

## University of Tasmania Sandy Bay Masterplan

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### Introduction – Planning Scheme Amendment incl. Sandy Bay Masterplan

After more than a decade of increasing and enhancing our city-based presence, in 2019 the University made a choice between two options regarding the future of our southern campus: consolidate in central Hobart or maintain the current distributed model split across Sandy Bay and the city.

Following extensive consultation with our community, the University decided to consolidate in the city. We did so in order to secure the future of higher education in Tasmania, and to provide better access, better facilities, a better student and staff experience and a more sustainable institution. Consultation and planning continued around how the city campus would take shape.

In 2021, the University began the process of consulting and engaging with the community about what the future of the Sandy Bay campus would be. We sought what the community valued and what principles they thought should guide it. Then, after a great deal of input from staff, students, the local community and a range of stakeholders, through multiple engagement processes, we developed a masterplan setting out the long-term vision for the site. We shared the key elements of the vision with the community. It was a proposal that protected bushland and featured a mix of housing, education, aged care, sporting facilities, retail and commercial space and more.

For any such new future to be realised on the site, we would need to apply for a planning scheme amendment to remove the educational overlay from the site. Such an application is made to the relevant council, in this case the City of Hobart, which then initiates the process enabling a period of public consultation and feedback before it is ultimately considered by the Tasmanian Planning Commission.

In December of 2021, the University lodged our application for a planning scheme amendment, which incorporates the full Sandy Bay masterplan and all supporting reports, but later withdrew it to enable further engagement through council processes. This means the proposal never got to the stage where the application and all the material it contains was available for the public to see. Given the community interest in the move to the city and the possible futures for Sandy Bay, we are releasing the application in full.

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This document is split over six downloadable files. This is file 4 of 6 - Go to [Building our Hobart University presence since 2007](#) for more.



Precinct 5

# Mt Nelson Hilltop Neighbourhood

An authentic, world-class, regenerative and climate positive precinct that brings together our interconnectedness and stewardship of the ecosystem.

**Principles**

- Conscious consumerism
- Curated local retailing
- Regenerative and climate positive
- Ecological custodianship
- Education around interconnected ecosystems

**What makes Precinct 5 so unique?**

A state significant eco, retreat and adventure tourism precinct uniquely located close to Hobart CBD. Precinct 5 is destinational and provides a selection of finely crafted environments that create wonder, joy and beauty.

**How does Precinct 5 relate to the guiding principles?**



Welcoming, diverse and inclusive

- Range of residential offerings including boutique hotel
- DDA accessible public amenity



An evolving and distinct sense of place

- Integrated adventure activities within quarry
- Destinational, retreat and tourism specific offerings



Towards a climate-positive and regenerative future

- Regenerative landscape and inclusion of protected bushland reserve
- Sustainable urban farming



Opportunities to live, work, play and learn

- Eco-tourism and learning opportunities
- Curated and locally focused retail offerings



A well connected place

- Access and connection from Olinda Grove
- Connecting to the existing landscape and bushland reserve

UTAS Sandy Bay Masterplan - Precinct 5









DESIGN RATIONALE:

1. Locating a mixed-use tourism precinct and residential community on hilltop is leverages views to kunanyi and Derwent river and position surrounded by natural environment/bushlands
2. A new street with view line to Olinda Grove entry creates an inviting place to both residents and tourists alike
3. A new market square serves as a village heart and provides a core identity for the community radiating out from the centre
4. The new market is strategically located and supports specialty retail to provide a fresh food offer to a broader residential catchment and also underpin targeted foodie tourism culture and drawcard of the precinct
5. Positioning of a low rise eco hotel and conference offer that takes advantage of the views and vistas and relationship to nature, providing a gateway to adventure and eco-tourism elements and the Bushland reserve
6. Large areas of significant vegetation are maintained and enhanced to help achieve net biodiversity gain target but also to create a unique nature-based children's play area which adds to multi-faceted nature-based destination
7. Low and medium density residential opportunities are focused on existing cleared areas of vegetation
8. Shop-top apartments are integrated along the entry street, framing the street and maintaining heights sympathetic to the skyline of existing tree canopy
9. Creation of new gateway to built form and landscape treatments celebrate the entry to the precinct creating a node for the area
10. A combined environment/Aboriginal cultural facility celebrating history, environment, and nature of the Site



