



NUNDUK

Retreat & Spa Landscape

Landscape Architecture Report
March 2018

T.C.L. +



+ studioalfano

Contents

01 Landscape Introduction	4
02 Existing Site Qualities	5
2.1 Views	6
2.2 Vegetation	7
2.3 Spatial Qualities	8
2.4 Topography	9
03 Landscape Vision & Approach	10
04 Landscape Proposal	
4.1 Key Moves	12
4.2 Landscape Plan	13
4.3 Landscape Plan Areas	14
4.4 Areas of Proposed Planting	15
4.5 Arrival & Roads	16
4.6 Roofscape	18
4.7 Villas	20
4.8 Infrastructure	22





01 Landscape Introduction

The proposal for the Nunduk landscape seeks to protect and connect visitors to the existing landscape site qualities.

The existing coastal salt marsh, estuarine scrub and woodlands are integral to the design approach and proposed development location.

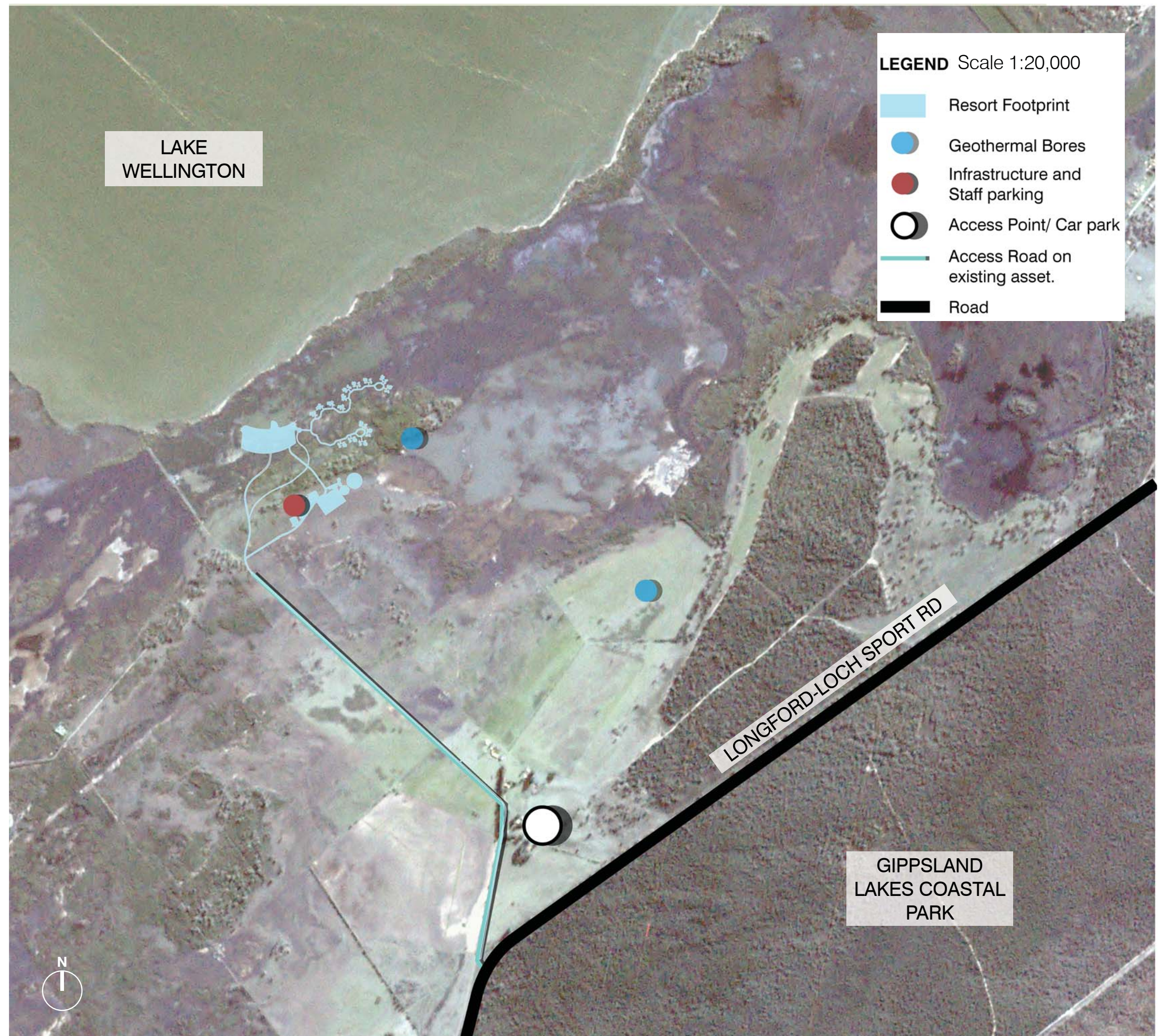
Design interventions are minimised to access and integrating green roof landscapes to merge the proposal into the greater setting.

