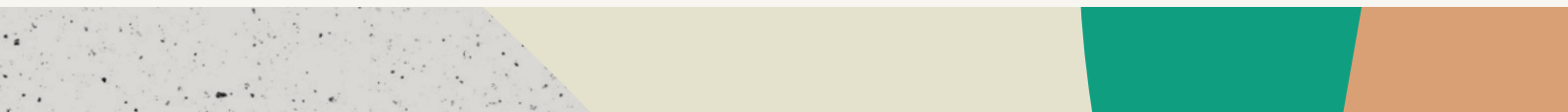


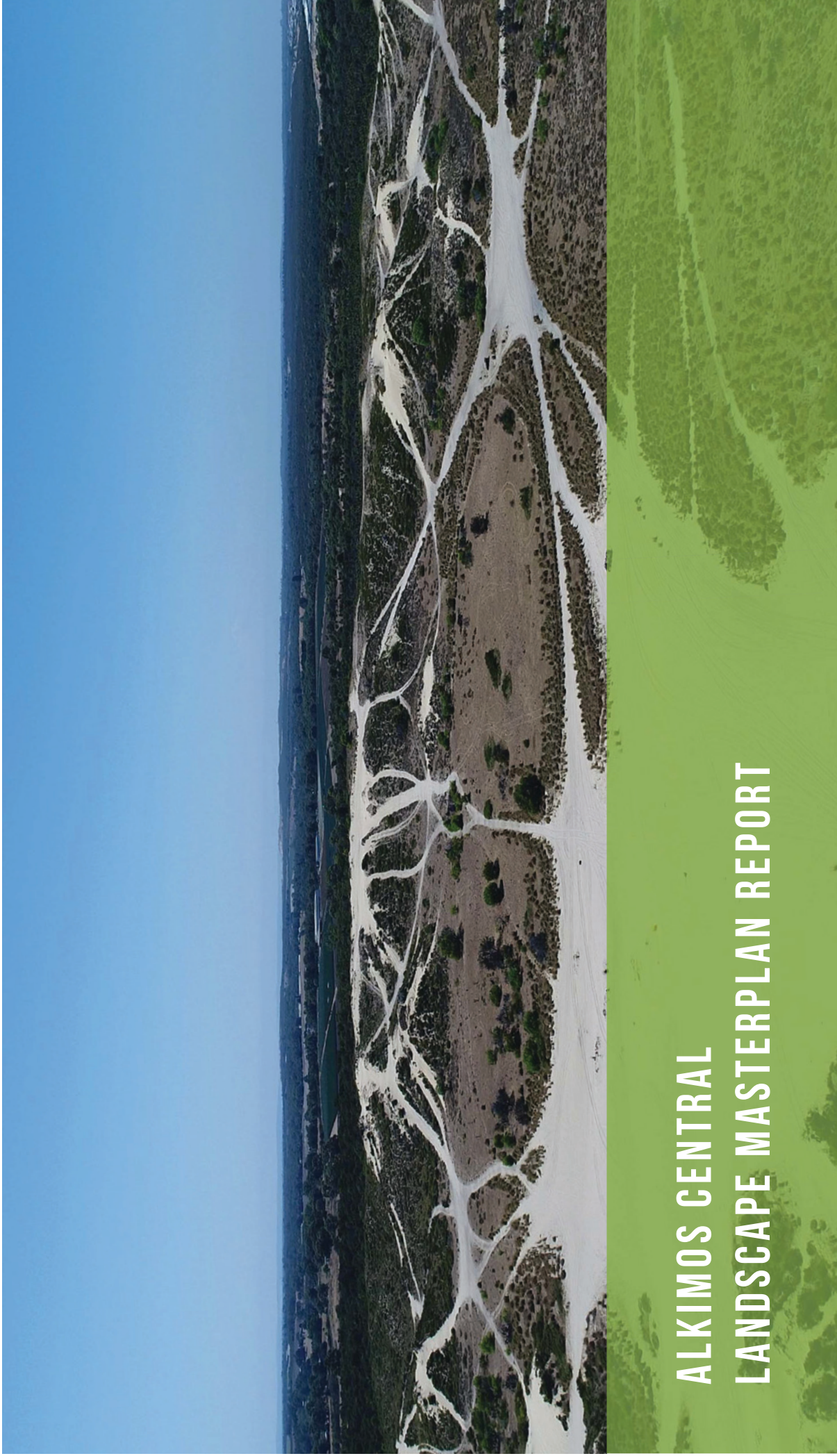


# Appendix J

Landscape Masterplan

Author: UDLA





# ALKIMOS CENTRAL LANDSCAPE MASTERPLAN REPORT



Prepared for:  
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Table 1. Edition Details

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Table 2. Document Register

Document Register			Prepared By
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B	16/03/20	Draft	SL
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D	21.07.20	Masterplan Update	SL
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F	11.10.21	Masterplan Update	SL
G	25.10.21	Masterplan Report Update	SL
H	10.11.21	Final Issue	SL

UDLA and Gundi Consulting wish to acknowledge the ongoing connection to culture and Budjar (country) held by Noongar people, the Traditional Custodians for the South West of Western Australia. We would like to extend our acknowledgement to the Noongar people that have worked continuously to protect, preserve and manage budjar and kaatadjin (knowledge), and the culturally significant areas within the Alkimos Central project area.

We would also like to pay our respects to Noongar elders and birdiya (leaders/teachers) past, present and emerging.

**Indigenous Cultural and Intellectual Property (ICIP)**

*UDLA and Gundi Consulting recognise that all shared cultural knowledge, material, and input into the Alkimos Central development captured within this document is the Indigenous Cultural and Intellectual Property (ICIP) of the Noongar people, and the Noongar people who have contributed to this report. It is recommended that prior to the reuse of any culturally related information, permission is acquired from the appropriate people and the project ADM's.*

Image 1. Site photograph (Cover). Source: UDLA

For more information on ICIP, please contact UDLA and/or Gundi Consulting.

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# REVISION STATEMENT

This revision of the Landscape Masterplan report follows significant changes to the overall Precinct Plan and key infrastructure for the project area. These changes have resulted in a far stronger plan that has benefited from genuine and meaningful collaboration and engagement with the Noongar community and with the appropriate Noongar people who can speak for this part of Noongar budjar (country).

This outcome has been the result of DevelopmentWA recognising that past practices in the planning and development industry have resulted in low levels of engagement with aboriginal communities and through a series of Reconciliation Action Plans prepared since 2008/9, gradual improvements have been occurring, with the most recent initiative being a trial program to strengthen engagement practices. Initially referred to as Aboriginal Development Managers (ADM's) and now evolving to be called "Cultural Advisors", DevelopmentWA has engaged Aboriginal consultants with the objective to mitigate the effects proposed development has on Noongar country, culturally significant sites and features. Furthermore this approach intends to consider Noongar peoples connection and access with and to the area and Noongar physical and spiritual wellbeing that can guide and assist in the engagement of appropriate Noongar people.

In this regard, Gundi Consulting were engaged in the role of ADM in mid-2020 to provide Noongar cultural input and direction into the development of Alkimos Central. Gundi Consulting conducted a series of site visits, attended regular meetings and community workshops and worked alongside the project team to collaborate on the overall design approach and treatment of the land on which the Alkimos Central development is located, including the sites/features of cultural significance. Some of the changes that have occurred during this process include, but are not limited to the following:

- Retaining and protecting of the pinnacles near the proposed Romeo Road and rail reserve intersection (and surrounding area);
- The realignment of Romeo Road;
- Realignment of North South One (NS1) - the Main Street;
- Retaining and protecting of a series of mature trees and important ecological areas;
- Redesign and planning of the development structure plan; and
- Relocation of the Town Square.

Additionally, cultural principles for the project have been developed to inform the project's planning and design process, community engagement and overall approach to the design of the public realm. These principles are outlined within this report and will undergo further refinement as the project progresses.



Image 2. Site photograph. Source: UDLA.

# EXECUTIVE SUMMARY

Through the development of this Precinct Plan, a Landscape Masterplan has been developed to articulate the approach to the Public Realm including the retaining and protection of the pinnacles, parabolic dune, the street network, town centre and areas of Public Open Space (POS).

The design process commenced with a review of the existing background information for the Alkimos Central precinct. Key features driving the physical response to development at the site are the pinnacles, existing parabolic dune and other key features of cultural significance (such as mature trees).

Through a number of site visits to understand and ground truth the previous strategies and test emerging scenarios, the team agreed that the parabolic dune is a key geological and topographic feature that defines the site and presents a key recreational feature which should inform the layout of the precinct.

Four high level Landscape Principles have been developed for the precinct including:

1. Cultural Context – Protect, preserve and support the principles, protocols, physical and spiritual aspects of Noongar Country, Family and Knowledge and implement the cultural principles for the project.
2. Two Loops – The creation of two loop trails for pedestrian and cyclists, the larger outer connecting Alkimos Central to the beach, the inner connecting to the City Centre.
3. Unbroken Dune Ridge Walk – As part of the larger outer loop, the section traversing over the parabolic dune should be unbroken, meaning bridges be constructed over the rail lines and major road cuttings.
4. 20,000 Trees – An aspirational target of planting one tree per 100m<sup>2</sup> or 20,000 trees for the precinct.

Through the collaborative development of the precinct plan, these landscape principles have informed the precinct layout with the pinnacles protected and retained and the parabolic dune retained and enhanced.

More specific landscape responses have been grouped under the six following 'Key Moves':

1. The Dune Ridge Walk – A continuous unbroken series of trails, lookouts, and passive recreation areas throughout the dune with numerous pedestrian access points to link the eastern and western development areas.
2. An East – West Civic Spine – A generous landscape spine that caters for vehicles but also creates a shaded landscape boulevard for cyclists and pedestrians.
3. A North – South Green Link – To create the inner pedestrian loop which creates a link between the pinnacles and town square, and connects the parabolic dune to the City Centre.
4. Transect – To retain an area of higher quality vegetation and a high point, a transect park will connect the recreation facilities central to the site across the dune to the eastern portion of the site.
5. Civic Heart – Creates a series of shaded landscape streets, lanes and walkways to support a vibrant commercial centre.
6. Station precinct – The creation of a new town square that connects the commercial precinct to the new railway station and creates a shaded, sheltered people focussed public square.

The project will also create numerous areas of POS that will be developed in accordance with Liveable Neighbourhoods (WAPC, 2009, Draft 2015) and Department of Sport and Recreation Classification Framework for Public Open Space 2012. These areas of POS will support a range of recreation opportunities as well as supporting the drainage function of the precinct.

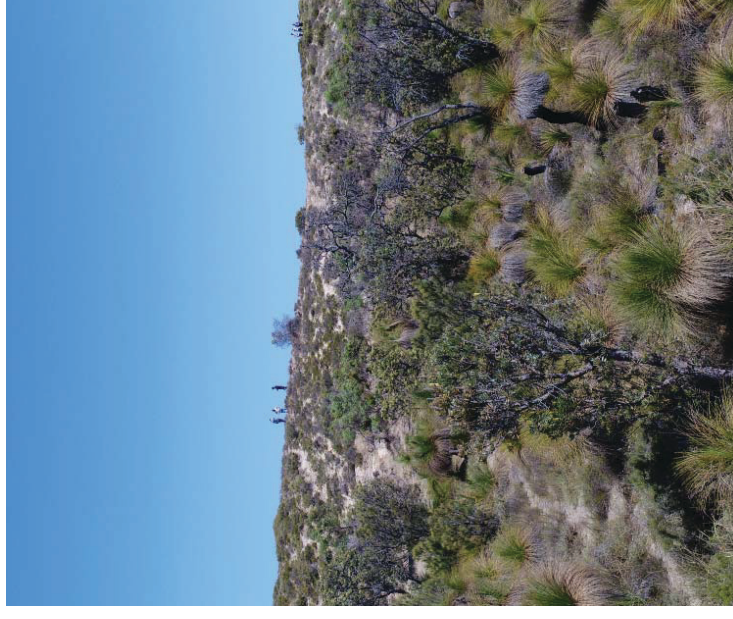


Image 3. Aerial site photograph. Source: UDLA.

# LITERATURE REVIEW

A number of key documents have informed the development of the Precinct Plan and this Landscape Masterplan. The key documents reviewed include:

- Gundi Consulting - Alkimos central Project - Aboriginal (Noongar) Heritage engagement Strategy
- Moodjar Consultancy - Alkimos Central Ethnographic Report
- Clarke Hopkins Clarke - Alkimos Central Design Review Report
- Emerge Associates - Environmental Assessment and Justification Report
- Ethnoscience - Aboriginal Heritage Management Plan: Alkimos City Centre (Regional Centre) Local Structure Plan, Alkimos, Western Australia
- ARID Group - Local Community Development Strategy For Central Alkimos Local Structure Plan Alkimos City Centre Structure Plan
- Lend Lease - Alkimos Beach City Centre Environmental Sustainability Strategy
- Cossill & Webley - Alkimos City Centre Local Structure Plan Engineering Servicing Report
- RPS - Retail Sustainability Assessment
- RPS - UPDATED Local Economic Strategy
- Emerge Associates - Local Water Management Strategy
- SKM - Alkimos City Centre Activity Centre Structure Plan Strategic Transport And Public Transport Planning Report
- City of Wanneroo - Alkimos City Centre Activity Centre Structure Plan Strategic Transport And Public Transport Planning Report
- Strategen - Bushfire Management Plan and;
- Herring Storer Acoustics - Alkimos Central And Regional Centre residential Development Acoustic Assessment



Image 4. Literature Review example images.

# MASTERPLAN



## LEGEND

- ① Dune Ridge Walk
- ② E/W Civic Spine
- ③ N/S Green Link
- ④ Parkway
- ⑤ Transect Park
- ⑥ Civic Heart
- ⑦ Town Square
- ⑧ Proposed Alkimos Aquatic and Recreation Centre (AARC)

- - - Site boundary

Note: Refer Alkimos Central Landscape Masterplan for more detail.

Image 5. Alkimos Central Landscape Masterplan. Source: UDLA



# 1.0 INTRODUCTION

Alkimos Central is approximately 203 ha in size and will be an employment focus and social hub with the requisite key services for the 60,000 residents of the Alkimos-Eglinton District over the next 25 – 30 years. The Alkimos Train Station within Alkimos Central is the first train station that forms part of the Yanchep Rail Extension being constructed by METRONET and is programmed to be operational by late 2023. Due to the rapidly evolving retail and residential environments, DevelopmentWA is undertaking a review of the approved Structure Plan (addendum one) which involves the preparation of a Landscape Masterplan.

UDLA was engaged by Development WA to assist the project team in the development of an amended Structure Plan, now referred to as a Precinct Plan. Through a collaborative design process a Landscape Masterplan has been developed.

The project team included:

- DevelopmentWA (Project Proponent)
- Gundi Consulting (Aboriginal Development Managers Cultural Advisors)
- Moodjar Consultancy (Aboriginal Heritage)
- Urbis (Planning)
- Hames Sharley (Architects)
- Cossil and Webley (Engineering)
- GTA (Traffic and Transport)
- Cundall (Sustainability)
- Emerge (Environment and Hydrology)
- Element (Community Development and Place Making)
- Herring Storer (Acoustics)
- RPS (Economics)

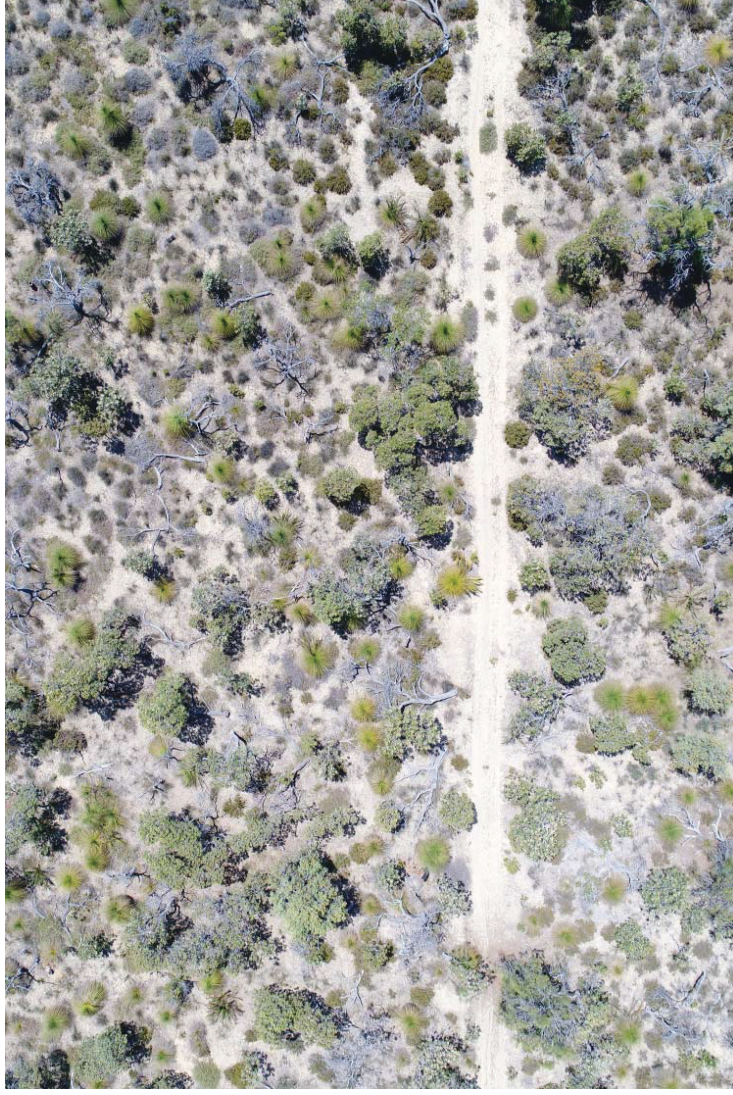


Image 6. Aerial site photograph. Source: UDLA.

# 1.1 SITE LOCATION

The Alkimos Central site is located approximately 40km north of Perth and approximately 17km north of the Joondalup activity centre. The proposed Yanchep Strategic Activity Centre is located approximately 8km to the north.

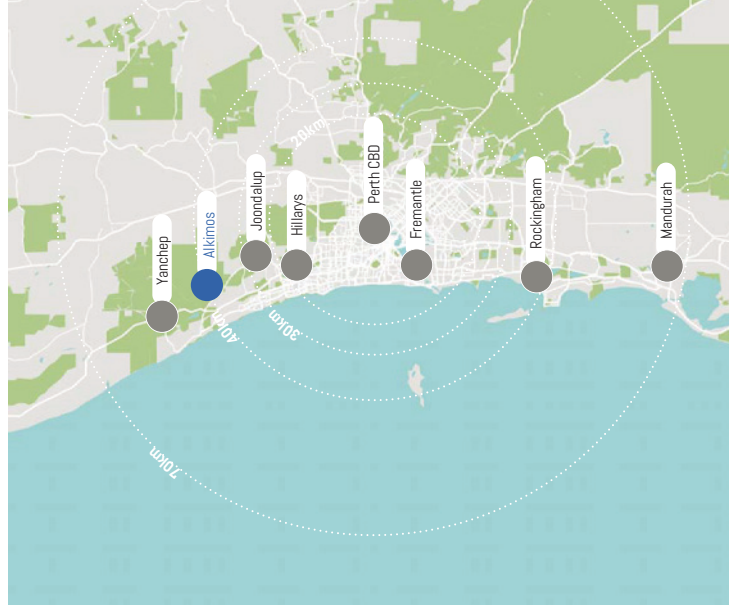


Image 7. Location context map. Source: UDLA

# 1.2 DISTRICT PLAN

Image 7 opposite shows the Alkimos Town Centre and surrounds. At approximately 203ha in size, the site is a key strategic development in the Perth northern corridor.

