maximum number of attractions being fully accessible. Full access relates to a range of situations for people with different abilities.	All buildings and wherever possible the walking tracks should be fully accessible. The hill top walkway would be excluded.
<i>Financial Viability</i>	
The annual funding of \$200,000 is insufficient to maintain the required levels of maintenance and management. There is a shortfall on repairs and maintenance and the staffing levels fall well short of that identified by Boden. Lack of finances means many essential upgrades and site development works are not possible.	The Garden Design Masterplan should support improved and diverse visitor experiences which in turn should lead to increased and repeat visitation.
Grants can assist on project basis, but they cannot be relied on for all projects and will rarely cover ongoing management costs.	In parallel with increased visitor numbers, there is a need to develop an increased visitor spend and other means of generating income. Events and functions are proven business generators, but suitable spaces, facilities and infrastructure to support these are required.

ANALYSIS PLAN



Olive Pink Botanic Garden
 27 Tuncks Road
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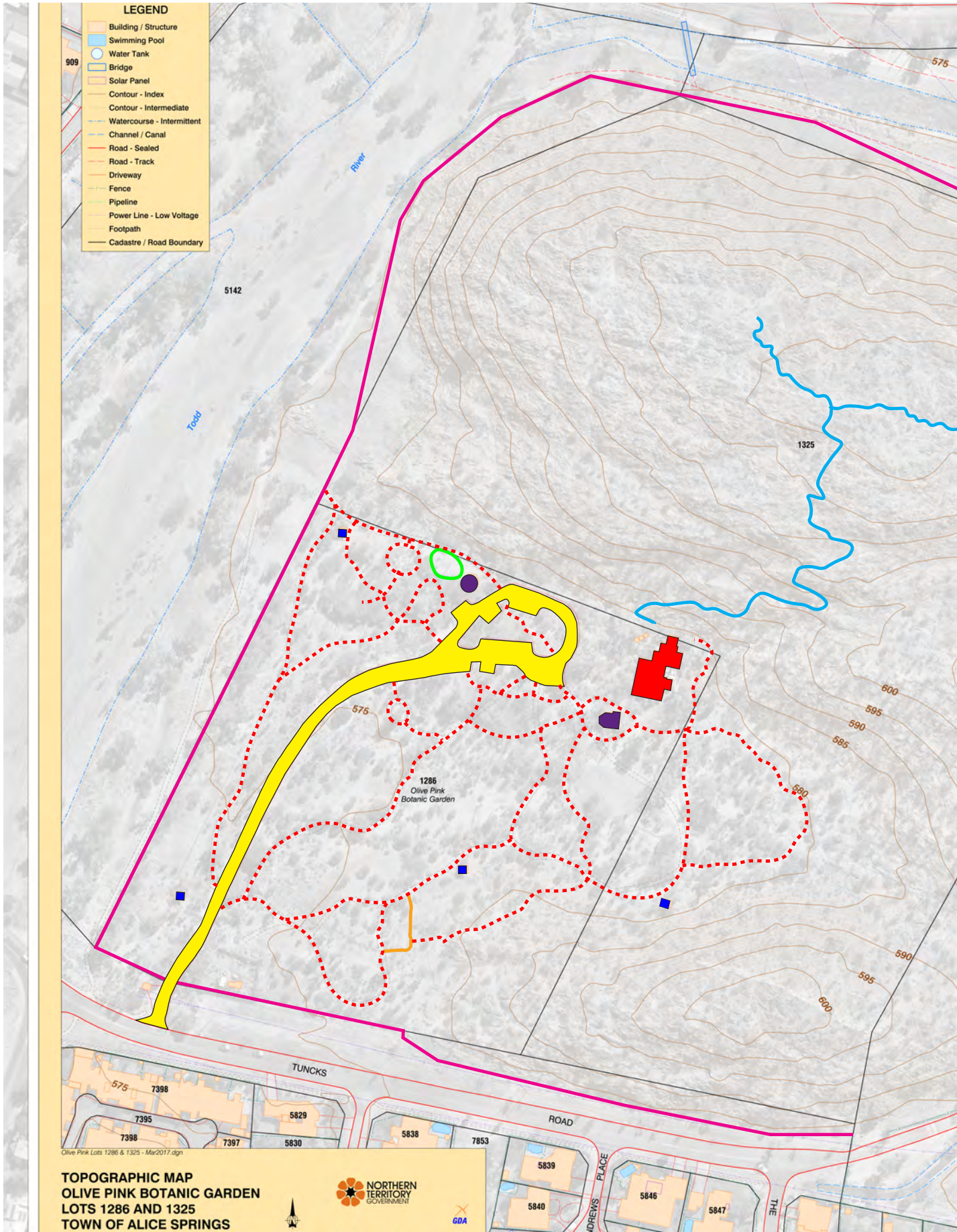
LEGEND



- A** Poor entry experience. Main entry hidden from road and greeted by an unappealing chainmesh fence and gate. New entry sign is not complemented by attractive landscaping.
- B** Area of alkaline soils limits new planting
- C** The hills are the 'heros' of the gardens creating brilliant backdrops and providing a visual connection to the surrounding ranges.
- D** The events space is poorly defined, lacks seating and adequate services infrastructure. There are no disabled compliant paths or toilets.
- E** The entry road and carpark are hot and dusty resulting in a poor entry experience. They occupy valuable areas of the garden that could be better utilised for the collection.
- F** The current playground is in disrepair and little used.
- G** The existing building sits sympathetically in the landscape and is a demonstration of good arid region building design. The cafe functions well. Staff facilities and 'back of house storage is inadequate. The library is not publicly accessible and the function room under utilised.
- H** Relationship to the Todd River should be celebrated.
- I** The Tharrarletneme trail sits well in the landscape, however, it is rough and in poor condition.
- J** The path network is complicated and lacks legibility. Sections of the paths wash away or go under water during rain events.
- K** Existing work yard does not present a good image at the entry.
- L** Possible future expansion to the east and incorporating the water tank and access drive.



EXISTING FACILITIES AND INFRASTRUCTURE



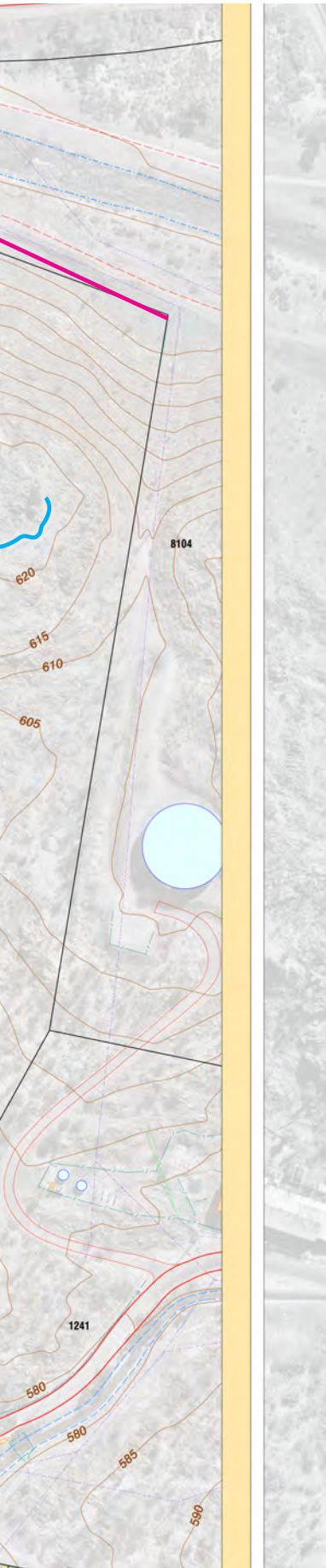
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LEGEND



- **EXISTING VISITOR CENTRE AND CAFE**
 - Staff area cramped
 - Library not readily accessible
 - Noncompliant toilets
 - Ad hoc and unsightly storage on eastern side
 - Poor interpretation

- **ENTRY, DRIVEWAY AND CARPARK**
 - Occupies valuable land on site
 - Creates a hot, dusty environment

- **GARDEN SHELTERS**
 - Well located and interpretation recently upgraded

- **PICNIC/MEETING SHELTERS**
 - Require upgrades and general maintenance

- **CHILDREN'S PLAYGROUND**
 - Limited play opportunities, preferred location close to cafe

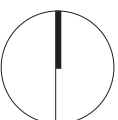
- - **MAIN GARDEN PATHS**
 - Paths should be robust for easy maintenance
 - Numerous minor paths are confusing
 - Wherever possible, paths should slow water and promote infiltration

- **THARRARLETNEME**
 - Walk to hill top requires upgrades for safety reasons

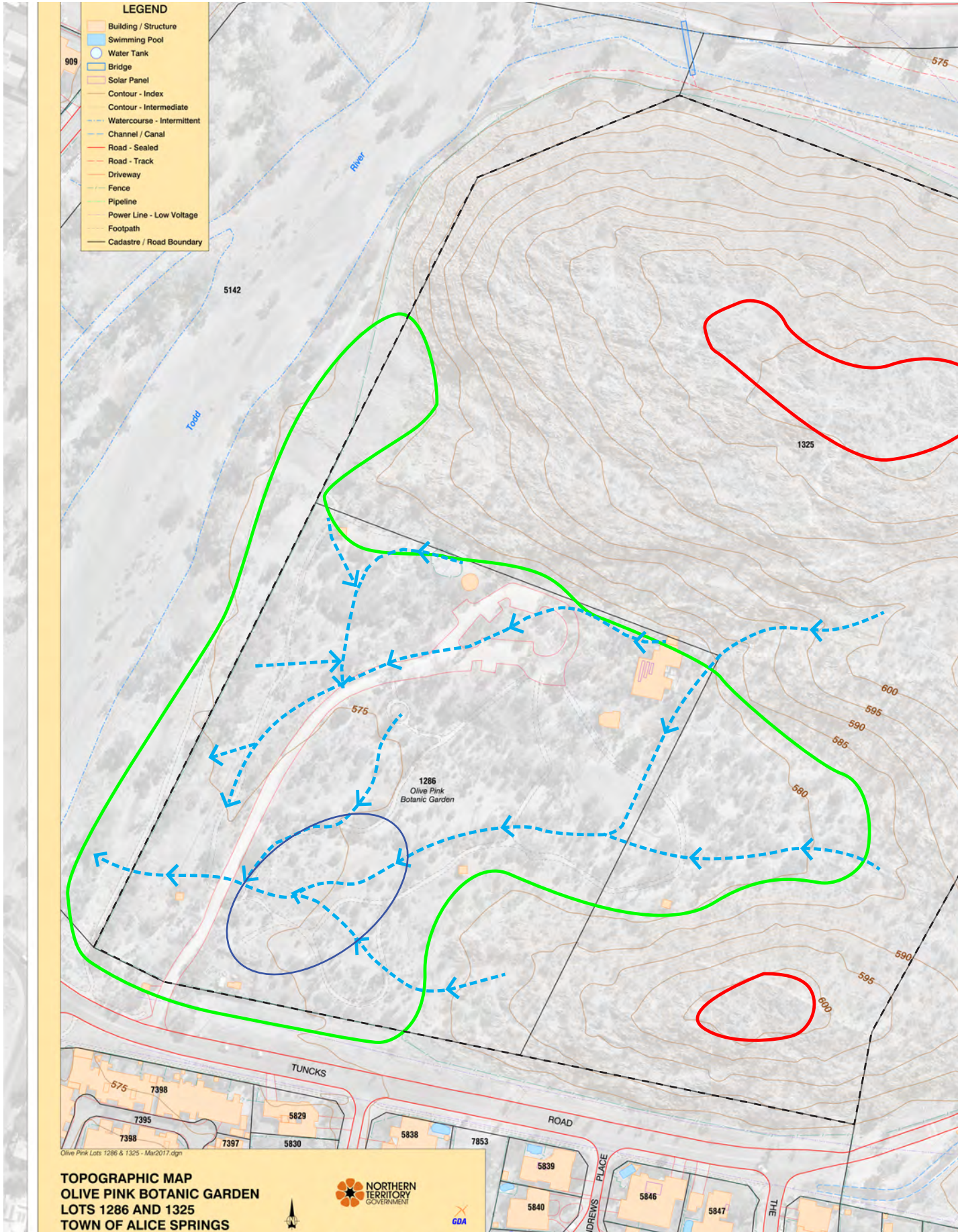
- **CHAINMESH BOUNDARY FENCE**
 - Existing fence does not provide adequate security and has poor appearance
 - Eastern boundary not effectively fenced

NOTES

1. Water supply adequate, but irrigation system will require further upgrades.
2. Sewer services currently adequate.
3. Communications and security to Existing Visitor Centre and Cafe is adequate.
4. Electricity supply upgraded and adequate.



TOPOGRAPHY, SOILS & DRAINAGE



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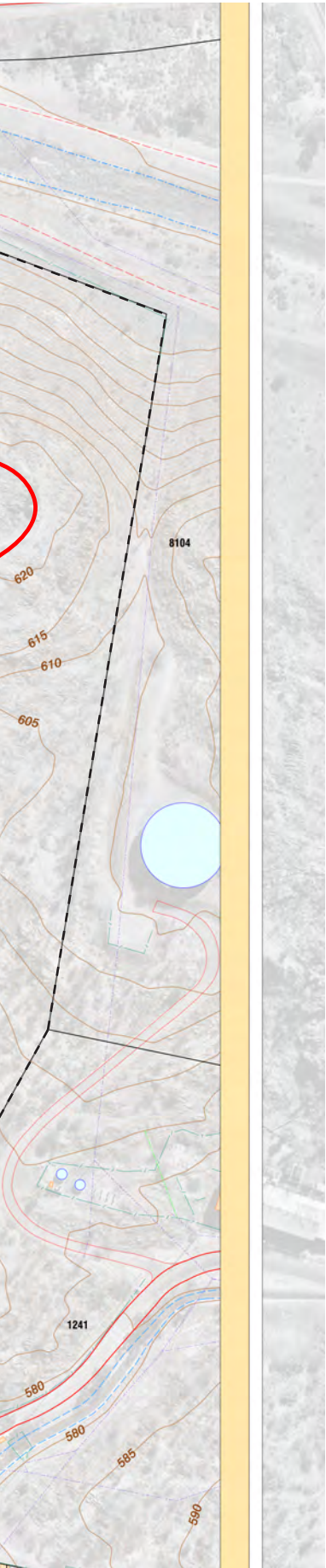


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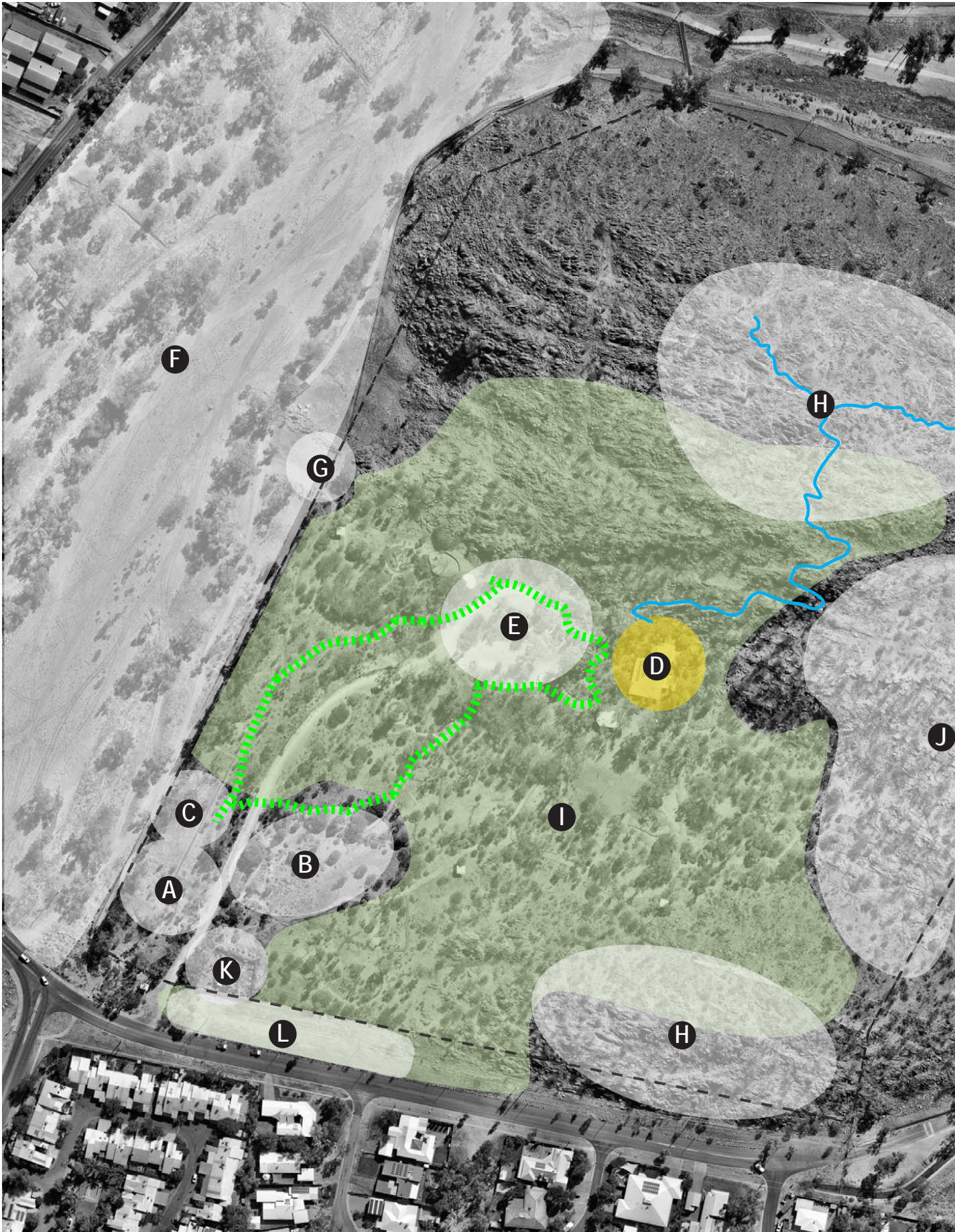


LEGEND

- 5m Contours
- 1m Contours
- ←- Main Drainage Paths
 - Extensive sheet flow elsewhere, including off hill tops
- Relatively fertile arid zone soils on flats with limited organic content and water holding capacity. Elevated alkalinity restricts nutrient uptake and is not ideal for arid area native plants without amelioration.
- Highly alkaline soils
- Elevated areas with 360° outlook



OPPORTUNITIES PLAN



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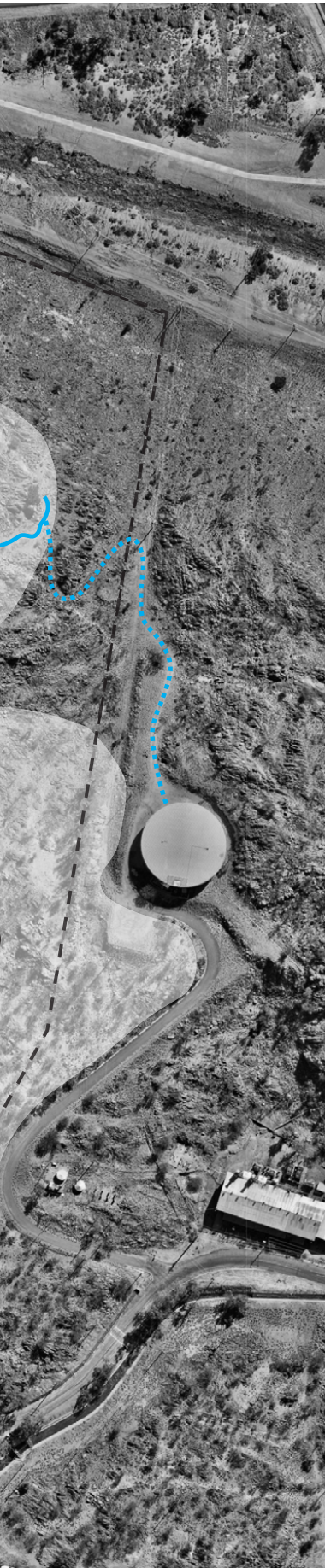


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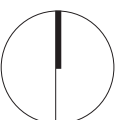
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LEGEND



- A Main Entry & Visitor Centre**
 - Could be highly visible with good views to river
 - Improved entry
 - B Car Park**
 - Located within alkaline soil area
 - Close to new visitor centre and childrens play area.
 - Reduced impact of entry road
 - C Children's Playground**
 - Playground with nature play elements could extend attraction
 - Located close to Visitor Centre & Cafe
 - D Olive Pink Centre**
 - Existing building re-purposed to present the Olive Pink story
 - Education and interpretation facility
 - E Events Space**
 - A well planned event space could generate income
 - F Todd River**
 - Incorporate a rehabilitated river corridor as an extension of the garden including medicinal and bush food species.
 - G Secondary Entry**
 - New entry feature for pedestrians and cyclists
 - H Tharrarletneme and Nurses Hill**
 - The two hills are the 'heroes' of the site with strong Arrernte cultural significance
 - I The Collection**
 - Control of weeds, fire, erosion and improved water retention will be the basis of a greatly enhanced collection
 - J Euro Area**
 - Promote as main area for viewing
 - K Works Yard**
 - Improve facilities and presentation
 - L Road Verge**
 - Bare road verge could be utilised to extend entry landscape and screen works yard
- Arrernte Walk**
- Links the hills and tells the Arrernte stories
- Olive Pink Walk Trial**
- Olive Pink interpretive walkway



A Thirty Year Plan



Rock Steps • Olive Pink Botanic Garden

A THIRTY YEAR PLAN

OLIVE PINK BOTANIC GARDEN - GARDEN DESIGN MASTER PLAN

The Overall Concept on the following pages describes the long-term vision and overall arrangement of the Olive Pink Botanic Garden as it will be developed over the next thirty years. The concept builds on the opportunities of the site and recognises that the long term viability of the Botanic Garden will be dependent on delivering excellent visitor experiences. The concept takes advantage of the location close to the CBD and maximises the exposure and recognition of the site.