Community-Oriented



Eco-Tourism

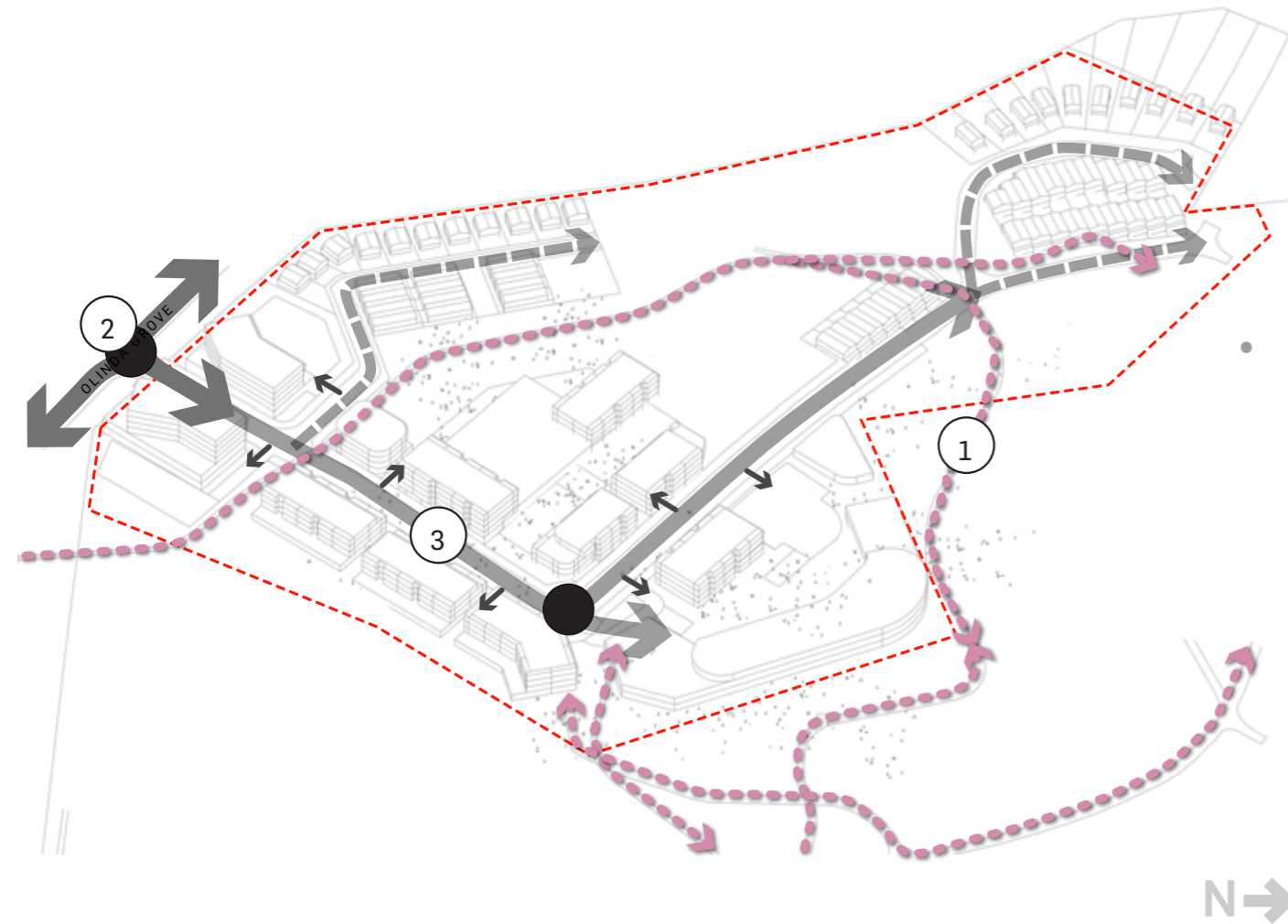


Sustainable living



Adventure Tourism

Circulation



1. Connected walking trails both existing and new link the hilltop neighbourhood and amenity to the adjacent bushlands and vistas out over the bay
2. Key entry and connection provided from the precinct onto the Southern Outlet via Olinda Grove and Proctors Road.
3. Low speed new road network connects amenity, retreat, eco--tourism and residential community

CIRCULATION

- EXISTING ROAD CONNECTION
- PRIMARY STREET
- SECONDARY STREET
- WALKING TRAILS
- CARPARK ACCESS
- INTERSECTIONS
- PRECINCT OUTLINE