Key aspects of the sites location include:

- A Threatened Ecological Community (TEC) that has been acknowledged and retained within POS.
- The Pinnacles Area has been identified as a culturally significant area and is to be retained, protected and maintained with ongoing direction from appropriate Noongar Traditional Owners.
- The district plan shows an area of Regional Open Space (ROS) immediately to the north of the site which includes a section of parabolic dune that encircles Alkimos Central.
- Adjacent to site, is the City of Wanneroo's potential future Regional Recreation Complex east of the Freeway.
- There is existing residential development to the south, and west. Areas for future residential development are shown in pink.
- A waste water treatment plan with surrounding exclusion zone on the western side of Marmion Avenue.
- The site fronts Marmion Avenue, a key north south vehicular link.
- Romeo Road will be extended from the new Mitchell Freeway extension through to Marmion Avenue and dissect the site's southern portion.
- A new train station linking the site to the northern suburbs and Perth CBD.
- There are several existing pedestrian/cycling connections available that will link the site to the beach (approx. 2km to the west) and surrounding suburbs.

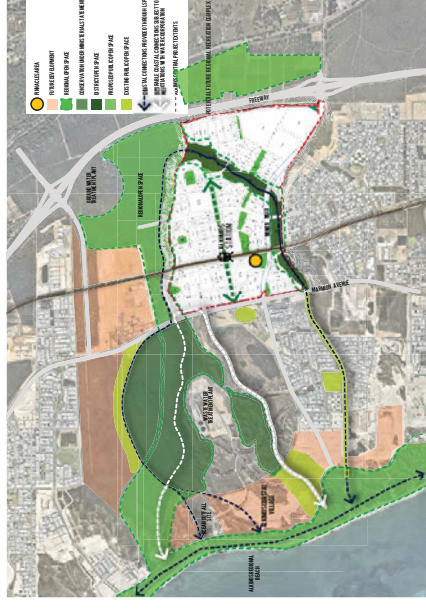


Image 8. District Plan. Source: UDLA

## 1.3 PROJECT VISION

The Alkimos Central Project has been under development for several years with key project milestones including:

1. The Alkimos City Centre Structure Plan which was approved in August 2018.
2. In January 2019, Clarke Hopkins Clarke undertook an independent review of the approved structure plan which identified a number of project strengths as well as opportunities for potential improvement to the plan.
3. In August 2019, the project team undertook a Vision and Place Pillars workshop that identified the following:
4. From October to December 2020 a significant planning review was undertaken to protect the Pinnacles and TEC sites and resulted in a redesign of the the surrounding area, including the realignment of Romeo Road.

### VISION STATEMENT

*"Alkimos Central is a dynamic, adaptive place to live, learn, work and retreat. Anchored by its town centre and new take on an integrated transit hub, it will blend seamlessly within its coastal context, integrated cultural heritage, connect communities across generations and foster economic and social vitality."*

### PRINCIPLES

The Alkimos Central Project will:

- Showcase best practice transit centred development;
- Give consideration to, and celebrate its unique coastal environment;
- Foster connection to its communities;
- Promote long term regional economic growth to deliver jobs and prosperity; and,
- Embrace adaptability over time to meet local and market needs.

The Principles will be delivered through the four pillars of:

1. Leading Edge and Designed to Evolve
2. Celebrating the Coast
3. Connected Destination
4. Activated and Alive

**"THE BEST URBAN OUTCOMES START WITH A CLEAR IDEA ABOUT PURPOSE, A PERSONALITY FOR THE PLACE IF YOU WILL. KNOWING WHAT IT IS YOU ARE SEEKING TO BECOME BRINGS ORDER AND CLARITY TO DESIGN THINKING AND CREATES A CLEAR FRAMEWORK AROUND WHICH INVESTMENT CAN BE PRIORITISED AND STAGED."**

**JAMES TUMA**

Source: Alkimos town centre vision (draft).

## 1.4 DESIGN PROCESS

The development of this landscape masterplan has been through a collaboration of consultants to develop a new Structure Plan. As part of the design process the team have delivered two presentations to the State Design Review Panel.

### SDRP 1

*Located between Yanchep and Joondalup, Alkimos Town Centre is well positioned to exploit its location near the beach, and deliver living, recreation and tourism opportunities with a strong green dimension. With the rail infrastructure being delivered ahead of development, in a location endowed with generous, quality open space, the opportunity exists to develop a site responsive Town Centre with a unique Alkimos character. A distinctive dense Town Centre core, which preserves and celebrates existing green space, would strengthen sustainability intentions, whilst simultaneously delivering a non-business as usual outcome.*

### SDRP 2

*The establishment of Alkimos Town Centre as a distinctive place sets a much needed new precedent for the North-West corridor of greater Perth. The unique dunal landscape and stunning coastal environment have not yet been celebrated to their full extent or possibility. The Panel supports the Local Government Authority desire to see demonstration projects that investigate new approaches for greater density for 'out of centre' centres.*

*Alkimos Town Centre has the opportunity to be a mitigating cool, green, desirable, highly differentiated and saleable development that aligns with the aspirations for a 5-star GBCA community rating. It could become a state and national exemplar.*

The above reinforces the teams Vision, Principles and Pillars and a strong landscape oriented development.



Image 9. Site photograph. Source: UDLA.

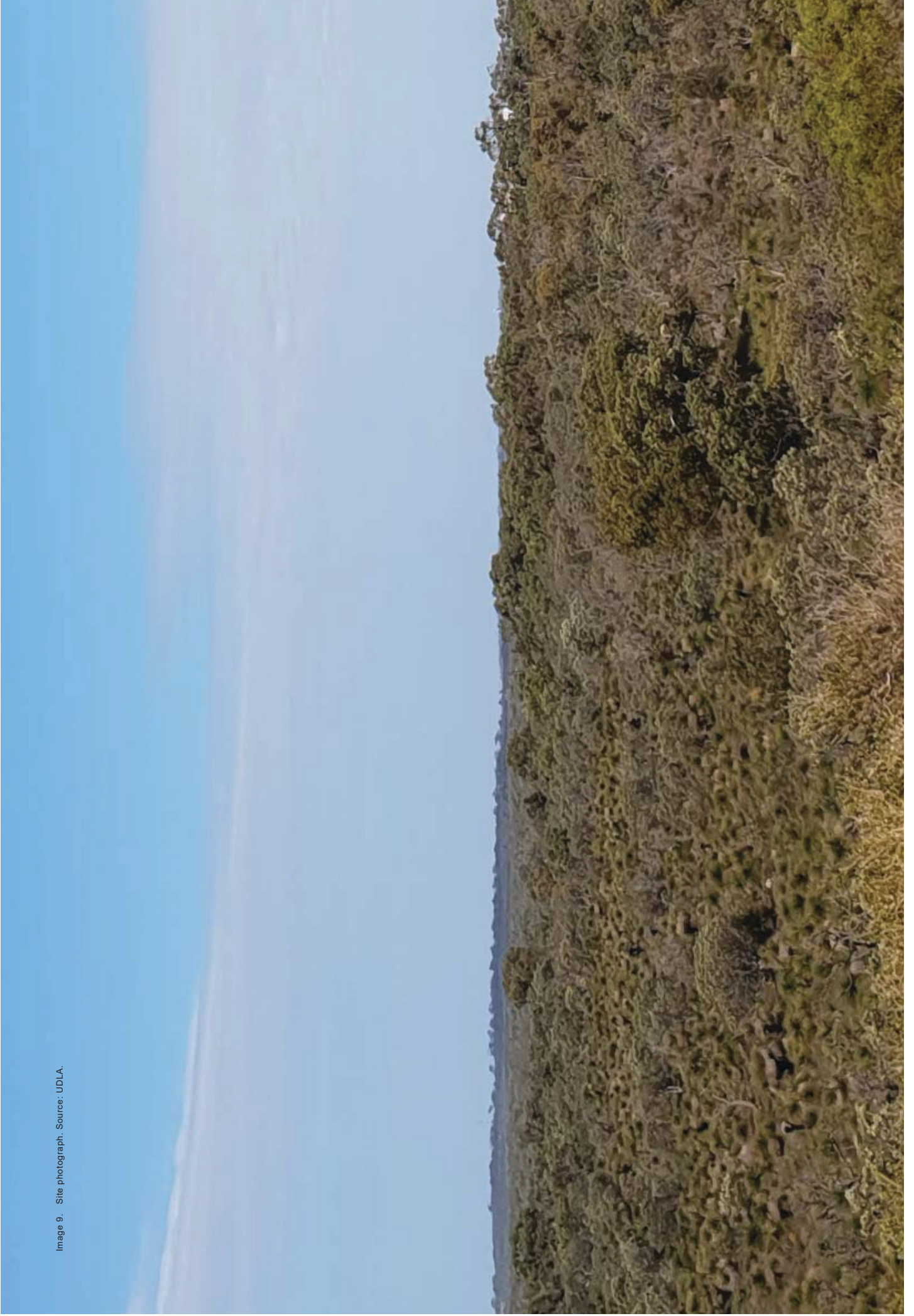


Image 10. Aerial site photograph. Source: UDLA.

# 2.0 SITE ANALYSIS



## 2.1 ABORIGINAL HERITAGE SURVEY

Moodjar Consultancy have undertaken a heritage survey of the Alkimos Central project area, identifying several culturally significant natural features, such as limestone pinnacles and mature trees. Moodjar Consultancy have listed a number of recommendations within their report for the future management of the project area and it's areas and features of cultural significance prior to, and during future development.



Image 11. Site photograph. Source: UDLA.

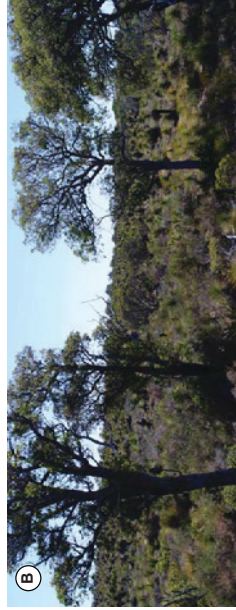


Image 12. Site photograph. Source: UDLA.

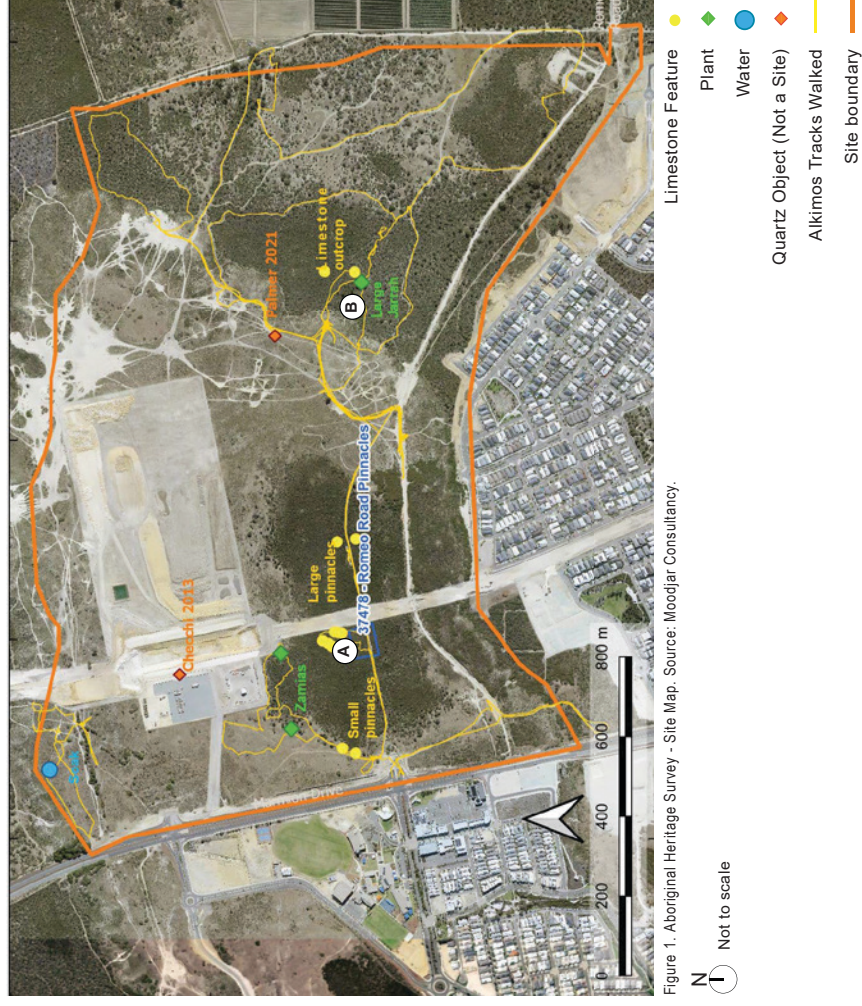


Figure 1. Aboriginal Heritage Survey - Site Map. Source: Moodjar Consultancy.

N  
1  
Not to scale

## 2.2 WIND

Wind directions and speed vary over the course of the year, with:

- Predominantly strong south west winds between 20-30km per hour throughout the summer and Autumn months; and;
- Easterly winds throughout the winter and spring months ranging between 10-20km per hour.

The landscape response will need to consider wind direction and strength to allow for the provision of comfortable outdoor spaces for use year round, for example; where particular tree species will be suitable and how POS features can create shelter.

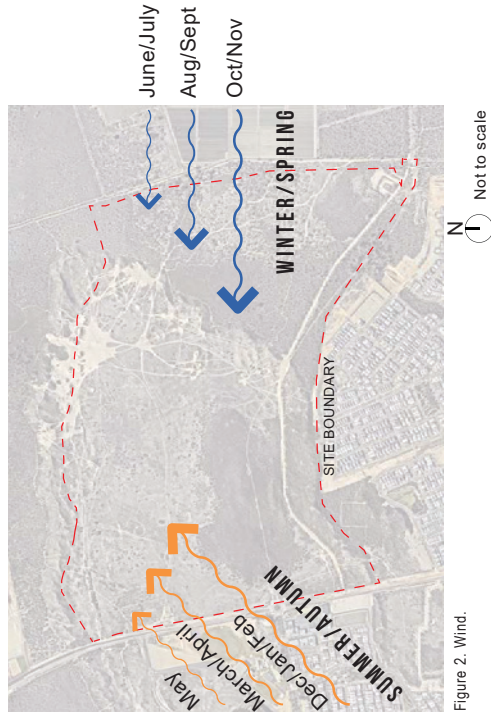


Figure 2. Wind.

## 2.3 SOLAR

According to the Bureau of Meteorology, not only is Australia's climate warming but the frequency of extreme heat events is increasing. With a rise in average high temperatures and an increase in the amount of days exceeding 40°C during summer months, it will be important to ensure a site, such as Alkimos central, adopts urban forest and cooling strategies to create liveable communities.

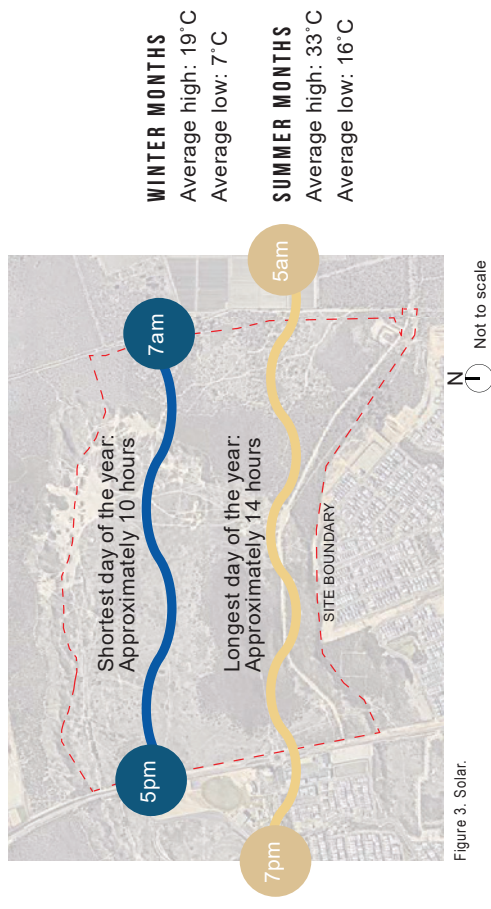


Figure 3. Solar.



## 2.4 VEGETATION CONDITION

The condition of the vegetation on site varies, with a large portion of the sites vegetation either degraded (shown in orange) or completely degraded (shown in red).

There are two aspects of the project that are outside the remit of this project, the alignment of the rail line and the extension of Romeo Road which both pass through areas of good and excellent vegetation. The broader development will aim to reduce impacts to areas of good vegetation, whilst making efforts to improve the quality of the poor/degraded vegetation.

A TEC, *Melaleuca huegelii* - *M. systena* shrublands on limestone ridges' is listed as 'endangered' in Western Australia. Two patches of the SCP26a TEC were recorded during an assessment, as shown in Figure 4. The eastern patch extends over 0.69 ha and includes parts of the two eastern patches recorded by GHD (2018). The western patch extends over 0.14 ha and includes part of the western patch recorded by GHD (2018). Both of these TEC patches have been protected and retained within POS.



Image 13. Site photograph. Source: UDLA.

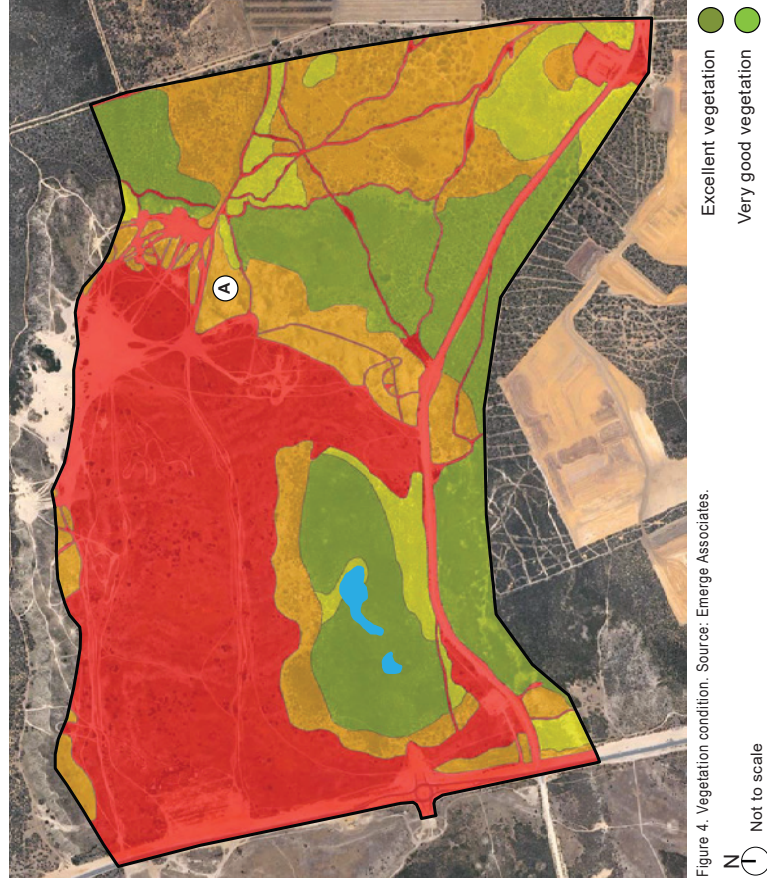


Figure 4. Vegetation condition. Source: Emerge Associates.

## 2.5 SOILS

The site is situated within the Swan Coastal Plain and there are a number of landform and soil units shown on the figure opposite. Soil characteristics that will inform the landscape response include:

- The area of Quindalup Second Dune Phase forms a parabolic dune which is a distinctive feature of the site and broader area.
- Much of the proposed development area consists of Quindalup Deep Sand Felt Phase (west of the dune) and Karrakatta Sand Yellow Phase (east of the dune). The sandy nature of these soil types needs to be considered when selecting plant species and irrigation systems etc.



Image 14. Site photograph. Source: UDLA.



Image 15. Site photograph. Source: UDLA.