The Garden Design Masterplan has been informed and supported by strong local community support and input, along with specialist advice from key stakeholders. This reflects the high regard that the Gardens enjoys within the Alice Springs community.

Key Design Components

The Overall Concept and Garden Design Masterplan layout that arises from this, is built around 4 key components:

The Collection is critical and will remain as the primary focus and attraction of the Botanic Gardens. As well as developing the diversity and range of the collection within what is currently the main area of the gardens, in time the Collection would extend out to include the northern aspect and southern aspect hill slopes and incorporate ethnobotanical displays throughout as well as extending out into the Todd River corridor to display the ethnobotanical qualities of this important environment. Actions to support the ongoing development and presentation of the Collection include management of Euros, improved water capture and infiltration, improved soil structures and the continued rollout of interpretation and signage.

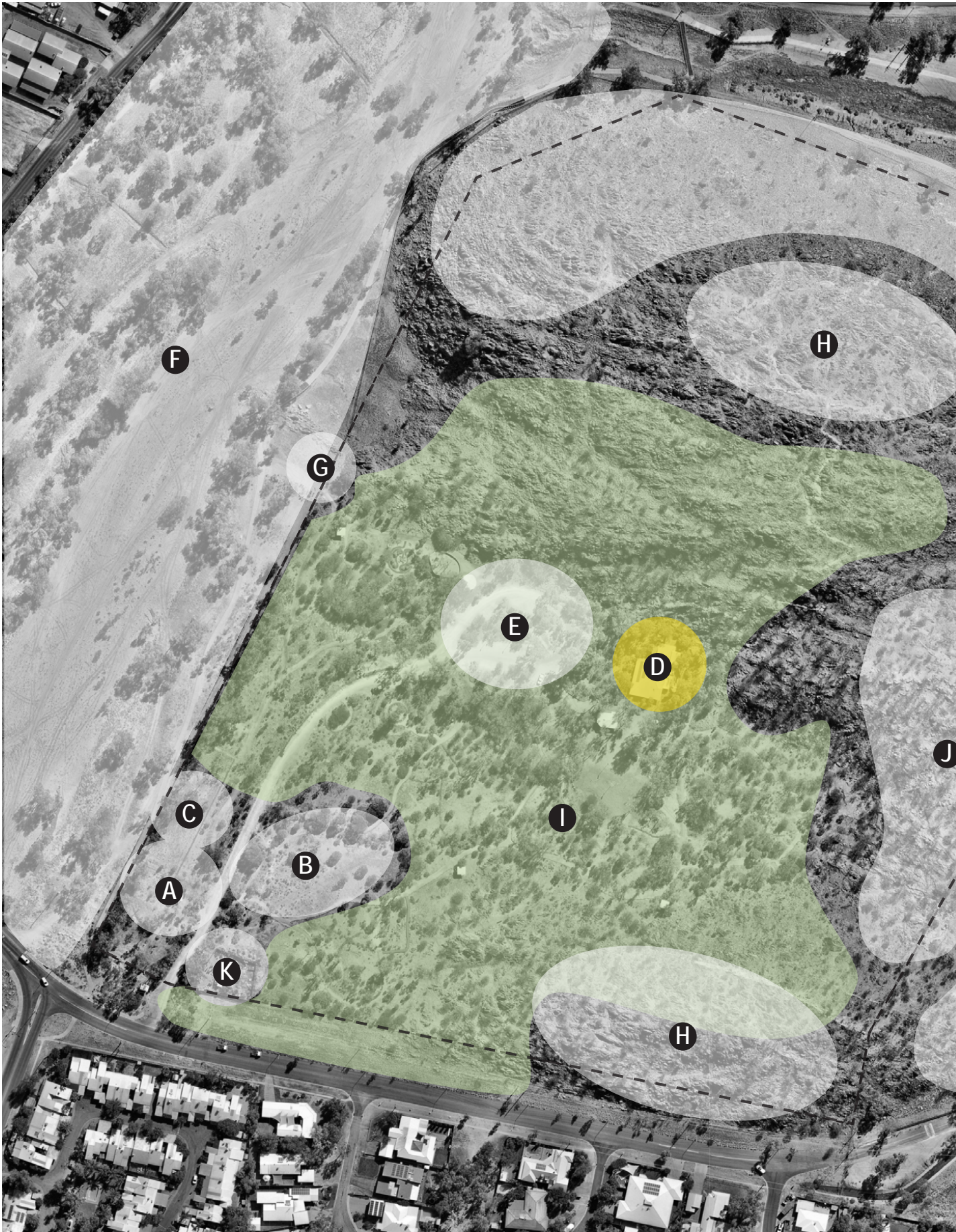
The Hills as Hero Visitor Attractions – Tharrlarletneme (Annie Meyers Hill) remains a prominent attraction that provides unparalleled view points of the Botanic Gardens, Alice Springs and the landscape beyond. It is developed with good quality walking trails to the summit and also linking with viewing stations, interpretation and guided walk options. In time, subject to possible Garden extensions into the Power and Water property to the east, a wheelchair accessible walkway could be built from the PWC Tank to the summit of Tharrlarletneme. All the works and activities associated with the trails will be developed in conjunction with Arrernte people and will provide direct training and employment opportunities.

Olive Pink Centre – the existing main building is to be refurbished to provide an appropriate facility for telling the fascinating and unique story of Miss Pink. As well as presenting a comprehensive story of the Garden, the centre will also reveal the important anthropological work undertaken. It is anticipated that selected artefacts, records and materials will be located within a secure and climatically controlled environment. An extensive library available to the public, an expanded and flexible meeting/ function room, café and kitchen would be part of the new centre.

Aboriginal Culture

The story of the Arrernte people needs to be told at Olive Pink Botanic Gardens. The Garden will provide the platform for training, education, employment and sharing of stories. Works proposed for the Gardens that will put Arrernte people at the forefront include the hill top walk, welcome signage and interpretation, plant use and knowledge and caring for country.

OVERALL CONCEPT



Olive Pink Botanic Garden
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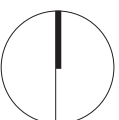
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LEGEND



- A** **New Entry, Visitor Centre & Cafe**
 - Highly visible location with close link between Garden and Todd River
- B** **Car Park**
 - 80 cars, located in area of alkaline soils and frees up land internally
 - Allow for bus drop-off
- C** **Children's Playground**
 - Established close to Visitors Centre & Cafe
- D** **Olive Pink Centre**
 - Key destination draws people into and through garden
- E** **Major Events Space**
 - Utilises former car park
- F** **Todd River**
 - Expanded biodiversity planting links with CBD and Tourist Precinct
- G** **Secondary Entry**
 - New entry feature for pedestrians and cyclists
- H** **Arrernte Stories**
 - The hills as significant Arrernte sites create the backdrop of the gardens and are the basis of shared stories
- I** **The Collection**
 - Enhanced and expanded collection
 - Includes Tunck Road Verge
 - Includes northern & southern aspects of Tharrarletneme & Nurses Hill
- J** **Euro Viewing Area**
 - Euros are contained and controlled on the eastern part of the gardens
- K** **The Collection**
 - Enhanced and expanded collection
- L** **Fire Control Zone**
 - Weed control and fire breaks in conjunction with other land owners



Delivering the Master Plan



Olive Pink Botanic Garden

DELIVERING THE GARDEN DESIGN MASTERPLAN

THE PEOPLES GARDEN

The design layout on the following pages illustrates how the Botanic Garden will be developed as funds and resources allow. The Garden Design Masterplan recognises that the Garden needs to be both a Botanic Garden and a popular destination for tourists and locals. The Gardens has long been an important social and cultural feature of Alice Springs. This role will also be strengthened.

To maintain relevance and viability, the Garden needs to attract increased numbers of visitors and maximise their spending. As for Botanic Gardens throughout Australia and the world, the long term sustainability will require the Garden to generate income beyond the standard funding and grants. Many of the proposed projects will support events, functions and uses that will generate an increased income for the Gardens.

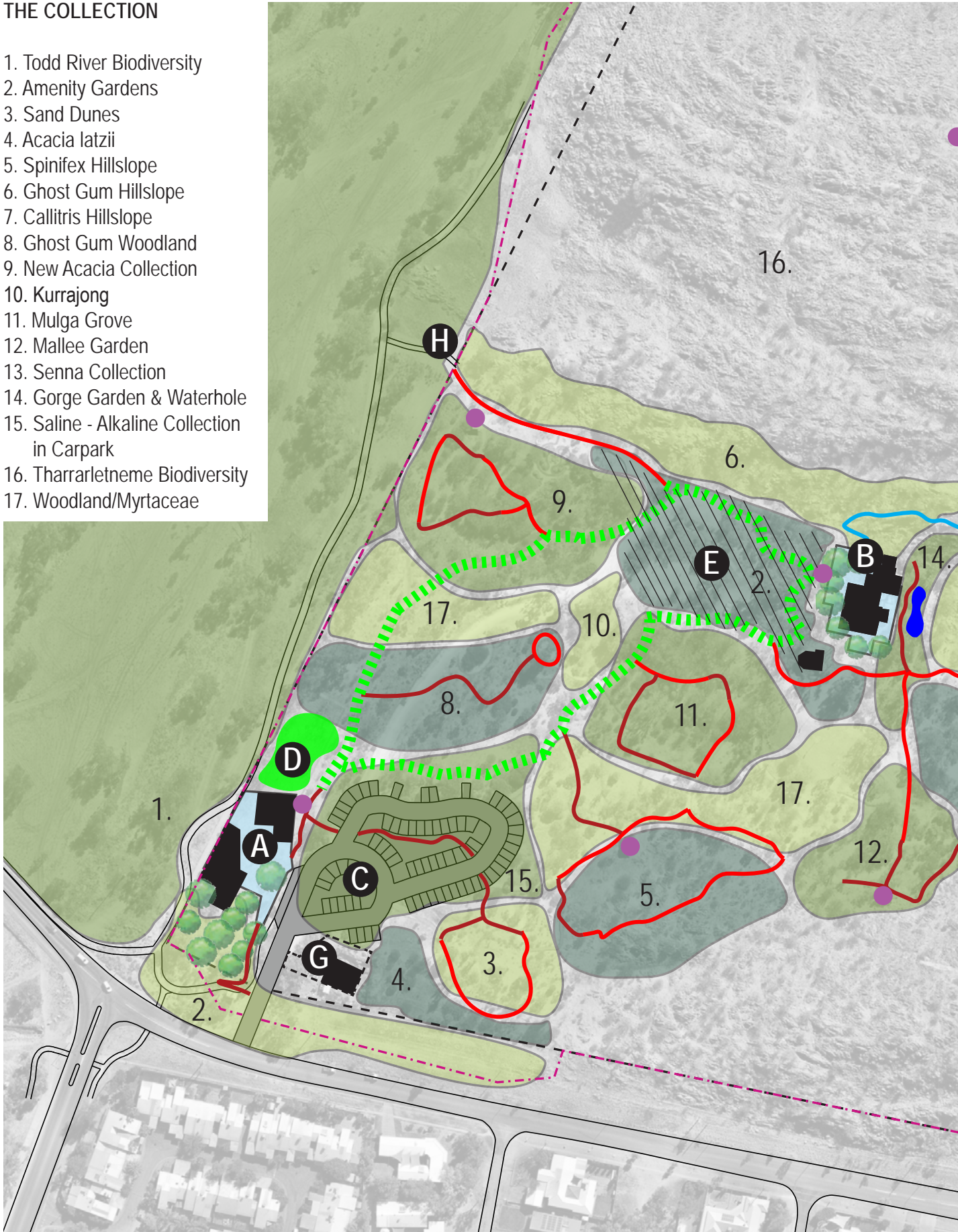
Repeat visitation and attractions for the local community is supported by the layout. The Café is and will remain a key attractor. The layout proposes a new café and visitor centre associated with a new entry. This is a long term development and would only proceed in parallel with the development of the Olive Pink Centre. Diverse short and long walks and the children's playground will be key destinations for repeat visitation.

The gardens are well placed to support events, functions and festivals. Flexible spaces, upgraded infrastructure and the opportunity to 'wheel in and wheel out' support equipment will see the Gardens become a much loved natural space in the heart of the town. Opening hours and activities extending into the evening will capitalise on the cooler temperatures and clear starlit nights.

MASTER PLAN - OVERALL

THE COLLECTION

1. Todd River Biodiversity
2. Amenity Gardens
3. Sand Dunes
4. Acacia latzii
5. Spinifex Hillslope
6. Ghost Gum Hillslope
7. Callitris Hillslope
8. Ghost Gum Woodland
9. New Acacia Collection
10. Kurrajong
11. Mulga Grove
12. Mallee Garden
13. Senna Collection
14. Gorge Garden & Waterhole
15. Saline - Alkaline Collection in Carpark
16. Tharrarletneme Biodiversity
17. Woodland/Myrtaceae



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LEGEND

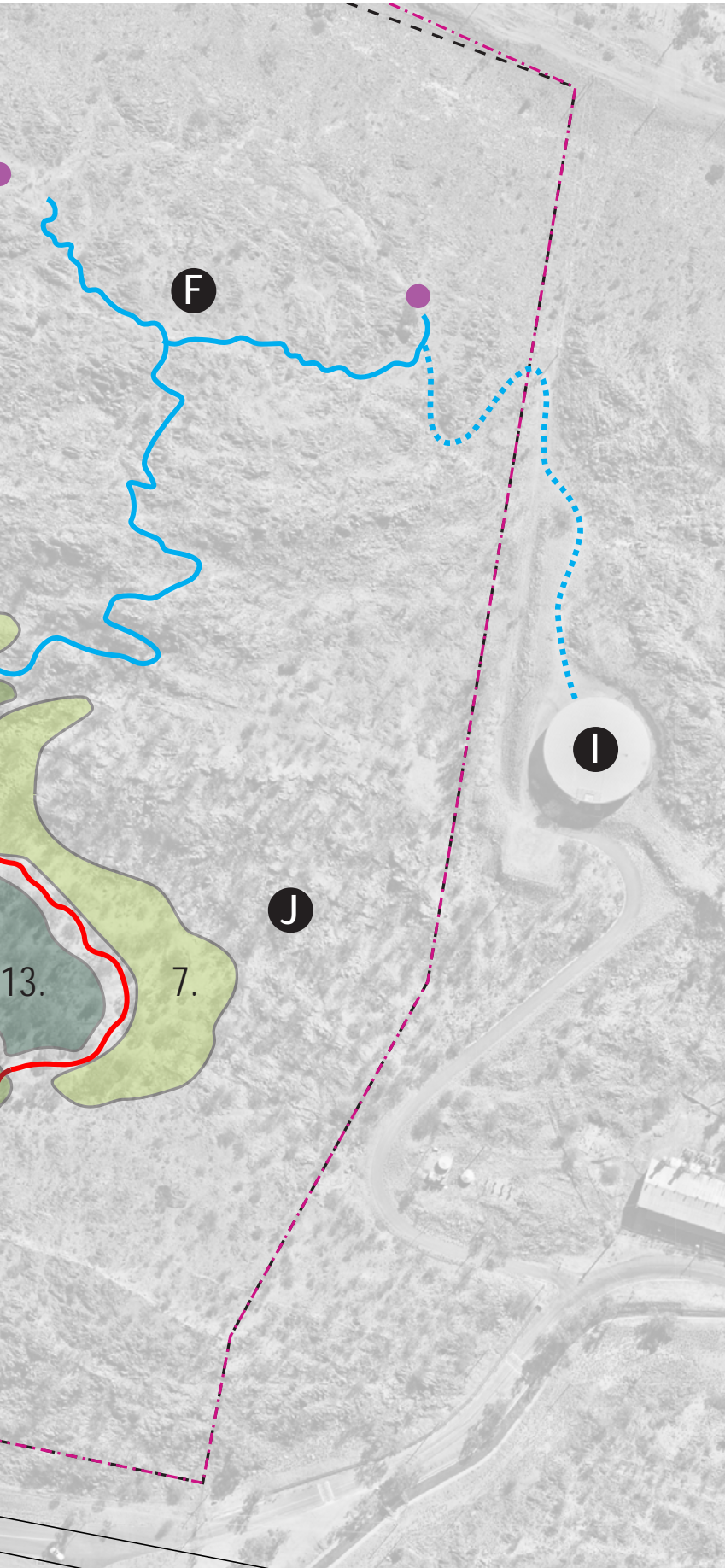
VISITOR FACILITIES

- A** Main Entry, Visitor Centre & Cafe
 - New visitor centre building and café
 - Re-arranged vehicle and pedestrian entrance with bus drop-off zone
- B** Olive Pink Centre
 - Existing building re-purposed to house Olive Pink collection and anthropological records
 - Meeting & Function Rooms
- C** Car Park
 - New carpark with 80 parking bays and dense shade tree planting - *Acacia maconochieana* & *Eucalyptus coolibah* subsp. *arida*
- D** Childrens Play Area
 - Playground with nature play elements
 - Relocated Labyrinth
 - Showcase grass alternatives
- E** Events Space
 - Services infrastructure installed
 - Events spaces defined through landscaping
- F** Tharrarletneme
 - Significant Arrernte sacred site
 - Minor clearing and shaping to accommodate viewing and seating area
 - Path upgrades
- G** Staff Facilities and Works Area
 - Lunchroom & storage
 - Heavily landscaped and screening
 - Secure parking (2 cars)
- H** Secondary Entry
 - New entry feature for pedestrians and cyclists
- I** Re-Purposed Tank
 - Re-purposed tank to create an additional attraction
- J** Euro Area
 - Main shelter and feeding area
 - Population to be managed
 - Viewing from adjoining paths



WALKS

- |||||** Olive Pink Walk Trail
 - Main pedestrian circulation path
 - Suitable for maintenance and staff vehicles
- Tharrarletneme Walk Trail
 - Upgraded Walk, Interpretation & Lookouts
 - Developed with full involvement of Arrernte (training & employment)
- Tharrarletneme All Abilities Walk
 - An all-abilities sealed path that is DDA compliant
 - Accessed from Water Tank site
- Arrernte Walk Trails
 - Includes all key interpretation & orientation nodes
 - Developed by and in consultation with Arrernte
- Interpretation/Orientation Nodes
 - Shelters and seating
 - Interpretation and maps
- .-.-** Boundary Fence
 - New feature design fence
 - Hidden in landscape and linked to buildings
 - Includes art panels



DELIVERING THE GARDEN DESIGN MASTERPLAN

STAGED IMPLEMENTATION

The Garden Design Masterplan is ambitious and will take a number of years to implement as funds and resources are available. The proposed staging provides a logical roll out of the development works that support the long term vision.

Initial focus should be on projects that will support events and the ability to generate income. Night time use is likely to be key – star gazing, outdoor movies, drinks and dining, parties/weddings/ functions. Some of these could also extend into day time activities depending on season. Additional events would include garden festival, music events, involvement of Arrernte people in story-telling, guided walks and knowledge sharing.

Immediate Priorities

These works are critical developments to consolidate the viability of the Gardens and establish the basis for an expanded Collection and options for increased income.