Open Space / Landscape

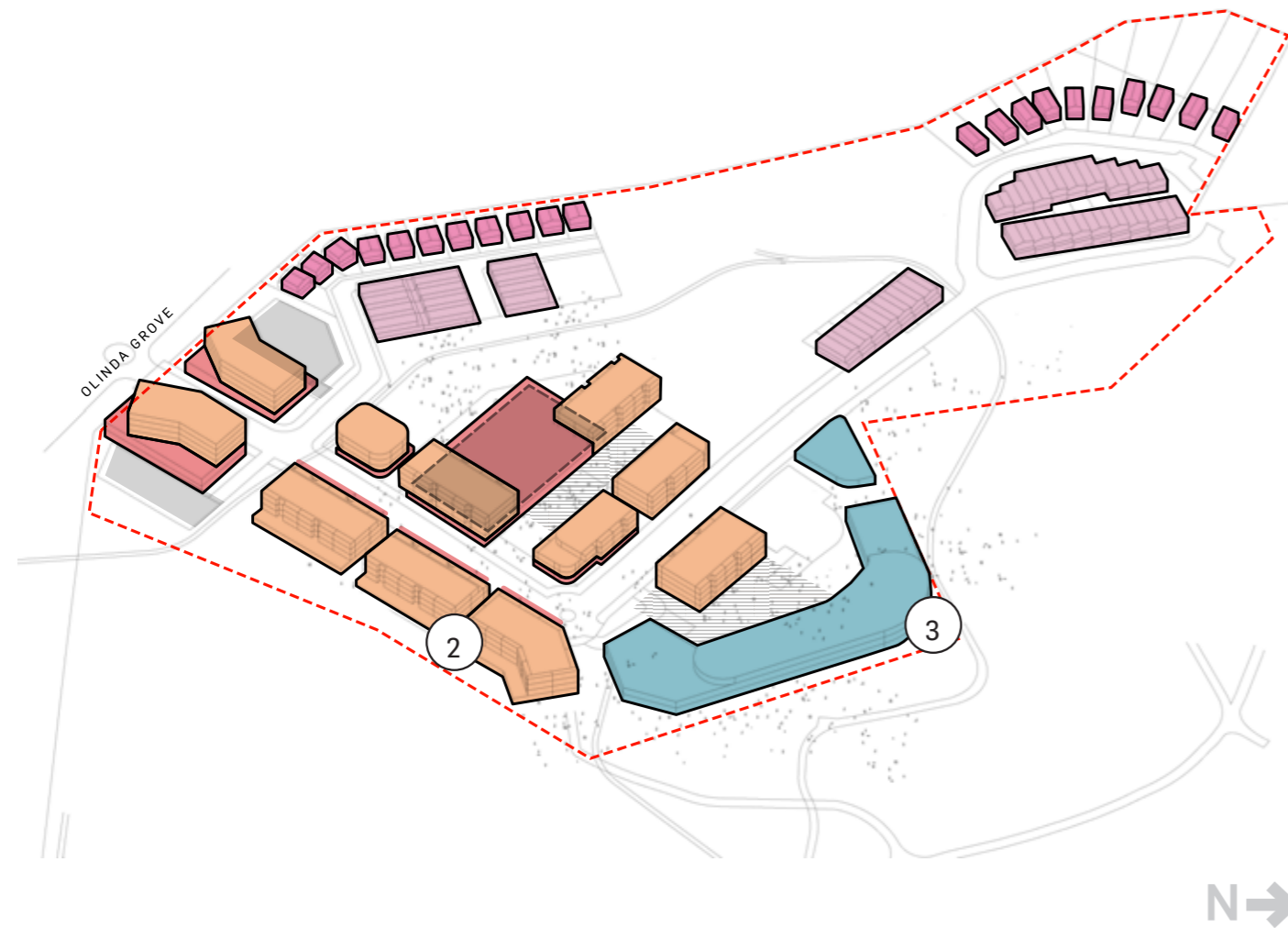


1. A series of embedded parklets offer the hilltop precinct design landscaped spaces
2. Opportunity for the integration of community commons and gardens in the residential neighbourhood
3. Wilded areas merge into the precinct from the surrounding bushlands
4. Protected conservation area to south provides high value ecological green amenity to the precinct and its offering

OPEN SPACE / LANDSCAPE

- POCKET PARKS
- ROOFTOP/PODIUM TERRACE
- BUSHLAND RESERVE
- PROTECTED DOV FOREST AREA (approx.)
- LANDSCAPE CONNECTION
- PRECINCT OUTLINE