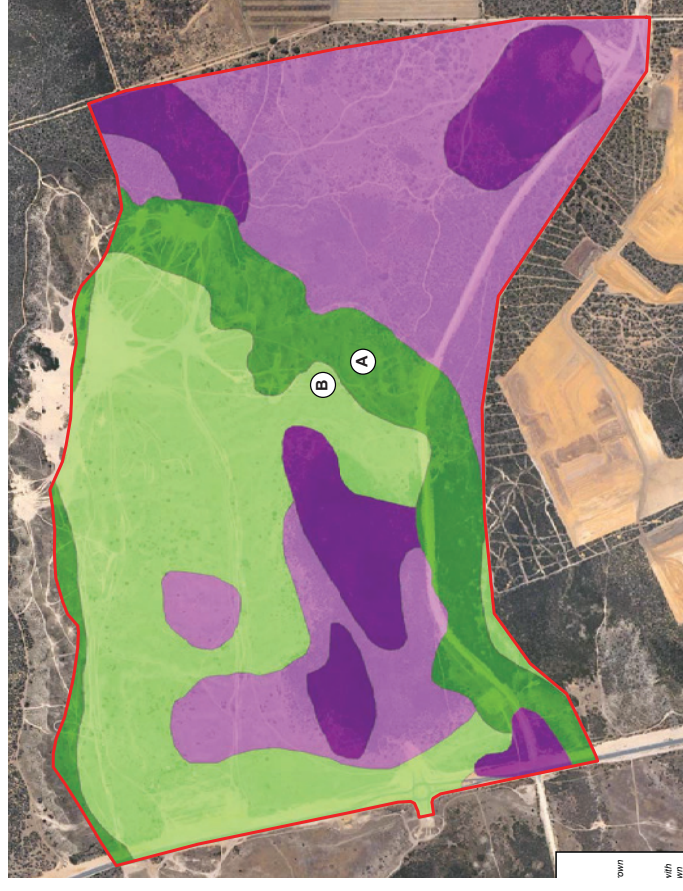


Figure 5. Soils. Source: Emerge Associates.

N  
 1  
 Not to scale

- KIs - Karrakatta Shallow Soils Phase - Bare rock, yellow/brown shallow sands and stony soils
- Ky - Karrakatta Sand Yellow Phase - Yellow deep sands
- Q2 - Quindalup Second Dune Phase - Calcareous sands with organic staining to about 20cm, passing into pale brown sand; some cementation below 1m
- Qp - Quindalup Deep Sand Flat Phase - Dark grey/brown sand to about 50cm and then pale brown sand
- Site boundary

## 2.6 TOPOGRAPHY + VIEWS

The parabolic dune is the most significant topographic feature of the site with approximately a 26m difference between the lowest and highest points. The highest points of the dune are above 50m AHD and these high points could potentially facilitate lookouts and places with desirable views and vantage points to the ocean. Natural low points and undulations on the site provide opportunities, such as drainage and storm water treatment within POS.

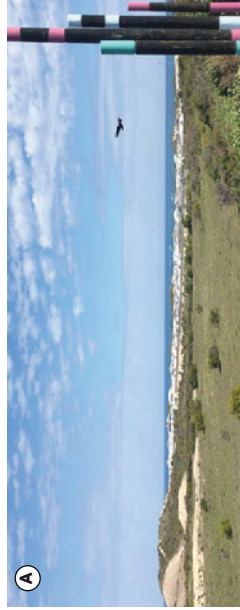


Image 17. Site surrounds photograph. Source: UDLA.

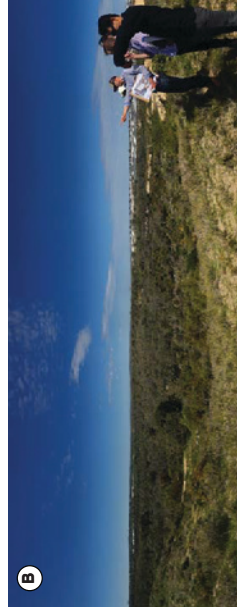


Image 18. Site photograph. Source: UDLA.

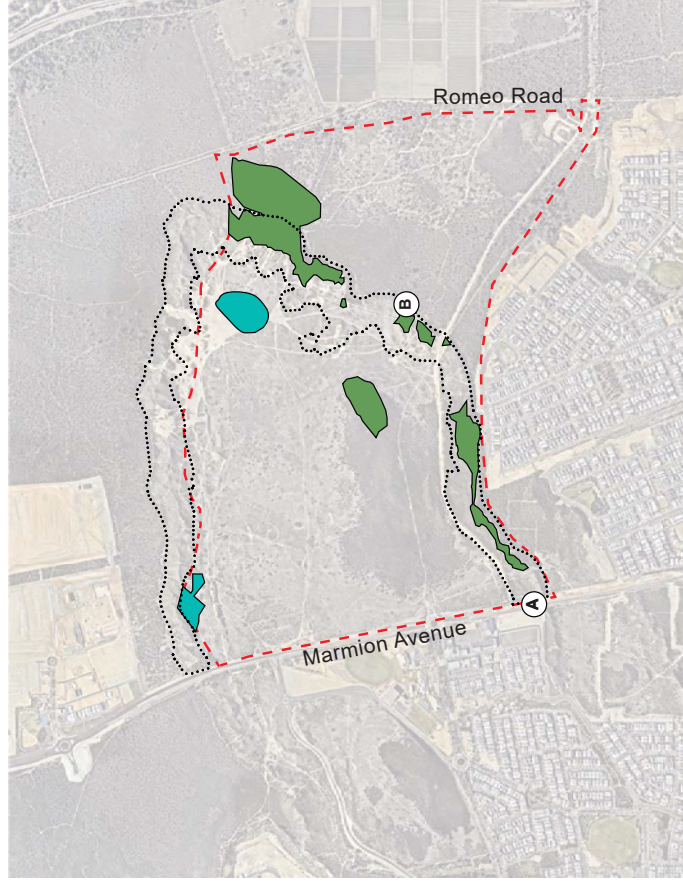


Figure 6. Topography and views.

N  
Not to scale

ADH 50m  
ADH <30m+  
Dune base outline .....  
Ocean views / vantage points  
Site boundary - - -

## 2.7 KEY FINDINGS



Image 19. Site photograph. Source: UDLA.

- Several culturally significant natural features reported, such as limestone features (pinnacles) and mature trees.
- Romeo Road Pinnacles to be retained and protected

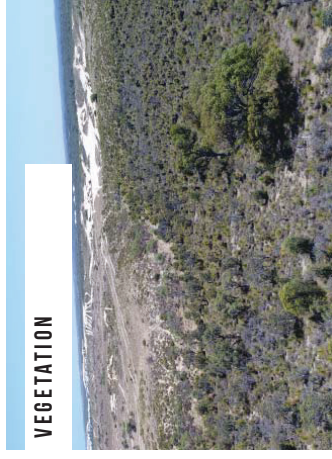


Image 20. Site photograph. Source: UDLA.

- There are areas of good vegetation that will be impacted by the development, however efforts should be made to retain these areas wherever possible.
- Areas of TEC have been included within POS as an effort to protect and preserve.
- There are large areas of poor or degraded vegetation and the project should seek to improve the vegetation quality in these areas.



Image 21. Site photograph. Source: UDLA.

- The parabolic dune is a key geological feature that should be retained wherever possible.
- Much of the site is characterised by generally sandy soils that will impact drainage and plant selections.



Image 22. Site photograph. Source: UDLA.

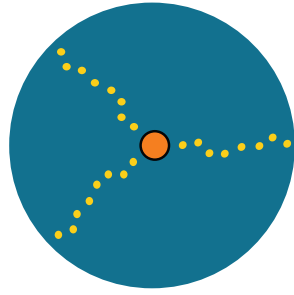
- The parabolic dune is a key feature of the site and creates opportunities for recreation and the creation of lookouts.
- The undulations of the site provide opportunities for wind protection and drainage.

Image 23. Site photograph. Source: UDLA.

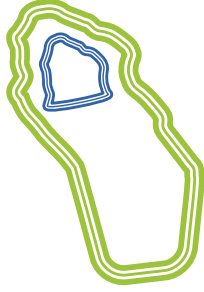
## 3.0 LANDSCAPE PRINCIPLES



### 3.1 LANDSCAPE PRINCIPLES & BIG IDEAS



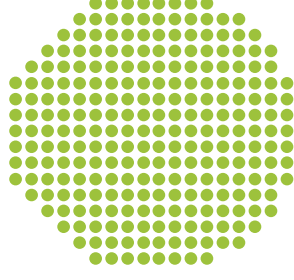
**CULTURAL CONTEXT**



**TWO LOOPS**



**UNBROKEN DUNE RIDGE WALK**



**20,000 TREES**

Figure 7. Landscape Principles.

## 3.2 CULTURAL CONTEXT

To protect and manage culturally significant places and features within the project area, establish Noongar cultural protocols within the future Alkimos Central community and identify opportunities for Noongar people to maintain ongoing connection and custodianship of the project area, the following cultural principles (the principles) have been developed.

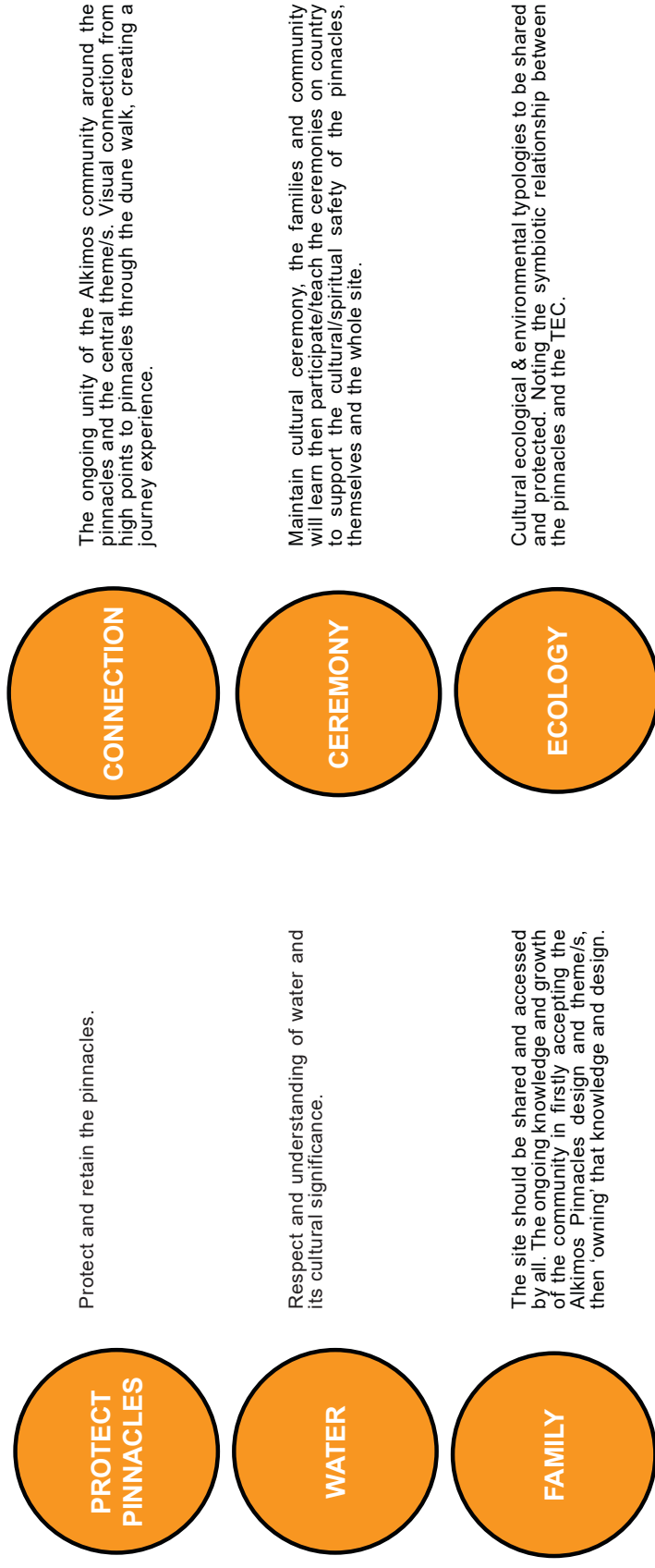
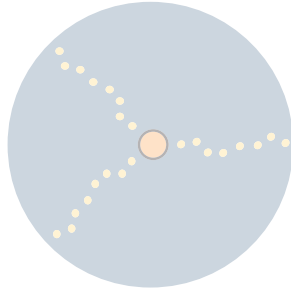


Figure 8. Cultural Principles (Gundt Consulting and UDLA).



# APPLYING CULTURAL PRINCIPLES

Each of the principles has a place in, and relationship to a Noongar system/protocol. To achieve each of the principles within the Alkimos Central development, it is essential that each of the systems/protocols is considered and informs decision making throughout the project life and into the future. It is understood that each principle cannot be achieved without the others, as they are interconnected and can only genuinely take place if all are considered equally.

Already, there are a number of actions and outcomes for the project that align with the principles, such as the following:

- The retaining and protecting of the pinnacles and mature trees on site;
- The retention of the parabolic dune;
- Management of ecological systems on site;
- Ongoing engagement with the appropriate Noongar people for the project area;
- Community awareness and support of the cultural principles; and;
- An understanding among the broader project team of the importance of the culturally significant features and places within the project area, and value of ongoing collaboration with the ADM's.

For future actions to continue achieving outcomes that reflect the cultural principles, it is absolutely essential that the appropriate Noongar people are engaged to provide direction and input into the planning and design of Alkimos Central and its future community.

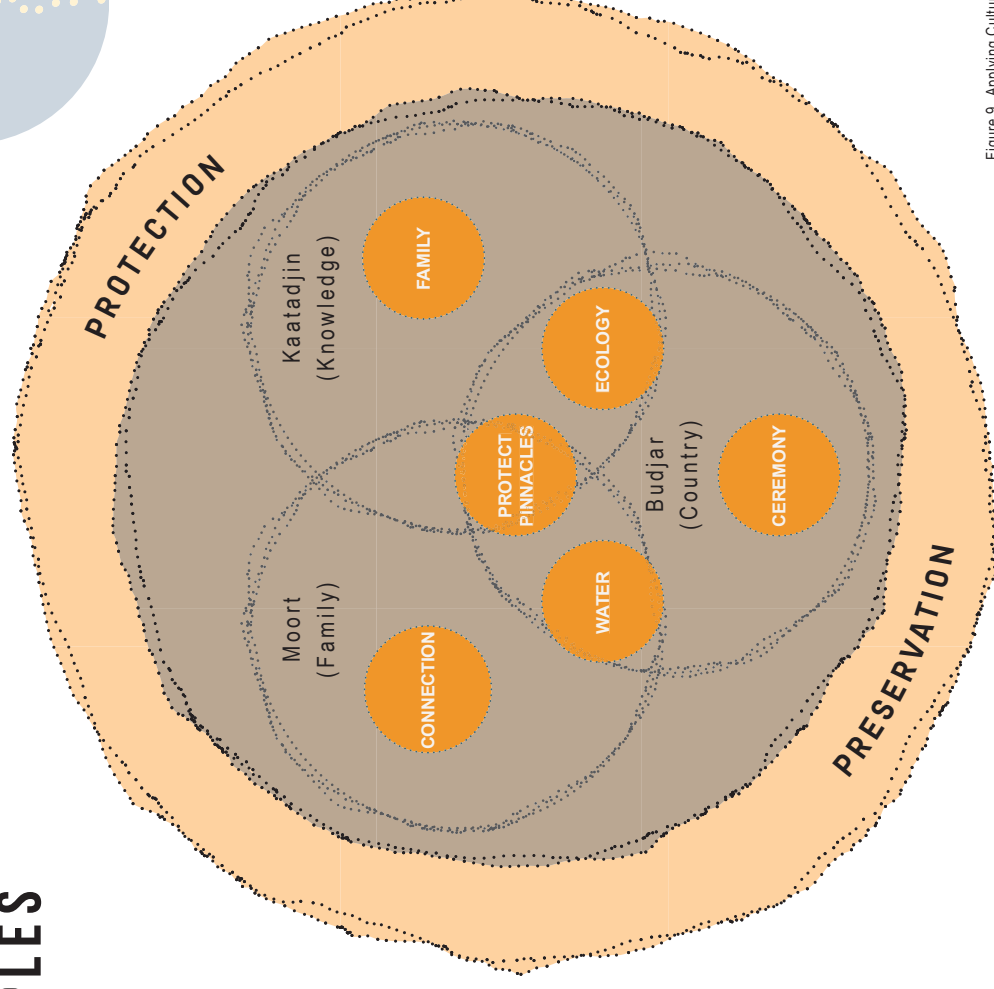
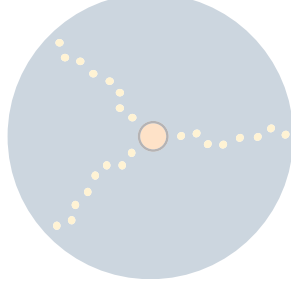


Figure 9. Applying Cultural Principles - UDLA



# CULTURAL INTERPRETATION PLAN

The Cultural Interpretation Plan illustrates the cultural context, connections and significant features for the project area. This information is grounded in place, oral histories and traditional knowledge, and this plan only serves as a graphic representation of the Aboriginal (Noongar) Heritage on site.

The Pinnacles were identified during the cultural engagement process and became a key driver for the cultural design and interpretation plan. Some aspirational outcomes for the pinnacles site are:

- Preserve and Protect the Pinnacles
- Noongar Access and Ongoing Cultural/ Maintenance Processes Encouraged
- Space for Ceremony and Cultural Business (Dance Ground and Meeting Space)
- Performance Space(s)
- Spaces for Learning and Knowledge Sharing (Outdoor Classrooms)
- Cultural/ Community Centre
- Active POS (BBQ's, Play, Exercise etc.)

This plan can be viewed in conjunction with other key documents, such as the following:

- Alkimos Central Archaeological Report, prepared by Moodjar (March, 2021);
- Alkimos Central Ethnographic Report, prepared by Moodjar in (March 2021); and;
- Alkimos central Project - Aboriginal (Noongar) Heritage engagement Strategy, prepared by Gundi Consulting (July 2020).









Figure 10. Cultural Interpretation Plan - UDLA



Image 24. Site photograph. Source: UDLA.

### 3.3 TWO LOOPS

The two loops will connect people to the ocean, to other parts of the site and connect the city centre with POS. The larger loop (shown in black) is a 9km walk experience which provides access to the dune ridge walk on site and delivers clear wayfinding to the beach. The smaller loop (shown in blue) encourages movement throughout site and the city centre, connecting people to the different POS types, and at points, allows access to the dune ridge walk and larger loop.

-  9km coastal loop - walkable connector to the ocean (suggested route via existing street network and pathways that require landowner approval)
-  4km City centre loop - walkable connector within city
-  Visual connection to the ocean
-  Marmion Ave
-  Train line
-  City centre


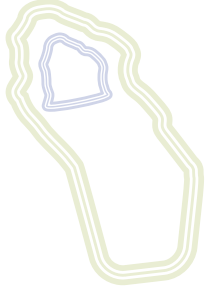
N  Not to scale

Figure 11. Two Loops.



## OBJECTIVES



**FUNCTIONAL**

Image 25. Minda Coast Park. Source: City of Holdfast Bay website.

- Connects people to the ocean
- Connects people with POS
- Encourages movement throughout the city centre
- Provides recreation opportunities
- Promotes physical activity



**ENVIRONMENTAL**

Image 26. Alkimos area photograph. Source: UDLA.

- Connects people with the environment
- Encourages observation and conservation
- Protects natural habitats
- Promotes green links



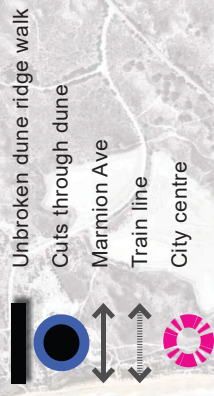
**RETREAT**

Image 27. Park of De Panne, by OMGEVING. Source: Landzine website.