Euro and Security Management Fence

- The current dilapidated fence on the eastern boundary allows unimpeded access to people and euros
- A new fence is critical to allow for new planting establishment free from severe grazing pressures. Design of the fence would allow free movement of the Black footed Rock Wallabies
- Stage 1 of the boundary fence would replace the eastern fence with one that allows euro numbers to be restricted and fills a critical security gap, while allowing Black-footed Rock Wallabies easy and safe transit

Pathway and Carpark Lighting

- With 3 phase power installed, improved lighting along the pathway network and within the current carpark allows for extended uses into the evening and resolves safety issues
- Allow for future developments and the new Olive Pink Walk Trail

Olive Pink Walk Trail

- Develop a new fully accessible loop trail that will be the Miss Pink Walk Trail providing a convenient loop through the Garden as the connecting path
- The Trail would be stabilised gravel and suitable for maintenance and emergency access

DELIVERING THE MASTER PLAN

Shade Tree Planting

- Once Euros are managed on site, commence early planting of shade trees
- Initial focus would be the proposed Olive Pink Walk Trail
- Tree selection would give consideration to adjoining collection as appropriate, but the main focus should be shade and long term viability of the trees

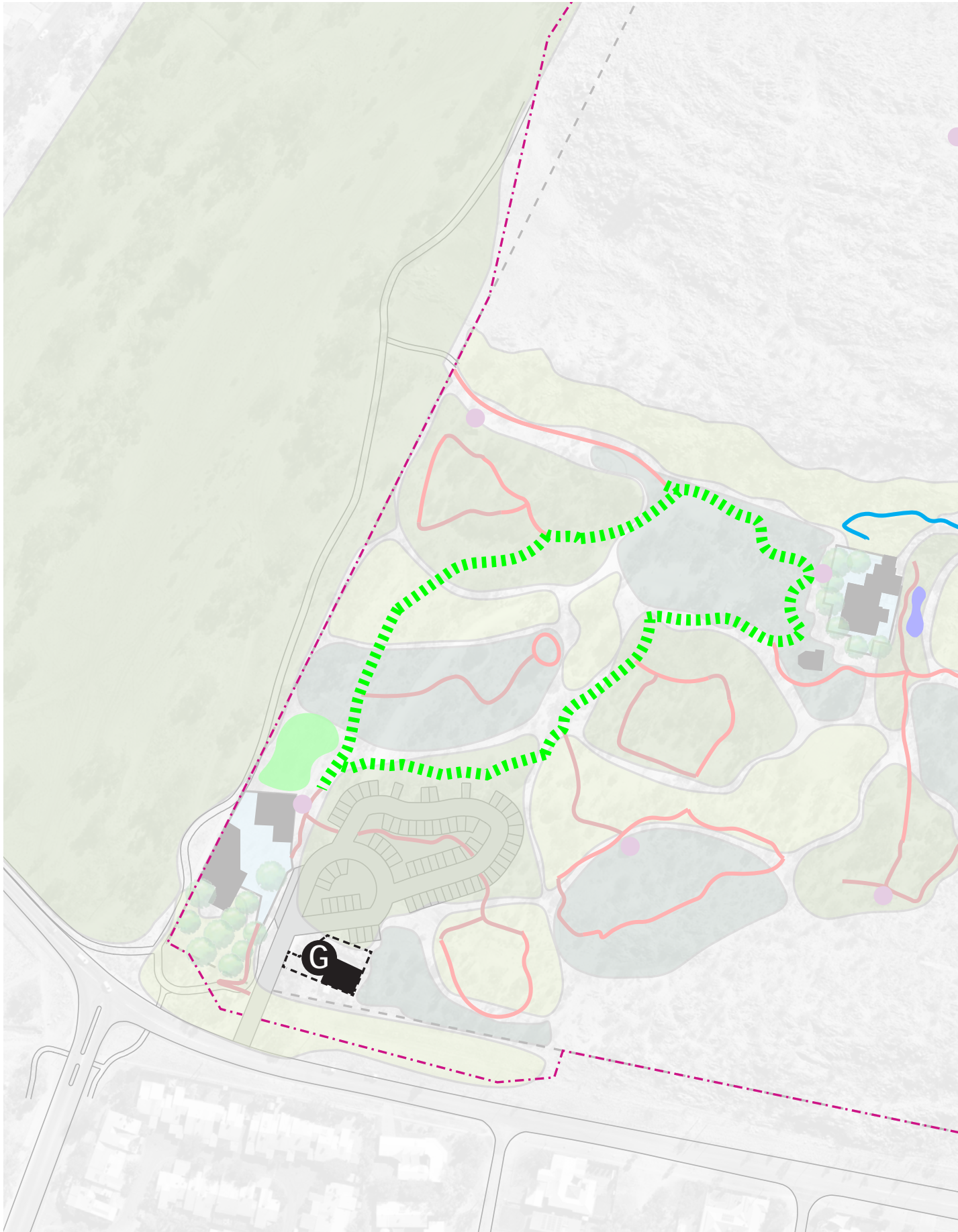
Arrernte Walk Trail

- Upgrade and improvement of Tharrarletneme as a key attractor – this will provide an excellent opportunity to attract other funding to engage Arrernte people in training, education and employment
- Establish seating and interpretation at the 2 view points – Rivers and Ranges Lookout and Coolibah Swamp Lookout
- Commence training of Arrernte people as guides

Works Depot

- Construct new works depot in current location as a well designed building
- Reconfigured for efficient operations and densely screened
- Consider future plans and include landscaping for screening
- Facilities to include staff/ briefing/ training room, kitchenette, unisex toilet, storage for event equipment, minor spare parts and tools, lock up for 2 vehicles

PRIORITY PROJECTS - IMMEDIATE (BY END OF 2022)



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Botanic Garden
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LEGEND

■■■■ Oliver Pink Walk Trail & Shade Tree Planting

- Construct 3.5m stabilised gravel walk trail. Pavement design suitable for maintenance and emergency vehicles
- Path lit to support night time functions and events
- Continue early planting of shade trees to Olive Pink Walk Trail

— Tharrarletneme Walk Trail

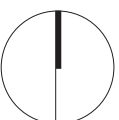
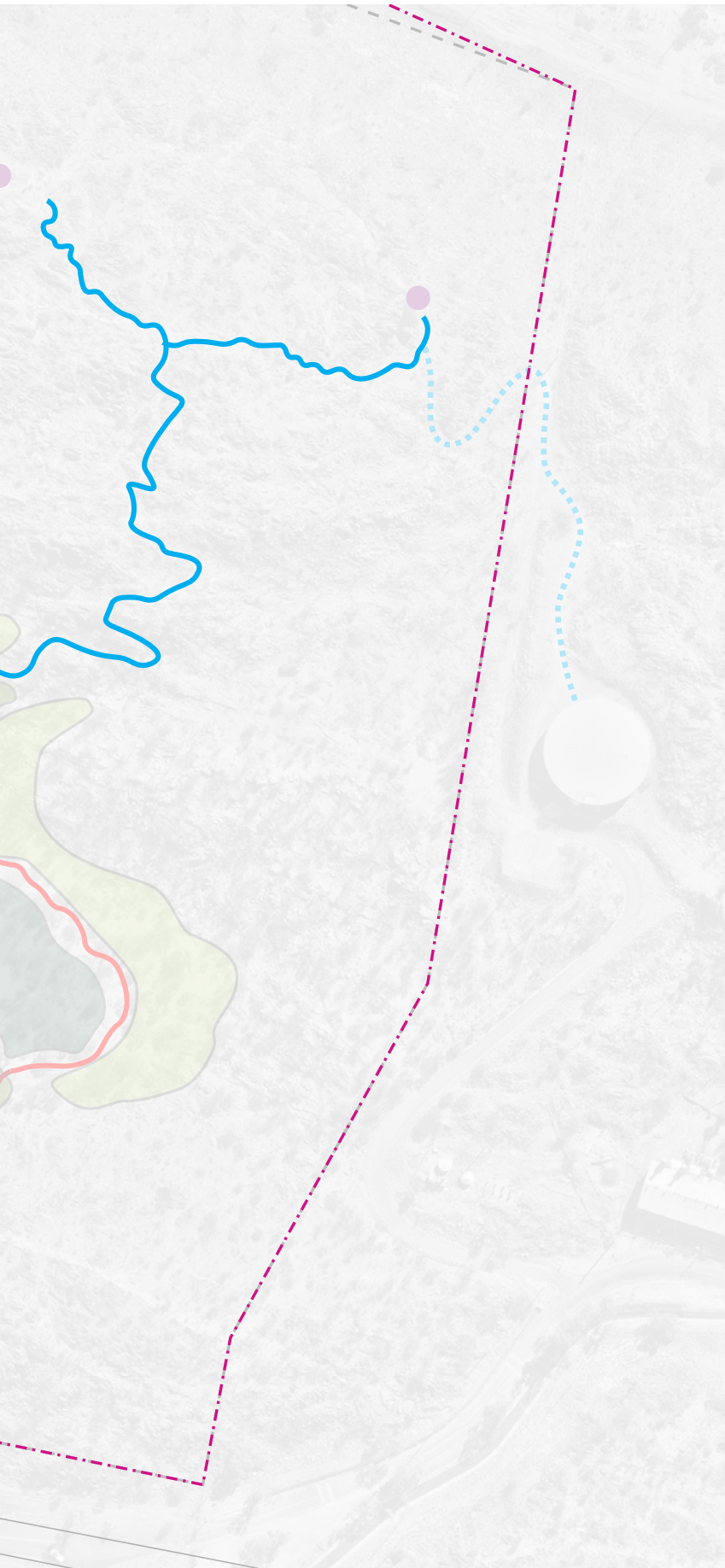
- Upgraded Walk, Interpretation & Lookouts
- Developed with full involvement of Arrernte (training & employment)

- - - - Boundary Fence

- Improves security and manages euro population
- Include art gates and fence panels
- Design allows Black Footed Rock Wallaby access

G Works Depot

- Office, meeting/training/lunch room, toilets
- Storage (office & General)
- Landscape treatment and architectural design
- Vehicle & equipment store



DELIVERING THE MASTER PLAN

Medium Priorities

These works build on the immediate works to provide additional and enhanced visitor experiences. The focus would be improved facilities and an enhanced Collection.

New Visitor Centre and Cafe

- The Visitor Centre and Cafe is a key aspect of the Garden. It includes introduction and interpretation with a focus on the Collection and the environment while also acting as a storage space.
- The Café/ Restaurant will be an expanded facility that take advantage of the highly visible location and proximity to Todd River and views of the hills. It would be able to comfortably accommodate up to 100 people within indoor and outdoor areas. A small office and storage room, toilets and a meeting/ function/ training room for groups up to 20 people would be included.
- The design and layout will support night time use of the café, while the Visitor Centre would typically be closed down and secure after hours.
- Development of the outdoor spaces are a critical requirement.
- Water to be collected off roofs and paved forecourt and stored for re-use under the raised podium - essentially a big storage tank under the buildings & pavement.

New Staff Offices

- This is required to free up space for the redevelopment of the Olive Pink Centre.
- The staff offices will be part of the proposed Visitor Centre and Café and will include offices, store/ printing/ equipment room, kitchenette and unisex toilet. This will require the design of the entire building group and surrounds at this stage, and complete documentation of the Visitor Centre

New Entry and Car Park

- This is a key intervention to free up space within the gardens
- Extended landscape verge developed in consultation with Alice Springs Town Council
- Existing entry upgraded to provide improved pedestrian/cycle access and feature artwork fence and gate
- Extensive amenity and shade tree planting to showcase Garden and new shared paths to promote active transport
- Carpark expanded to approximately 80 spaces
- Provision for bus drop-off and turn around

Garden Upgrades

- The Collection will continue to be developed with additional plantings and increased diversity.
- The first priority would be shade trees along the walking trails
- Garden shelters and seating to be built

DELIVERING THE MASTER PLAN

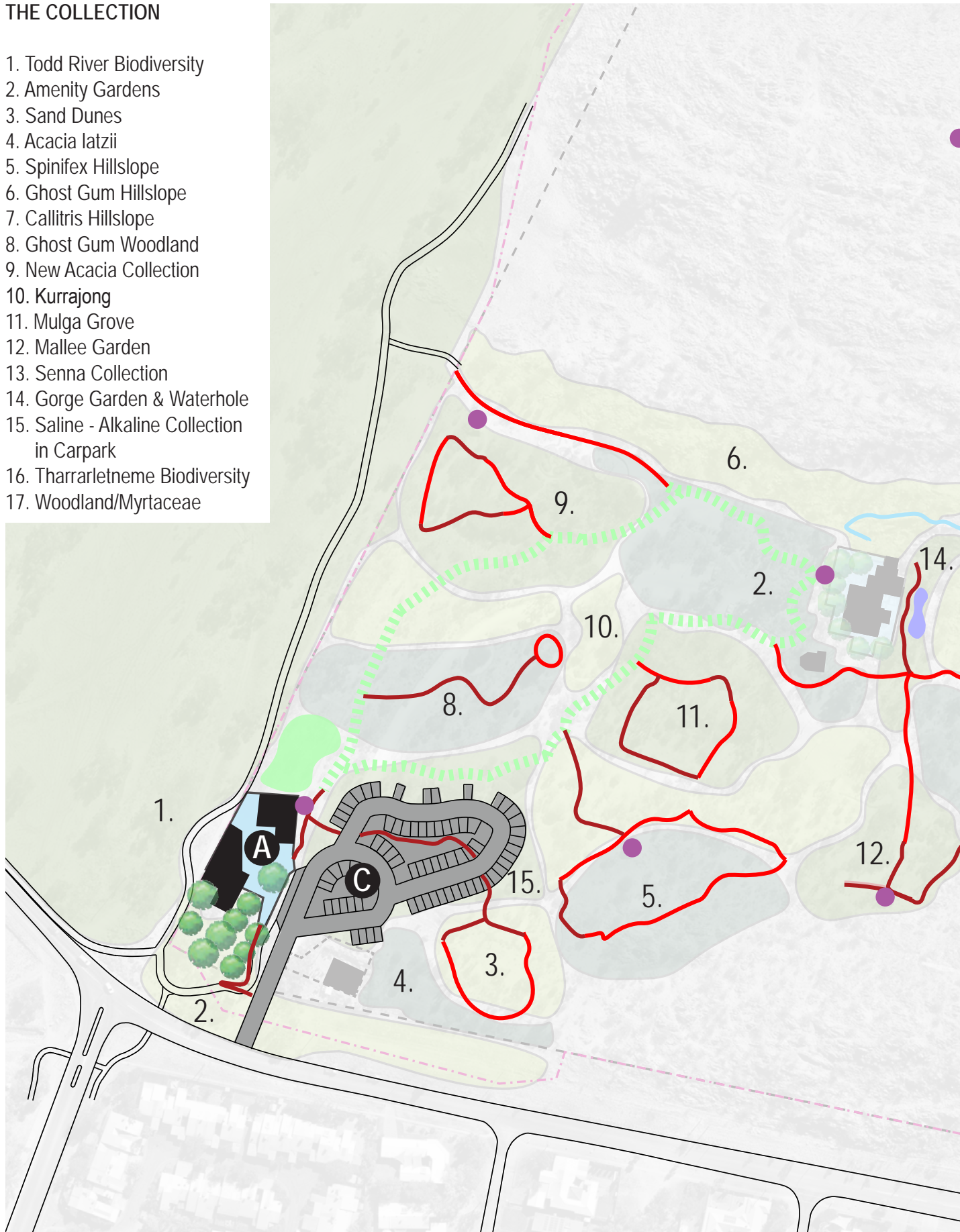
Walking Trails and Interpretation

- Completion of Arrernte Walks and upgrades to Tharrarletneme. This would again involve Arrernte people directly.
- Ongoing upgrades of paths, providing DDA compliant paths wherever possible.
- Paths will be designed to act as water control structures to harvest water and maximise infiltration. Flood and storm resilience will be built into paths with flow out points hardened up and protected.
- Ongoing roll out of interpretation based on established style guide.
- Investigation and implementation of new technologies to expand interpretation options.

PRIORITY PROJECTS - SHORT TERM (BY END OF 2025)

THE COLLECTION

1. Todd River Biodiversity
2. Amenity Gardens
3. Sand Dunes
4. Acacia latzii
5. Spinifex Hillslope
6. Ghost Gum Hillslope
7. Callitris Hillslope
8. Ghost Gum Woodland
9. New Acacia Collection
10. Kurrajong
11. Mulga Grove
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17. Woodland/Myrtaceae



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LEGEND

A Main Entry & Cafe Visitor Centre

- Includes new staff offices and facilities, visitor centre, cafe/restaurant
- Large outdoor area

C New Carpark & Entry

- Enhanced pedestrian and cyclist entry
- Vehicle and bus drop off
- Heavy shading from *Acacia maconochieana* & *Eucalyptus coolibah* subsp. *arida*
- At completion, existing access road closed and rehabilitated
- New gates and access control

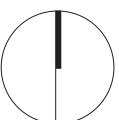
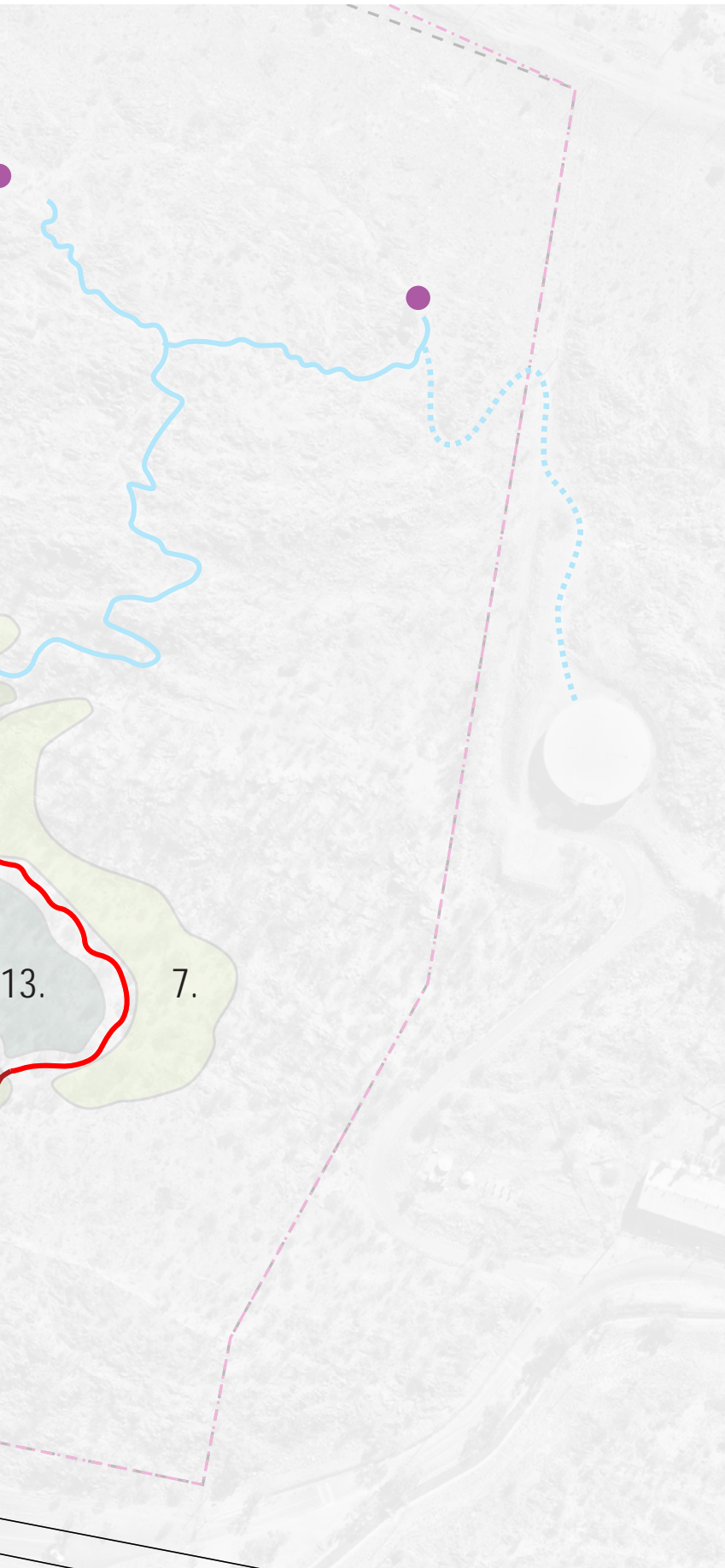
Garden Upgrades

- Additional plantings and consolidation of collection
- Seating and picnic facilities

Walkways and Interpretation

- Upgrades (red) and realignment (maroon) of all secondary paths for enhanced resilience and to meet access requirements

New and relocated Interpretation/ Orientation Nodes



DELIVERING THE MASTER PLAN

Future Works

These future works include the major building works and will require significant funding to implement. Timing is likely to be beyond 15 years and would also be dependent on a significant increase in visitor numbers and overall Garden budget.

Refurbishment of Olive Pink Centre

- With the removal of the staff offices and toilets, the existing building can be refurbished. This would be undertaken in response to a detailed brief and architectural design. The basic structure of the rammed earth building is to be preserved and enhanced where possible.
- The existing office and library area is redeveloped as the Olive Pink Centre with quality interpretation, displays and library available to the public. The focus would be on Miss Pink and her anthropological work and records. It should open up to the east, north and west.
- The Bean Tree Café is refurbished to make better use of the space – storage and cool rooms are brought into the building and the servery is pushed out to the building perimeter.
- The meeting/ function room is remodelled and gallery and theatre.
- Building surrounds should be developed as an integrated outdoor transition space to the Garden
- The existing toilets are remodelled to include a disabled access toilet.
- Rainfall directed from roof to gorge garden and waterhole.