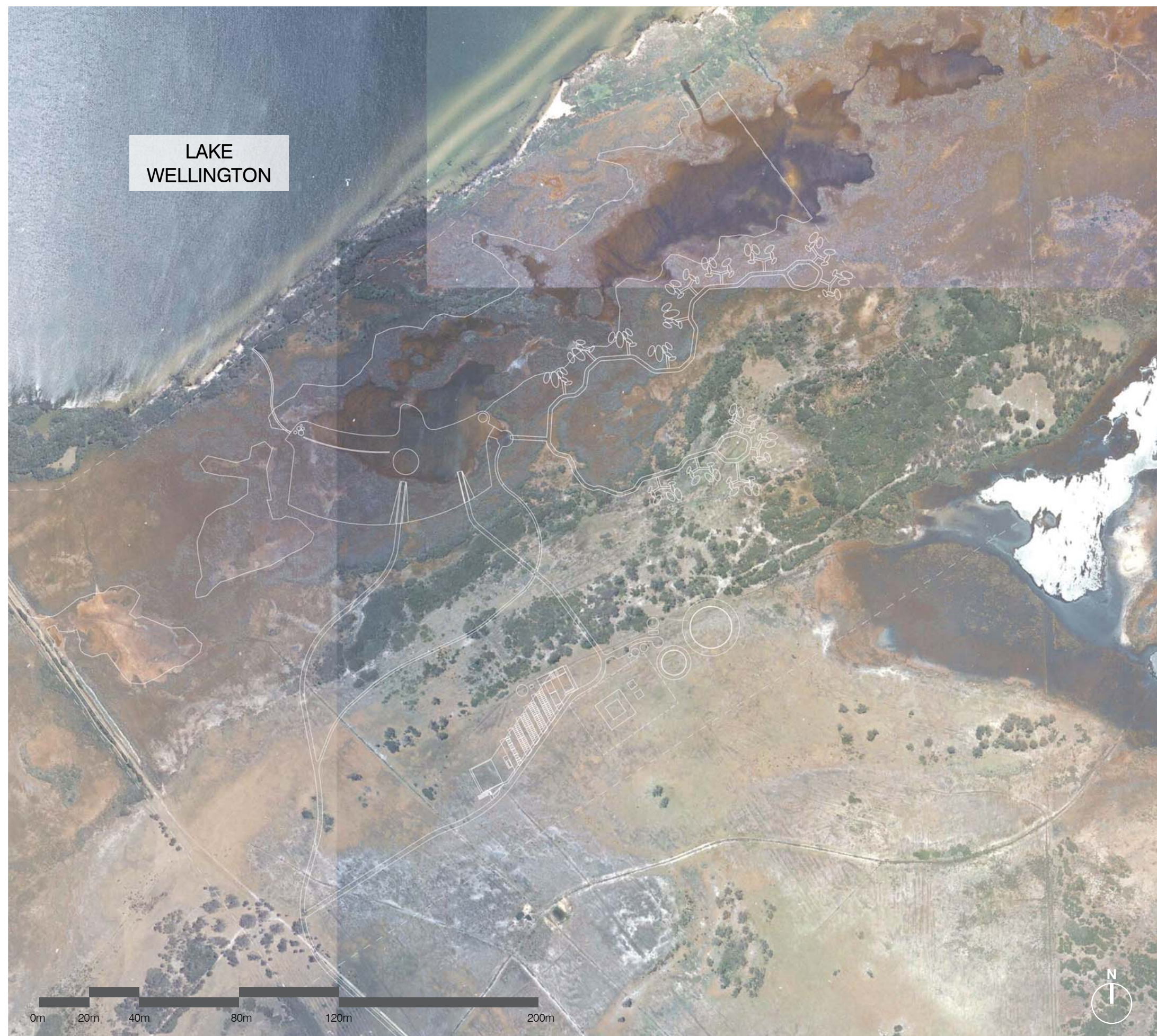
Proposed green roofs will minimise any visual impacts of the project from the south and provide a memorable sense of arrival into the resort.

Building siting is carefully considered to minimise impact on existing flora and orientated for solar access and views to Lake Wellington.

Locations of cabins and their above landscape access boardwalks are sited to ensure minimal disturbance to existing flora.

All new vegetation will be utilising site sourced seed to ensure ecological integrity.





02 Existing Site Qualities

The proposed resort is located at Seacombe, 30 kilometres west of Sale, on Lake Wellington. The site is accessed from Longford Loch Sport Road and currently comprises primarily rural land uses.

Its landscape is characteristically flat allowing broad and distant views, to woodlands, Lake Wellington and rural landscapes.

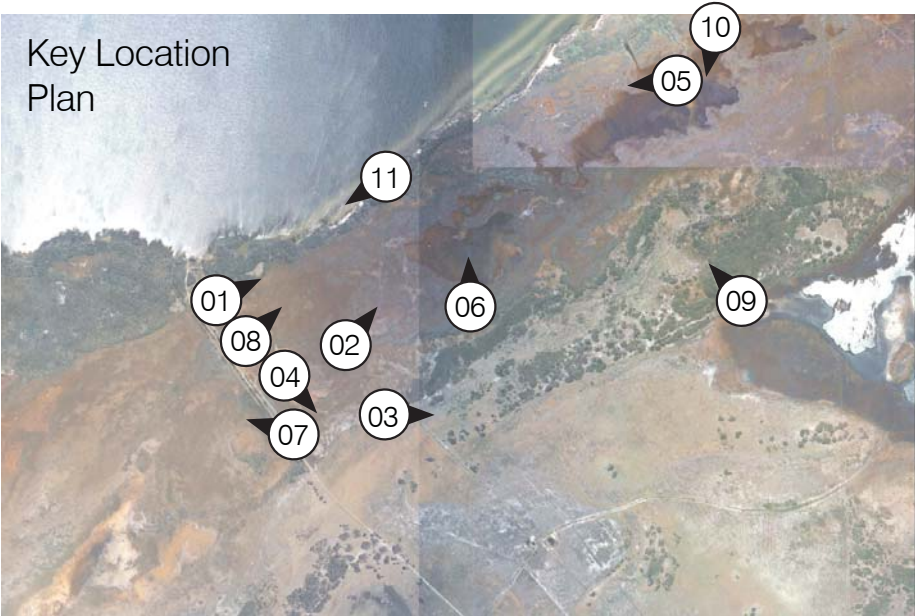
The subject site is approximately 10 hectares and defined by three landscapes, coastal woodlands, located on the southern edge of the site, coastal saltmarsh, located in the centre of the site and Estuarine Scrub, located on Lake Wellington. The site is under transition with salt water inundation of the site from Lake Wellington resulting in ecologies more tolerant of this condition such as saltmarsh flora.

2.1 Views

Nunduk landscape is flat, offering long views over planar landscapes.

The coastal saltmarsh provides a strong foreground to many views with the silhouette of trees providing an undulating edge to big skies. This salt marsh with its subtle shifts in topography, hosts shallow and often ephemeral water providing varied patterns and textures across often vast spaces.

Intimate views are contained within the paperbark and woodland landscapes. These are contrasted with expansive views across Lake Wellington to distant mountains from its foreshore edge.



2.2 Vegetation

The site is characterised by three primary vegetation types:

- Coastal Saltmarsh comprises the majority of the site, and characterised by the following mix of species: Rounded Noon-flower and *Salicornia quinqueflora*, *Ficinia nodosa*, and *Juncus kraussii subsp. australiensis*.
- Estuarine scrub located on the fringes of Lake Wellington is characterised by the following mix of species: *Melaleuca ericifolia*, *Myoporum insulare* Common Boobialla, Rounded Noon-flower and Beaded Glasswort, *Scenecio halophilus*, *Brachyscome parvula*, *Comesperma volubile*, *Einadia nutans*, *Leptocarpus tenax* and *Apium aff. prostratum* (Tyrendarra).
- Herb Rich Woodland is located on the south eastern sections of the site on slightly elevated ground and is characterised by the following mix of species: *Eucalyptus tereticornis subsp. mediana*, *Myoporum insulare*, *Melaleuca ericifolia*, *Distichlis distichophylla*, *Poa labillardierei*, *Disphyma crassifolium subsp. clavellatum*, *Lycium ferocissimum* African Boxthorn.