- Visual connections to the ocean and city centre
- Points of rest, reflection and retreat
- Contributes to wayfinding

### 3.4 UNBROKEN DUNE RIDGE WALK

A key portion of the two loops will be the creation of an unbroken dune ridge walk within the sites District Open Space (DOS) as per the POS classification at section 6.1 Classification, which will provide a unique experience along the parabolic dune. By connecting each dune segment through a hierarchy of bridges and crossings by which people can experience a continuous walk which facilitates different experiences such as walking trails, lookouts etc.



N  
1  
Not to scale

Figure 12. Unbroken Dune Ridge Walk.



# OBJECTIVES

## WALKABLE



Image 28. Te Ara Manawa, by Isthmus. Source: Landzine website.

- A walkable and unique experience
- Connects people with POS
- Promotes physical activity

## CONTINUOUS / UNBROKEN

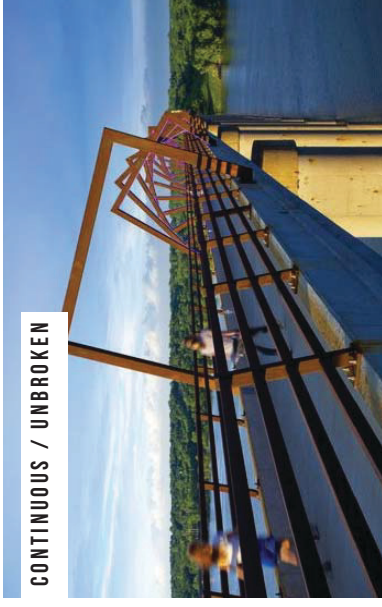


Image 29. High Trestle Trail bridge, by RDG Planning and Design. Source: Archdaily website.

- Continuous walk experience
- Hierarchy of bridges and crossings
- Connects dune segments post road/rail cuts

## VARIANCE

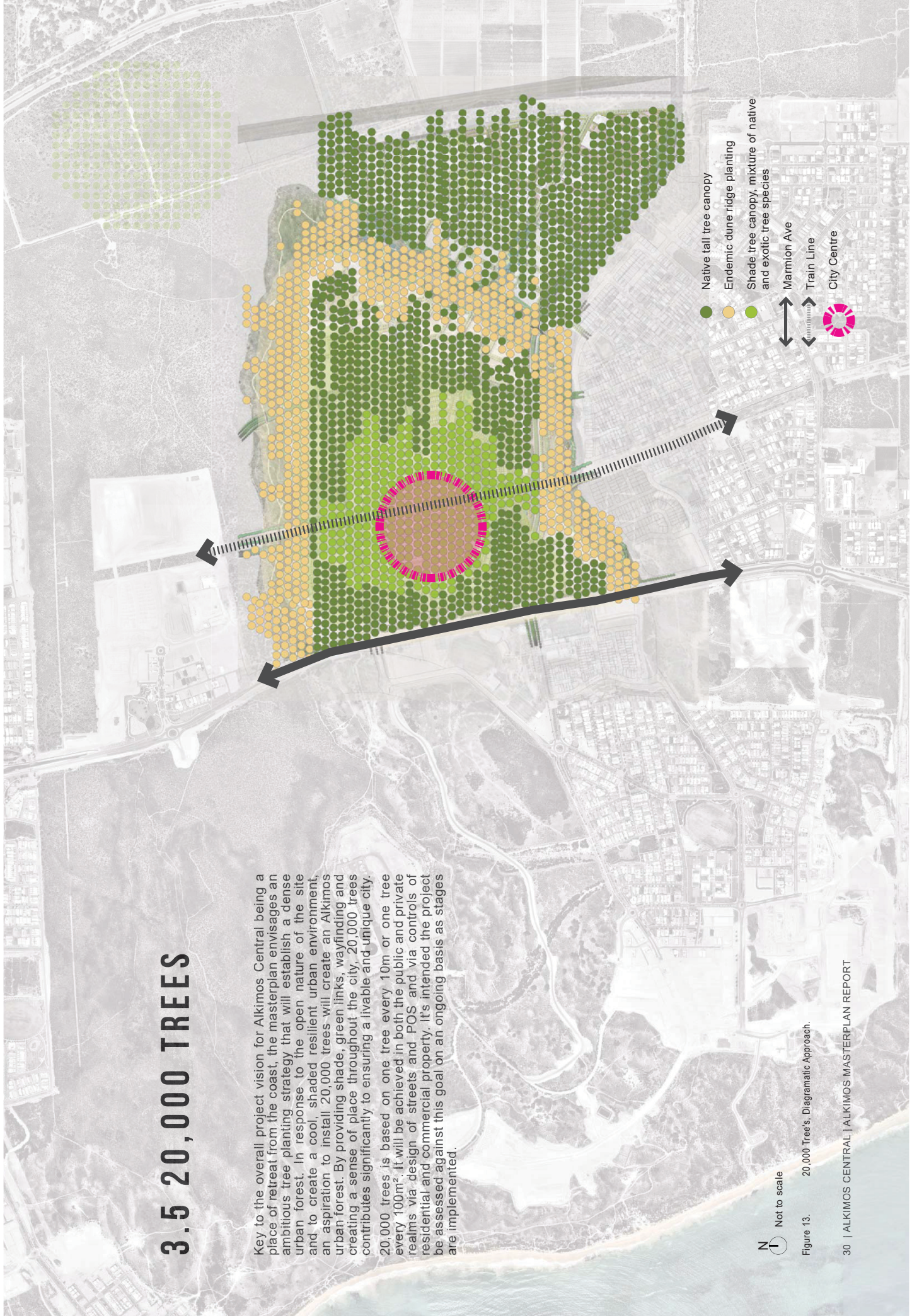


Image 30. Panorama Terrace, by Buro Lubbers. Source: Landzine website.

- A number of different experiences
- Characterised by natural topography and views
- Various active opportunities along the walk e.g. walk, run, ride etc...
- Creation of 'gateways' / thresholds with opportunities for art
- Iconic

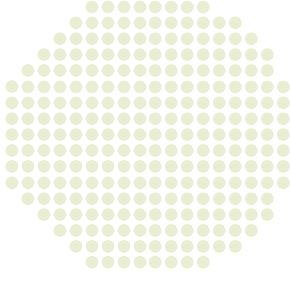
# 3.5 20,000 TREES

Key to the overall project vision for Alkimos Central being a place of retreat from the coast, the masterplan envisages an ambitious tree planting strategy that will establish a dense urban forest. In response to the open nature of the site and to create a cool, shaded resilient urban environment, an aspiration to install 20,000 trees will create an Alkimos urban forest. By providing shade, green links, wayfinding and creating a sense of place throughout the city, 20,000 trees contributes significantly to ensuring a livable and unique city. 20,000 trees is based on one tree every 10m or one tree every 100m<sup>2</sup>. It will be achieved in both the public and private realms via design of streets and POS and via controls of residential and commercial property. It's intended the project be assessed against this goal on an ongoing basis as stages are implemented.



N  
Not to scale

Figure 13. 20,000 Trees, Diagrammatic Approach.



## BENEFITS OF AN URBAN FOREST

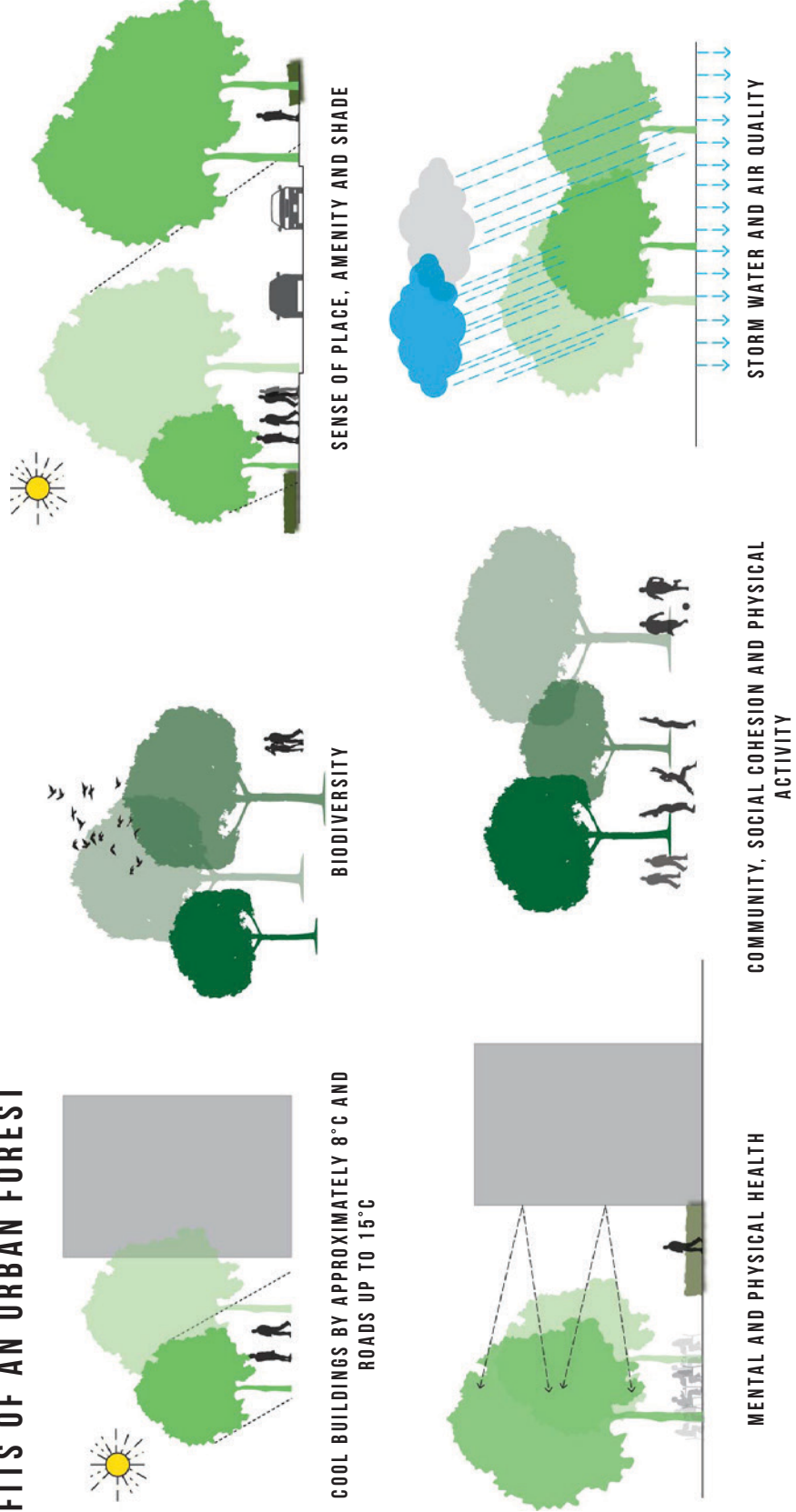


Figure 14. Benefits of an Urban Forest, Diagrammatic Approach.





# 4.0 PRECINCT PLAN RESPONSE

## 4.1 INTRODUCTION

The Precinct Plan has been informed by existing site features including:

- The parabolic dune; and
- Existing vegetation.

New committed infrastructure also includes:

- Romeo Road extension through to Marmion Avenue;
- The Yanchev Railway Line; and;
- The Extension of the Mitchell Freeway.

The diagrams on the following pages illustrate how the Structure Plan layout has responded to these features to create a site responsive layout.

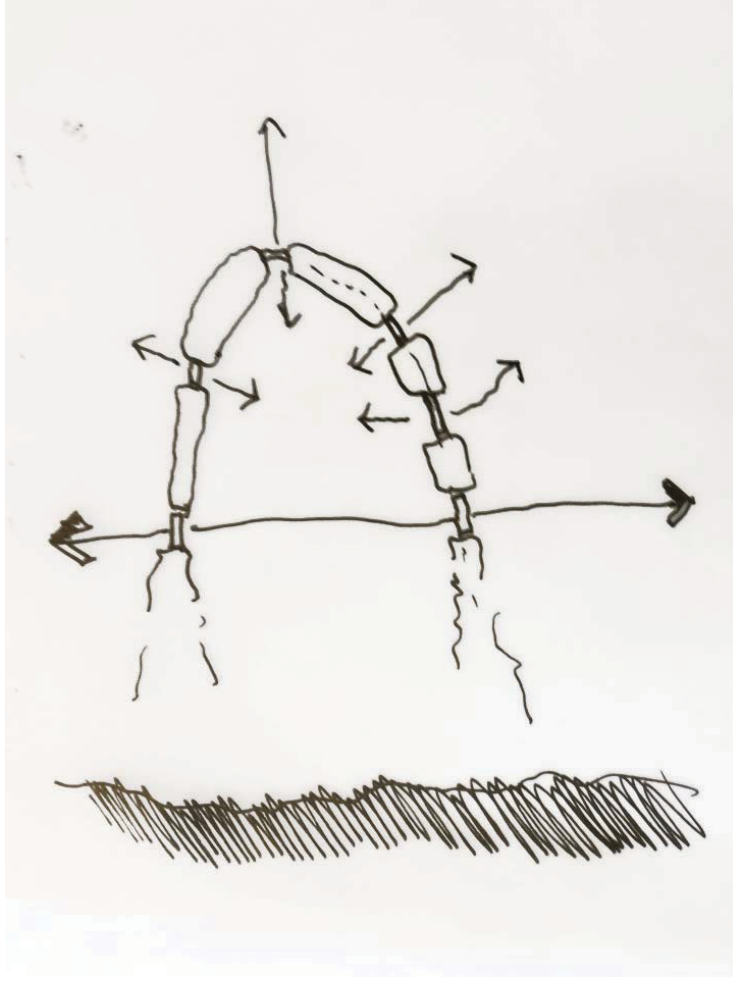
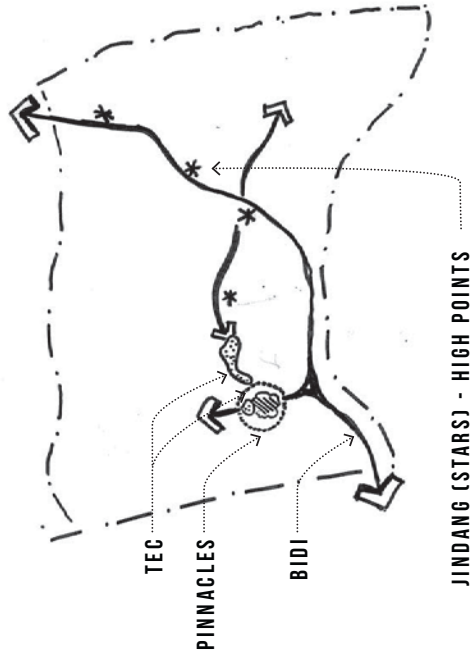


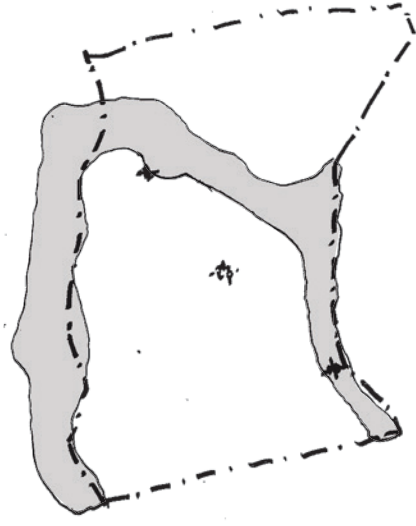
Image 31. Parabolic Dune and Cuts Hand Sketch, Alkimos Central Site. Source: UDLA.

## 4.2 PRECINCT PLAN RESPONSE



### CULTURAL CONTEXT

Identifying and translating the cultural stories into plans and key moves.



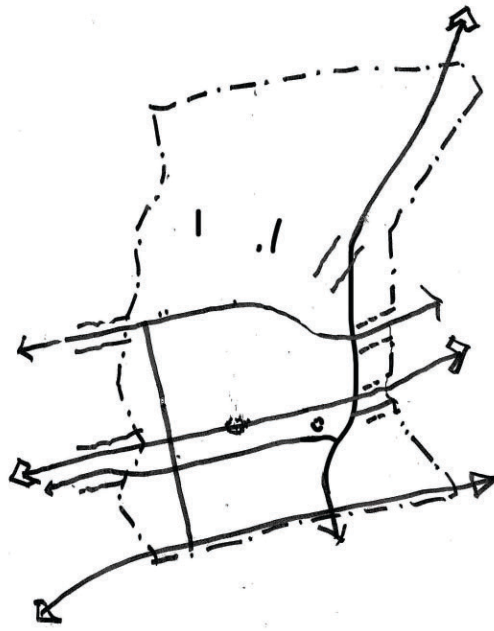
### SITE

The parabolic dune is retained and celebrated as the sites key identifying feature. It is the foundation of the future town centre.



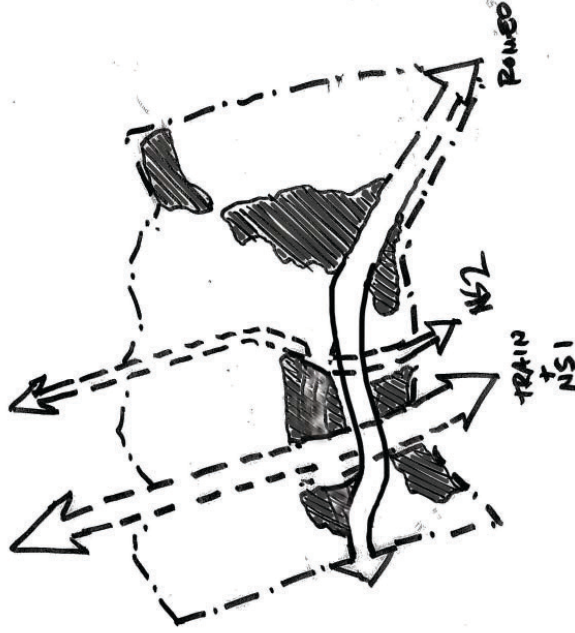
### VERY GOOD VEGETATION

Identifying good quality vegetation indicates the dunes to the south and east provide the best opportunity for retention. The central vegetation is affected by future infrastructure.



**FIXED ELEMENTS CUTS**

Fixed infrastructure including Romeo Road, Brindabella Parkway, Marmion Avenue and the rail corridor means that the dunes will be cut and the vegetation will be impacted.



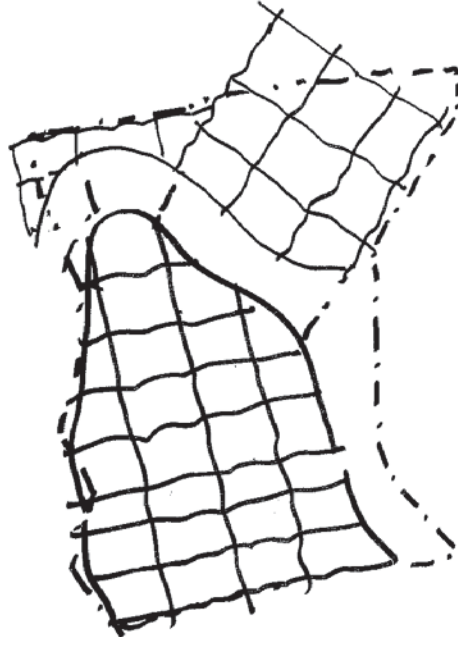
**GOOD VEGETATION AFTER FIXED ELEMENTS IMPOSED**

Vegetation becomes disconnected and the central community becomes enviable. The best opportunity is to retain on the dune.



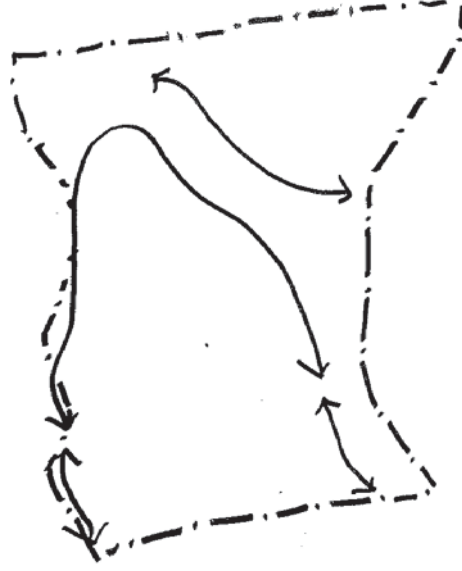
**CUTS**

The cuts through the dunes need to be resolved as gateways and thresholds into the site. They become opportunities for approach and reveal.