Childrens Playground

- Located close to Café with a mix of activities to suit different age groups and with a focus on nature play
- A child activated water play area would be a key attraction. It can be designed to be low water use and all water is harvested and directed to nearby amenity planting
- Lawn alternatives utilising native plants are to be trialed

Event Space

- Existing car park repurposed as an event space for up to 350 people seated
- Additional shade trees, extended lighting and power supply and upgraded pedestrian surface treatments

DELIVERING THE MASTER PLAN

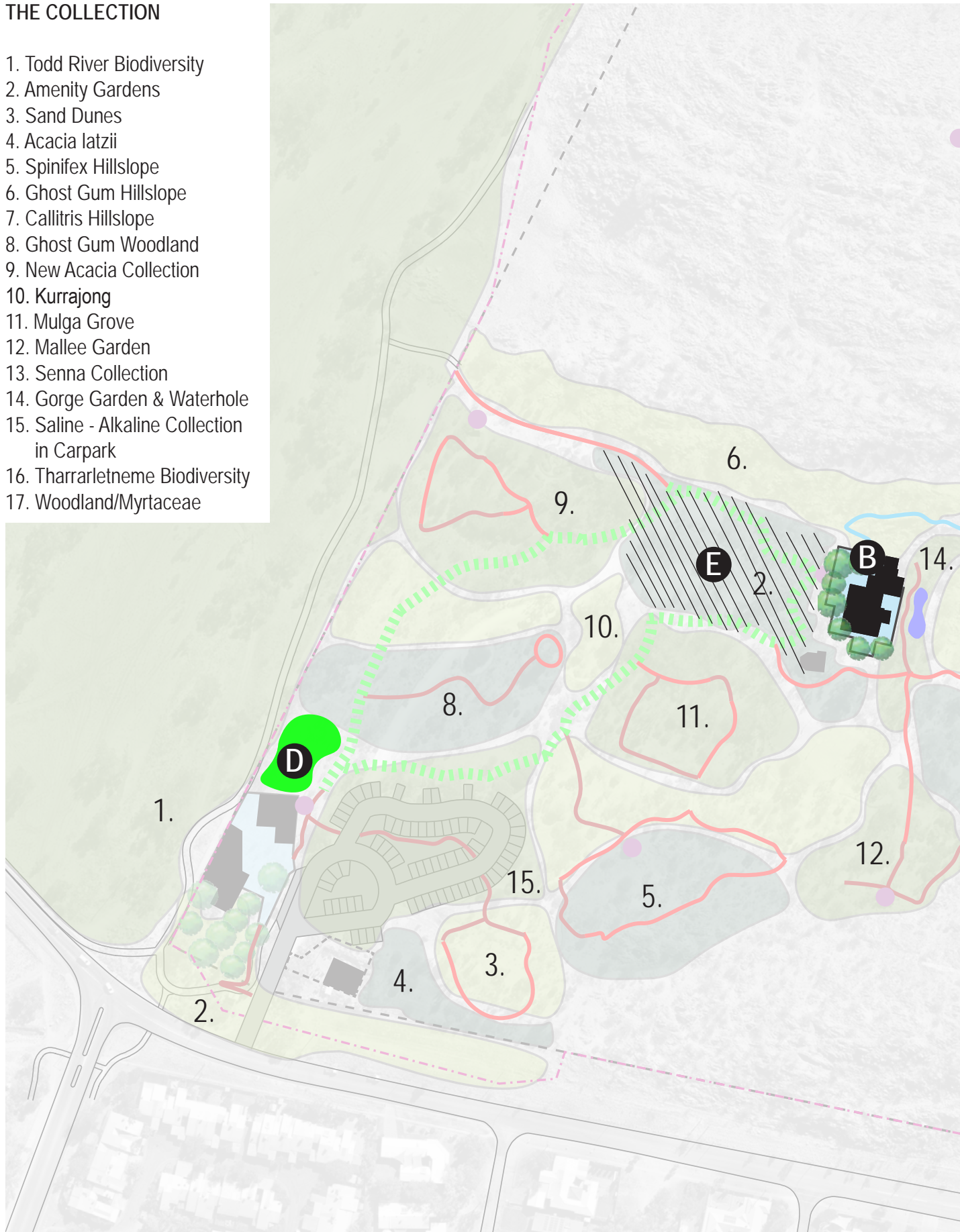
Garden Upgrades

- Ongoing upgrades to Garden – expanded and infill plantings, northern and southern aspect hill slope restoration
- Completion of perimeter boundary fence (Euro control and security)
- Construction of waterhole and associated plantings

PRIORITY PROJECTS - FUTURE

THE COLLECTION

1. Todd River Biodiversity
2. Amenity Gardens
3. Sand Dunes
4. Acacia latzii
5. Spinifex Hillslope
6. Ghost Gum Hillslope
7. Callitris Hillslope
8. Ghost Gum Woodland
9. New Acacia Collection
10. Kurrajong
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LEGEND

B Olive Pink Centre

- Existing building re-purposed to house Oliver Pink Collection and anthropological records
- Theatre & Function Rooms
- Upgraded toilets
- Expanded Kitchen

D Children's Play Area

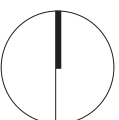
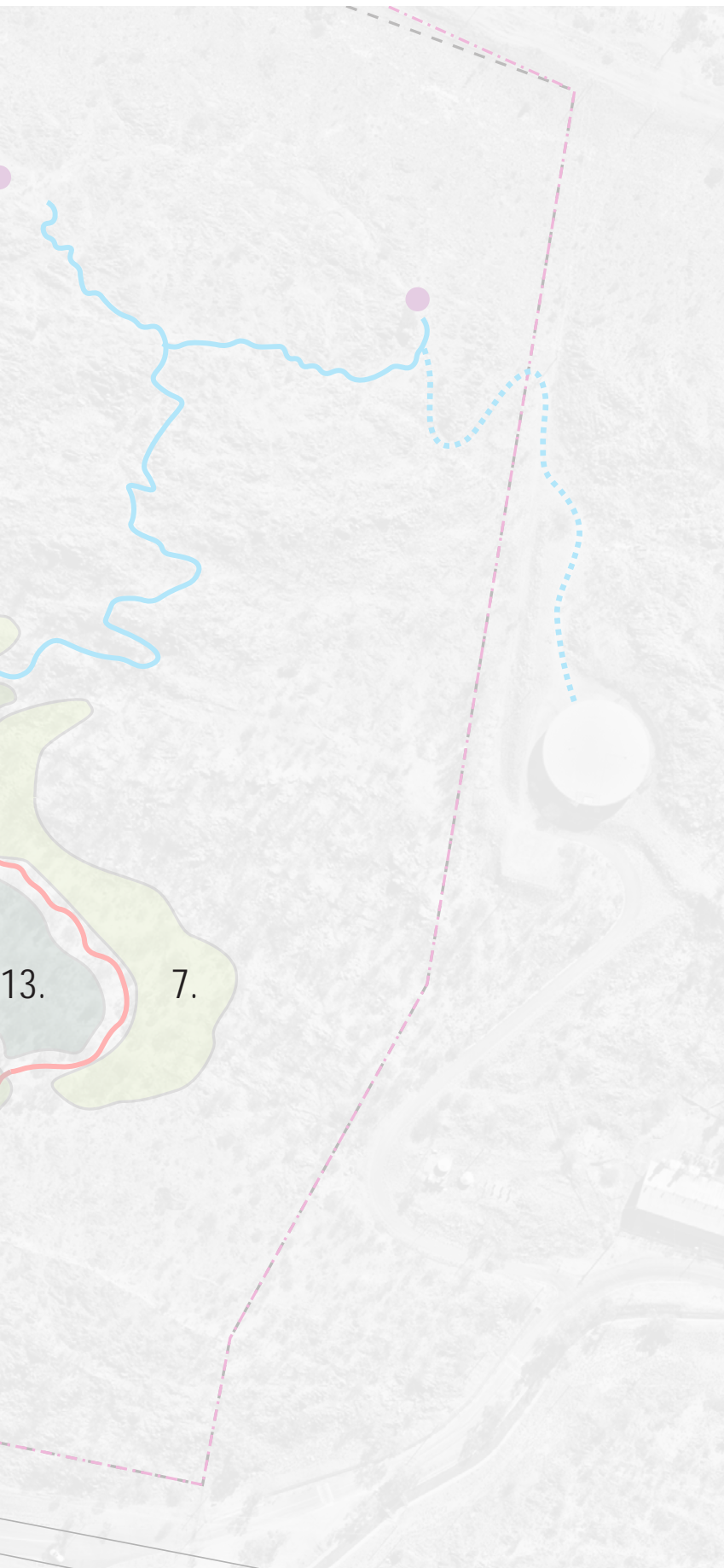
- Includes low use water play
- Trials of native plant grass alternative
- Close link to Cafe

E Event Space

- With carparking now off site this area is returned to the gardens
- Additional lighting and power supply
- New pedestrian surfaces
- Extensive shade tree planting

Garden Upgrades

- Ongoing upgrade to The Collection



APPENDIX A - PROJECT COSTING SUMMARY



ESTIMATE OF PROBABLE COSTS

NUMBER	D17-0003	PREPARED BY	TC	ISSUE	B
PROJECT	OLIVE PINK BOTANIC GARDENS	REVIEWED		ISSUE DATE	16/10/2020
STAGE	GARDEN DESIGN PLAN	VERIFIED		ORIGINAL DATE	14/02/2018

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE	COST
1.00	PRIORITY PROJECTS - IMMEDIATE				
1.01	Boundary and Euro Management Fence	2600	m	\$400.00	\$1,040,000.00
1.02	New LED lighting to pathway	1	Item	\$100,000.00	\$100,000.00
1.03	Miss Pink Walk Trail	1940	m	\$250.00	\$485,000.00
1.04	New shade tree planting along Miss Pink walk	150	No.	\$200.00	\$30,000.00
1.05	Works Depot	1	Item	\$889,935.00	\$889,935.00
1.06	Arrennte Walk Trail	1	Item	\$300,000.00	\$300,000.00
	SUB_TOTAL - IMMEDIATE				\$2,844,935.00
2.00	PRIORITY PROJECTS - SHORT TERM				
2.01	Visitor Centre - Both Buildings (VC1 & VC2)	1	Item	\$3,664,815.00	\$3,664,815.00
2.02	Upgraded entry and new drop off and car park	1	Item	\$2,400,000.00	\$2,400,000.00
2.03	Upgraded pedestrian linking paths & landscape to front entry	2500	m	\$250.00	\$625,000.00
2.04	General garden upgrades - additional plantings, upgraded irrigation and water treatment, seating and shelters, relocated and upgraded interpretation nodes	1	item	\$2,000,000.00	\$2,000,000.00
2.05	Upgrades of secondary walk trails throughout gardens	2040	m	\$150.00	\$306,000.00
	SUB-TOTAL - SHORT TERM				\$8,995,815.00
3.00	PRIORITY PROJECTS - FUTURE				
3.01	Miss Olive Pink Centre	1	Item	\$702,606.00	\$702,606.00
3.02	Children's Play Area	1	Item	\$950,000.00	\$950,000.00
3.03	Event Space	5000	m	\$270.00	\$1,350,000.00
3.04	Continued garden upgrades	1	Item	\$1,200,000.00	\$1,200,000.00
	PRIORITY PROJECTS - FUTURE				\$4,202,606.00
	OVERALL PROJECT TOTAL				\$16,043,356.00

OPINION OF PROBABLE COSTS NOTES:

1. Opinion of probable costs are based on current concept drawings at time of preparing estimate
2. This opinion of probable cost is intended to be a guide for project budgeting rather than estimating actual construction costs.
3. As Landscape Architects and not quantity surveyors, CLOUSTON Associates can not and do not guarantee that the opinion of probable cost will not vary from actual construction costs.
4. Cost plan for building facilities prepared by RLB, darwin.

APPENDIX B - NEW BUILT FACILITIES DESCRIPTIONS AND AREA SCHEDULES

OLIVE PINK BOTANIC GARDEN MASTER PLAN - BUILDING FACILITIES 1st March 2018

MISS OLIVE PINK CENTRE (MOPC)

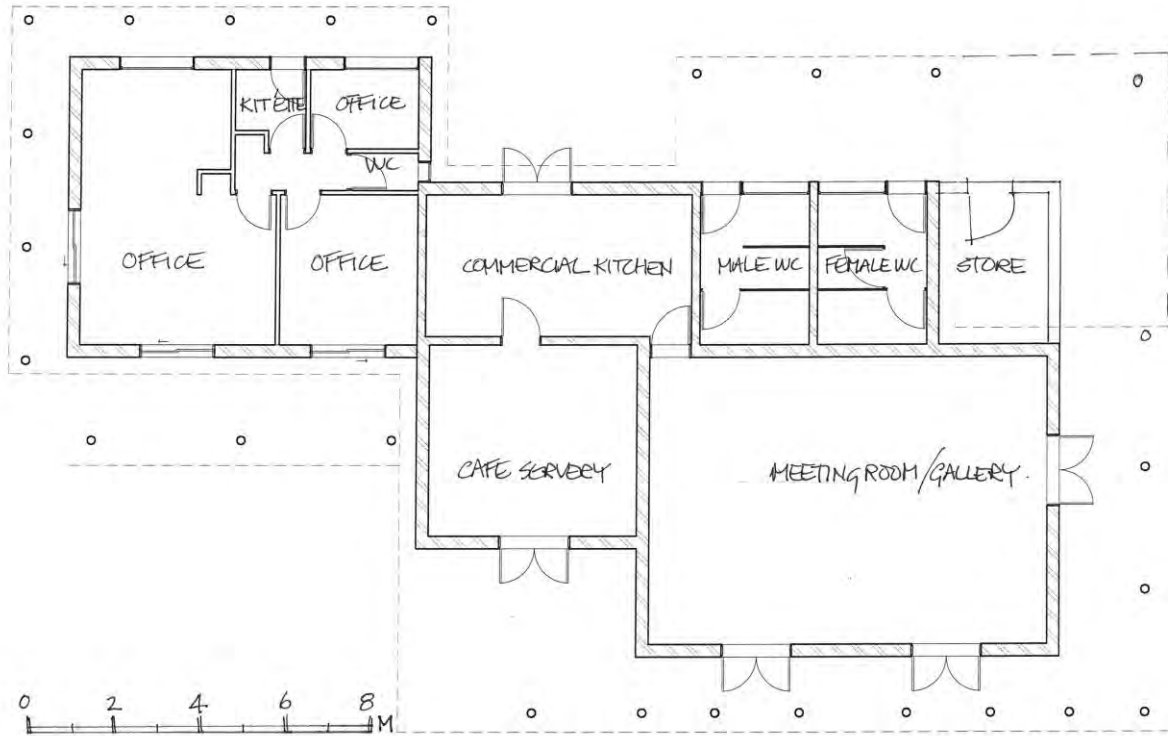
The MOPC will celebrate the life and work of Miss Olive Pink and her great interest in botany, and will also celebrate Arrernte culture and the stories of Arrernte people. This emphasis on Arrernte culture reflects Miss Pink's support for and close relationships with Arrernte people during her life, and also the cultural significance of the land on which the Garden is sited.

The MOPC will be located in the existing rammed earth building that currently houses the café, meeting room/gallery, toilets and all administrative functions of the Garden. This building will be converted from its existing general purpose function to a specific-purpose function highlighting Miss Pink and Arrernte culture as noted above, though some facilities such as kitchen and toilets will still serve multiple purposes.

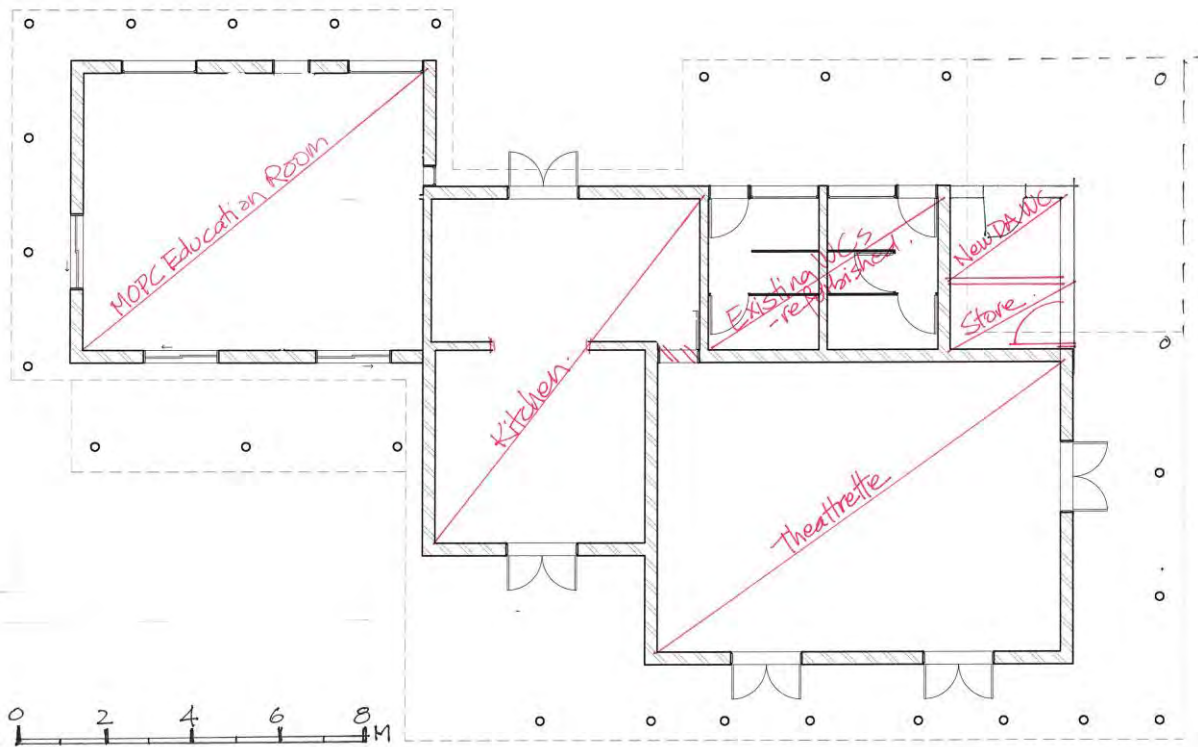
The building will be developed and completely refurbished to:

- Create a stronger and more positive connection between the building and the water feature to the east side. Public visitors will be able to access the full perimeter of the building.
- This building will no longer provide a venue for meetings, which will be accommodated at the proposed VC.
- The existing meeting room/gallery will become a theatre to exhibit specific content relating to Miss Pink and Arrernte culture, and to possibly be available for community purposes.
- The existing commercial kitchen will be expanded into the existing servery space and will serve the outdoor events space.
- A separate kitchenette will be available for events held in the building.
- The external cold store will be removed altogether, as it will not be required when a permanent concessionaire is not operating in the kitchen.
- The HVAC (heating, ventilation and cooling) system for this building is near the end of its useful life and will be replaced in the refurbishment. An exception to this is the extraction system in the commercial kitchen which was replaced with a fully compliant system in 2017.
- The main café for the site will be located in the new VC. This concessionaire will have the option of operating a 'satellite' café function from the existing commercial kitchen at the MOPC at peak periods, serving a minimal range of refreshments such as coffee, cold drinks and cake. Current peak café times are from April to September.
- The roof water from the MOPC will be collected in eaves gutters and discharged directly into the existing pond system immediately to the east.
- It is recommended that toilets for this building remain within the footprint of the existing building, in either their current location or in another space. This strategy will minimise the extent of built facilities in relation to the natural/botanical features of the site which is an important relationship to maintain, especially in this part of the Garden. The stand-alone building will have the status of a pavilion, whereas any increase in the number of buildings will tend to dominate the surrounding area.

Refer to plans following:



EXISTING BUILDING – CURRENT USE



EXISTING BUILDING – PROPOSED PLAN

VISITOR CENTRE (VC)

The proposed visitor centre will relocate the main administrative functions and initial visitor contact point and facilities closer to the entry point to the Garden. It is proposed to be two individual buildings with a courtyard between offering a high-amenity open space for visitors and staff.

As the proposed site for the VC is subject to flooding, the facility will be designed with a finished internal floor height 1.0m above existing ground level. This elevation will be achieved with localized benching of the footprint of the VC buildings and the adjoining courtyard. This proposed level to be confirmed.

The two buildings will be roughly divided into visitor functions in one building and staff functions in the other. For planning purposes the buildings are designated VC1 and VC2.

Building VC1 will house:

- A visitor arrival point/foyer
- A café with commercial kitchen including a cold store, with the café able to host medium size functions
- A souvenir and gift shop connected with the café
- An interpretive display
- Toilets for public use
- A cleaners' store
- Storage adjacent to the café for furniture and minor equipment
- A generous verandah, possibly connecting VC1 and VC2. It will be a seating area for the café and available for general public use.

Building VC2 will house:

- An open plan administrative office
- One enclosed office for the curator/manager
- A library (see notes below)
- A research office (which can be an area within an open plan office)
- A utility area for stationary, photocopier, etc
- Meeting and training room
- An archive
- A staff room with kitchenette
- Toilets for staff
- IT hub
- Storage

Library:

- At this point 80% of the collection belongs to the Australian Plant Society – Alice Springs, who hold their meetings at the Garden.
- The library's purpose is to provide a resource to staff to support the Garden, and to maintain the long-standing relationship between the Garden and the Australian Plant Society.
- It will be managed and controlled by Garden staff. Plant Society members can borrow from the library collection.
- The library will be a staff resource and not available for general public access.
- It can be located in the general open office area

WORK DEPOT & STORAGE

The work depot will have a finished floor level built approximately 300mm above existing ground level to be above the Q100 flood level. This level to be confirmed.

The depot will store equipment and furniture needed for the events space to be developed in the existing carpark area. These may include chairs, marquee/s, lights, a generator, and a portable stage/platform, and will be stored on trailers for convenient delivery to the events area.

It is anticipated that the depot will be located within a secure yard with hardstand.

The work depot will include:

- One office for the Gardens Manager
- Meeting and training area
- Lunchroom and locker area
- Toilets
- Storage – tools
- Storage – materials
- Storage – equipment for events area, see note above.
- Storage – vehicles
- The water filter equipment for the site

EVENT SPACE

The existing carpark will be developed as a space for larger outdoor events. Temporary toilets will be brought in to suit each event. A temporary stage and/or marquees may also be used for events and will require access to electrical power. Equipment owned by the Garden and used in the events area will be stored at the work depot.

FLOODING

Alice Springs is located on the flood plain of the Todd River. The Garden's location adjoining the river make parts of the Garden subject to inundation in a peak rain event, and also subject to high velocity water flows.

The proposed Visitor Centre in particular will be exposed to flood waters. To manage this risk the footprint of the two visitor centre buildings and the courtyard between them will be benched to bring the finished internal floor levels above the estimated Q1:100 flood level. Where necessary the edges of the benched area will be designed to resist the impact of high-velocity water flows.

Information available at time of writing indicates that the Q100 level at the proposed site for the visitor centre is 0.75m above existing ground level. Therefore a suitable finished internal floor height is 1.0m above existing ground level. As non-residential buildings are not required to be constructed above Q100 flood levels in Alice Springs, the measures adopted to deal with flood issues are at the discretion of the Garden. Therefore the proposed extent of benching will be reviewed against budget and accessibility issues, noting that a proactive strategy in dealing with flood issues will contribute to future risk management and asset protection.

The proposed work depot may also be subject to flooding in a Q100 rain event, but to a lesser extent than the proposed visitor centre.

BOUNDARIES AND LOT CONSOLIDATION

The Garden's operational area covers two individual lots:

- Lot 1286 which contains most of the existing development including the Garden entry, internal driveway, rammed earth building and various shade structures. This lot is listed under the NT Heritage Act.
- Lot 1325 is a larger L-shaped lot that wraps around Lot 1286 and contains Tharrarletneme (also known as Annie Meyer Hill). This entire lot is listed as a sacred site under the NT Aboriginal Sacred Sites Act.