LEGEND

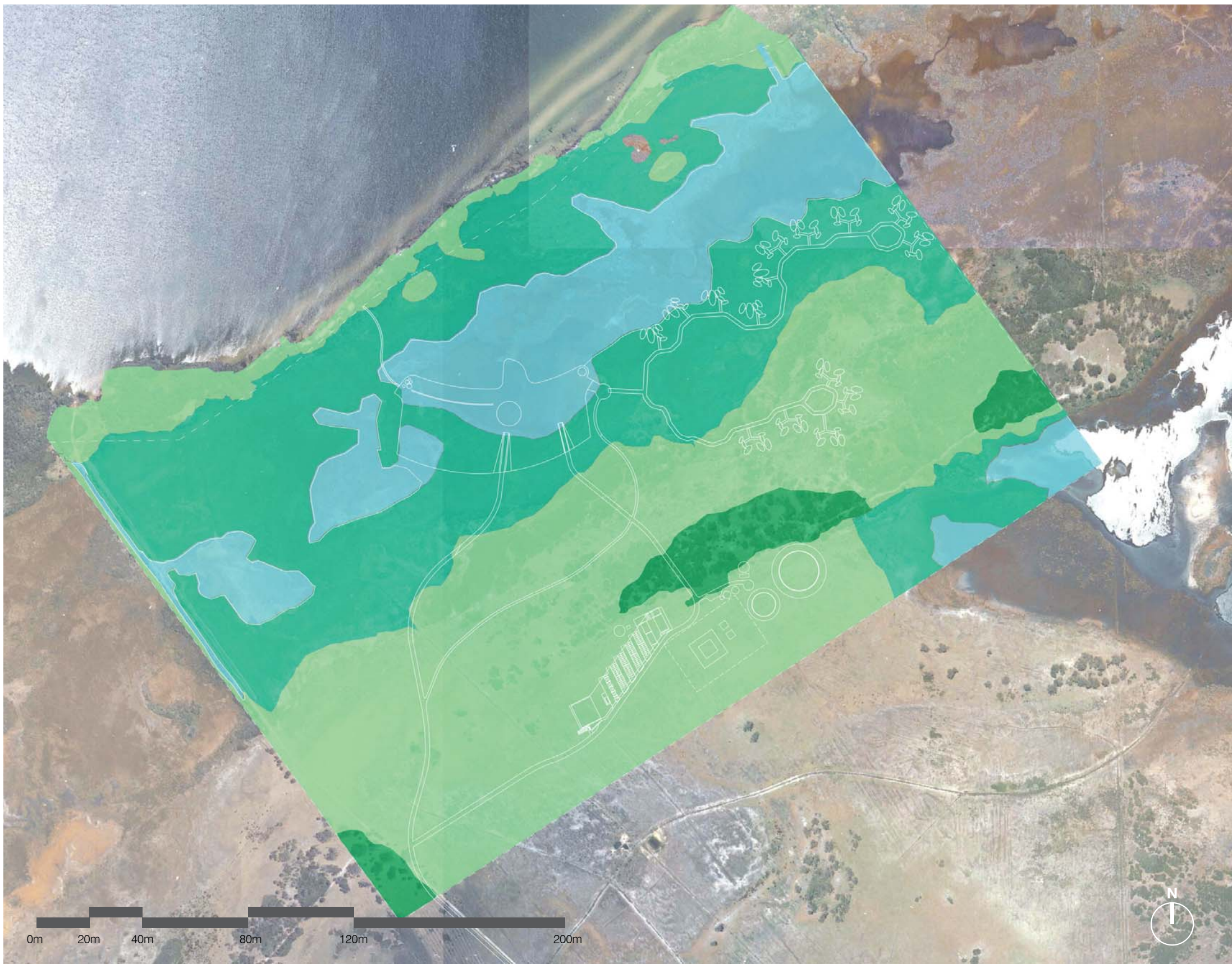
Existing Water Body

EVCs

Coastal Saltmarsh

Estuarine Scrub

Damp Herb-Rich Woodland

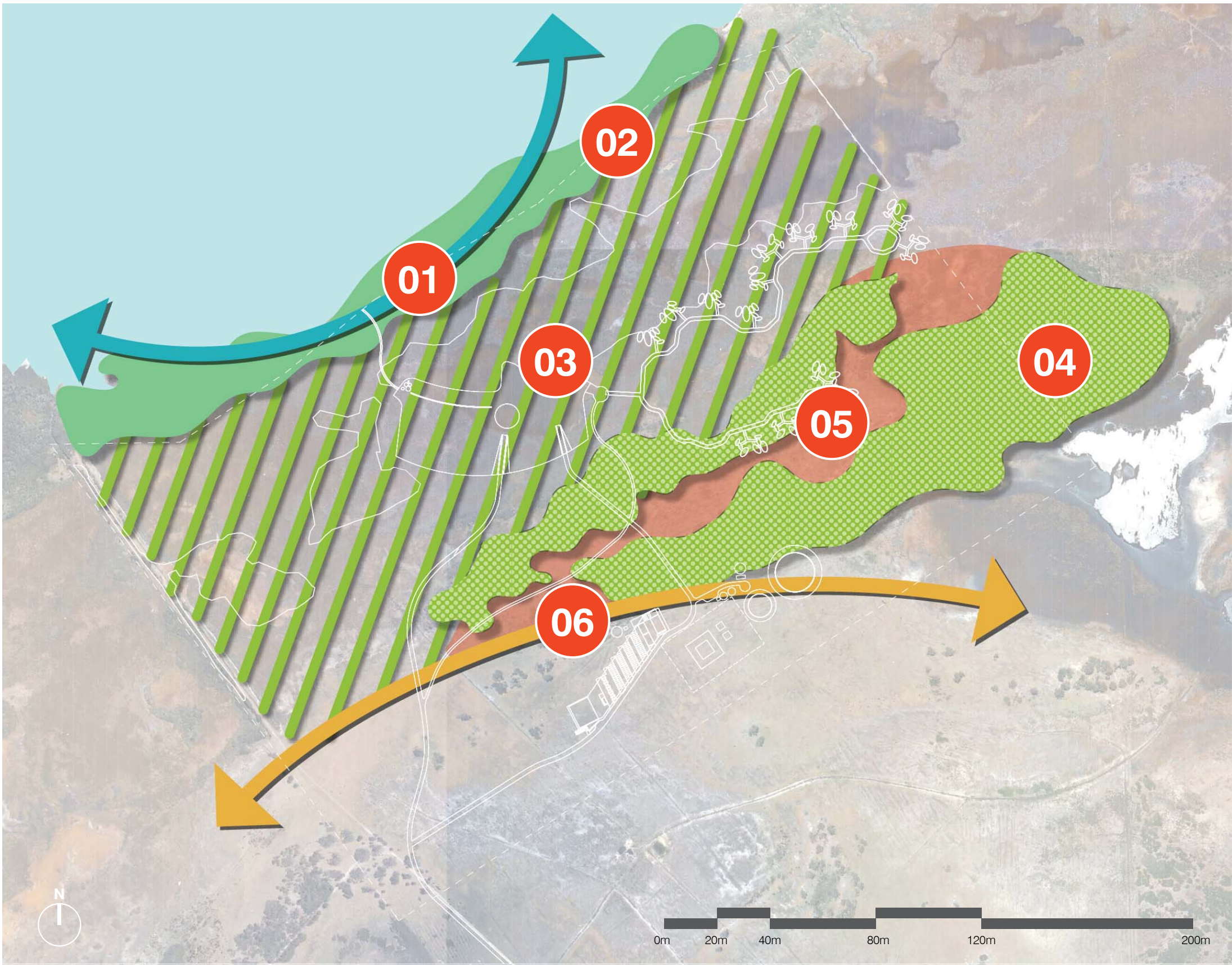


2.3 Spatial Qualities

The site is characterised by the contrast of vast expansive experiences associated with the flat coastal saltmarsh landscapes and the more framed and enclosed experiences associated with estuarine scrub and woodlands.