**RESULTING MESH**

The grid and parkway combine to connect the dune physically and visually - ensuring it remains prominent and public.



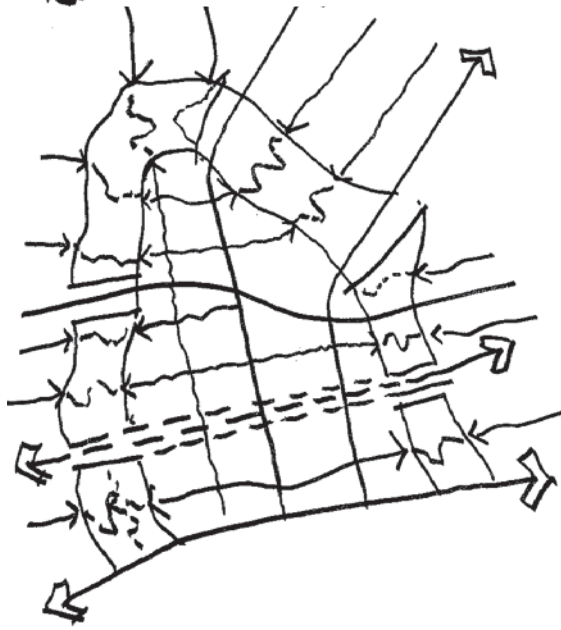
**PARKWAY**

Establishing a datum to the edge of the dune based on the contours and rate of inclination to form a hard edge for development.



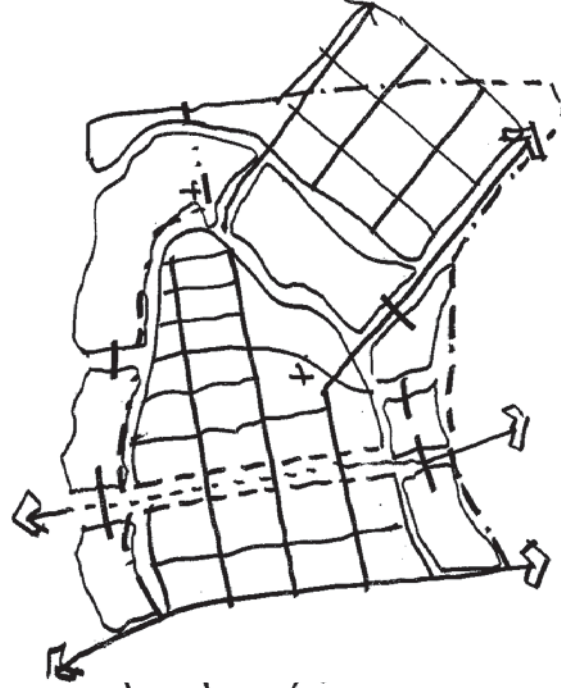
**INTERSECTING "CRANKED" GRIDS**

The development grids are projected across the site and allow views to the dunes terminating at each street. Visually connecting the dune to the town centre.



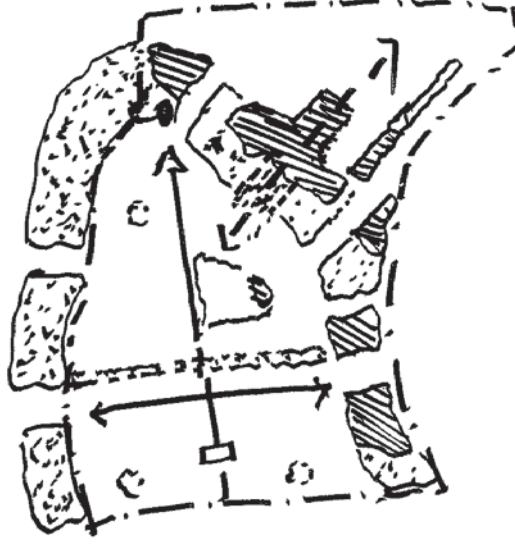
**GRID WRAPS OVER DUNE AS FINER GRAIN OF PATHS**

The street grid manifests into the dunes trails and boardwalks, providing public access to the dune.



**GENERAL ENCLOSURE**

The resulting urban form ensures the primacy of the dune and the establishment of a compact and efficient built environment that is easy to get around.

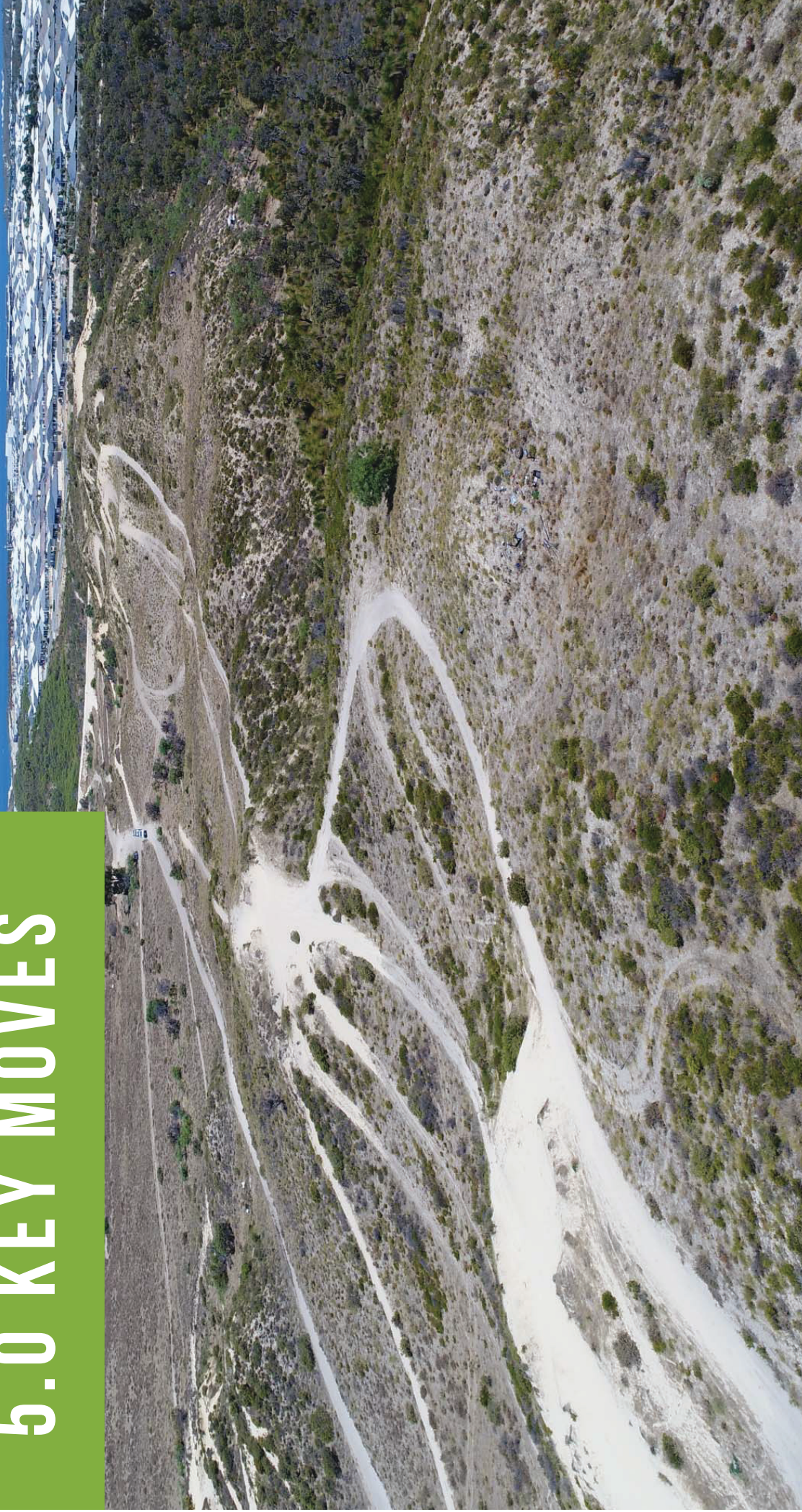


**PUBLIC OPEN SPACE AND REGIONAL OPEN SPACE**

Connected town square via linear parks and streets to the open space at both local and regional level.



# 5.0 KEY MOVES





## 5.1 KEY MOVES

THE APPROACH TO THE PUBLIC REALM IS CAPTURED IN THE FOLLOWING SIX 'KEY MOVES'

1. DUNE RIDGE WALK
2. E/W CIVIC SPINE
3. N/S GREEN LINK
4. PARKWAY
5. TRANSECT
6. CIVIC HEART



Figure 15. Concept Masterplan Key Moves Diagram - UDLA

# INDICATIVE EXAMPLES

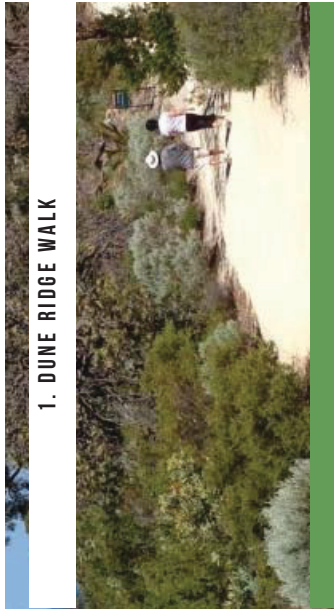


Image 32. Bold Park Perth WA, Photograph. Source: Google images.

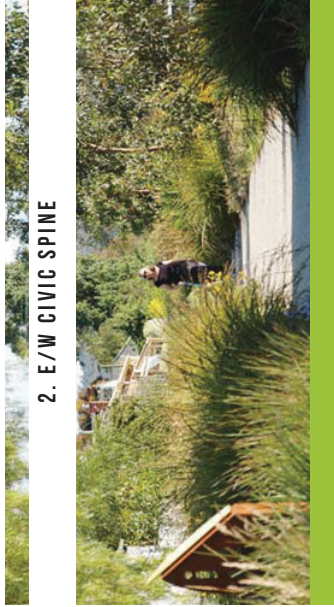


Image 33. Windsor Street Linear Reserve, by OXIGEN. Source: Google images.



Image 34. North Coogee. Source: UDLA.

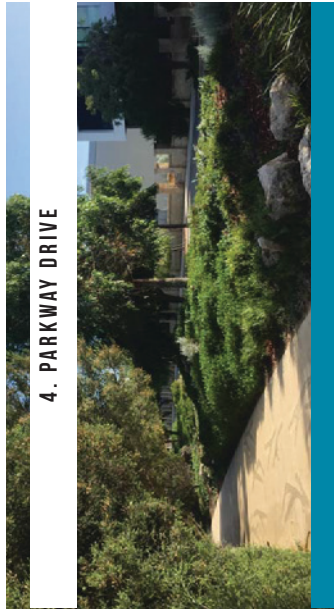


Image 35. North Coogee. Source: UDLA.

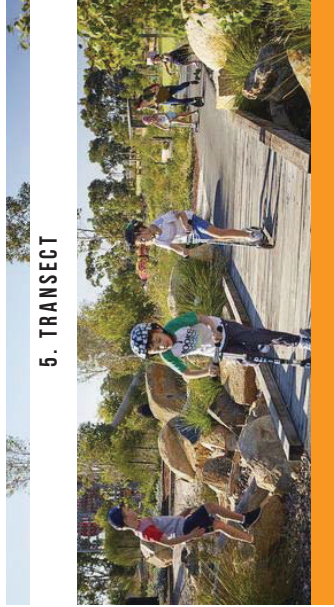


Image 36. Stadium Park and Chevron Parklands. Source: Hassell website.



Image 37. Newman Town Centre. Source: UDLA.

## 5.2 DUNE RIDGE WALK

The dune is a culturally significant feature of the site which provides a raised path of travel and visual connections across the project area, and beyond. The parabolic dune topography links Alkimos city centre to the beach by providing an unbroken connection that traces the ridge line towards the coast. The Dune Ridge Walk will provide active and passive recreation opportunities along its length. It will have multiple entry/exit opportunities to encourage use and connect back to the city centre. Prominent viewpoints and key active recreational nodes will be universally accessible, however, due to the natural elevation changes along the route it may not be feasible to maintain a fully accessible loop.

The Dune Ridge Walk will be re-vegetated in areas of degradation whilst tracts of good quality vegetation will be protected and retained, where possible. Where roads cut through the dune, alternate crossing opportunities will be investigated for feasibility, such as pedestrian bridges or signalled crossing points at road level. The Dune Ridge Walk can be defined by the following:

- **CONTINUOUS:** A dune experience which utilises natural topography and views;
- **CONNECTION:** Culturally significant connector, visual and physical connections to the ocean and to the City Centre; and;
- **VEGETATION:** Protection of high quality vegetation and re-vegetation of degraded areas.

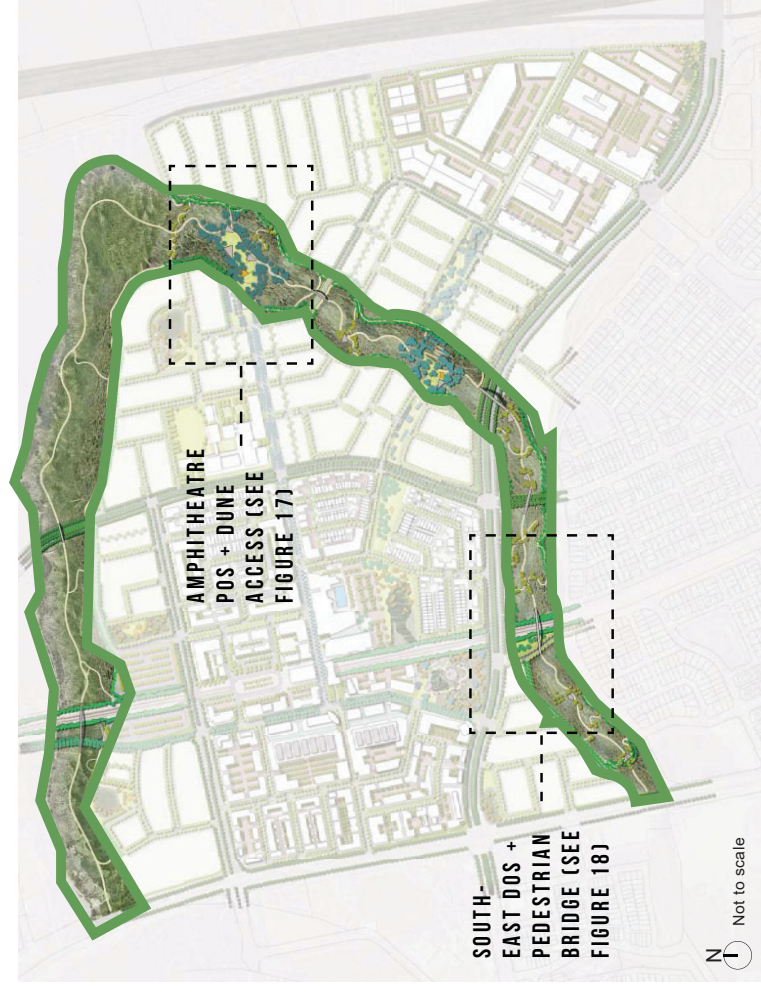


Figure 16. Concept Plan Dune Ridge Walk - UDLA

# DUNE RIDGE WALK



Not to scale

Figure 17. Concept Plan Amphitheatre POS and Dune Access - UDLA

The amphitheatre POS is located at the termination of Tuart Drive, where the street meets the dune. It will be a key area which will provide residents and visitors with clear access to the dune DOS (as per the POS classification at section 6.1 Classification) and include desired views to the ocean and city centre.



Not to scale

Figure 18. Concept Plan Pedestrian Bridge and Linear POS - UDLA

The southern parts of the dune which are transected by the rail reserve have some of the better quality vegetation and this area will mostly consist of protected vegetation, revegetation and walking/cycling trails. Additionally, due to the rail reserve cut, a pedestrian bridge being included would connect the dune DOS either side of the rail, enhancing a continuous unbroken dune ridge walk.