This does not present significant practical difficulties for the Garden's operations, except in the case of the existing building. While the existing building is located in the 'middle' of the Garden, it is in fact located very close to or possibly over the adjoining boundary of the two lots. This presents difficulties in obtaining building approvals for alterations to the building, and also invokes the need to obtain approvals under the differing protections of the two lots – the NT Heritage Act (Lot 1286) and the NT Aboriginal Sacred Sites Act (Lot 1325).

As the existing building and the proposed visitor centre and work depot are, or will all be located close to existing lot boundaries, a survey of boundaries by a licensed surveyor is highly recommended. A professional survey may be mandated by a building certifier when the buildings are designed and approved.

This survey can also provide essential information on existing levels, services and features in the areas proposed for development. It may help the Garden's other planning activities such as paths, drainage and planting to extend a survey to map all levels across the entire area in which the Garden operates.

SUSAN DUGDALE & ASSOCIATES

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OPBG MASTERPLAN - BUILDINGS & FACILITIES

Issue A - 1st March 2018

EXISTING BUILDING/MISS OLIVE PINK CENTRE	
<i>New functions for existing internal space:</i>	<i>area</i>
<i>Refer to attached plan</i>	
Theatrette	64.0
Kitchen	42.0
MOPC Education Room	51.0
Toilets	23.0
Store	4.0
SUBTOTAL:	184.0
Plus wall thickness:	28.0
TOTAL ENCLOSED AREA:	212.0
<i>Existing covered areas:</i>	140.0

VISITOR CENTRE - VC1	
<i>Internal space:</i>	<i>optimum area</i>
Visitor arrival point/foyer	8.0
Souvenir and gift shop	15.0
Café - public area	60.0
café - work area	50.0
Interpretive display	60.0
Cleaner's store	2.0
Public WCs	35.0
Storage	12.0
SUBTOTAL:	242.0
Plus 5% circulation:	12.1
SUBTOTAL:	254.1
Plus 8% plant room:	20.3
SUBTOTAL:	274.4
Plus 5% wall thickness:	13.7
TOTAL ENCLOSED AREA:	288.1
<i>Covered areas:</i>	
Arrival shaded area	24.0
Verandah	80.0
Total covered area:	104.0

VISITOR CENTRE - VC2	
Internal space:	optimum area
Open plan administrative office	40.0
with research hub	6.0
with library	9.0
Manager/curator office	12.0
Meeting/training room	54.0
Office utility area	6.0
Staff room with kitchenette	12.0
Staff toilets	9.0
IT hub	5.0
Archive	9.0
Storage	9.0
	SUBTOTAL: 171.0
	Plus 10% circulation: 17.1
	SUBTOTAL: 188.1
	Plus 8% plant room: 15.0
	SUBTOTAL: 203.1
	Plus 5% wall thickness: 10.2
	TOTAL ENCLOSED AREA: 213.3
Covered areas:	
Refer to VC1 areas above	0.0

WORK DEPOT	
Internal space - habitable/air conditioned:	optimum area
Office	12.0
Work meeting & training area	54.0
Lunch room & lockers	15.0
WCs	9.0
Storage	6.0
	SUBTOTAL: 96.0
	Plus 10% circulation: 9.6
	SUBTOTAL: 105.6
	Plus 8% plant room: 8.4
	SUBTOTAL: 114.0
	Plus 5% wall thickness: 5.7
	TOTAL ENCLOSED AREA: 119.8
Internal space - nonhabitable/not air conditioned:	
Storage - tools	20
Storage - materials & equipment	40
Storage - event space equipment	40
Total nonhabitable area:	100.0
Covered areas:	
Site water filter	4.0
Lockup for 2 OPBG vehicles	36.0
Verandah/arrival/gathering point	15.0
Total covered area:	55.0

APPENDIX C - NEW BUILT FACILITIES COST PLAN

MASTER PLAN COST ESTIMATE

AUGUST 2020

OLIVE PINK BOTANIC GARDENS

27 TRUNCKS ROAD ALICE SPRINGS NT

Prepared For

Clouston

Prepared By

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Project number

16328

Submitted on

14/08/2020

OLIVE PINK BOTANIC GARDENS - MASTERPLAN COST ESTIMATE - AUG 2020

Total Cost Summary

GFA: Gross floor area
Rates current at March 2018

Level	Zone	GFA m ²	Cost/m ²	Total Cost
A	MISS OLIVE PINK CENTRE	352	\$1,996	\$702,606
B	VISITOR CENTRE - VC1	392	\$6,381	\$2,501,195
C	VISITOR CENTRE - VC2	317	\$3,671	\$1,163,620
D	WORK DEPOT	275	\$3,236	\$889,935
Total Cost		1,336	\$3,935	\$5,257,356

OLIVE PINK BOTANIC GARDENS - MASTERPLAN COST ESTIMATE - AUG 2020

Item Details

Rates current at March 2018

Item	Description	Unit	Qty	Rate	\$
A	MISS OLIVE PINK CENTRE	GFA 352 m2	Cost/m2	\$1,996	
	MO MISS OLIVE PINK CENTRE				
	1 Demolish internal walls and doors	m2	168.00	25.00	4,200
	2 Form opening in external wall for new single door	No	1.00	900.00	900
	3 Form opening in internal wall for new walkthrough	No	1.00	1200.00	1,200
	4 Block up internal single door opening	No	1.00	800.00	800
	5 Refurbish existing male / female toilets	m2	17.00	600.00	10,200
	6 Change existing space for new MOPC Education Room	m2	51.00	1500.00	76,500
	7 Change existing space for new 'satellite' cafe kitchen	m2	42.00	800.00	33,600
	8 Change existing space for new theatrette	m2	64.00	1000.00	64,000
	9 Change existing space for new store	m2	4.00	500.00	2,000
	10 Change existing space for new DA WC	m2	4.00	4500.00	18,000
	11 Replace existing HVAC system	m2	166.00	350.00	58,100
	12 Lighting and power reconfiguration and upgrade to suit new format internal	m2	184.00	100.00	18,400
	13 Upgrade external lighting to covered areas	m2	140.00	30.00	4,200
	14 Paint columns to covered areas	No	26.00	100.00	2,600
	15 New eave gutters and downpipes	m2	342.00	18.00	6,156
	16 Miscellaneous painting works	Item			3,000
	17 Miscellaneous demlition and refurbishment works	Item			5,000
	18 Hard Landscaping: Re-paving open areas adjacent to building	m2	450.00	115.00	51,750
	Element MO total			1,024/m2	360,606
PR	PRELIMINARIES				
	1 Head contractors preliminaries, on-costs and mobilisation	Item			54,000
	2 Head contractors margins and profit	Item			38,000
	Element PR total			261/m2	92,000
CT	CONTINGENCY ALLOWANCES				
	1 Project Design Contingency @ 10%	Item			45,000
	2 Project Construction Contingency @ 10%	Item			50,000
	Element CT total			270/m2	95,000
ES	ESCALATION				
	1 Escalation for works to commence end of 2025	Item			61,000
	Element ES total			173/m2	61,000
	Page total				608,606

OLIVE PINK BOTANIC GARDENS - MASTERPLAN COST ESTIMATE - AUG 2020

Item Details

Rates current at March 2018

Item	Description	Unit	Qty	Rate	\$
A	MISS OLIVE PINK CENTRE	GFA 352 m2	Cost/m2	\$1,996	Cont'd
	PF	PROFESSIONAL FEES			
	1	Professional design consultant fees	Item		55,000
	2	Professional consultant fees during construction	Item		20,000
	3	OPBG Administration costs	Item		14,000
		Element PF total		253/m2	89,000
	YY	SPECIAL PROVISIONS			
	1	Statutory fees and charges	Item		5,000
		Element YY total		14/m2	5,000
		A MISS OLIVE PINK CENTRE Total			702,606

OLIVE PINK BOTANIC GARDENS - MASTERPLAN COST ESTIMATE - AUG 2020

Item Details

Rates current at March 2018

Item	Description	Unit	Qty	Rate	\$
B	VISITOR CENTRE - VC1				
	VC VISITOR CENTRE - VC1				
	1 Clear site	m2	471.00	5.00	2,355
	2 Building pad 1.0m high	m2	392.00	95.00	37,240
	3 Visitor arrival point / foyer	m2	8.00	3250.00	26,000
	4 Souvenir and gift shop	m2	15.00	2250.00	33,750
	5 Cafe - public area	m2	60.00	2180.00	130,800
	6 Cafe - work area	m2	50.00	2980.00	149,000
	7 Interpretive display area	m2	60.00	2750.00	165,000
	8 Cleaner's store	m2	2.00	2150.00	4,300
	9 Public WC	m2	35.00	3650.00	127,750
	10 Storage	m2	12.00	1150.00	13,800
	11 Circulation space	m2	12.00	1450.00	17,400
	12 Plant room	m2	20.00	1650.00	33,000
	13 Wall thickness	m2	14.00	600.00	8,400
	14 Arrival shaded area	m2	24.00	850.00	20,400
	15 Verandah	m2	80.00	650.00	52,000
	16 Courtyard including hard & soft landscaping and 800mm fill platform	m2	1000.00	335.00	335,000
	17 Landscaped walkways/ramps to benched levels	m2	48.00	650.00	31,200
	18 New furniture, fittings and equipment including IT	m2	254.00	450.00	114,300
	Element VC total			3,321/m2	1,301,695
PR	PRELIMINARIES				
	1 Head contractors preliminaries, on-costs and mobilisation	Item			198,000
	2 Head contractors margins and profit	Item			135,000
	Element PR total			849/m2	333,000
CT	CONTINGENCY ALLOWANCES				
	1 Project Design Contingency @ 10%	Item			163,500
	2 Project Construction Contingency @ 10%	Item			180,000
	Element CT total			876/m2	343,500
ES	ESCALATION				
	1 Escalation for works to commence end of 2023	Item			198,000
	Element ES total			505/m2	198,000
PF	PROFESSIONAL FEES				
	1 Professional design consultant fees	Item			196,000
	Page total				2,372,195

OLIVE PINK BOTANIC GARDENS - MASTERPLAN COST ESTIMATE - AUG 2020

Item Details

Rates current at March 2018

Item	Description	Unit	Qty	Rate	\$
B	VISITOR CENTRE - VC1 GFA 392 m2 Cost/m2 \$6,381 Cont'd				
	PF PROFESSIONAL FEES Cont'd				
	2 Professional consultant fees during construction	Item			72,000
	3 OPBG Administration Costs	Item			49,000
	Element PF total			809/m2	317,000
	YY SPECIAL PROVISIONS				
	1 Statutory fees and charges	Item			8,000
	Element YY total			20/m2	8,000
	B VISITOR CENTRE - VC1 Total				2,501,195

OLIVE PINK BOTANIC GARDENS - MASTERPLAN COST ESTIMATE - AUG 2020

Item Details

Rates current at March 2018

Item	Description	Unit	Qty	Rate	\$
C	VISITOR CENTRE - VC2	GFA 317 m2	Cost/m2	\$3,671	
	VR VISITOR CENTRE - VC2				
	1 Clear site	m2	381.00	5.00	1,905
	2 Building pad 1.0m high	m2	317.00	95.00	30,115
	3 Open plan administrative office	m2	40.00	1850.00	74,000
	4 Open plan research hub	m2	6.00	2350.00	14,100
	5 Open plan library	m2	9.00	2950.00	26,550
	6 Manager / curator office	m2	12.00	2350.00	28,200
	7 Meeting / training room	m2	54.00	2100.00	113,400
	8 Office utility area	m2	6.00	1890.00	11,340
	9 Staff room with kitchenette	m2	12.00	2180.00	26,160
	10 Staff toilets	m2	9.00	3650.00	32,850
	11 IT hub	m2	5.00	2850.00	14,250
	12 Archive	m2	9.00	2200.00	19,800
	13 Storage	m2	9.00	1150.00	10,350
	14 Circulation space	m2	17.00	1450.00	24,650
	15 Plant room	m2	15.00	1650.00	24,750
	16 Wall thickness	m2	10.00	600.00	6,000
	17 Arrival shaded area	m2	24.00	850.00	20,400
	18 Verandah	m2	80.00	650.00	52,000
	19 New furniture, fittings and equipment including IT	m2	188.00	400.00	75,200
	Element VR total			1,912/m2	606,020
	PR PRELIMINARIES				
	1 Head contractors preliminaries, on-costs and mobilisation	Item			91,000
	2 Head contractors margins and profit	Item			63,000
	Element PR total			486/m2	154,000
	CT CONTINGENCY ALLOWANCES				
	1 Project Design Contingency @ 10%	Item			76,000
	2 Project Construction Contingency @ 10%	Item			83,600
	Element CT total			503/m2	159,600
	ES ESCALATION				
	1 Escalation for works to commence end of 2023	Item			92,000
	Element ES total			290/m2	92,000
	PF PROFESSIONAL FEES				
	1 Professional design consultant fees	Item			91,000
	Page total				1,102,620

OLIVE PINK BOTANIC GARDENS - MASTERPLAN COST ESTIMATE - AUG 2020

Item Details

Rates current at March 2018

Item	Description	Unit	Qty	Rate	\$
C	VISITOR CENTRE - VC2 GFA 317 m2 Cost/m2 \$3,671 Cont'd				
	PF PROFESSIONAL FEES Cont'd				
	2 Professional consultant fees during construction	Item			33,000
	3 OPBG Administration Costs	Item			23,000
	Element PF total			464/m2	147,000
	YY SPECIAL PROVISIONS				
	1 Statutory fees and charges	Item			5,000
	Element YY total			16/m2	5,000
	C VISITOR CENTRE - VC2 Total				1,163,620

OLIVE PINK BOTANIC GARDENS - MASTERPLAN COST ESTIMATE - AUG 2020

Item Details

Rates current at March 2018

Item	Description	Unit	Qty	Rate	\$
D	WORK DEPOT GFA 275 m2 Cost/m2 \$3,236				
	WD WORK DEPOT				
	1 Clear site	m2	330.00	5.00	1,650
	2 Building pad 0.3m high	m2	275.00	55.00	15,125
	3 Office	m2	12.00	1780.00	21,360
	4 Work meeting and training area	m2	54.00	1950.00	105,300
	5 Lunch rooms and lockers	m2	15.00	2180.00	32,700
	6 WC's	m2	9.00	3650.00	32,850
	7 Storage	m2	6.00	1150.00	6,900
	8 Circulation	m2	10.00	1450.00	14,500
	9 Plant room	m2	8.00	1650.00	13,200
	10 Wall thickness	m2	6.00	600.00	3,600
	11 Storage for tools: internal no AC / non habitable	m2	20.00	1050.00	21,000
	12 Storage for materials & equipment: internal no AC / non habitable	m2	40.00	950.00	38,000
	13 Storage for event space equipment: internal no AC / non habitable	m2	40.00	950.00	38,000
	14 Site water filter covered area	m2	4.00	750.00	3,000
	15 Lockup for 2 OPBG vehicles	m2	36.00	950.00	34,200
	16 Verandah/arrival/gathering point	m2	15.00	650.00	9,750
	17 Uncovered area/hardstand/vehicle turning/loading	m2	200.00	300.00	60,000
	18 Furniture, fittings and equipment including IT	m2	106.00	300.00	31,800
	Element WD total			1,756/m2	482,935
	PR PRELIMINARIES				
	1 Head contractors preliminaries, on-costs and mobilisation	Item			73,000
	2 Head contractors margins and profit	Item			50,000
	Element PR total			447/m2	123,000
	CT CONTINGENCY ALLOWANCES				
	1 Project Design Contingency @ 10%	Item			61,000
	2 Project Construction Contingency @ 10%	Item			67,000
	Element CT total			465/m2	128,000
	ES ESCALATION				
	1 Escalation for works to commence mid of 2021	Item			37,000
	Element ES total			135/m2	37,000
	Page total				770,935

OLIVE PINK BOTANIC GARDENS - MASTERPLAN COST ESTIMATE - AUG 2020

Item Details

Rates current at March 2018

Item	Description	Unit	Qty	Rate	\$
D	WORK DEPOT GFA 275 m2 Cost/m2 \$3,236 Cont'd				
	PF PROFESSIONAL FEES				
	1 Professional design consultant fees	Item			70,000
	2 Professional consultant fees during construction	Item			26,000
	3 OPBG Administration Costs	Item			18,000
	Element PF total			415/m2	114,000
	YY SPECIAL PROVISIONS				
	1 Statutory fees and charges	Item			5,000
	Element YY total			18/m2	5,000
	D WORK DEPOT Total				889,935

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APPENDIX D - GARDEN BED AND PLANTING PLAN

Garden Bed and Planting Plan

Incorporating Appropriate Arid Zone Sustainable Techniques into the Garden

For

Olive Pink Botanic Garden – the People’s Garden

The original version was produced in March 2016 by



August 2020

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PART ONE – OBSERVATIONS AND PRIORITIES

Introduction

This Garden Bed and Planting Plan fits within the 'Olive Pink Botanic Garden – the People's Garden: Master Plan'.

The design incorporates a staged development process that can act as a working document for the Trustees of the Gardens, and to provide guidance government with particular reference to future funding applications. The key aim is to further the development of the Garden as an exceptional regional arid zone botanic garden that has a clear point of difference to the Alice Springs Desert Park.

An extensive consultation process has been undertaken allowing the Trustees, Traditional Custodians, Garden volunteers, visitors to the Garden and the broader Alice Springs community to have input into the design and the staged development process.

This design document proposes to:

- Protect the heritage value of the garden, respect the significant Arrernte cultural site(s);
- Honour the legacy of Miss Olive Pink;
- Improve visitation access and movement throughout the Garden;
- Promote specific existing habitats that give strong definition to the vegetation collections found in Central Australia; and
- Compliment and enhance the upgraded infrastructure recommended by CLOUSTON Associates, including:
 - Facilitating an improved experience and sunset viewing from Tharrarletneme;
 - Accommodating an events/activities area to cater for events such as fairs and Plant Sale Markets and the Writer's Festival;
 - Providing improved vehicular movement and parking;
 - Facilitating improved wheelchair and pedestrian movement throughout the entire Garden;
 - Developing a service area able to meet the needs of the Garden; and
 - Promoting the traditional Arrernte Custodian's linkages and heritage to the Garden.

The Olive Pink Botanic Garden is a wonderful community resource, attracting visitors from national and international locations, as well as the local Alice Springs community.

The Garden is positioned in or bounded by Tharrarletneme (Annie Meyers Hill) and other foothills including Nurses Hill and the Todd River – an ideal setting that mirrors the magic of the country typical of Central Australia. By strengthening the focus on the existing garden collections it will give the Garden a stronger definition, a better visitor experience, and allow new plant collections. It will be necessary to redevelop particular plant collections (e.g. the Sand Dune habitat) to suit the soil types and topography naturally occurring within the grounds of the Olive Pink Botanic Garden.

Severe resource constraints over the long term must be addressed if the Garden is ever able to fully develop.

Terms of Reference

1. Conduct a preliminary review of the grounds of the Olive Pink Botanic Garden and undertake a consultation process with CLOUSTON Associates, Trustees of the Garden and the Curator and employees of the Olive Pink Botanic Garden and others as appropriate.
2. Review and rationalize the number of gardens identified within the Garden.
3. Propose design options to strengthen the impact of each habitat or section of the Garden.
4. Reinforce and develop the potential of the Garden as a user-friendly educational and recreational resource for locals, interstate and overseas visitors.
5. Provide guidance for a planting schedule that can be implemented over an extended period.

Objectives

This Garden Bed and Planting Plan (Appendix D) will provide Central Australian specific plant and horticulture knowledge in order to:

- Promote the preservation and presentation of Central Australian plants consistent with their natural habitat;
- Incorporate design elements to magnify the potential and impact of Central Australian plants; and
- Incorporate arid zone gardening techniques to promote an appropriate approach to cultivating gardens in an arid zone.

Overview and Priorities

The Olive Pink Botanic Garden should be developed as an inclusive people-friendly garden presenting the widest collection of Central Australian plants within themed garden collections, supported by appropriate arid zone gardening techniques.

The Garden is small in size however it has the capacity to display a variety of planting arrangements within the grounds. Its natural setting provides significant opportunities to develop and display a range of garden collections, leading to in a garden of excellence that also facilitates and demonstrates best practice within an arid zone.

A Euro management fence must be given number one priority status before significant new planting can be introduced into the Garden.

Other key concepts include:




- Limiting the number of identified collections;
- Strengthening the impact of the vegetation displays;
- Mass plantings should feature more within the Garden, thus promoting a positive impact through seasonal floral displays and foliage variations.


- Increasing the shade canopy particularly for the main loop walkway to be developed through the Garden and identified as the Miss Olive Pink Walk Trail;
- Continuing to add to the botanical diversity of plant species of Central Australia on display within the Garden;
- Giving clearer definition to the genus on display
- Presenting elements of local Indigenous culture associated with plants and living in the desert;
- Water harvesting incorporated into the Garden's overall design.




With growing mature trees/shrubs being a long term proposition, priority status also needs to be given to cultivating a collection of plants ready for planting once the Euro fencing has been installed. Some of these plants may take several years to grow in the nursery before being ready for planting.

Undertaking the necessary earth works to construct the Miss Pink Walk Trail and pathways within the Garden should have priority so that plantings can follow. The development of the Arrernte Walking Trails also needs to be given high priority.