The adjacent plan illustrates the main spatial experiences and their location.

- 01 Expansive views across Lake Wellington.
- 02 Immersive paper bark lake edge.
- 03 Expansive coastal saltmarsh experience.
- 04 Enclosed Woodland experience.
- 05 Defined clearing.
- 06 Expansive rural experience.

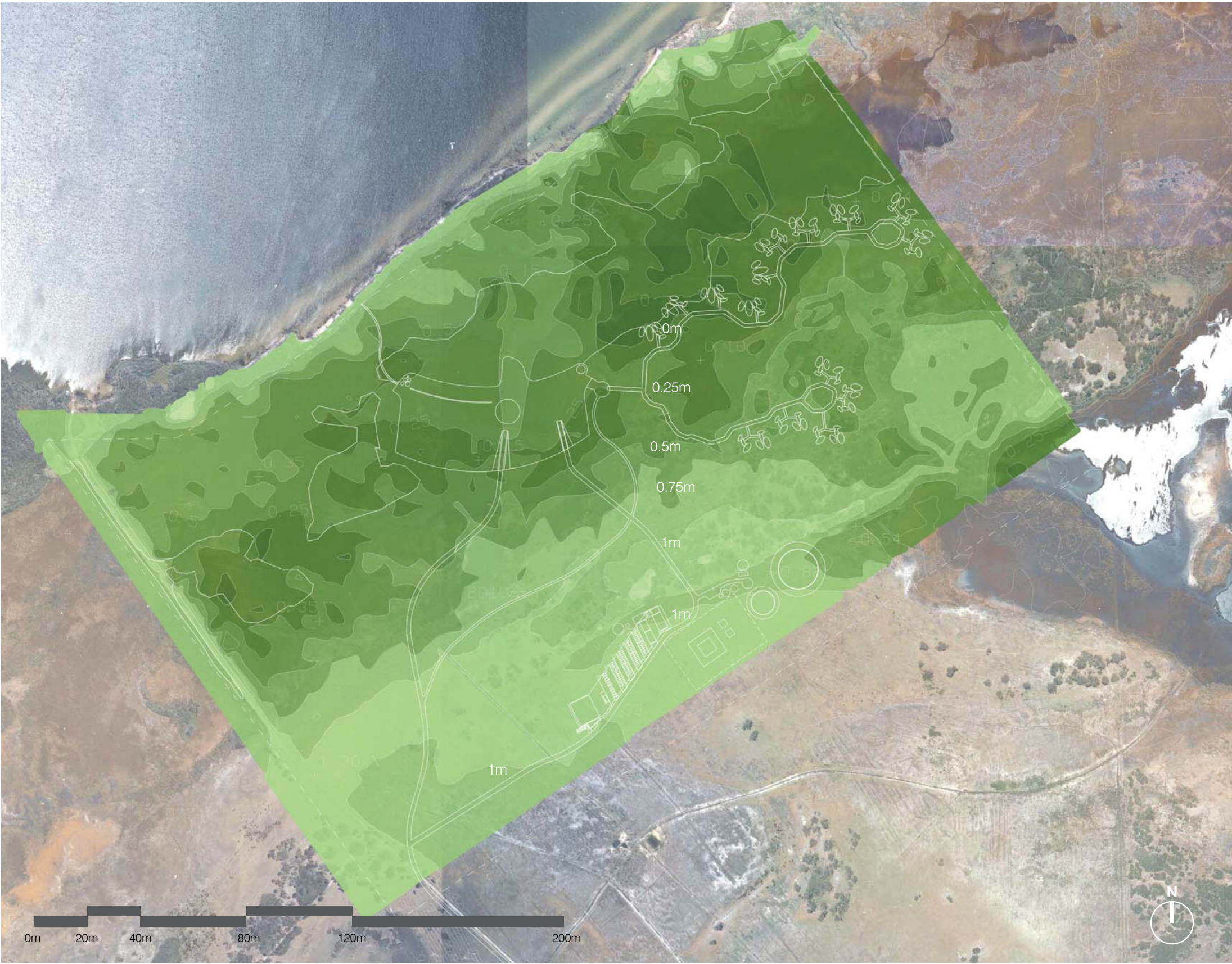


2.4 Topography

The subject site is flat with a maximum change of level of 1 metre. This subtle topography is however significant in informing the type of flora that grows on the site. The large areas that are low lying are characterised by the coastal saltmarsh and areas of large shallow water bodies.

Whilst the areas that are up to 1 metre high, are outside of the salt laden ground water table, and are host to woodland eucalypt areas.

The proposed resort is essentially located in the areas of low lying water bodies.



LEGEND

Elevation (metres)

Dark Green	+0m
Medium Green	+0.25m
Light Green	+0.5m
Very Light Green	+0.75m
Lightest Green	+1m

03 Landscape Vision & Approach

Design Principles

The proposed resort celebrates the powerful and raw nature of the existing site.

The broad views, site topography and existing flora are used to sensitively locate the built form, minimise its impact but also to accentuate the sites distinct qualities.

Landscape gestures are limited to arrival pathways, the green roof of the building, which merges it into its setting, and fine grain revegetation to ameliorate any disturbed areas.

The vision can be described in five key gestures:

01 Merge Architecture and Landscape

Landform is sculpted to gently merge the resort into the broader landscape setting.

02 Orientation Views and Aspect

The resort architecture is located to maximise solar orientation as well as provide expansive views over lake wellington.

03 Choreography

The project highlights the sense of arrival, gradually revealing the project, first its merged landform, arrival courtyard, lobby and expansive vistas.

04 Robustness

The delicacy of the existing site landscape is contrasted with the robust concrete expression of the architecture.

05 Elegant Simplicity

Paths, landform and architecture are simple legible additions to the landscape.



Merge Architecture and Landscape



Orientation, Views and Aspect



Choreography



Robustness



Elegant Simplicity

04 Landscape Proposal

4.1 Key Moves

The Project can be described under the following key moves:

01 Create a Sense of Arrival

Existing farm roads will connect with new arrival roads closer to the resort. The long path through existing rural and coastal landscapes will culminate in an arrival at a resort that is hidden under landform.