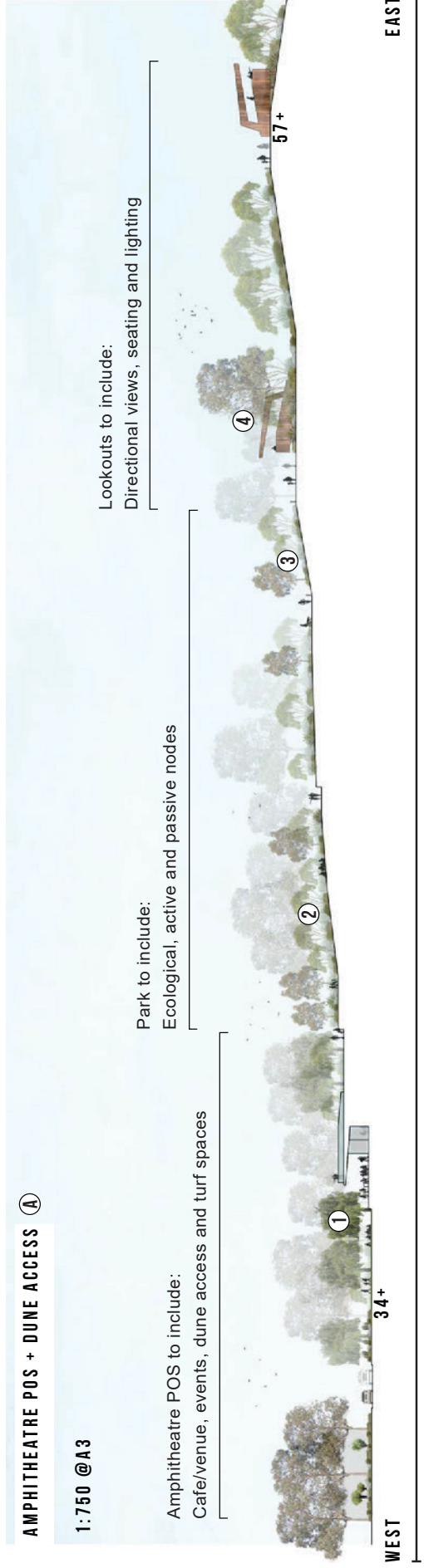


Figure 19. Amphitheatre POS and Dune Access - Indicative Section - UDLA



# DUNE RIDGE WALK

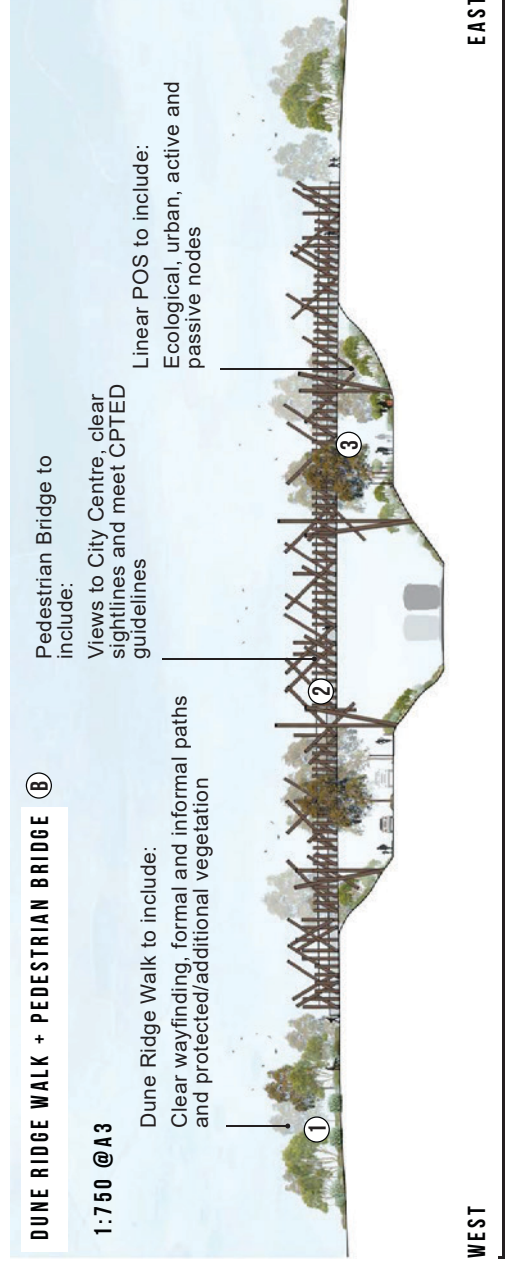


Figure 20. Dune Ridge Walk and Pedestrian Bridge - Indicative Section - UDLA

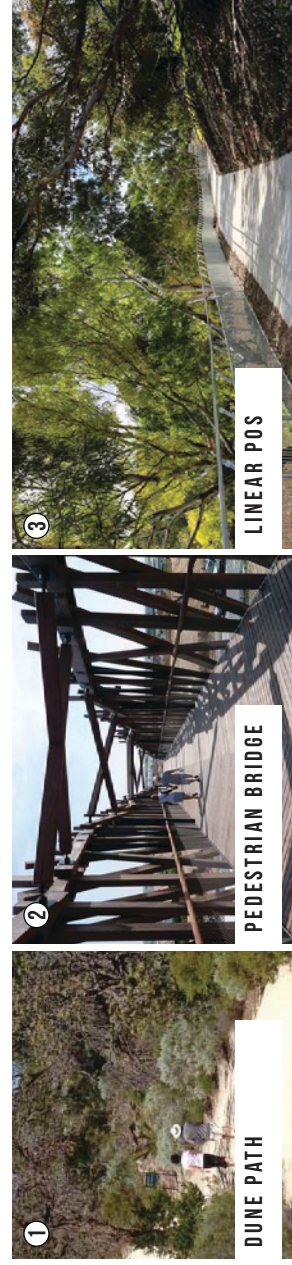


Figure 21. Above: Indicative limestone path on dune ridge walk - UDLA

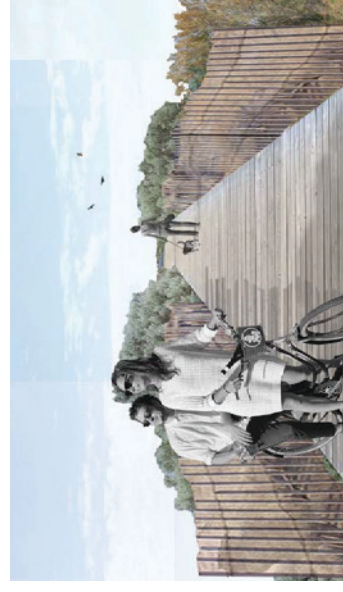


Figure 22. Below: Indicative weathered timber decked path - UDLA

## 5.3 E/W CIVIC SPINE

The E/W Civic Spine establishes a direct visual and physical connection from the eastern edge of the dune to the city centre and beyond towards Marmion Ave. The Civic Spine can be characterised as a processional street with a large central vegetated median that provides an experiential pathway between town square and the dune ridge. The POS at the eastern end of Tuart Drive, terminating the axis, uses the natural amphitheatre topography of the dune and will be established as a great public gathering space, ideal for performance, events or just relaxing with an overlook towards the city and ocean. Sitting atop this amphitheatre space will be a prominent public building that celebrates the viewpoint and can potentially become an iconic space for the Alkimos city centre. The E/W Civic Spine can be defined by the following:

- **CONNECTION:** Long straight road linking residents and visitors to the City Centre and the dune;
- **VEGETATION:** A large median strip accommodating Tuarts and other plants; and;
- **HABITAT:** Provides habitat for native species.



Figure 23. E/W Civic Spine - UDLA



Figure 24. E/W Civic Spine - Indicative Section - UDLA



Not to scale

Figure 25. Concept Plan Green Link and Retail Lane - UDLA

The Green Link Street and Retail Lane make up the western most part of the E/W Civic Spine, providing connection across this part of the site. Purposeful plant selection creates intuitive wayfinding, shade and connectivity between the central and west precincts of the city centre, while giving people opportunities for visual and physical connections to the dune. The Retail Lane will be guided by the builtform guidelines.



Not to scale

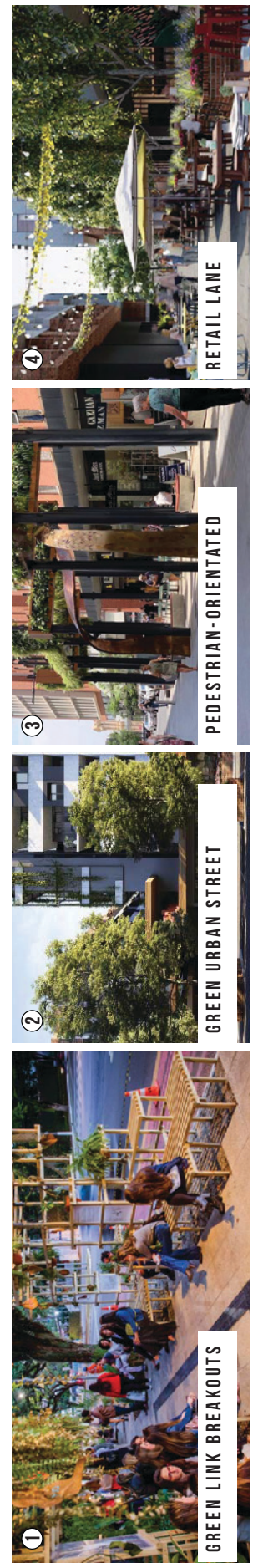
Figure 26. Concept Plan Tuart Drive - UDLA

Tuart Drive forms the biggest part of the E/W Civic Spine, connecting the dune, amphitheatre POS and the city centre along a straight street which is characterised by a generous planted median, efficient multi-use paths and Tuarts.





Figure 27. Green Link and Retail Lane - Indicative Section - UDLA



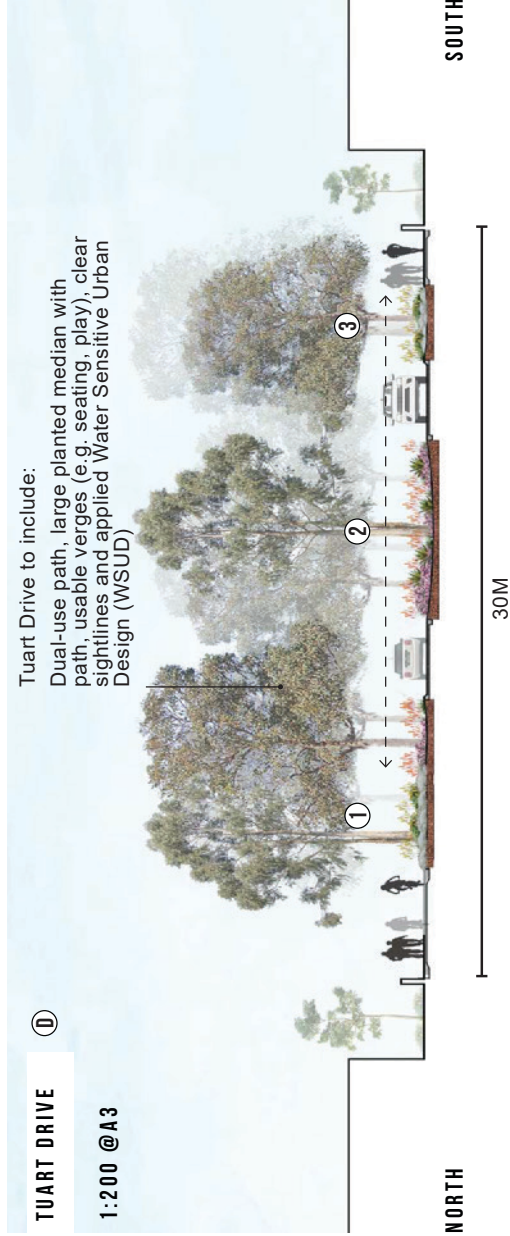


Figure 28. Tuart Drive - Indicative Section - UDLA



## 5.4 N/S GREEN LINK

Adjoining the rail corridor will be a Linear Park connecting either end of the parabolic dune directly to the city centre and train station. The park provides an opportunity to establish a high quality green edge along the rail corridor, improving amenity, access and outlook for immediately adjacent development lots. It will be a highly animated 'urban' park towards the centre of city with opportunities for play-spaces, exercise nodes, youth spaces and community gardens, inserted as 'outdoor rooms' along its length. A shared path, promenade will provide continuous physical connection. The extreme north and south ends of the N/S Linear POS will largely be re-vegetated spaces with subtly shifting topography providing a slow transition into the space of the Parabolic Dune and direct access to the Dune Ridge Walk. The N/S linear POS can be defined by the following:

- **DIVERSITY:** Accommodates a range of different uses;
- **CONNECTION:** Connects users with the city centre and parabolic dune; and;
- **GREEN:** Provides high quality planting along rail corridor.



Figure 29. Concept Plan N/S Linear POS - UD/LA

# N/S LINEAR POS



Figure 30. Concept Plan N/S Linear POS, Rail and Main Street - UDLA

The N/S Green Link runs along Main street and is intersected by nodal POS and green verge opportunities. From south to north the journey includes The Pinnacles POS, Main Street, The Town Square, Green Verge links, then onto the northern Dune.

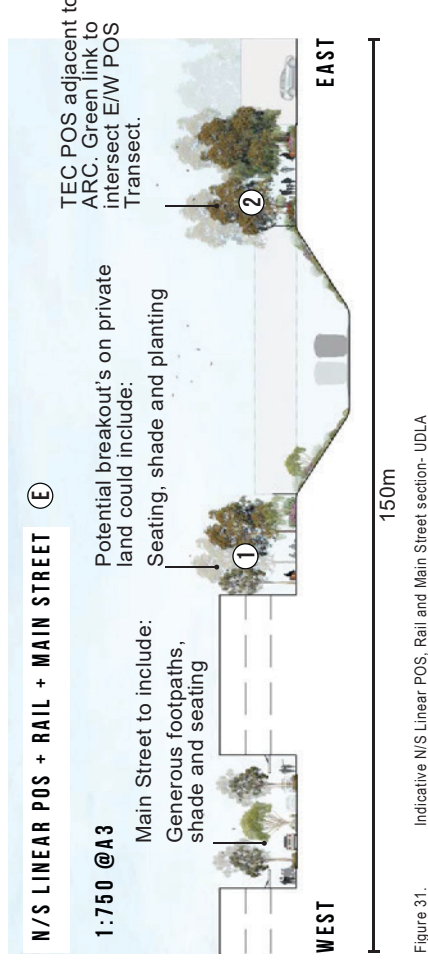


Figure 31. Indicative N/S Linear POS, Rail and Main Street section- UDLA



## 5.5 PARKWAY

Parkway will be the internal interfacing edge between built form and the parabolic dune. It establishes a base datum that limits the expansion of development and provides clarity to the dune base. It will provide access to the Dune Ridge Walk allowing total public access with no private lots fronting or backing directly onto the dune. The Alkimos Parkway will have active and passive POS at key locations abutting the dune. The road and path are intended as low key and meandering routes – organic and sinuous in character with soft edges, flush kerbs, native vegetation and opportunities for vegetated verges. The character of the street will be akin to a coastal country road. Parkway can be defined by the following:

- **INTERFACE:** Acts as a clear datum between the dune and built form;
- **ACCESS:** Provides users with easy visual and physical connections to the dune; and;
- **POS:** Runs adjacent to a number of the city's POS.

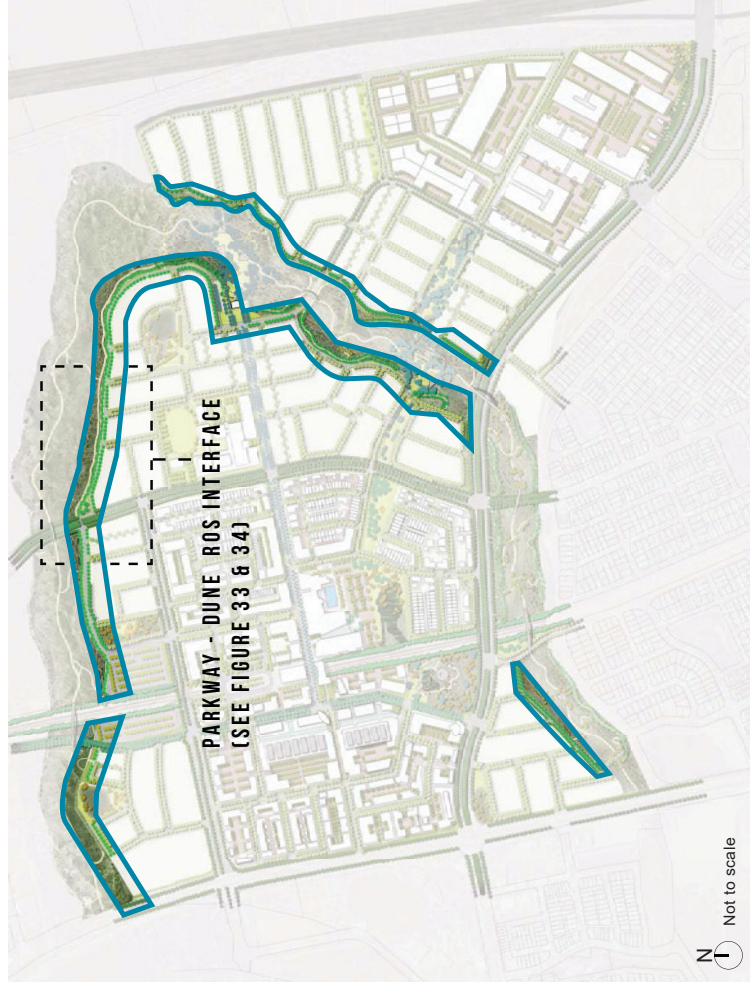


Figure 32. Concept Plan Parkway - UDLA

# PARKWAY

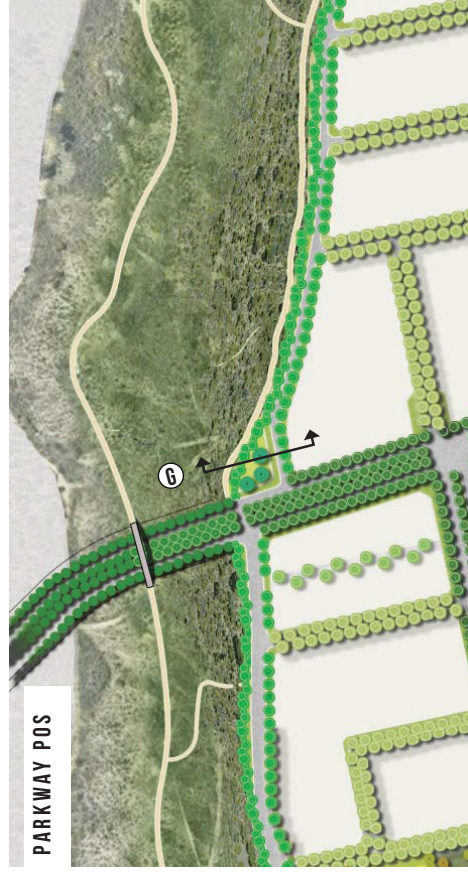


N Not to scale

Figure 33.

Concept Plan Parkway - Dune ROS Interface - UDLA

Parkway acts as a datum line between the dune and built form, creating a space which can accommodate ecological, active and passive uses, such as walking and cycling. It also provides residents with an easily accessible active shared path. However, a significant section of Parkway runs parallel with the ROS to the north of site, works along this portion are subject to approvals from the Department of Planning Lands and Heritage (DPLH) and the Department of Biodiversity, Conservation and Attractions (DBCA).



N Not to scale

Figure 34.

Concept Plan Parkway POS - UDLA

There are a number of POS located along Parkway which provide various opportunities, such as active and passive recreation, drainage, stormwater treatment and dune access.

**PARKWAY - DUNE INTERFACE (F)**

1:200 @A3



Figure 35. Parkway - Dune Interface - Indicative Section - UDLA



**PARKWAY POS ⑥**

1:200 @A3

**Dune Ridge Walk to include:**  
Desired views, wayfinding, seating nodes and POS access

**Parkway POS to include:**  
Dune Access, ecological, urban, active and passive nodes

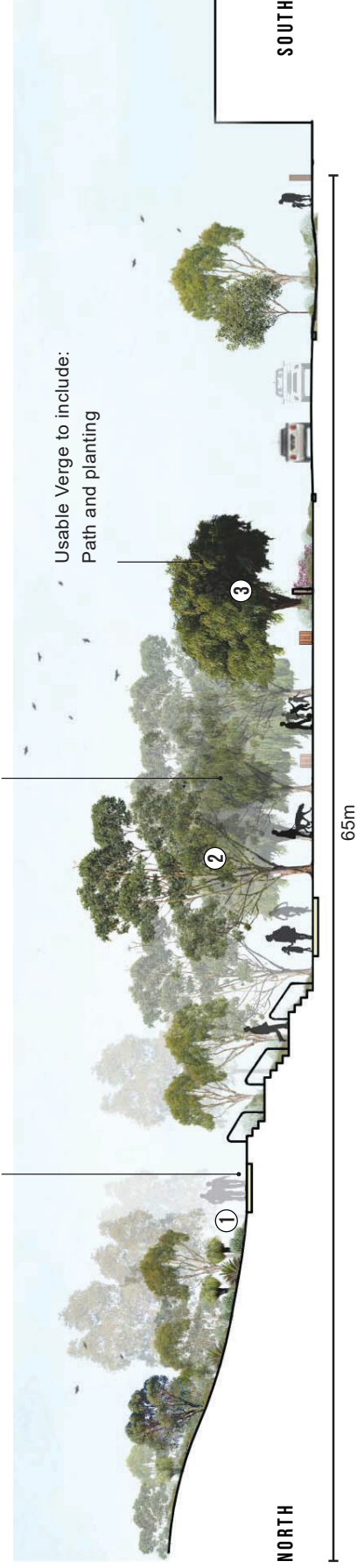
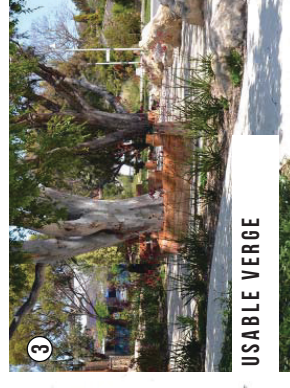
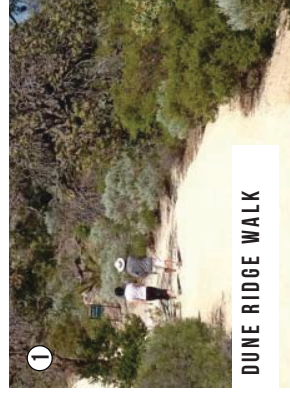


Figure 36. Parkway POS - Indicative Section - UD/LA





## 5.6 TRANSECT

Most of the vegetation over the Alkimos Central Project area is in average to poor condition after years of grazing and 4WD recreation on the site. The proposed Dune Vegetation Transect retains some of the best existing vegetation ensuring that good quality examples on both windward and leeward sides of the dune are retained and improved as an unbroken POS. This will provide a positive ecological benefit and passive recreation at strategic points along the transect.

The transect will become an important pedestrian link between the east and west of the dune. The Transect will be universally accessible and will provide an opportunity to access the Dune Ridge Walk as they intersect. Each end of the site will be book ended with POS providing an active function for the community.