PART TWO - COMMENTS AND RECOMMENDATIONS



AREA	COMMENTS & INITIAL RECOMMENDATIONS
<p><u>Todd River Biodiversity Planting</u> (Linear Strip from Tuncks Road to the Orange Peril Walk Bridge, outside the boundary of Garden)</p>  <p>The new Todd River walkway provides a strong focus encouraging people to walk towards the Olive Pink Botanic Garden.</p>  <p>Recent plantings along the Todd River embankment strengthen the link with the Garden.</p>	<ul style="list-style-type: none"> • The Todd River to the west of the Garden presents opportunities both as a riverine environment and by allowing the Garden to extend beyond its defined boundaries through partnerships with the NT Government and the Alice Springs Town Council. • Recent development of the Todd River walkway promoting pedestrian traffic should increase the flow of pedestrians from the centre of town into the Garden. • Development of a formal pathway from the main walkway to the side entrance will promote the side entrance into the Garden. • Development of the side entrance to make a stronger inviting statement with the intent of drawing people into the Garden. • Considerable resources need to be devoted to the Friends of the Garden Group, thereby ensuring it as an active body able to support further plantings and development of the site along with being able to work on the important and ongoing issue of Buffel management. • Further opportunities exist to protect the mature trees that line the river and to undertake the reintroduction of riverine plant species that once inhabited the banks of the Todd River within the town boundaries.
<p><u>Amenity Plantings around Front Entrance</u> and proposed new main entry, café & visitor centre along with development of gardens around the proposed Miss Olive Pink Centre.</p>  <p>A bold confident inviting statement encouraging visitors to enter the Garden.</p>	<ul style="list-style-type: none"> • The front entry signage is striking, attractive and gives clear definition, however the immediate grounds could provide a stronger, more definitive and attractive entry statement, compelling people to come into the Garden. • The plan to construct a café, toilets, children's playground and entry point on the south-western corner provides an opportunity to strengthen the concept of an exciting entry statement. • Attractive, colourful demonstrations of the use of arid zone plant species around the exterior signage and within the grounds around the building(s), playground and car park provides numerous opportunities to best demonstrate using arid zone plant species within a highly designed and integrated series of connecting gardens. • The plantings within these designated areas will have a strong sense of design utilising a range of Central Australian plant species thereby demonstrating to the public the potential use of the plant species. • The front entrance building and the Miss Olive Pink Centre provide opportunities to best demonstrate the use of Central Australian plant species in a highly managed and designed amenity garden, which aligns with the concept of the reserve being a botanic garden best presenting plant species found

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 <p data-bbox="240 600 587 685">A mix of semi-mature trees provide an ideal setting for developing an attractive arid garden surrounding the proposed new entrance building to the Garden.</p>	<p data-bbox="746 324 1046 351">throughout Central Australia.</p> <ul data-bbox="703 356 1425 600" style="list-style-type: none"> <li data-bbox="703 356 1425 477">• The amenity gardens are also able to demonstrate best practice of gardening within an arid zone by demonstrating water harvesting, appropriate irrigation systems and the utility of local resources synonymous with Central Australia. <li data-bbox="703 481 1425 600">• These gardens will be relatively high maintenance, will have a high impact factor and will provide a strong welcoming statement to patrons visiting the two main building complexes within the Garden.
<p data-bbox="209 707 587 734"><u>Tuncks Road Verge Development</u></p>	<ul data-bbox="703 707 1425 981" style="list-style-type: none"> <li data-bbox="703 707 1425 891">• The car verge is to be landscaped with an attractive shade canopy of trees like <i>Acacia maconochieana</i> and an understorey of low shrubs and ground cover plant species to soften the impact of the adjoining works depot and new car park (as it is close to the entrance) and improve local amenity particularly for residents on Tuncks Road. <li data-bbox="703 896 1425 981">• Species for consideration could include <i>Rhagodia spinescens</i> as a low form ground cover and <i>Eremophila obovata</i> & <i>E. ovate</i> as a low shrub form as examples.




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<p data-bbox="209 338 606 367"><u>Proposed new Miss Pink Walk Trail</u></p>  <p data-bbox="209 656 627 741">From outside the Garden the plantings connect with the riverine habitat however from within the Garden this linear garden could be significantly uplifted providing a much bolder entry statement.</p>	<ul style="list-style-type: none"> • Immediately within the western boundary are trees planted during Olive Pink's time that link to the river habitat. Currently rather nondescript, this garden needs clearer definition. Clusters of trees and shrubs should be dispersed along the boundary with sections between cleared trees bordered only by tall tree trunks. This will allow for sight lines through to the Todd River while walking through the Garden, which helps to incorporate the Todd River into the Garden. • It is important that any pathways within the Garden are constructed from local materials that demonstrate an empathy with the Central Australian landscape. • Orange/red/pink road base/paving/concrete is of a colour consistent with the landscape. Orange road base can be compacted suitable for pedestrian traffic and remains quite firm even during periods of rain. Orange road base is my favoured material to best meet path requirements in the Garden. • The proposed Miss Pink Walk Trail is to be used for transporting visitors and materials as required, and by pedestrians. • The proposed road/pathway will be lined with shady trees to provide amenity for visitors to the Garden. • It is proposed that tree species to be used have demonstrated their capacity to grow within the Garden along the proposed road route. • Tree species will include <i>Eucalyptus gongylocarpa</i>, <i>Eucalyptus intertexta</i>, <i>Eucalyptus coolabah arida</i>, <i>Acacia estrophiolata</i>, <i>Corymbia aparrerinja</i>, <i>Grevillea striata</i>, <i>Eucalyptus gilleni</i>, <i>Eucalyptus thozetiana</i>, <i>Eucalyptus minniritchi</i>, <i>Eucalyptus normantonensis</i> & <i>Corymbia opaca</i>. • It is proposed that clusters of a particular tree species and further group plantings of a particular tree species and accompanying shrubs and ground covers be a feature of the planting pattern. • Between the road and the western boundary, it is proposed that tree and shrub clusters be dispersed along the boundary with cleared areas between housing only singular erect trees allowing for site lines to be preserved. This will allow visitors in the Garden to maintain a visual contact with the Todd River and accompanying riverine environment.
<p data-bbox="209 1532 555 1561"><u>Staff Facilities and Works Area</u></p>  	<ul style="list-style-type: none"> • The existing facilities and work area is close to the front entrance of the Garden. It is important that the impact of this facility be kept to a minimum by installing an environmentally friendly 'invisible' fence and planting a screen barrier shielding this zone from visitors to the Garden. The works facility needs to be unnoticeable. • This designated area is to be utilised only as a temporary transfer facility for landscape materials with an underlying policy of only transporting landscape materials directly onto the site where they are being used. • <i>Atriplex nummularia</i> (Old Man Saltbush) currently growing around the facility will in time come to hide the works facility. • Atriplex, Senna and Melaleuca are three species that are the most suitable as screening plants for the situation.


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<p>The location of the current storage and works facility will remain, however it needs to be screened so it is not visible to the public.</p>	<ul style="list-style-type: none"> It is recommended that the designated area be extended in a westerly direction to encompass the existing entrance road, and 5m north. This extension will have little impact on the surrounding gardens.
<p><u>Sacred Site, Acacia Latzii Collection and Saline/Alkaline Area</u></p>	<ul style="list-style-type: none"> East of the proposed car park is a sacred site, a relatively high saline/alkaline area and a small sand dune demonstration garden. This section of the Garden is currently quite underwhelming in its current state however has magnificent potential to be redeveloped. While not documented as a sacred site the emerging horizontal rock strata does connect with the eastern hill slope and has been noted verbally as being an area of significance. Appropriate development would allow for the preservation and promotion of this small but significant sacred site. Accordingly, discussion should occur with Aboriginal Custodians prior to any development of the area. Tucked away in a corner next to the Staff amenities and storage area is a collection predominantly of <i>Acacia latzii</i>. This area could be further planted out with other rare species suitable for the location, or alternatively more <i>Acacia latzii</i> could be planted. Where a single rare species has been planted signage needs to accompany the collection providing detail on the species. Alternatively and/or accompanying the signage, literature should be made available on the plant species, literature that can be read by visitors walking the Garden. Currently one <i>Acacia peuce</i> exists in this zone. It is possible a smaller scale loop path could be developed, inviting people into the collection to examine these rare species. With respect to the saline area, <i>Atriplex nummularia</i> (Old Man Saltbush) currently is the dominant plant species. Other salt tolerant plant species should be introduced into this zone to best demonstrate plant species able to be grown successfully in a highly alkaline and saline situation. Plant species best suited to this site would be those able to cope with a difficult location and that can work with the local conditions. This site has the potential to demonstrate best practice and provide examples of addressing similar alkaline/saline situations elsewhere in Central Australia. <i>Acacia latzii</i> (existing), <i>Acacia maconochieana</i> (proposed car park species), <i>Atriplex spongiosa</i> (Little Pop Bush) and other <i>Atriplex</i> species along with some salt tolerant <i>Acacia</i> and <i>Eremophila</i> species could be introduced to compliment the landscape. <i>Enchylaena tomentosa</i> (Ruby Saltbush) can always be relied upon to thrive in difficult conditions, reproduce naturally and is a bird attracting and recognised bush tucker plant species. The currently identified saline area could be expanded to include the flat flood-out zone bordering the southern edge of the <i>Corymbia aparrerinja</i> plantings.



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<p data-bbox="209 338 630 398"><u>Managing Water Run-off from the Hill Slopes</u></p>  <p data-bbox="236 674 587 757">Water run-off from Annie Meyers Hill could become an important element in the future development of the Garden creating a gorge and riverine habitats.</p>  <p data-bbox="220 1133 579 1216">Limiting erosion and clogging up of drains alongside maximum utilisation of the natural rainfall will provide enormous benefits to the Garden.</p>	<ul data-bbox="699 327 1426 1942" style="list-style-type: none"> • Drainage management systems need to be given priority, turning immediate, negative environmental issues into positives by taking the problem and converting it into an asset. The systems would enable soil management and water harvesting opportunities that would flush the Garden and provide deep soakage watering for the mature plant species, thereby ensuring their long term sustained healthy growth. • With the Garden dominated largely by a surrounding ring of hill slopes, significant rainwater run-off presents problems that can be turned into a positive asset to promote the long-term health of the Garden. • The aim is to limit the erosion caused by rainwater run-off and subsequently capture as much rainwater as possible and utilise this asset to increase the Garden's sustainability. • Artesian water pumped into Alice Springs and used in the Garden is both alkaline and saline, potentially impacting on the long-term health of many plant species within the Garden that in their natural habitat enjoy neutral or acidic pH soil conditions. • The aim is to retain the rainwater on site as it has a low pH and is essential in addressing this problem. • The large scale fertigation system recently installed will permit designated soil treatments to move through the drip irrigation systems installed throughout the Garden. This is an essential step toward providing more ideal growing conditions for the introduced Central Australian plant species now found within the Garden. • The current Curator, Board and technical advisors (such as Peter Latz) must be congratulated for being innovative in their approach to addressing current and long-term issues likely to impact on the health of the Garden. • It is recommended that a series of low impact water channels, concrete coloured spillways over pathways, physical barriers or 'filter systems' be constructed to hold back soil, organic vegetative materials and nutrient sources like kangaroo/wallaby and Euro dung. • A series of ponding banks and ponds should be developed to capture water run-off that will subsequently seep through the soil providing a refreshing deep watering to the plant species within the Garden. • A detailed eco-engineering map needs to be developed that documents all water run-off channels and the network of drainage lines that results in rainwater being collected in larger sumps to feed selected plant collections within the Garden. This should be part of an additional report. • Materials generated within the Garden are currently being used to limit soil erosion and slow water run-off. Alternative methods should also be explored that are less obvious within the landscape and don't look so manufactured. • Reference to the Australian Landcare Council and Greening Australia may unearth examples of innovative approaches to managing erosion while also introducing larger scale water harvesting techniques into the landscape.




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<p data-bbox="209 338 512 394"><u>Developing the Sand Dune Collection</u></p>  <p data-bbox="229 728 608 831">With the exception of a couple of plant species this does not reflect in any way a sand dune habitat. The opportunity exists to create some bold red earth dunes and introduce plant species that truly reflect the sand dune habitat.</p>	<ul data-bbox="699 327 1426 1346" style="list-style-type: none"> • Red sand dunes are synonymous with Central Australia and are a sought-after tourist experience. Expanding the current sand dune habitat by close to 100% would provide a more powerful and lasting image. • The red sand dune area could be expanded in an eastern, north-eastern direction and to a lesser extent in a western direction from the current dunes, located to the east of the proposed car park. There is enormous potential to develop this section of the Garden. • Considerable quantities of 'virgin' red dune soil will need to be imported to support healthy plant growth along with necessary site preparations prior to importing such materials. • The opportunities for plant species cultivation are considerable once appropriate earth works are undertaken and innovative irrigation and water harvesting methods are incorporated into the garden design, all working towards presenting an environment that maintains a low pH to support sand dune healthy plant growth. • The strengthening of the sand dune habitat with a select collection of trees that thrive in this situation, a range of seasonable wildflowers that provide colourful and exciting visual displays along with small perennial shrubs, herbaceous plant species and grasses would provide a powerful, colourful demonstration of the beauty of the sand dune desert environment. • This habitat will possibly need a slightly higher degree of attention to ensure it presents well. Currently two quite well developed <i>Xanthorrhoea thornstonii</i> or Desert Grass Trees are growing in the dunes however most people could be forgiven for not noting them. • A backdrop of <i>Eucalyptus gamophylla</i> (Blue Mallee) towards the southern boundary may provide a colourful foliage contrast to the sand dune setting.
<p data-bbox="209 1402 544 1435"><u>Developing a Spinifex Garden</u></p>  <p data-bbox="240 1738 596 1823">What impact if the hillside was planted out by a mass of spinifex in flower/seed waving in the wind, not simply a few plants that currently are quite underwhelming.</p>	<ul data-bbox="699 1391 1426 1946" style="list-style-type: none"> • Currently, isolated Spinifex plants can be found in at least four/five locations within the Garden, with one site currently identified as the Spinifex Garden. All plantings are small in scale and low in impact. • It is recommended that the current Spinifex Garden be developed on a much larger scale to strengthen the impact that Spinifex in flower and seed can have, utilising appropriate hillside Spinifex species. • As part of the sand dune gardens development an appropriate Spinifex species could also be introduced into the habitat to compliment the few Spinifex plants currently growing on the western side of an existing dune. • The Spinifex planting is well-placed to be a feature planting linking the sand dune collection to the hillside collection further to the east. • This would be appropriate for both the hillside and sand dune garden habitats. Different Spinifex species could be incorporated into the two habitats. There are eleven Spinifex species found in



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	<p>Central Australia. These species could be planted out in mass on the Sand Dune, Saline area and Hillside area.</p> <ul style="list-style-type: none"> • See Part Four, Section 6 for species list. • It is recommended that nursery cultivated plants be introduced on a large scale for immediate short to medium impact, while a concerted seed harvesting program be incorporated into the Garden's activities and that this seed be direct seeded to promote the expansion of the Spinifex collection. • Other feature grasses like <i>Themeda triandra</i> or kangaroo grass could be incorporated into these landscapes on the lower flats or along pathways, providing stunning drifts particularly when planted on mass.



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<p data-bbox="209 338 568 394"><u>The Southern Boundary Hillside Collection</u></p>  <p data-bbox="221 730 600 813">It would be much more impressive if this slope was planted with 40-50 <i>Callitris</i> creating a much more powerful impact than eight trees do.</p>	<ul data-bbox="700 327 1425 880" style="list-style-type: none"> • The wonderful rocky hillside that borders the southern and eastern boundaries of the Garden provides an ideal opportunity to display a vast collection of plant species from Central Australia. • The western end could feature a mass planting of predominately <i>Callitris glaucophylla</i> (Native Pine) (currently there are only eight trees) with the mass plantings of spinifex located slightly to the east. Mass planting in general needs to replace the historic practice of scattered planting of species. • The next section is well-suited to accommodate the odd planting of <i>Callitris</i> (to connect the western planting group with the eastern end plantings on the flat) accompanied by <i>Eucalyptus minniritchi</i> & <i>E. sessilis</i> with plantings of hillside <i>Sennas</i>, <i>Hakeas</i> and <i>Indigoferas</i>. • <i>Eremophila freelingii</i>, <i>Eremophila christophori</i> and <i>Dipteracanthus australasicus</i> as a mass planted foreground plant would contribute to providing colour floral displays with <i>E. christophori</i> coming in at least three floral colour forms.
<p data-bbox="209 943 552 999"><u>The Eastern Boundary Hillside Collection</u></p>	<ul data-bbox="700 927 1425 1234" style="list-style-type: none"> • <i>Callitris glaucophylla</i> dominate the foreground in the south-eastern corner with <i>Eucalyptus lucens</i> and <i>Eucalyptus orbifolia</i> providing an attractive eastern aspect. More Eucalypts could be planted for greater effect. • Once the Euros have been isolated from this section of the Garden consideration could be given to introducing complimentary plants to provide an attractive understorey. • Further to the north-eastern corner hillside Acacias may be added if deemed necessary. This section of the Garden works well as it is – a natural setting.
<p data-bbox="209 1263 408 1285"><u>Annie Meyers Hill</u></p>  <p data-bbox="225 1559 557 1597">Wonderful vistas are accessible from the top of Annie Meyers Hill.</p>  <p data-bbox="221 1861 612 1899">Walking tracks and management of Buffel grass are two priority projects on Annie Meyers Hill.</p>	<ul data-bbox="700 1247 1425 1675" style="list-style-type: none"> • Managing the presence of Buffel grass growing over the hill and improving access should be given priority. The track should be more accessible, easier to scale and upgraded to promote the pathway up the hill as both a walking and running track. This development should be given priority status. • The base and hill slopes provide a wonderful backdrop for the Garden. Further plantings of Ghost Gums along the southern base rising slightly up the slopes – following extensive consultation with Aboriginal Custodians – is recommended. • <i>Corymbia aparrerinja</i> (Ghost Gum) can be found growing on the flat and on hillsides in the Garden and can look stunning, particularly when growing on hillsides. Planting Ghost Gum trees along the southern base of Annie Meyers Hill will make for a striking planting and should be a priority planting project.





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<p><u>The Acacia Collection</u></p>	<ul style="list-style-type: none"> • With an upper high canopy cover it is possible to introduce smaller growing Acacia species providing another layer to the Garden. Some of these often frost tender Acacia species would be offered protection from the taller trees. <i>Acacia spongylophyla</i>, <i>Acacia hilliana</i> and <i>Acacia spongylophyla</i> are three examples of low growing arid zone wattles that could form part of the understory. Earth works are recommended to create ideal growing conditions. • <i>Acacia cyperophylla</i> works well when planted as a group or collection being particularly noted for its flaky red minniritchi bark. They could be planted along a proposed creek or water drainage line flowing away from the water gardens. • <i>Acacia undoolyana</i> being considered a rare, possibly threatened species could be given prominence within the Acacia collection or equally could be introduced into the rare plants collection.
<p><u>The Gorge/ Water/Riverine Gardens</u></p>  <p>The northern section of the water garden in isolation presents well as the plants develop however the concrete and poorly displayed rocks along the water feature look unnatural.</p>	<ul style="list-style-type: none"> • Opportunities exist for developing the current water feature into a gorge garden starting from the upper reaches of Annie Meyers Hill and heading onto the flat land where it would evolve into a natural water land habitat. This would become part of a riverine habitat extending through the Garden that sits within an extensive water harvesting exercise best able to capture and utilize water run-off from the surrounding hills. • The current concrete pond design is artificial and quite unnatural in its presentation. It radically needs to be remodelled to present a more natural setting while addressing issues of occupational health and safety. • The existing water holes require protective fencing. By filling these pools with sand, gravel and river pebbles the depth of water can be managed, thereby removing the necessity to have this garden fenced. By adopting this approach, it will still be possible to cultivate water plants and present attractive water plant species in a natural setting. • Consideration needs to be given to incorporating a physical structure that would contribute towards creating a protected gorge-like situation able to best display the wide range of mosses, lichens, cycads and ferns that can be found throughout Central Australia. • The gorge garden will require considerable planning in order to effectively integrate it into the overall Garden design. Extensive planning for the development of the protective structure necessary to create this environment, as well as the particularities of the elements involved both for functionality and aesthetic purposes are required. • The development of this gorge garden provides a range of exciting opportunities for the evolution of the current water garden situation into a plant collection displayed in a functional, attractive setting. • The development of the gorge collection/garden concept will need further exploration, best undertaken initially by a working group.