Arrival is subtle, entry is choreographed resulting in heightened drama.

02 Retain Existing Water Bodies

The proposed resort architecture and landform are located to retain existing shallow water bodies. Views are orientated from the resort across these water elements which are used as foreground to more expansive views to the Lake.

03 Retain Existing Flora

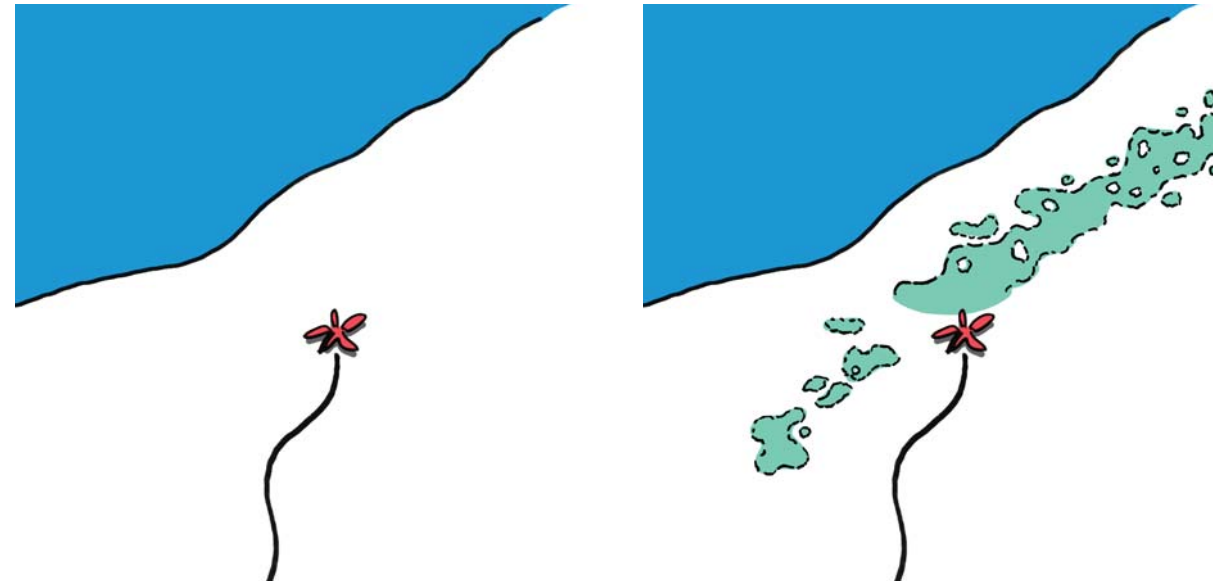
The proposed resort architecture, landform and boardwalk pathways are located to retain existing flora. Existing coastal saltmarsh as identified in the vegetation mapping (page 8) has been used to carefully site interventions to minimise impacts. Any localised impacts will be revegetated to match into existing EVC's.

04 Merge Built Form Seamlessly

A feature of the resort is the green roof which merges seamlessly into the existing landform. From southern views and arrival the resort architecture is not apparent. The reading of built form and landscape is merged seamlessly.

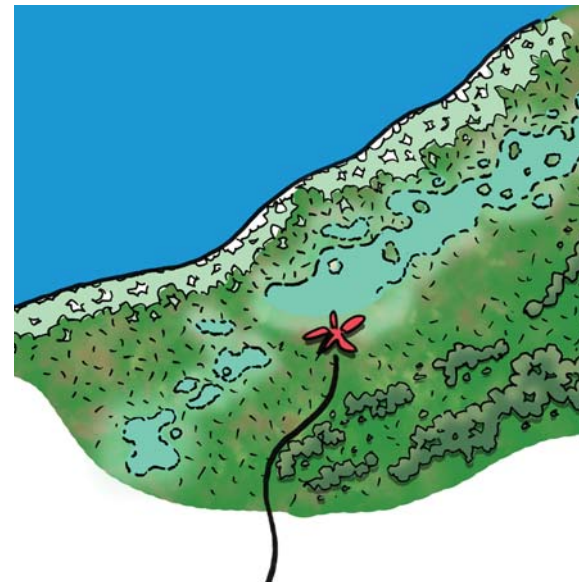
05 Make Delicate Insertions

Delicate hovering pathways will connect the resort villas that are located within the coastal saltmarsh and eucalypt woodlands.

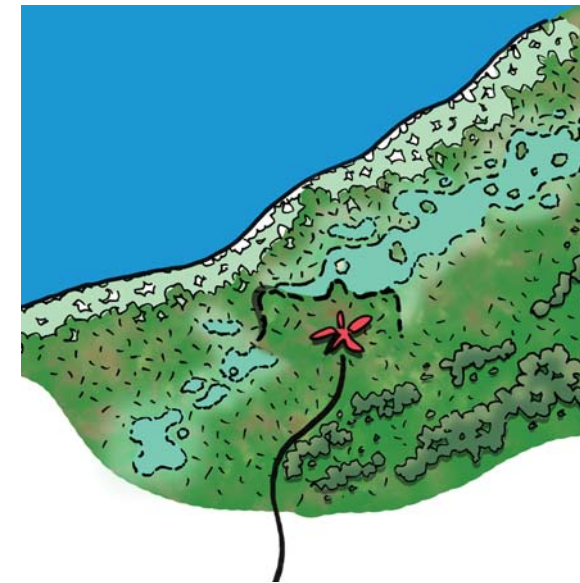


Create a sense of arrival.

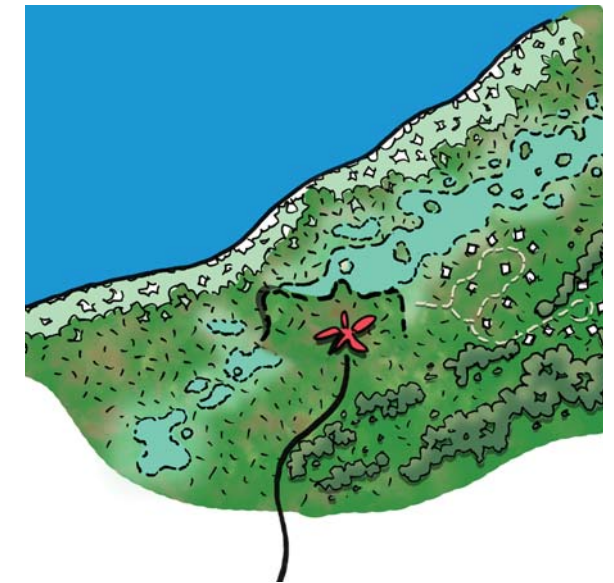
Retain existing water bodies.



Retain existing flora.



Merge built form seamlessly.



Make delicate insertions.