- **LINK:** Links east and west through POS;
- **VEGETATION:** Hosts retained mature Tuarts; and;
- **POS:** A public open space offering diverse uses and ecological benefits.
- **TOPOGRAPHY:** Retained topography connecting back to the dune.

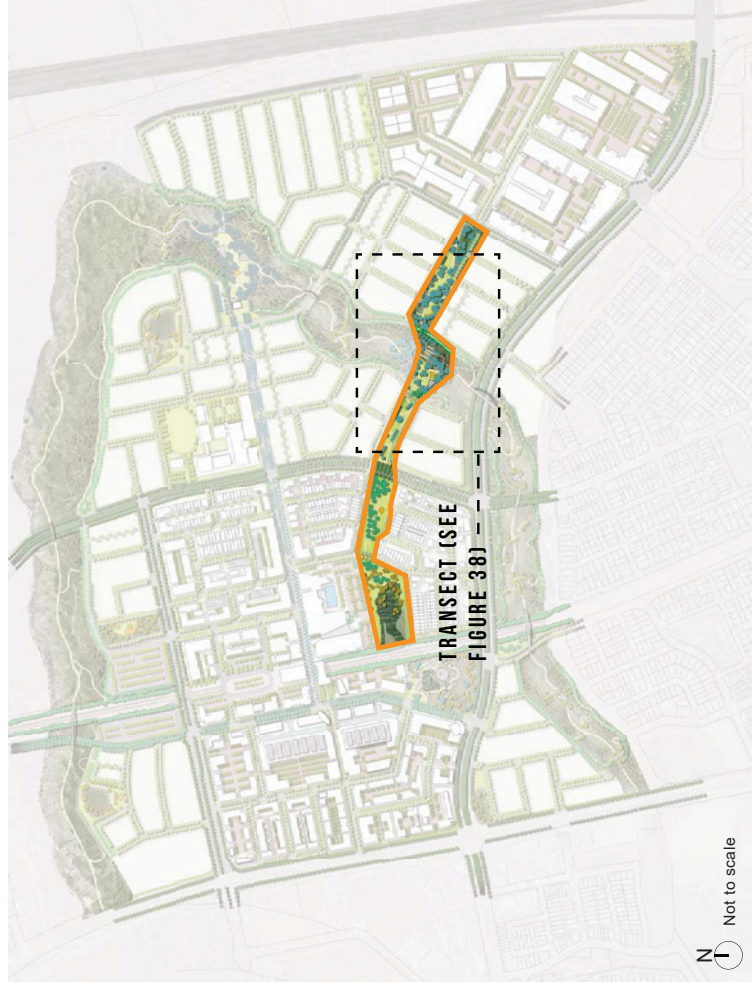


Figure 37. Transect - UD/LA

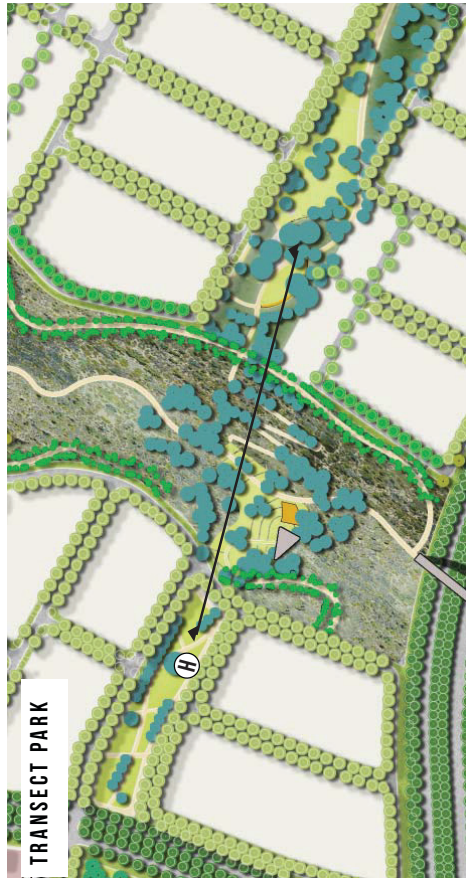


Figure 38. Concept Plan Transect Park - UDLA

East and west of the Transect there are existing mature Tuarts which will be retained, providing great shade, ecological function and wayfinding for the area. The Park connects people across the site and allows easy access to the dune.

**TRANSECT PARK (H)**

1:750 @A3

Transsect POS to include:  
Dune Ridge Access, Ecological,  
Urban, Active and Passive Nodes



WEST

EAST

220m

Figure 39. Transsect Park - Indicative Section - UDLA





## 5.7 CIVIC HEART

The Civic Heart of Alkimos Central will be a grid of tight streets with generous tree canopy and verge side planting forming the basis of a buzzing urban realm characterised by filtered light, shade, and coastal colours, materials and textures. The scale of streets and paths will make for a great pedestrian experience with the benefits of being nearby, but protected from the Alkimos coastline. At the centre of the Civic Heart will be Alkimos Town Square. The Main Street – NS1 – will be a slow speed environment for vehicles, and a great street for pedestrians to engage with. The Civic Heart can be defined by the following:

- **URBAN:** A place to shop, work, eat and utilise public transport services;
- **LOCALISED:** A uniquely Alkimos Central hub which feels local and references the surrounding landscape; and;
- **SUSTAINABLE:** The use of high quality and sustainable materials.



Figure 40. Civic Heart - UD/LA

# CIVIC HEART

## TOWN SQUARE PRELIMINARY CONCEPT- 'THE FRAME'

- Firstly - create a space that encourages people to stay longer by defining a frame that establishes edges and can expand as development grows, containing its size, framing views and establishing a baseline for future façades.
- Secondly - make the space comfortable - a retreat with shade and shelter and a pleasant micro-climate by planting trees to provide natural shade.
- Thirdly - programme the space with activity that encourages people to linger and interact.
- Lastly - A future sleeving building between the train station and town square could be demarcated as a green urban room using the frame.



Figure 41. Town Square (Refer Landscape Masterplan) - UDLA



Image 38. Christchurch's Container Mall, by BUCHAN . Source: BUCHAN website.



Image 39. Auckland Waterfront, by TCL. Source: TCL website.

# 5.8 TOWN SQUARE - KEY PRECEDENTS

# CIVIC HEART



Image 43. MFO Park, by Raderschall. Source: Urban Next website.



Image 40. MazeITov - 81Font, by Arkitekt. Source: Archdaily website.

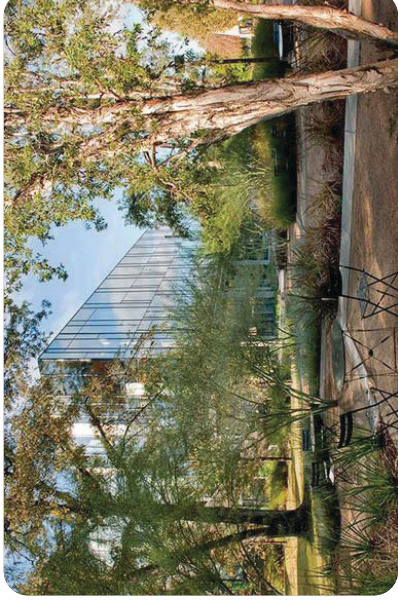


Image 41. The Annenberg Center For Information, Science and Technology, by OJB. Source: OJB website.



Image 44. Dyrailya Square, by Oculus. Source: Oculus website.

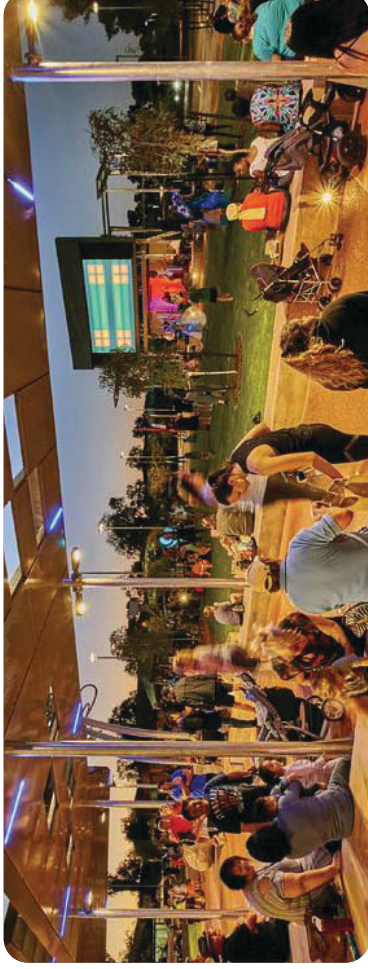
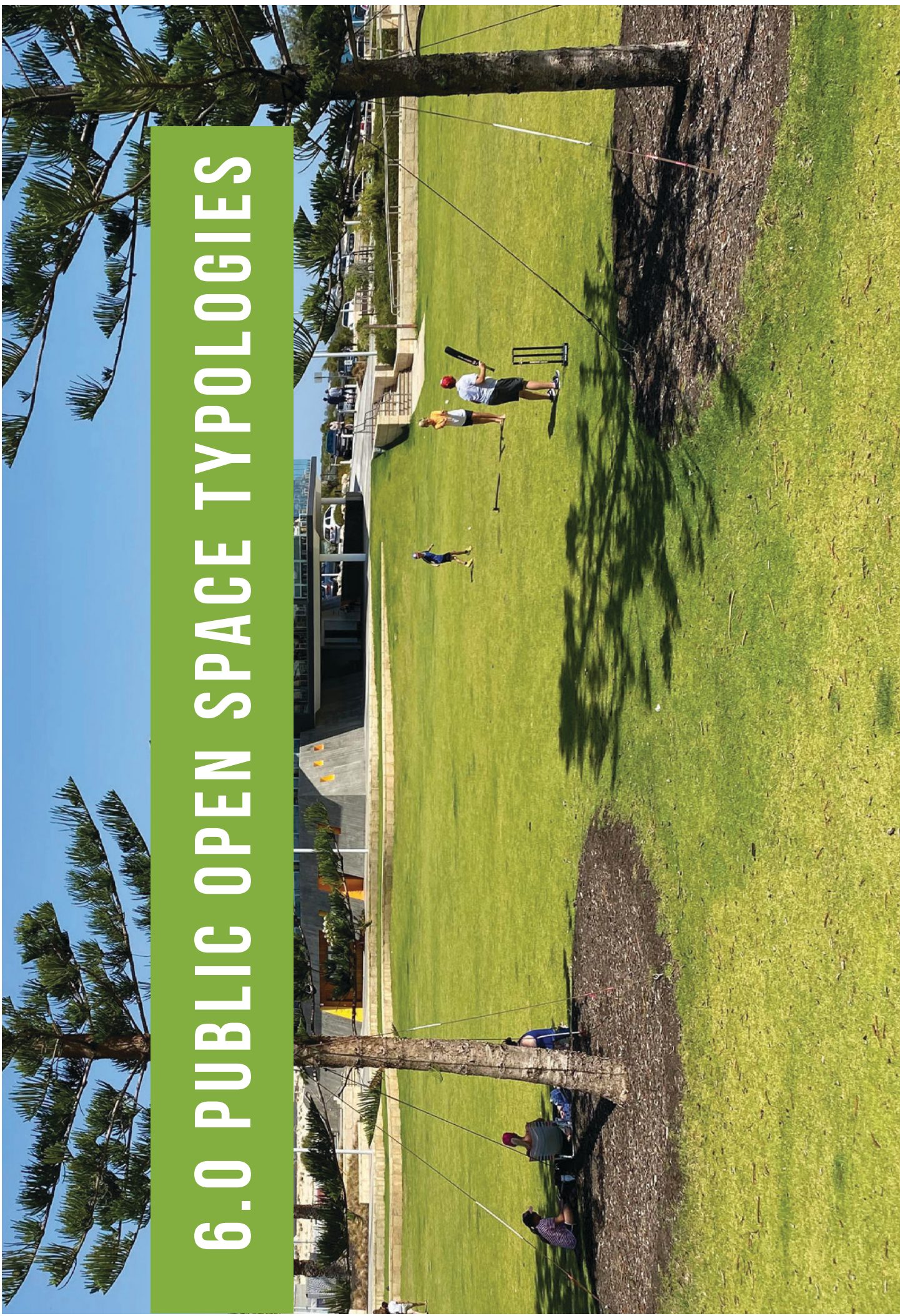


Image 42. Newman Town Centre, by UDLA. Source: UDLA.

# 6.0 PUBLIC OPEN SPACE TYPOLOGIES





## 6.1 CLASSIFICATION

The size of POS is indicative of the uses it can offer the community. Smaller POS offer day to day passive recreational opportunities, whereas larger spaces provide organised active recreation and events. Due to these differing uses and demands, it is necessary to assess the distribution of these spaces to ensure the population have equitable access to each type of open space and the benefits that they provide.

Note: All examples shown are within the City of Wanneroo.

**MICRO**  
Less than 0.5Ha  
200m/3min walk  
'extended backyard'



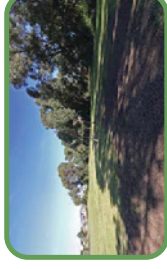
POS: Kin Bay Park, Mandarie WA  
Size: 0.3Ha

**LOCAL**  
0.5Ha - 1Ha  
400m/5min walk  
'local meeting place'



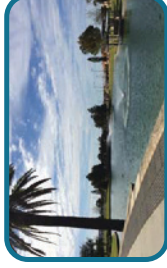
POS: Remer Park, Wanneroo WA  
Size: 0.7Ha

**NEIGHBOURHOOD**  
1Ha - 7Ha  
800m/10min walk  
'community meeting place'



POS: Eastwall Park, Alkimos WA  
Size: 2Ha

**DISTRICT**  
7Ha - 20Ha  
1-2km from home  
'sport & play'



POS: Brampton Park, Butler WA  
Size: 9Ha

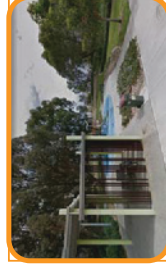
## 6.2 FUNCTION

POS can include a range of different functions depending on their size, location and design. For example, some may offer ecological functions and others may provide purely passive or recreational functions. Ensuring that a balanced mix of POS types is achieved across the site, guarantee's the community access to a variety of different outdoor spaces which can be used by diverse user groups.

Note: All examples shown are within the City of Wanneroo.

**PASSIVE**

No organised sporting facilities, however may include open turf areas, play spaces and infrastructure to support social gathering.



POS: Doncaster Park, Butler WA  
Size: 0.7Ha

**ACTIVE**

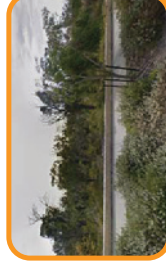
Has infrastructure to accommodate competitive sport and recreational pursuits such as skateparks.



POS: Kingsbridge Park Butler, WA  
Size: 0.7Ha

**ENVIRONMENT**

Areas worth protection and enhancement due to environmental values. Predominantly vegetated green space with limited open space.



POS: Santalopa Park, Alkimos WA  
Size: 2Ha

**EVENTS**

Gathering spaces with opportunity to hold events.



POS: Queenscliffe Park, Quimms Rocks, WA  
Size: 0.9Ha

# 6.3 POS TYPOLOGIES

## MICRO POS

**Key User Group:** Resident / Worker/Visitor  
**Size:** <0.4Ha  
**Broad Purpose:**

A public 'backyard'/respite point, designed to function as a small green pocket that allows for green relief; residential sized passive spaces (i.e. grass for kids to play, path for children to ride along, dog walking) and respite points (i.e. a spot to eat lunch, make a call).

**Length of Stay:** 30min - 1hr



Figure 42. Micro POS - UDLA

## LOCAL POS

**Key User Group:** Resident  
**Size:** 0.4Ha - 1Ha  
**Broad Purpose:**

Local POS is a small space that provides day to day recreation opportunities for the immediate residential population. The space may incorporate areas of natural vegetation to provide ecological functions which can be enjoyed by the community.

**Length of Stay:** 1 - 2hrs

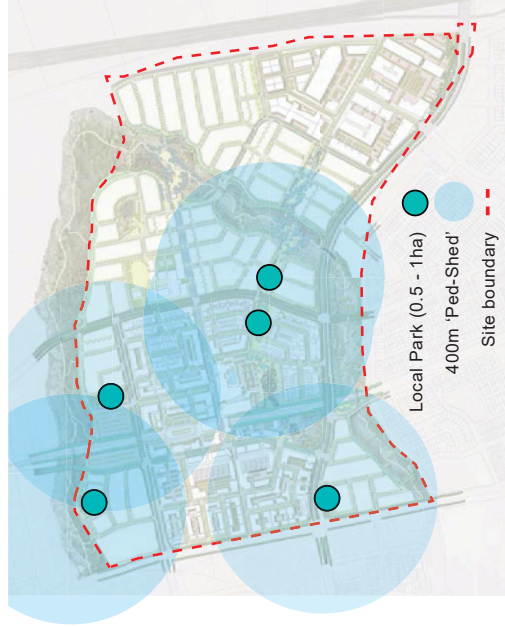


Figure 43. Local POS - UDLA

## NEIGHBOURHOOD POS

**Key User Group:** Resident, Sporting  
**Size:** 1Ha - 5Ha  
**Broad Purpose:**

Neighbourhood POS provides a passive and active recreational and social space for Town precincts. Neighbourhood POS will have a variety of features and facilities, and will reflect the unique characteristics of the precinct. Neighbourhood POS will also serve a function in the area's broader ecological system.