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<p data-bbox="209 338 480 394"><u>A Garden-Wide Riverine Environment</u></p>  <p data-bbox="212 719 579 797">Water harvesting opportunities are so little understood and provide wonderful opportunities for introducing design elements into the Garden.</p>	<ul data-bbox="699 327 1426 1216" style="list-style-type: none"> • Developing a riverine environment flowing right through the Garden that captures and utilises rainwater run-off from the surrounding hills should be given the highest priority. • Alice Springs water is alkaline. Many Central Australian plant species prefer acidic to neutral soils thus highlighting the necessity to utilise acidic rainwater. All run-off should be captured and used to the best effect to promote healthy plant growth. • Once the current water run-off lines through the Garden have been identified and mapped it should be possible to develop a series of channels and interconnecting sumps and water collection points that meander through the Garden. These systems – in the event of good rainfall – should be able to contain the run-off and keep it within the boundaries of the Garden, where it can then be effectively utilised. • This meandering water course should be developed as a natural riverine environment utilising materials consistent with a creek/river setting and characterised by creek beds and water holes best able to capture, channel and store rainwater. This will allow the rainwater to slowly seep into the top and subsoils of the Garden, thereby refreshing the soils, flushing salt build-up back down into the subsoils and giving the plants a refreshing tonic. • There has been a tendency to rely on using <i>Eucalyptus camaldulensis</i> as they are easy to grow, have massive growth rates and are visually impactful in a relatively short time, however we must look beyond this species. There are many other plant species that inhabit river/creek and flood-outs. • See Part Four, Section 10 for a species List.
<p data-bbox="209 1249 616 1272"><u>The Miss Olive Pink Centre Gardens</u></p>  <p data-bbox="212 1585 624 1709">The Bush Tomato plant (<i>Solanum ellipticum</i>) is a plant used by the Arrernte people to treat toothache. The roots are baked in ash and then placed on the aching tooth. The fruit is also an important bushfood, but can act as a laxative if too many are eaten.</p>	<ul data-bbox="699 1238 1426 1727" style="list-style-type: none"> • The gardens surrounding the proposed Miss Olive Pink Centre should be entirely re-designed to create an attractive amenity garden of great appeal that provides seasonal colour and interest. • Traditional medicinal and bush tucker plants are to be incorporated into these gardens, providing added interest for both locals and interstate and overseas visitors to the Garden. • Most bush tucker plants are seasonal, so the incorporation of them into an amenity garden where a higher degree of attention is devoted to the presentation is appropriate as the setting is particularly able to cover for their periods of dormancy. • Bush tucker and medicinal plants need to be incorporated into the Garden as appropriate with supporting information, along with relevant activities and products that support employment, industry and income generation. • See Part Four, Section 1 for a suggested species list.
<p data-bbox="209 1756 616 1812"><u>Identification, Naming and Priorities Reflected in the Garden</u></p>	<ul data-bbox="699 1744 1426 1946" style="list-style-type: none"> • The current separation of the Garden into over 40 categories needs to be simplified down to approximately 14 garden collections. • In previous years moves were made to rename the Garden, thereby removing the significance of Miss Olive Pink. The Olive Pink Botanic Garden is a legacy to the eccentric, forward-thinking anthropologist and botanist who recognized and fought


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 <p>The map above provides a simplified categorization of the collections within the Garden. There should be reflection on this along with the current categorization of the Garden and other documentation and select a simplified and easily identifiable classification of collections within the Garden.</p>   <p>Currently two garden collections have been dedicated to individuals.</p>	<p>to preserve this significant landscape. This legacy must be preserved as a priority.</p> <ul style="list-style-type: none"> • Recognition of the country within the reserve as being of considerable significance to the local Arrernte Aboriginal people must also be reflected within the development, presentation and promotion of the Garden. Close working relationships need to be maintained as the Garden continues to evolve. • Medicinal and bush tucker food plants generate enormous interest with visitors and should be recognised as important plant species for Aboriginal peoples. • The naming of individual gardens after significant participants involved with the development of the Garden needs to be re-examined. The Garden should look for a more appropriate way of recognising individual contributions. • A move away from naming garden collections after individual people should not be seen in a negative light. As the Garden ages, more people will deserve recognition. Many people deserve immediate recognition for past contributions. • Currently two garden collections have been dedicated to individuals who have made significant contributions to the Garden. Current recognition structures see gardens dedicated to individuals, signage that identifies individuals and plaques. • Instead, dedicating significant trees or presenting these valued contributors to the Garden on an honour board are options to consider. A policy position regarding the appropriate recognition of significant contributors needs to be considered and adopted.


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<p data-bbox="209 338 616 398"><u>Previous Event Area Developed into a Forest Woodland</u></p>  <p data-bbox="221 692 608 775">Opportunities exist within this area to improve infrastructure, maintain a degree of open space and further develop planting schedules to compliment the Garden development.</p>	<ul data-bbox="699 327 1425 1010" style="list-style-type: none"> • The proposal to redevelop the open space event area south of the gazebo allows for the development of an area able to present another collection of Central Australian plant species. The open space provides an opportunity to develop a eucalyptus woodland setting. • The planned decommission of the existing events area provides an opportunity to develop a riverine setting that could extend throughout the grounds and flow on from the gorge/water gardens. Importantly, this could act as a water harvesting mechanism providing water run-off to several areas within the Garden. • The water gardens flowing from the gorge garden will continue into a riverine environment flowing through the grounds and eventually heading towards the Todd River. This riverine feature will border the existing open space zone. • <i>Eucalyptus coolabah</i>, <i>Eucalyptus intertexta</i>, <i>Acacia cyperophylla</i> and <i>Eucalyptus thozetiana</i> are four tree species worth considering as suitable species that could be mass planted to create a woodland environment that has vertical impact while creating an almost forest-like situation within an arid environment adjacent to the proposed riverine environment. • See Part Four, Section 10 for a suggested species list.
<p data-bbox="209 1032 403 1061"><u>The Mulga Grove</u></p>	<ul data-bbox="699 1021 1425 1299" style="list-style-type: none"> • The Mansfield, John Blakeman and Mulga grove are largely dominated by differing forms of <i>Acacia aneura</i>. These three areas are to be linked as one collection within the Garden. • These three areas of the Garden should be further linked with the various forms of mulga that can be found in Central Australia with the possibility of other plant species that link closely with mulga groves being massed in areas within the mulga collections. • See Part Four, Section 11 for a species list.
<p data-bbox="209 1323 472 1352"><u>The Kurrajong Planting</u></p>	<ul data-bbox="699 1312 1425 1612" style="list-style-type: none"> • The <i>Brachychiton gregorii</i> collection stands out as residing in an isolated stand within the Garden. The opportunity exists for several more trees to be planted to compliment the collection. • While recognising that the Desert Kurrajong grows in red sand, sandy loam, undulating sand dunes, rocky ridges and slopes, as this collection is an isolated stand, it provides an opportunity to 'dress' the area to present a different landscape. Red sand could be introduced to reinforce the concept of the 'Red Centre' while being consistent with an environment that the Desert Kurrajong naturally reside in.
<p data-bbox="209 1626 606 1711"><u>Ghost Gums as an Iconic Tree Species</u> linking three areas within the Garden.</p> 	<ul data-bbox="699 1626 1425 1924" style="list-style-type: none"> • Currently <i>Corymbia aparreinja</i> (Ghost Gum) is growing within the linear western boundary garden collection and to the east of the current entry road into the Garden. It is currently quite underwhelming in its presentation. The use of the Ghost Gum is quite limited and must be utilized further throughout the Garden, especially in mass plantings. • Grown in clusters running through the front and middle of the Garden, planting of the iconic 'Twin Gum' will look stunning. The Ghost Gum grows naturally in alluvial country and on hillsides and can therefore be grown in several locations within the




AREA	COMMENTS & INITIAL RECOMMENDATIONS
<p>An underwhelming botanical statement. Increase the density by 100% and incorporate an understorey of shrubs and grasses that inhabit Ghost Gum country.</p>  <p>Examples of striking Ghost Gum species and plantings.</p>	<p>Garden.</p> <ul style="list-style-type: none"> • The Ghost Gum is synonymous with Albert Namatjira and the Central Australian landscape. As a long-term investment it is recommended that the use of Ghost Gums within the Garden is expanded. • The Garden provides numerous opportunities for the tree to become a significant, stunning and iconic tree throughout, particularly along the base of Annie Meyers Hill. • It is recommended that: along the proposed new road entry into the Garden (the mid-section) more Ghost Gums are planted to complement the existing three trees; that east of this planting other trees are introduced into the existing Ghost Gum collection close to the current road side; and that a linear planting of Ghost Gums are introduced into the flat and lower section of the southern slopes of Annie Meyers Hill.
<p><u>Role of River Red Gums in the Garden</u></p>  <p>While tempting to allow self-sown trees to grow these trees can often be found in most inappropriate places and should be removed. Examples of River Red Gums growing in most inappropriate locations can be found right throughout Alice Springs.</p>	<ul style="list-style-type: none"> • The importance of <i>Eucalyptus camaldulensis</i> (River Red Gums) lining the banks of the Todd River and tributaries throughout the town are most significant, bringing the natural landscape into the town and providing charm, character and ambiance to the town of Alice Springs. • <i>Eucalyptus camaldulensis</i> can be found throughout the grounds of the Olive Pink Botanic Garden. Many are self-sown trees growing in the wrong locations. • It is appropriate that these tree species are planted as they relate to the Todd River on the western border of the Garden, and therefore belong in that section. • However, these self-sown trees should be discouraged from growing throughout the Garden. This tree species should be left off the planting palette except in a riverine context. • It is recommended that these trees be removed from the Garden where they are inappropriately located, after comprehensive consultations with Custodians.


AREA	COMMENTS & INITIAL RECOMMENDATIONS
<p data-bbox="209 324 564 383"><u>The inter-connecting pathways</u> throughout the Garden</p>   <p data-bbox="217 947 580 1014">Pathways bordered by logs, sticks, branches and rocks look messy. They require cleaner and clearer definition using other materials.</p>  <p data-bbox="225 1238 632 1323">Strong professionally presented visual information displays add another element to the garden experience by providing valuable informative botanical and historical information.</p>  <p data-bbox="244 1588 604 1673">Shady rest areas with a water source along with graphic pictorially illustrated information provide a relaxing rest point for visitors walking the Garden.</p>	<ul style="list-style-type: none"> • Opportunities exist to improve the pathway network by promoting short informative walks that bring the participant back to their original starting point. • The pathway network needs to improve mobility and meet visitor-specific needs in order to assist with giving clearer definition to the habitat presentations. • It is proposed that the pathways within the Garden vary only as required in order to achieve looping paths that provide ample short walk options while also providing natural delineation that separates different collections within the Garden. • The proposed new pathways need to be created without dramatically impacting on the Garden. • From the proposed front entrance buildings it is recommended that a main walking track lead diagonally across the Garden through several collections to the Miss Olive Pink Centre. This offers a shorter walking option to the Miss Olive Pink Centre while still showcasing collections within the Garden. • The proposed main walkway to the Miss Olive Pink Centre largely follows existing tracks. • A lack of resources has necessitated using logs, sticks, branches and rocks to border pathways in an effort to give clear definition to the walkways, to help provide direction, to keep people off developed garden areas and to further manage soil erosion due to heavy rains. Generally these borders look untidy. Resources need to be sourced to allow for the installation of either one type or a variety of types of bollards that clearly define the walkways and present as a suitable alternative to logs, branches, sticks and rocks. • It is recommended that a consistent material is used to construct pathways. An orange or pinkish/red road base material is the preferred option for smaller paths as it compacts well, is not easily subject to erosion and is little impacted upon by wet conditions, compared to red laterite that can become quite muddy when wet. • A network of walking paths throughout the Garden allows visitors to meander through the Garden at leisure. These self-guided walks are generally short in duration and with the improved signage, will provide informative interpretation to increase the experience. • Throughout the Garden there are shelters that provide seating and a table along with information about the Garden accompanied by infographic and photographic displays. Beside them are water points. These rest stops are a wonderful recent addition to the Garden.

AREA	COMMENTS & INITIAL RECOMMENDATIONS
<p><u>The Mallee Garden</u></p>	<ul style="list-style-type: none"> • Mallee Gums can be found extensively throughout arid Australia and should be well represented in any botanic garden presenting plant species from the dry zone. • Mallee Gums grow in many varied environments and should, where possible, be presented in a setting close to their natural habitat. This opportunity exists within the grounds of the Garden. • Consideration could be given to removing the poor unhealthy examples of some of the Mallee species and a new replanting program undertaken to replace them and to fill spaces where new tree species could be introduced.
<p><u>The Proposed Event Area</u></p>	<ul style="list-style-type: none"> • The existing car park and the currently under-utilised entertainment area are two sites that provide significant opportunities for redevelopment. • As the car park is to be relocated to the southern boundary to the east of the main entrance area, there is potential to redevelop the existing car park as an events area. • Currently <i>Grevillea striata</i>, <i>Capparis spinosa</i> and a collection of native grasses are presented within the centre of the existing carpark along with tables and bench seats. • It is recommended that this area become the main activity centre; that further shade trees are introduced into the area; that ground cover plants are introduced to provide a cooling surface treatment; more infrastructure is provided and that native grasses be cultivated that can periodically be mown down improving the amenity of the area. • This open space entertainment activity zone provides an ideal opportunity to experiment with several species of Central Australian ground cover plants that may serve as a grass lawn alternative. • There are several <i>Bergia</i> species that actually grow in quite adverse conditions, grow horizontally and make for an ideal ground cover plant species. <i>Bergia henschallii</i> is certainly one such species worth experimenting with, it is a plant species not currently cultivated commercially and rarely found within botanical collections in Australia. <i>Dentella</i> is another species worth experimenting with. • If all else fails <i>Lippea</i>, <i>Phyla notiflora</i> makes for a suitable native plant species lawn cover alternative. • Although it may not be considered appropriate, in the end it may be necessary to cultivate a Kikuyu/Buffalo lawn to provide a comfortable family friendly entertainment area. • Necessary infrastructure can be incorporated into this section of the Garden to compliment an attractively landscaped setting able to accommodate patrons for a variety of activities.
<p><u>The Labyrinth & The Twin Gums Bird Attracting Gardens</u></p> 	<ul style="list-style-type: none"> • Aside from the two amenity gardens around the proposed Entrance building/Car park and the Miss Olive Pink building, two other gardens stand aside from the rest of the Garden as they are quite formal in their presentation. They are the Twin Gums Bird Attracting garden and the Labyrinth garden. • The formal design elements should be reinforced by replanting with plant species that can be well managed in shape and form. This would simply add another design element in the Garden.

AREA	COMMENTS & INITIAL RECOMMENDATIONS
The Twin Gums Bird Attracting garden.	<ul style="list-style-type: none"> Both gardens require a high degree of maintenance to achieve the appropriate standard of presentation.
<u>Tuncks Road Verge</u>	<ul style="list-style-type: none"> Negotiations need to be initiated with the Alice Springs Town Council in regard to landscaping and improving the public amenity of the verge. This can be done by removing the Buffel grass and other weed species and planting an avenue or single rows of attractive, appropriate local native tree, shrub and grass species appropriate to the soil type. A recent attempt has been made to plant on the southern border of Tuncks Road a row of citrus and fruit trees. These trees are dead or near dead and out of character with the Garden. Aside from these trees the verge is dominated by mown Buffel grass. It is recommended that the development of this verge be with local native species that will thrive and add to residents' amenity and align with the Garden behind the current boundary fence. Also, management of the Buffel grass dominating the verge needs to occur. Removing the Buffel will limit seed entering the Garden from the southern boundary.
<p><u>Developing Understorey Plantings</u> Between Established Trees</p>  <p>Mass plantings of low ground cover plants and small to medium shrubs has the potential to introduce another element to the Garden where collections of more established trees as currently presented. Natural groupings of Sennas provide examples of such mass plantings.</p>	<ul style="list-style-type: none"> With tree canopy having matured over several decades thought needs to be given to developing understorey mass plantings, particularly throughout the existing Mallee, Eucalypt and Acacia gardens. Numerous opportunities exist whereby plantings of understorey small shrubs could be introduced in existing collections where established trees have matured. In the Acacia garden Sennas appear to have established naturally. Developing waves of a particular plant species weaving through tree collections would add to the ambience providing increased foliage and floral colour to the Garden. Mass plantings will provide linkage to Garden collections, provide strong seasonal floral displays and provide powerful massed foliage colour to reinforce species. Sennas, Eremophilas, Indigofera and Dodoneas are species that could be used as complimentary plantings. See Part Four, Section 12 for recommended species.

AREA	COMMENTS & INITIAL RECOMMENDATIONS
<p data-bbox="209 338 616 365"><u>Management of Euros in the Garden</u></p>  <p data-bbox="229 618 632 801">Euros and red kangaroos can all impact on the gardens particularly when population numbers increase in drought years as they seek out healthy plant growth and water availability. A management program needs to be developed allowing visitors to appropriately interact with wildlife while also protecting the vegetation within the Garden and allowing for future development of the grounds.</p>	<ul data-bbox="699 327 1425 757" style="list-style-type: none"> • Euro management within the Garden has to be addressed. Currently the relatively large population of Euros within the boundaries of Olive Pink Botanic Garden limits the potential to establish new plantings. Parts of the Garden have to be fenced to keep the Euros out, thus allowing new plantings to survive. • The Euros do however provide an added element to the experience for visitors to the Garden. • The plan to construct a fence to control the Euro population must be given immediate priority. A portion of the eastern section of the grounds can be left open to allow the Euros to still access the Garden without destroying new plantings. This will also act as a viewing area to enable visitors to experience the enjoyment of witnessing the free range of an iconic Australian animal.
<p data-bbox="209 846 616 902"><u>Walkway from the Entrance Building to the Miss Olive Pink Building</u></p>	<ul data-bbox="699 846 1425 1339" style="list-style-type: none"> • It is proposed that increased shade for pedestrians be created by extensive plantings of clusters of appropriate trees. • Although the section close to the gazebo is well-timbered with Mulgas and, towards the south western entrance, with <i>Acacia maconochieana</i>, a small number of <i>Brachychiton gregorii</i> could be added to the southern end of the current collection. <i>Eucalyptus coolabah</i> could be also planted on the eastern mid-section of the main walkway along with several more <i>Grevillea striata</i> and a collection of <i>Acacia jennerae</i> to complement the existing Acacias. • The eastern boundary of the track opposite the plantings of <i>Acaciamaconochieana</i> needs more plantings to provide a continuous shade canopy. • Planting needs to be strategic to ensure trees proposed do not obscure important site lines along the walking track (e.g. views of Nurses Hill need to be preserved).

AREA	COMMENTS & INITIAL RECOMMENDATIONS
<p><u>The Old Road</u></p>  <p>The existing driveway needs to be decommissioned and repurposed.</p>	<ul style="list-style-type: none"> • It is proposed that the service road be decommissioned and replaced by the looping Miss Pink Walk Trail. This walkway would allow for service vehicles and pedestrians to move through the Garden. • Once the existing road is decommissioned the grey Cracker Dust or quarry sand will need to be removed, the road then ripped and fresh top soil introduced in an effort to revitalise this section of the Garden.
<p><u>The Power and Water Corporation Water Tank</u></p>  <p>A creative, imaginative exercise may result in wonderful opportunities re-utilising this structure, road access and land to increase opportunities for visitors to the Garden.</p>	<ul style="list-style-type: none"> • It is possible that opportunities may exist to cultivate partnerships with the Power and Water Corporation to utilise the land and existing water tank in the event the land and tank become redundant in the future. • Correspondence and discussions need to be undertaken regarding the possible future use of the land where the Power and Water water tank is located. This will be a long term venture however it is best to express an interest early and maintain this interest so it doesn't "fall off the table". • Utilisation of the water tank hillside could involve a site for parking, as well as providing opportunities for people with disabilities to access the significant Arrernte sacred site Tharrarletneme. This site provides a wonderful location from which to survey the grounds of Olive Pink and further afield, providing a striking visual presentation of Alice Springs that is an alternative view to the viewing site on Anzac Hill.
<p><u>Surface Treatments of Garden Collections</u></p>  <p>Example of current surface treatment in the Garden.</p>	<ul style="list-style-type: none"> • Utilising a range of garden surface treatments can help strengthen the collections by providing continuity within each collection and reinforcing and defining each particular area. • Mulching materials vary greatly from sand to organic mulches to river rubble, aggregates and river boulders. • A healthy cover of Mulga mulch works well in a Mulga grove and river rubble, boulders and sands can be used to great effect in riverine and water gardens. • More 'manufactured' treatments can be utilised in more formal gardens such as the Twin Gums Bird Attracting garden and the Labyrinth garden. • To provide a varied experience sometimes it is necessary to treat a range of garden collections in various ways, some left quite natural, some developed as 'bush' gardens and others in a variety of ways contributing to increased interest throughout the entire Garden.
<p><u>Plant Maintenance and Weed Management</u></p>	<ul style="list-style-type: none"> • The Garden provides an ideal opportunity to demonstrate best practice in developing arid zone appropriate gardens. The display of plants that grow within an arid zone is the principle focus of the Botanic Garden, however the successful cultivation and growth of these plants within a sustainable environment using best practice should be priority. Lack of resources restricts the capacity of the Garden to take advantage of this opportunity. • Numerous examples of plants in poor condition can be found

AREA	COMMENTS & INITIAL RECOMMENDATIONS
 <p data-bbox="225 589 598 696">The management of Buffel grass must be given absolute priority as its invasion has the capacity to suppress natural revegetation and carries the potential through fire to devastate the Garden.</p>	<p data-bbox="746 322 1425 383">throughout the Garden. The new fertigation system in will help address this issue.</p> <ul data-bbox="700 387 1425 878" style="list-style-type: none"> <li data-bbox="700 387 1425 533">• A strong focus on presenting a healthy plant collection is being developed with the implementation of a fertigation system. Plant removal, pruning and treatment programs need to be upgraded to present the collections to the public in the best possible condition. <li data-bbox="700 537 1425 683">• The most significant weed species capable of impacting on the Garden environment is Buffel grass. Buffel grass has the capacity to suppress natural revegetation and result in the loss of local plant species because of its capacity to dominate an area and its ability to burn with such intensity. <li data-bbox="700 687 1425 878">• Management of weed species like Buffel grass over the entire land mass under the management of the Olive Pink Trustees has to be a high priority issue. It is an ongoing problem that requires the implementation of management plans and strategies designed to address operational issues to ensure the long-term sustainability of the Garden.