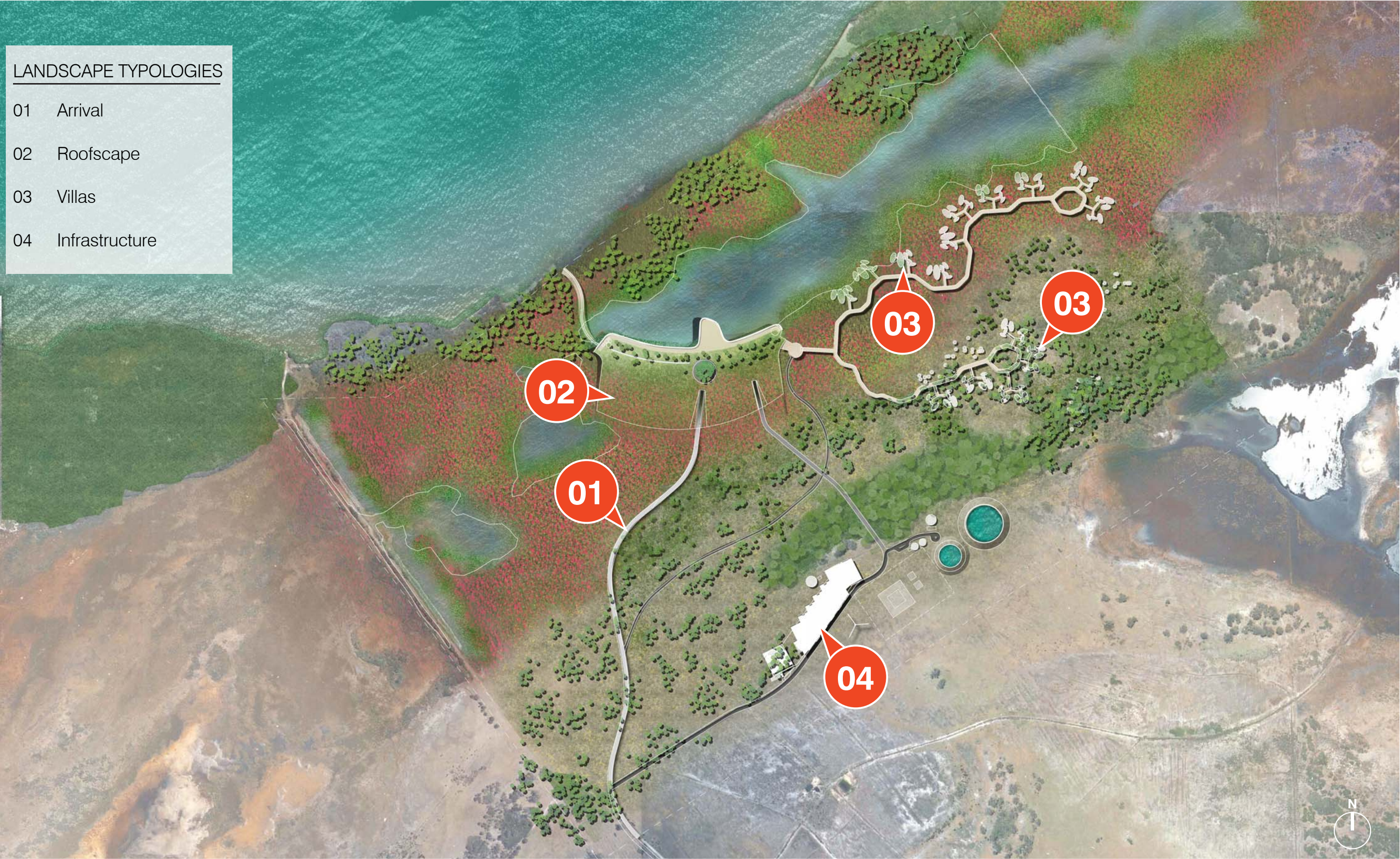
4.2 Landscape Plan



- LEGEND**
- Impact Areas
- 1. Building below landform FSL @RL +3.20
 - 2. Outdoor spas
 - 3. 10 No. Villas over existing coastal saltmarsh connected by elevated walkway.
 - 4. 5 No. Villas over existing estuarine scrub connected by elevated walkway.
 - 5. Gravel entry road rises to RL +2.0m
 - 6. Gravel access road @ RL +1m
 - 7. Retained existing vegetation
 - 8. Photovoltaic cells on roof of carpark @ RL +1.0m.
 - 9. Staff accommodation @ RL +3.2m.
 - 10. Lake Wellington access by elevated walkway.



4.3 Landscape Plan Areas



LANDSCAPE TYPOLOGIES	
01	Arrival
02	Roofscape
03	Villas
04	Infrastructure



4.4 Areas of Proposed Planting



LEGEND

Proposed planting to match surrounding EVC planting.

- Coastal Saltmarsh
- Estuarine Scrub
- Damp Herb-Rich Woodland

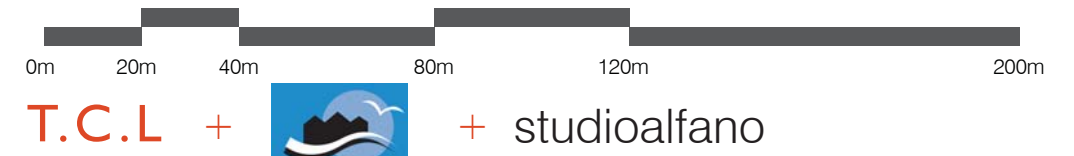




4.5 Arrival & Roads

The proposed arrival road will extend from the existing road that currently services the existing homestead area. It will be extended, in the same gravel material and width and connect to the proposed resort arrival experience. The road is sited primarily in rural landscape and located to minimise impact to existing vegetation.

Additional gravel roads will provide access to the villas and other proposed infrastructure.



Planting List

Proposed planting to match surrounding EVC planting.