**Length of Stay:** 1 - 3hrs

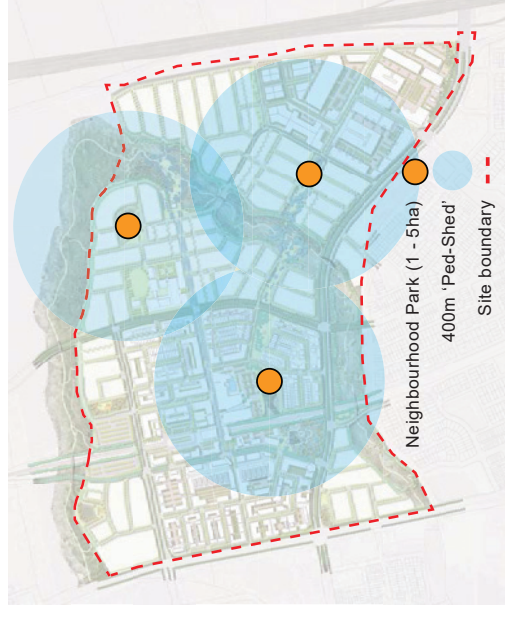


Figure 44. Neighbourhood POS - UDLA

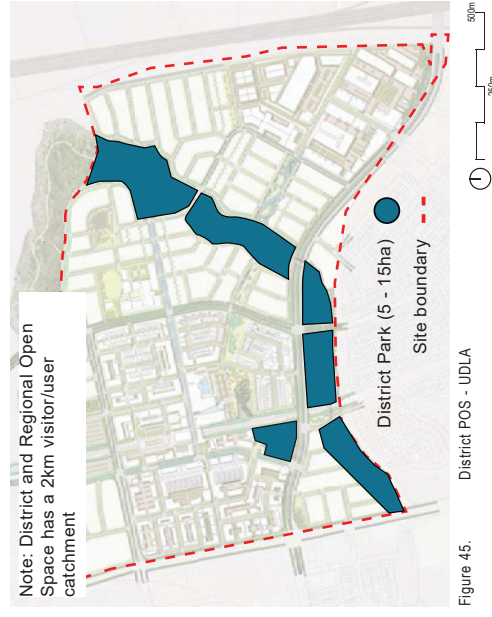
## DISTRICT POS

**Key User Group:** Resident / Sporting / Visitor (Surrounding Suburbs)

**Size:** 5Ha - 15Ha

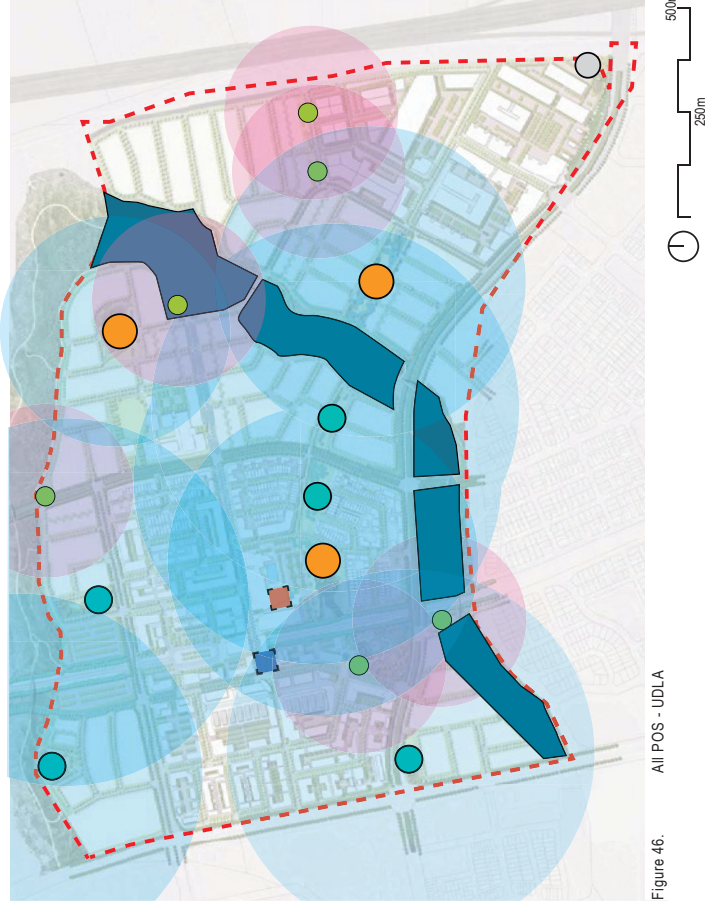
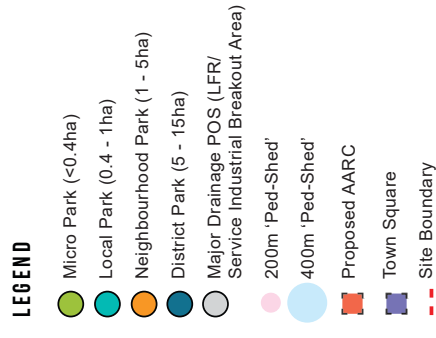
**Broad Purpose:**

District POS provides space for organised formal sports, large scale Town events and/or significant ecological processes. These spaces serve Alkimos and surrounds as a whole, reflecting a broader Town character and will be utilised by both residents and visitors. The District POS will be supplemented and enhanced by the presence of the Regional Open Space to the north that will facilitate the planned unbroken dune connections. It is also acknowledged that the City of Wanneroo's planned active Regional Open Space to the east will provide significant active recreational opportunities to Alkimos Central residents.



## ALL POS

The site has 20.1% POS, this vastly exceeds the minimum requirement of 10%. The diverse types and sizes of POS across Alkimos Central, caters for a range of different user groups. Additionally, the map locates the Town Square and the 'AARC', whilst not technically POS under scheme calculations, these spaces offer similar uses and benefits to



## 6.4 POS REGISTER

Each of the POS and DOS have been allocated a register number, which can assist with discussion and planning. The map opposite shows the POS and DOS register numbers that have been allocated, and also illustrates the type of POS (micro, local, neighbourhood or district). Additionally, the map locates the Town Square and the ARC, whilst not technically POS, these spaces offer similar uses and benefits to the public.

### LEGEND

- # Micro POS
- # Local POS
- # Neighbourhood POS
- # District POS
- Proposed AARC
- Town Square
- Site Boundary



Figure 47. POS Register - UDLA

## 6.5 POS PRINCIPLES MATRIX

PRINCIPLES	MICRO	LOCAL	NEIGHBOURHOOD	DISTRICT
CONNECTION TO THE DUNE	✓	✓	✓	✓
TREES	✓	✓	✓	✓
BIODIVERSITY	✓	✓	✓	✓
PLAY	✓	✓	✓	✓
ACTIVE AND PASSIVE NODES	✓	✓	✓	✓
RECREATION FUNCTIONS			✓	✓
EDUCATIONAL FUNCTIONS		✓	✓	✓
STREET CONNECTION/PARKING		✓	✓	✓
SUSTAINABLE MATERIALS	✓	✓	✓	✓
INTERGRATED DRAINAGE	✓	✓	✓	✓
INFRASTRUCTURE AND AMENITIES			✓	✓

Note: Locational Specific ✓

Figure 48. POS Principles Matrix - UD/LA

# 6.6 TYPICAL MICRO\_POS #05



Image 45. North Coogee. Source: UDLA.



Image 46. Port Coogee. Source: UDLA.

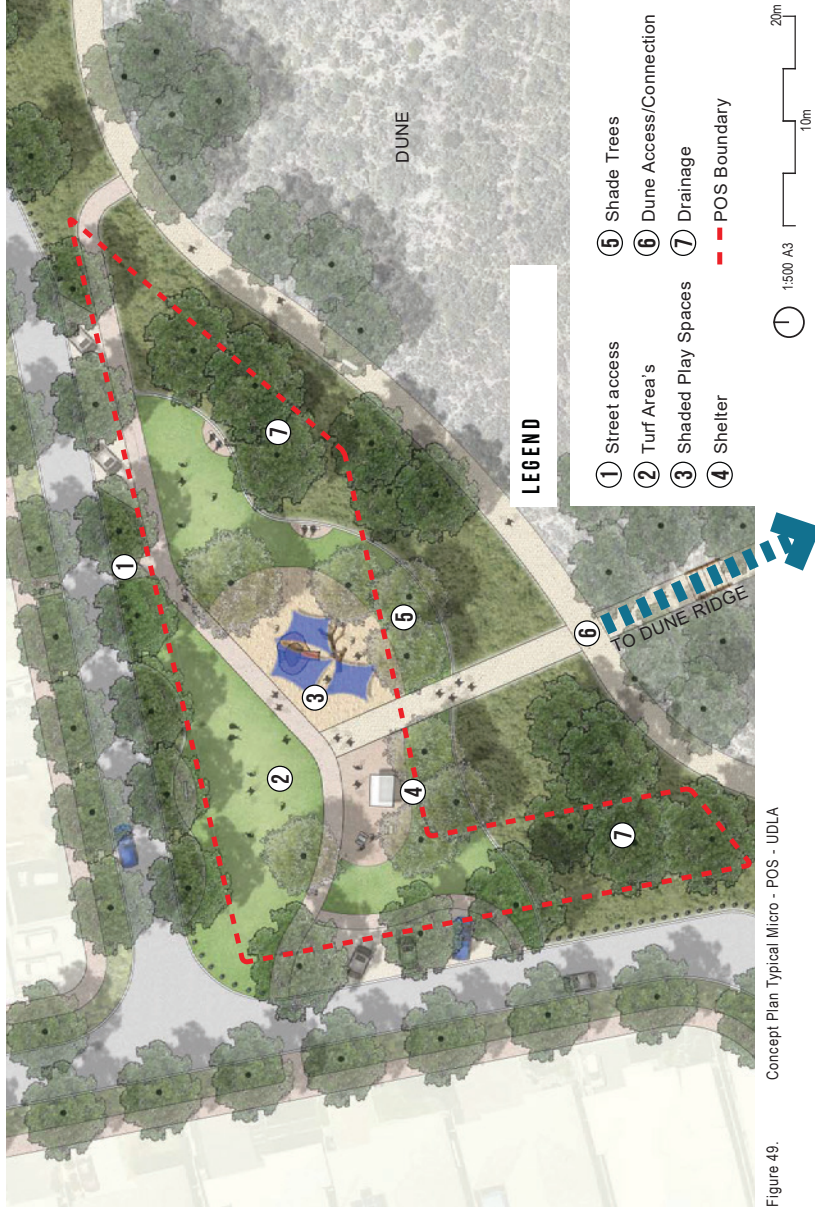


Figure 49. Concept Plan Typical Micro - POS - UDLA

# 6.7 TYPICAL LOCAL\_POS #1

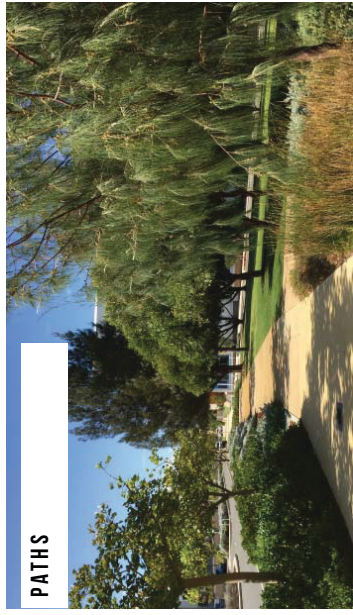


Image 47. Port Coogee. Source: UDLA.



Image 48. Esperance Waterfront, by Hassell. Source: Landzine website.

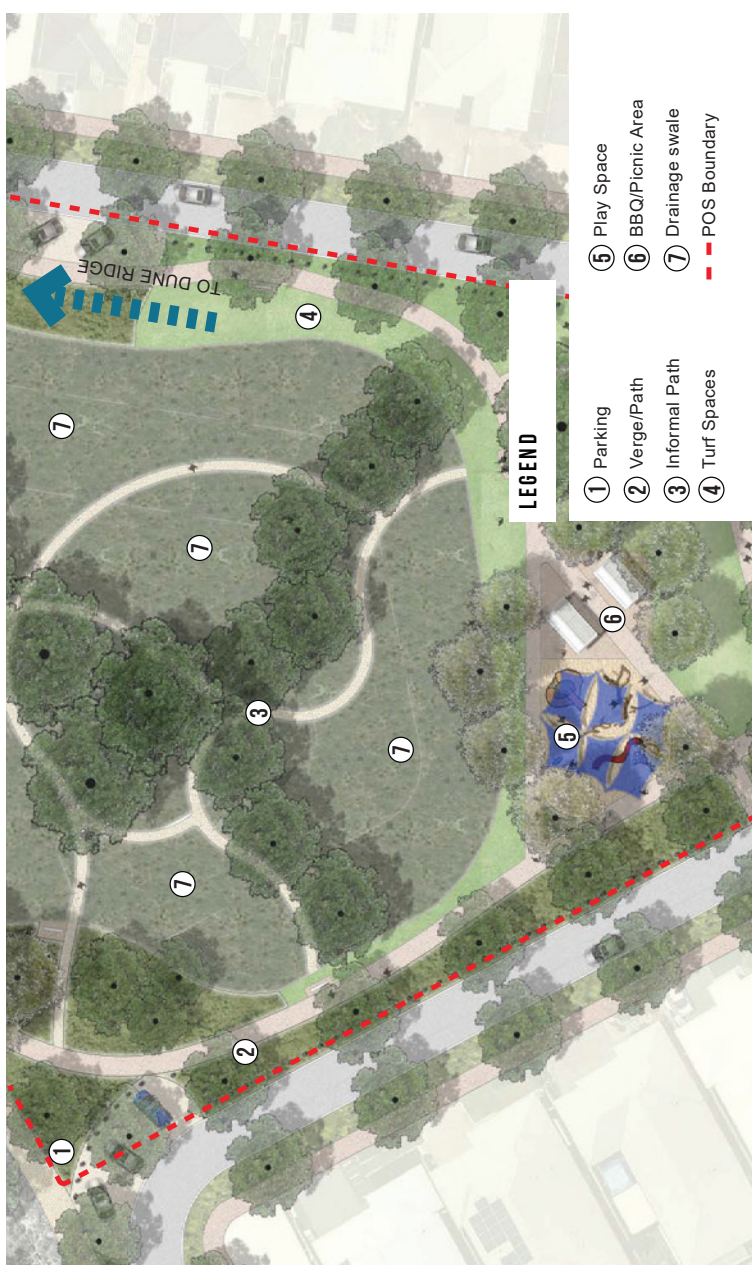


Figure 50. Concept Plan Typical Local POS - UDLA



## 6.8 TYPICAL NEIGHBOURHOOD\_POS#4



**BARBECUE/PICNIC AREAS**

Image 49. Victoria Park, by Hassell. Source: Landzine website.



**RECREATION**

Image 50. South Beach Basketball Court. Source: City of Fremantle website.

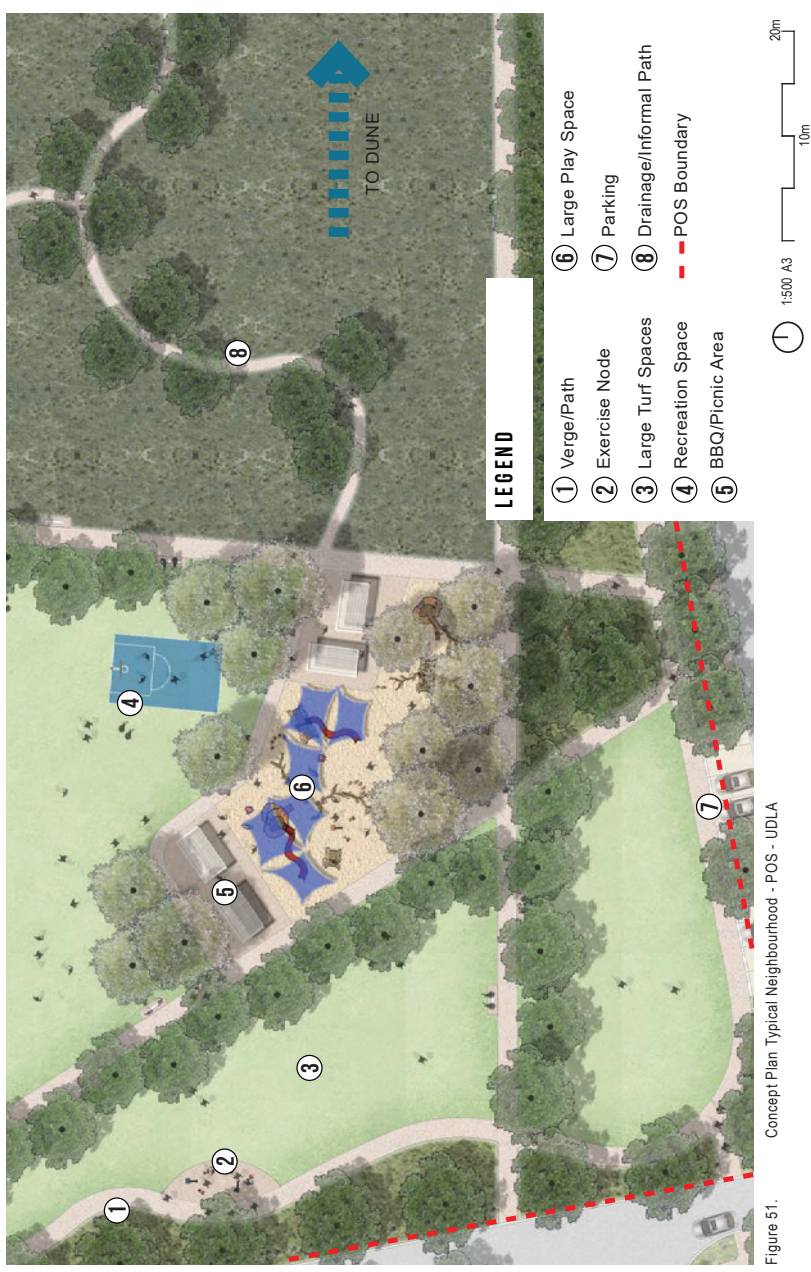


Figure 51.



# 6.9 TYPICAL DISTRICT\_DPOS #01

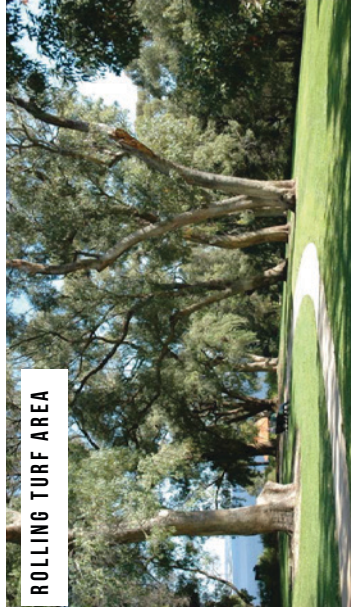


Image 51. Tuart Lawn. Source: Botanic Gardens and Parks Authority WA website.



Image 52. Lizard Log Parklands, by McGregor Coxall. Source: Landzine Website.



Figure 52.

# 7.0 CONCLUSION



## 7.1 NEXT STEPS

Alkimos Central will create a public realm that responds to the site and its future community. To enable the project to realise its full potential it requires commitment towards:

- Ongoing collaboration with the appropriate Cultural Advisors and the broader Noongar community to develop a management plan for the pinnacles and more broadly the cultural principles for the development of Alkimos Central.
- Funding the bridges and crossings to create the unbroken Dune Ridge Walk;
- Establishing the necessary frameworks across public and private development to plant 20,000 trees;
- Consider development and ongoing review of an urban forest strategy to further guide tree implementation;
- Ongoing engagement with relevant Stakeholders including CoW and DBCA to develop the site with 20.1% Public Open Space; and;
- Confirmation of implementation, budgets, staging, boundaries and timing.

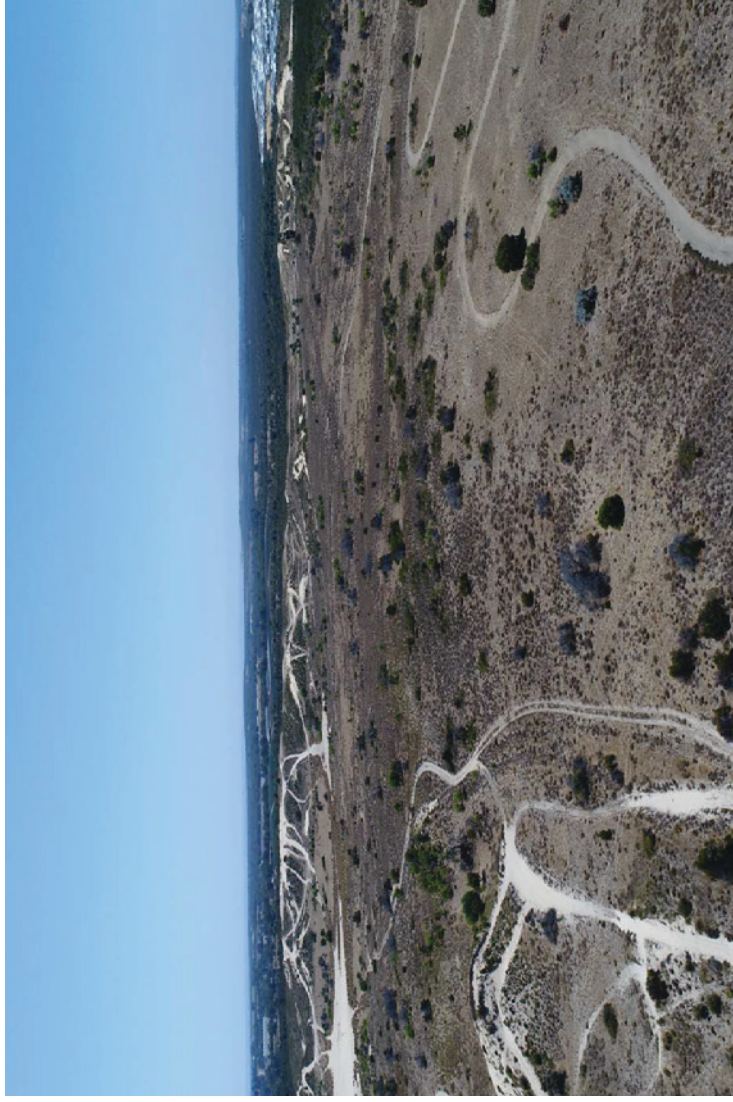


Image 53. Aerial site photograph. Source: UDLA.

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**urda**  
NEW IDEAS THROUGH  
SHARED DESIGN-THINKING