PART THREE – RECOMMENDED SPECIES LIST

Section 1 – Lhere Mparntwe Biodiversity

Focus to be on Bushfood and Medicine plants. A restoration area where most of species in the link below are to be encouraged and/or reintroduced:

<https://wildlife.lowecol.com.au/wp-content/uploads/sites/25/Vegetation22.pdf>

Section 2 – Amenity gardens within the Garden

BUSH FOODS GARDEN:

<i>Abutilon leucopetalum</i>	Desert Lantern-bush
<i>Abutilon octocarpum</i>	Keeled Lantern-bush
smaller Acacias - <i>A. dictyophleba</i> – Sandhill Wattle, <i>A. ancistrocarpa</i> – Fitzroy Wattle, <i>A. cuthbertsonii</i> – Silver Witchetty, <i>A. inaequilatera</i> – Fire Wattle, <i>A. maitlandii</i> – Maitlands Wattle	
<i>Atalaya hemiglauca</i>	Whitewood
<i>Calandrinia balonensis</i>	Broad-leaf Parakeelya
<i>Capparis spinosa</i>	Wild Passionfruit
<i>Carissa lanceolata</i>	Conkerberry
<i>Cynanchum viminale</i> subsp. <i>australe</i>	Caustic Vine
<i>Cynanchum floribundum</i>	Native Pear
<i>Enchylaena tomentosa</i>	Ruby Saltbush
<i>Eucalyptus pachyphylla</i>	Red-bud Mallee
<i>Grevillea eriostachya</i>	Honey Grevillea
<i>Ipomoea costata</i>	Bush Potato
<i>Ipomoea muelleri</i>	Native Morning Glory
<i>Marsdenia australis</i>	Bush Banana
<i>Psydrax latifolia</i>	Native Currant
<i>Santalum acuminatum</i>	Quandong
<i>Santalum lanceolatum</i>	Plum Bush
<i>Solanum centrale</i>	Desert Raisin
<i>Solanum chippendalei</i>	Bush Tomato
<i>Vigna lanceolata</i>	Pencil Yam

MEDICINE PLANTS GARDEN:

<i>Chrysopogon fallax</i>	Golden Beard Grass
<i>Crinum flaccidum</i>	Sandover Lily
<i>Cymbopogon ambiguus</i>	Lemon-scented Grass
<i>Cymbopogon obtectus</i>	Silky heads
<i>Clerodendrum floribundum</i>	Smooth Clerodendrum
<i>Dodonaea viscosa</i>	Sticky Hopbush
<i>Dodonaea viscosa</i> subsp. <i>angustissima</i>	Desert Hopbush
<i>Duboisia hopwoodii</i>	Pituri Bush
<i>Eremophila alternifolia</i>	Narrow-leaf Fuchsia Bush
<i>Eremophila longifolia</i>	Long-leaf Emu Bush

<i>Eremophila neglecta</i>	
<i>Melaleuca glomerata</i>	Inland Teatree
Variety of <i>Nicotiana</i> species	
<i>Petalostylis cassioides</i>	Butterfly Bush
<i>Pittosporum angustifolium</i>	Native Apricot
<i>Prostanthera striatiflora</i>	Striped Mint-bush
<i>Senna artemisioides</i> (any/all of subspecies)	Cassias
<i>Tinospora smilacina</i>	Snake Vine

AREAS AROUND NEW BUILDINGS:

<i>Chrysopogon fallax</i>	Golden Beard Grass
<i>Crinum flaccidum</i>	Sandover Lily
<i>Cymbopogon ambiguus</i>	Lemon-scented Grass
<i>Cymbopogon obtectus</i>	Silky heads
<i>Clerodendrum floribundum</i>	Smooth Clerodendrum
<i>Dodonaea viscosa</i>	Sticky Hop Bush
<i>Dodonaea viscosa</i> subsp. <i>angustissima</i>	Desert Hopbush
<i>Duboisia hopwoodii</i>	Pituri Bush
<i>Eremophila longifolia</i>	Long-leaf Emubush
<i>Eremophila alternifolia</i>	Narrow-leaf Fuchsia Bush
<i>Eremophila neglecta</i>	
<i>Melaleuca glomerata</i>	Inland Tea Tree
Variety of <i>Nicotiana</i> species	
<i>Petalostylis cassioides</i>	Butterfly Bush
<i>Pittosporum angustifolium</i>	Native Apricot
<i>Prostanthera striatiflora</i>	Striped Mint Bush
<i>Senna artemisioides</i> (any/all of subspecies)	Cassias
<i>Swainsona Formosa</i>	Sturt Desert Pea
<i>Tinospora smilacina</i>	Snake Vine

TUNCKS ROAD VERGE DEVELOPMENT

<i>Acacia maconochieana</i>	Salt Wattle
<i>Acacia undoolyana</i>	Undoolya Wattle
<i>Acacia desmondii</i>	Des Nelson Wattle
<i>Enchylaena tomentosa</i>	Ruby Saltbush
<i>Eremophila macdonnellii</i>	Splendid Fuchsia
<i>Eremophila obovata</i>	
<i>Eremophila ovata</i> (white and purple flower forms)	Krichauff Ranges Fuchsia
<i>Eremophila alternifolia</i>	Narrow-leaf Fuchsia Bush
<i>Eremophila neglecta</i>	
<i>Rhagodia spinescens</i>	Spiny Saltbush
<i>Senna</i> (suitable species)	Cassias
<i>Swainsona Formosa</i>	Sturt Desert Pea

Section 3 – Sand Dune collection

<i>Acacia sericophylla</i>	Dogwood
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<i>Acacia dictyophleba</i>	Sandhill wattle
<i>Acacia ligulata</i>	Umbrella Bush
<i>Allocasuarina decaisneana</i>	Desert Oak
<i>Aluta maisonneuvei</i>	Desert Heath Myrtle
<i>Alyogyne pinoniana</i>	Sand Hibiscus
<i>Brunonia australis</i>	Blue Pincushion
<i>Calandrinia balonensis</i>	Broad-leaf Parakeelya
<i>Calandrinia pumila</i>	Tiny Purslane
<i>Calandrinia reticulata</i>	Parakeelya
<i>Calytrix carinata</i>	Desert Fringe Myrtle
<i>Crotalaria cunninghamii</i>	Parrot Pea
<i>Crotalaria eremaea</i>	Desert Rattlepod
<i>Dodonaea viscosa</i>	Sticky Hop Bush
<i>Eremophila gibsonii</i>	Desert Fuchsia
<i>Eremophila goodwinii</i>	Purple Fuchsia Bush
<i>Eremophila macdonnellii</i>	Splendid Fuchsia
<i>Eremophila obovata</i>	
<i>Eremophila willsii</i>	Sandhill Fuchsia
<i>Exocarpos sparteus</i>	Broombush
<i>Gossypium sturtianum</i>	Sturts Desert Rose
<i>Grevillea albiflora</i>	White Spider Flower
<i>Grevillea eriostachya</i>	Honey Grevillea
<i>Grevillea juncifolia</i>	Desert Grevillea
<i>Grevillea stenobotrya</i>	Rattlepod Grevillea
<i>Gyrostemon ramulosus</i>	Camel Poison Bush
<i>Ipomoea costata</i>	Potato Vine
<i>Ipomoea muelleri</i>	Native Morning Glory
<i>Olearia stuartii</i>	Daisy Bush
<i>Pittosporum angustifolium</i>	Native Apricot
<i>Radyera farragei</i>	Bush Hibiscus
<i>Santalum lanceolatum</i>	Plumbush
<i>Senecio magnificus</i>	Perennial Yellowtop
<i>Xanthorrhoea thorntonii</i>	Desert Grass Tree
<i>Xerochrysum interiore</i>	Golden Everlasting

Section 4 – Acacia latzii collection

Section 5 – Spinifex collection

The Spinifex Collection is to incorporate two collections, the Sand Dune Collection and the Southern Hillside Collection. It is intended that mass planting of at least nine of the eleven spinifex species can be presented in both the sand dune and hillside collections.

Sand Dune Species

<i>Triodia basedowii</i>	Hard Spinifex
<i>Triodia pungens</i>	Soft Spinifex
<i>Triodia schinzii</i>	Feathertop Spinifex

Rocky Hills and Hill Slopes

Leptosema chambersii
Themeda triandra
Triodia brizoides
Triodia hubbardii
Triodia irritans
Triodia longiceps
Triodia pungens
Triodia spicata

Upside-down Plant
Kangaroo Grass
Hillside Spinifex
Hubbards Spinifex
Porcupine Grass
Buck Spinifex
Soft Spinifex
Spike-flowered Spinifex

Section 6 – Ghost Gum Hillslope

Corymbia aparrerinja

Ghost Gum

Section 7 – Callitris Forest Slope

Callitris glaucophylla
Eremophila christophori
Eremophila elderi
Eremophila freelingii
Eremophila goodwinii
Eremophila latrobei
Eremophila neglecta
Eremophila obovata
Eremophila ovata
Eremophila serrulata
Ptilotus whitei

Native Pine
Dolomite Fuchsia Bush
Sticky Fuchsia Bush
Rock Fuchsia Bush
Purple Fuchsia Bush
Native Fuchsia

Krichauff Ranges Fuchsia
Green Fuchsia Bush
Perennial Ptilotus

Section 8 – Ghost Gum Woodland

Corymbia aparrerinja
Gossypium bickii
Eremophila latrobei

Ghost Gum
Low Desert Rose
Grey Fuchsia Bush

Section 9 – New Acacia Collections

Acacia ammobia
Acacia aneura
Acacia aptaneura
Acacia ayersiana
Acacia cambagei
Acacia colei
Acacia cowleana
Acacia cuthbertsonii
Acacia cyperophylla
Acacia desmondii
Acacia dictyophleba
Acacia dolichophylla
Acacia doreta
Acacia estrophiolata
Acacia georginae

Mount Connor Wattle
Mulga
Mulga
Ayers Rock Mulga
Gidgee
Kalkardi
Halls Creek Wattle
Silver Witchetty
Mineritchie/Red Mulga
Des Nelson Wattle
Sandhill Wattle
Chewings Range Wattle

Ironwood
Georgina Gidgee

<i>Acacia hilliana</i>	Flying-saucer Bush
<i>Acacia kempeana</i>	Witchetty Bush
<i>Acacia holosericea</i>	Candelabra Wattle
<i>Acacia incurvaneura</i>	Mulga
<i>Acacia inaequilatera</i>	Fire Wattle
<i>Acacia jennerae</i>	Coonavitra Wattle
<i>Acacia latzii</i>	Tjilpi Wattle
<i>Acacia lysiphloia</i>	Turpentine
<i>Acacia macdonnellensis</i>	Hill Mulga
<i>Acacia maconochieana</i>	Salt Wattle
<i>Acacia maitlandii</i>	Maitlands Wattle
<i>Acacia melleodora</i>	Waxy Wattle
<i>Acacia monticola</i>	Hill Turpentine

<i>Acacia mulganeura</i>	Mulga
<i>Acacia murrayana</i>	Colony Wattle
<i>Acacia olgana</i>	Mount Olga Wattle
<i>Acacia paraneura</i>	Weeping Mulga
<i>Acacia peuce</i>	Waddy Wood
<i>Acacia pruinocarpa</i>	Black Gidgee
<i>Acacia pteraneura</i>	Christmas Tree Mulga
<i>Acacia ramulosa</i>	Horse Mulga
<i>Acacia rhodophloia</i>	Western Red Mulga
<i>Acacia salicina</i>	Cooba
<i>Acacia sericophylla</i>	Dogwood
<i>Acacia sessiliceps</i>	Curly Pod Wattle
<i>Acacia</i> sp. Holey trunk	
<i>Acacia spondylophylla</i>	Curry Wattle
<i>Acacia tetragonophylla</i>	Dead Finish
<i>Acacia undoolyana</i>	Undoolya Wattle

Section 10 - Kurrajong

<i>Brachychiton gregorii</i>	Desert Kurrajong
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Section 11 – Mulga Grove

<i>Acacia aneura</i>	Tree Mulga
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To include different sub sub-species

Section 12 – Mallee Garden

Largely mirror existing Mallee species to re-enforce collection

Section 13 – Senna Collection

<i>Senna artemisioides</i> subsp. <i>artemisioides</i>	Silver Cassia
<i>Senna artemisioides</i> subsp. <i>filifolia</i>	Desert cassia
<i>Senna artemisioides</i> subsp. <i>helmsii</i>	Blunt-leaved Cassia
<i>Senna artemisioides</i> subsp. <i>oligophylla</i>	Oval-leaf Cassia
<i>Senna artemisioides</i> subsp. <i>sturtii</i>	Grey Cassia

Senna notabilis
Senna venusta

Cockroach Bush
Graceful Cassia

Section 14 – Gorge/Water garden

Acacia strongylophylla
Cheilanthes sieberi
Cheilanthes lasiophylla
Cynanchum viminale subsp. *australe*
Eremophila christophori
Eremophila freelingii
Eremophila ovata
Eremophila serrulata
Ficus brachypoda
Gossypium sturtianum
Grevillea wickhamii
Indigofera basedowii
Indigofera georgei
Indigofera leucotricha
Livistona mariae
Macrozamia macdonnellii
Marsilea drummondii
Marsilea exarata
Melaleuca faucicola
Pandorea doratoxylon
Plectranthus intraterraneus
Prostanthera striatiflora
Stemodia viscosa

Round-leaf Wattle
Mulga Fern
Woolly Cloak-fern
Caustic vine
Dolomite Fuchsia Bush
Rock Fuchsia
Krichauff Ranges Fuchsia
Green Fuchsia Bush
Native Rock Fig
Sturts Desert Rose
Holly-leaf Grevillea
Showy Indigo
Georges Indigo
White Indigo
Palm Valley Palm
MacDonnell Ranges Cycad
Common Nardoo
Little Nardoo
Desert Bottlebrush
Spearwood
Purple Mintbush
Striped Mintbush
Sticky Blue-rod

Section 15 – Saline/ Alkaline Collection in Carpark

Acacia maconochieana
Atriplex holocarpa
Atriplex nummularia
Einadia nutans
Enchylaena tomentosa
Eremophila polyclada
Eucalyptus gongylocarpa
Eucalyptus intertexta
Frankenia cordata
Maireana campanulata
Maireana triptera
Melaleuca glomerata
Rhagodia eremaea
Rhagodia spinescens
Stemodia florulenta

Salt Wattle
Pop Saltbush
Old Man Saltbush
Climbing Saltbush
Ruby Saltbush
Lignum Fuchsia Bush
Marble Gum
Bastard Coolabah
Salty Heath
Bell-fruit Bluebush
Three-winged Bluebush
Inland Teatree
Tall Saltbush
Spiny Saltbush
Blue Rod

<i>Tecticornia calyptrata</i>	
<i>Tecticornia indica</i> subsp. <i>leiostachya</i>	
<i>Tecticornia pergranulata</i> subsp. <i>elongata</i>	Blackseed samphire
<i>Tecticornia pruinosa</i>	
<i>Tecticornia tenuis</i>	Slender Glasswort
<i>Tecticornia triandra</i>	Desert Glasswort
<i>Tecticornia verrucosa</i>	Mungilpa

Section 16 - Tharrarletneme Biodiversity

The majority of natural species in the link are to be encouraged and potentially reintroduced. <https://wildlife.lowecol.com.au/wp-content/uploads/sites/25/Vegetation05.pdf>

Section 17 – Woodland/Myrtaceae

<i>Acacia estrophiolata</i>	Ironwood
<i>Eragostis elongata</i>	Clustered Love Grass
<i>Eremophila duttonii</i>	Harlequin Fuchsia Bush
<i>Eremophila maculata</i>	Spotted Emu Bush
<i>Eremophila polyclada</i>	Lignum Fuchsia Bush
<i>Eucalyptus camaldulensis</i>	River Red Gum
<i>Eucalyptus coolabah</i> subsp. <i>arida</i>	Coolabah
<i>Eucalyptus intertexta</i>	Bastard Coolabah
<i>Eucalyptus gillenii</i>	Mallee Red Gum
<i>Eucalyptus minniritchii</i>	Round-leaf Mallee
<i>Eucalyptus thozetiana</i>	Thozets Box
<i>Grevillea striata</i>	Beefwood
<i>Hakea divaricate</i>	Fork-leaved Corkwood
<i>Livistona mariae</i>	Palm Valley Palm
<i>Melaleuca bracteata</i>	Black Teatree
<i>Melaleuca glomerata</i>	Inland Teatree
<i>Melaleuca trichostachya</i>	Narrow-leafed Paperbark
<i>Radyera farragei</i>	Bush Hibiscus

The majority of natural species in the link are to be encouraged and potentially reintroduced.

<https://wildlife.lowecol.com.au/wp-content/uploads/sites/25/Vegetation17.pdf>

Loop Road within the Garden

<i>Acacia aneura</i>	Mulga
<i>Acacia cyperophylla</i>	Mineritichie/Red Mulga
<i>Acacia estrophiolata</i>	Ironwood
<i>Acacia kempeana</i>	Witchetty Bush
<i>Acacia ligulata</i>	Umbrella Bush
<i>Corymbia aparrerinja</i>	Ghost Gum
<i>Corymbia opaca</i>	Bloodwood
<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	River Red Gum
<i>Eucalyptus coolabah</i> subsp. <i>arida</i>	Coolabah
<i>Eucalyptus normantonensis</i>	Normanton Box

Eucalyptus gillenii
Eucalyptus trivalvis
Grevillea striata
Hibiscus sturtii
Petalostylis cassioides
Radyera farragei

Mallee Red Gum
Victoria Spring Mallee
Beefwood
Sturts Hibiscus
Butterfly Bush
Bush Hibiscus

Understorey Plantings

Eremophila alternifolia
Eremophila gilesii
Eremophila latrobei
Eremophila maculata
Eremophila serrulata

Narrow-leaf Fuchsia Bush
Mulga Fuchsia
Native Fuchsia
Spotted Emu Bush
Green Fuchsia Bush

Shade canopy for the walking tracks

Shade canopy along walking tracks to largely mirror existing tree species or species to re-enforce plant collections within the gardens.

Acacia aneura
Acacia cyperophylla
Acacia holosericea
Atalaya hemiglauca
Clerodendrum floribundum
Corymbia aparrerinja
Corymbia opaca
Eucalyptus camaldulensis subsp. *arida*
Eucalyptus coolabah subsp. *arida*
Eucalyptus gillenii
Eucalyptus intertexta
Eucalyptus normantonensis
Eucalyptus thozetiana
Eucalyptus victrix
Grevillea striata

Mulga
Mineritchie/Red Mulga
Candelabra Wattle
Whitewood
Smooth Clerodendrum
Ghost Gum
Bloodwood
River Red Gum
Coolabah
Mallee Red Gum
Bastard Coolabah
Normanton Box
Thozets Box
Smooth-barked Coolabah
Beefwood

APPENDIX E - MISS OLIVE PINK STATEMENT OF SIGNIFICANCE

Proposal for an OLIVE PINK CENTRE at the Olive Pink Botanic Garden

3/5/2017

Dear Ian,

Thankyou for the opportunity to join your discussions around the future of the Garden. I like the idea of an 'Olive Pink Centre' as it would help to establish the unique nature of the Olive Pink Botanic Garden by distinguishing it from other dryland gardens—to give it a brand, as people now say—and to keep her name in the public eye. I also like the idea of basing the centre in the existing building that sits more or less on the site of her own shed and fits snugly into the landscape. It has the potential to offer space to resident visitors who are working on some aspect of the garden and Olive Pink's work and life.

I have been thinking about Olive Pink's life, about what she wanted and how she went about it. That there were many facets to her concerns is now well known: she began as an artist, took an interest in how Indigenous people were being treated, studied anthropology in order to carry out research among the Arrernte and Warlpiri peoples and finally took up the cause of conserving the desert flora and establishing the present Garden. Looking back on what was indeed a very full life, it seems to me that the constant element and driving force was her wish to get a better deal for Aboriginal people. It was her determined political activism that carried through, bringing her eventually to central Australia. Despite great adversity and many setbacks her concern and the sense of responsibility that drove her to write those thousands of letters never failed.

Although she was a woman of many parts and many interests, it is her sometimes hopeless political activism that most characterises her. She wanted equal rights for Aborigines, equal pay and conditions for Aboriginal workers, she wanted them to own and control their own lands and she looked forward to the day that the Northern Territory would be an Aboriginal state governed by Aboriginal people. On a number of occasions she also said that anthropologists, missionaries and government officials were all intent on furthering their own interests rather than those of the people they were claiming to help. In simple words, she said that researchers asked Aboriginal people to help them, rather than asking what Aboriginal people wanted for themselves.

If there is to be an Olive Pink Centre, and if she were here today, I think she would want the Centre to be designed to advantage the Arrernte and Warlpiri peoples whose prospects she cared so much about. She would think that a Centre should address the matters that were important to Aboriginal persons themselves. So the first task of the Centre would be to establish ways of finding out what Warlpiri and Arrernte people thought they might get done through such a Centre. The Centre might be established with the help of some of the descendants of the people she worked with. I know that Doris Stuart, her brother and her family have worked with the Trustees and staff of the Garden so that there is a basis of goodwill there that could be expanded.

In terms of the memories of Olive Pink that have already been collected, I have some recollection of a series of recorded interviews carried out some years ago that were intended for use by visitors to the garden. These are a valuable resource. Some of the speakers have already passed away, so it would be important to install the sound

systems that would allow visitors to have a way of listening to them, perhaps as they moved around the garden.

The Centre might also organize events that would help to keep Olive Pink's name at the forefront of the Garden's publicity, to help define its 'brand'. With proper consultation there could be, for example, a competition among Warlpiri primary school children for the best portrait of Miss Pink, a project that could be organized through the schools at Yuendumu and Lajamanu where Olive Pink's name still circulates through the stories told about her.

From time to time, the Trustees might like to consider providing desk space for a 'visiting fellow' of the centre, a place for someone wishing to paint, write, or take up an aspect of Miss Pink's political aspirations and hopes.

And if you move quickly, you might be able to make Linda Veness (*editor's note: Miss Pink's great niece*) a 'patron' of the new Centre along with an Indigenous person of status and community respect.

I'm not sure if any of this will be of use to you, but I like the idea of a Centre that bears the old girl's name, one that focussed on doing things that Arrernte and Warlpiri people themselves would like to see done.

With very best wishes and kind regards,

Julie Marcus

(*editor's note: author of The Indomitable Miss Pink*)