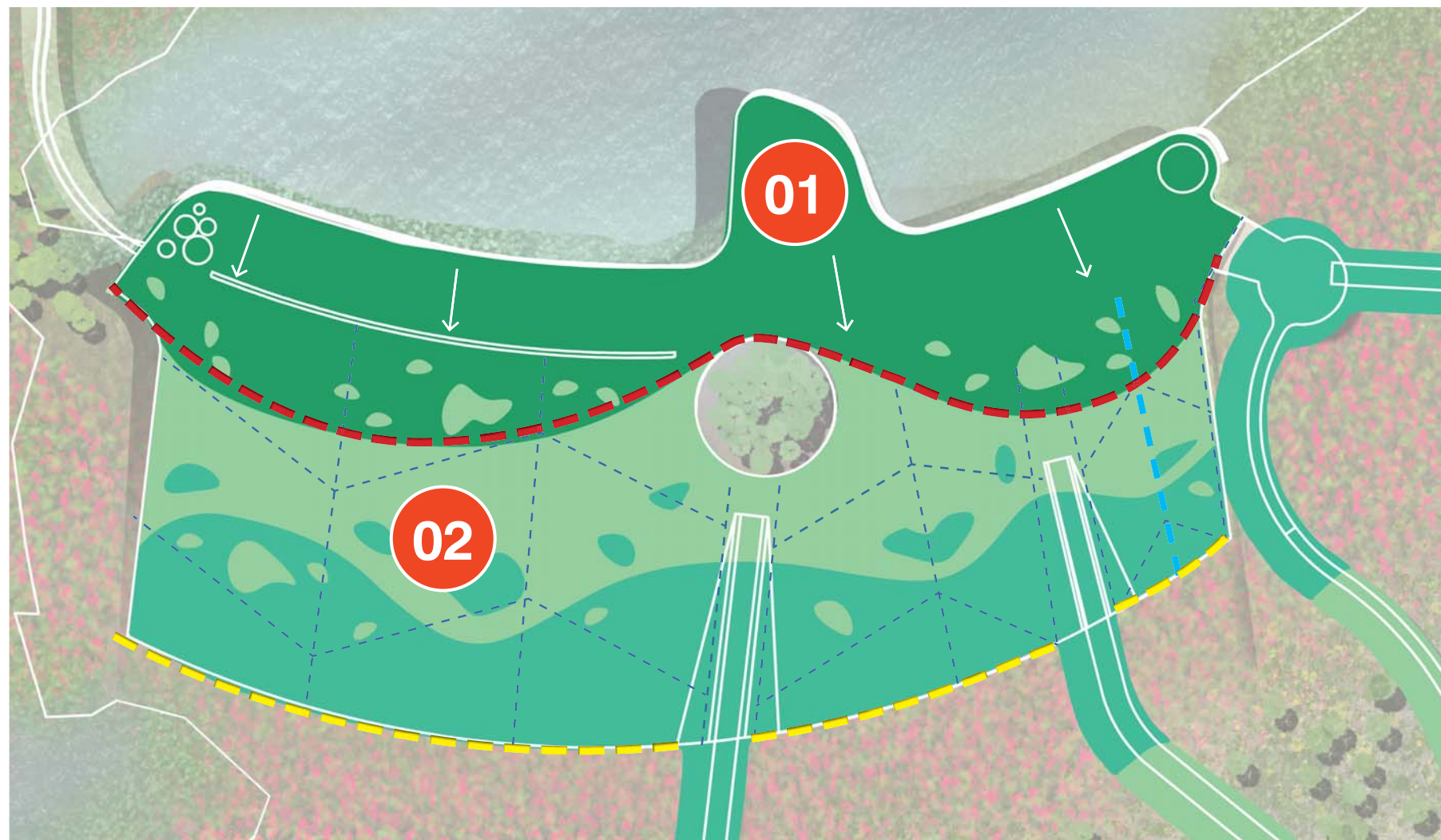
Coastal Saltmarsh

- Apium* aff. *prostratum* (Tyrendarra) Sea Celery
- Disphyma crassifolium* subsp. *Clavellatum* Rounded Noon-flower
- Gahnia filum* Chaffy Saw-sedge
- Juncus kraussii* subsp. *australiensis* Sea Rush
- Phragmites australis* Common Reed
- Rhagodia candolleana* subsp. *candolleana* Seaberry Saltbush
- Samolus repens* var. *repens* Creeping Brookweed
- Sarcocornia quinqueflora* Beaded Glasswort
- Selliera radicans* Shiny Swamp-mat
- Spergularia brevifolia* Salt Sea-spurrey
- Spergularia* spp. Sand Spurrey
- Sporobolus virginicus* Salt Couch
- Triglochin striata* Streaked Arrowgrass
- Wilsonia backhousei* Narrow-leaf Wilsonia

Estuarine Scrub

- Acacia melanoxylon* Blackwood
- Anthosachne scabra* s.l. Common Wheat-grass
- Apodasmia brownii* Coarse Twine-rush
- Baumea juncea* Bare Twig-sedge
- Brachyscome parvula* Coast Daisy
- Centrolepis strigosa* subsp. *strigosa* Hairy Centrolepis
- Distichlis distichophylla* Australian Salt-grass
- Ficinia nodosa* Knobby Club-sedge
- Gahnia filum* Chaffy Saw-sedge
- Juncus kraussii* subsp. *australiensis* Sea Rush
- Juncus pallidus* Pale Rush
- Leptinella* spp. Cotula
- Melaleuca ericifolia* Swamp Paperbark
- Poa labillardierei* Common Tussock-grass
- Poa* spp. Tussock Grass
- Rumex brownii* Slender Dock
- Rytidosperma caespitosum* Common Wallaby-grass
- Rytidosperma geniculatum* Knead Wallaby-grass
- Rytidosperma* spp. Wallaby Grass
- Samolus repens* var. *repens* Creeping Brookweed
- Selliera radicans* Shiny Swamp-mat
- Senecio biserratus* Jagged Fireweed
- Senecio halophilus* Salt Groundsel
- Senecio hispidulus* s.l. Rough Fireweed
- Wahlenbergia multicaulis* Branching Bluebell





Legend

- Surface drain
- Swale
- Ag. pipes (indicative)

4.6 Roofscape

The resort is cloaked with a planted roof, to merge it into the broader landscape and provide a dramatic visitor experience.

The roof will provide many environmental benefits including thermal massing, water harvesting, and habitat restoration. It will also provide dramatic views over Lake Wellington.

It is proposed to merge the roofscape with existing saltmarsh at its base and utilise a range of existing native flora at its higher elevations.

Water will be harvested from the roof for reuse in the resort.

Water Catchment

01 Damp Herb-Rich Woodland On Structure

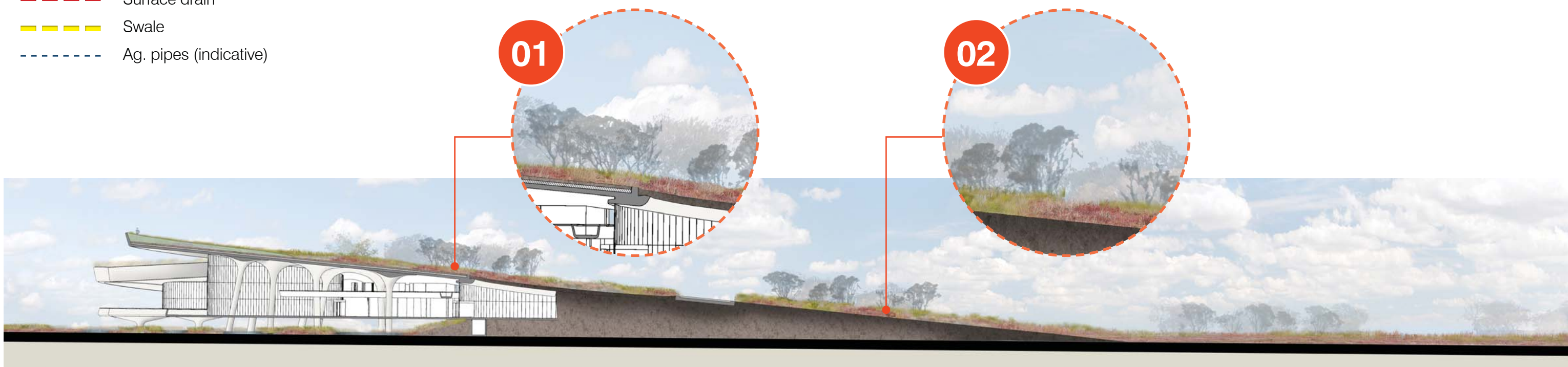
- Area: 0.9 hectares.
- Comprising 200mm free-draining growing media (e.g. Fytogreen) on structure, over drainage cell and roof membrane.

02 Coastal Saltmarsh + Estuarine Scrub Planted Slope

- Area: 2.4 hectares.
- Planting on free-draining soil media with herringbone ag. pipe over compacted subbase.

Assumptions:

- Roof slope: 1:10
- With medium - coarse growing substrate: 20% - 50% of capture during significant rain events
- Based on *Growing Green Guide, State of Victoria, February 2014*.





Melaleuca ericifolia Swamp Paperbark



Gahnia filum Chaffy Saw-sedge



Apium aff. prostratum (Tyrendarra) Sea Celery



Comesperma volubile Love Creeper



Rounded Noon-flower



Samolus repens var. *repens* Creeping Brookweed



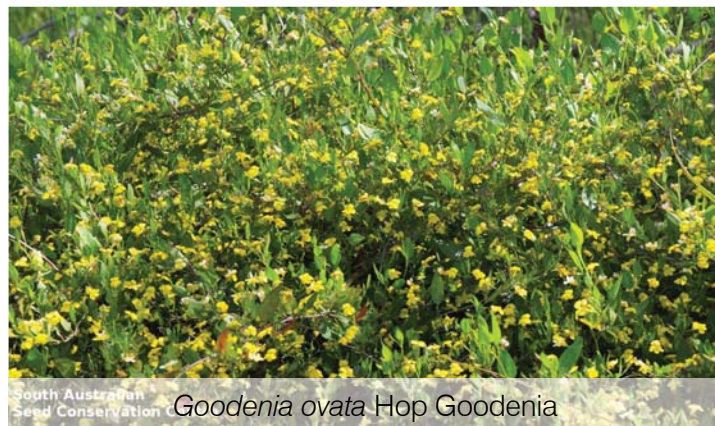
Ficinia nodosa Knobby Club-sedge



Wahlenbergia multicaulis Branching Bluebell



Acacia genistifolia Spreading Wattle



Goodenia ovata Hop Goodenia



Einadia nutans Nodding Saltbush



Pteridium esculentum Austral Bracken

Planting List

Coastal Saltmarsh

Apium aff. prostratum (Tyrendarra) Sea Celery
Disphyma crassifolium subsp. *Clavellatum* Rounded Noon-flower
Gahnia filum Chaffy Saw-sedge
Juncus kraussii subsp. *australiensis* Sea Rush
Phragmites australis Common Reed
Rhagodia candolleana subsp. *candolleana* Seaberry Saltbush
Samolus repens var. *repens* Creeping Brookweed
Sarcocornia quinqueflora Beaded Glasswort
Selliera radicans Shiny Swamp-mat
Spergularia brevifolia Salt Sea-spurrey
Spergularia spp. Sand Spurrey
Sporobolus virginicus Salt Couch
Triglochin striata Streaked Arrowgrass
Wilsonia backhousei Narrow-leaf Wilsonia

Estuarine Scrub

Acacia melanoxylon Blackwood
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Apodasmia brownii Coarse Twine-rush
Baumea juncea Bare Twig-sedge
Brachyscome parvula Coast Daisy
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Wahlenbergia multicaulis Branching Bluebell

Damp Herb-rich Woodlands

Acacia genistifolia Spreading Wattle
Acacia melanoxylon Blackwood
Amyema spp. Mistletoe
Cassinia aculeata Common Cassinia
Comesperma volubile Love Creeper
Deyeuxia quadriseta Reed Bent-grass
Dichondra repens Kidney-weed
Einadia nutans Nodding Saltbush
Eucalyptus tereticornis subsp. *mediana* Gippsland Red-gum
Eucalyptus viminalis subsp. *pyroriana* Coast Manna-gum
Exocarpos cupressiformis Cherry Ballart
Goodenia ovata Hop Goodenia
Hydrocotyle spp. Pennywort
Leptocarpus tenax Slender Twine-rush
Melicytus dentatus s.l. Tree Violet
Microlaena stipoides var. *stipoides* Weeping Grass
Oxalis perennans Grassland Wood-sorrel
Pomaderris aspera Hazel Pomaderris
Pteridium esculentum Austral Bracken
Stackhousia monogyna s.l. Creamy Stackhousia



4.7 Villas

The villas are located within the coastal saltmarsh landscape and woodlands. Their elevated design and location are intended to minimise impact on this flora. Access boardwalks will float above the prostrate vegetation forms to connect visitors from the main building to each of the villas.

Any disturbed areas will be reinstated with site sourced indigenous species to match into existing EVC's.





Melaleuca ericifolia Swamp Paperbark



Brachyscome parvula Coast Daisy



Samolus repens var. *repens* Creeping Brookweed



Rhagodia candolleana subsp. *candolleana* Seaberry Saltbush



Triglochin striata Streaked Arrowgrass



Senecio halophilus Salt Groundsel



Rytidosperma caespitosum Common Wallaby-grass



Disphyma crassifolium subsp. *Clavellatum*
Rounded Noon-flower



Acacia melanoxylon Blackwood

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Proposed planting to match surrounding EVC planting.

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Wahlenbergia multicaulis Branching Bluebell



4.8 Infrastructure

The proposed infrastructure area will host a range of facilities that will service the resort and spa; including staff accommodation, parking, water treatment and storage, waste treatment and communications. The intent is to minimise impact on surrounding flora, including any significant flora.

These will contribute to creating a self-sufficient and sustainable development utilising off-grid renewable electricity and thermal energy.

Any disturbed areas will be reinstated with site sourced indigenous species to match into existing EVC's.



Planting List

Proposed planting to match surrounding EVC planting.



Rytidosperma caespitosum Common Wallaby-grass



Acacia melanoxylon Blackwood



Anthosachne scabra s.l. Common Wheat-grass



Samolus repens var. repens Creeping Brookweed



Poa spp. Tussock Grass



Juncus pallidus Pale Rush



Ficinia nodosa Knobby Club-sedge



Melaleuca ericifolia Swamp Paperbark



Senecio halophilus Salt Groundsel

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