Built Form

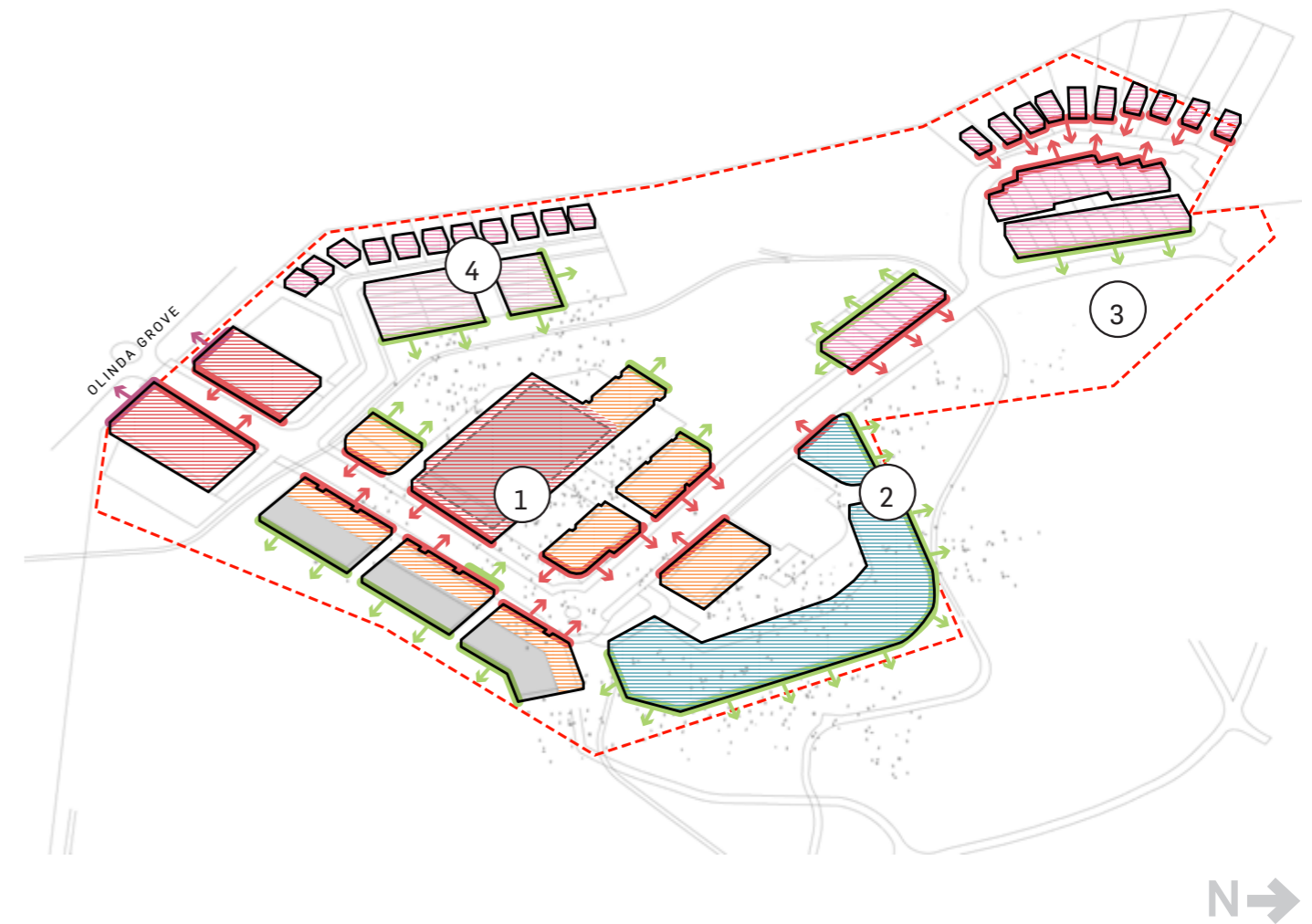


1. Built form situated to form a mixed-use precinct of various zones; retail, eco-tourism and residential neighbourhood
2. Higher density built form frames the streetscape at the entry from Proctors Rd into the precinct
3. Eco-tourism built form is located in marker position with high-value outlook and adjacency to Bushland Reserve

BUILT FORM

- RESIDENTIAL - APARTMENTS
- RESIDENTIAL - TOWNHOUSES
- RESIDENTIAL - SINGLE LOTS
- RETAIL / COMMERCIAL
- ECO-TOURISM
- ON-GRADE CARPARKS
- SEMI BASEMENT CARPARKING
- PRECINCT OUTLINE

Uses + Activation

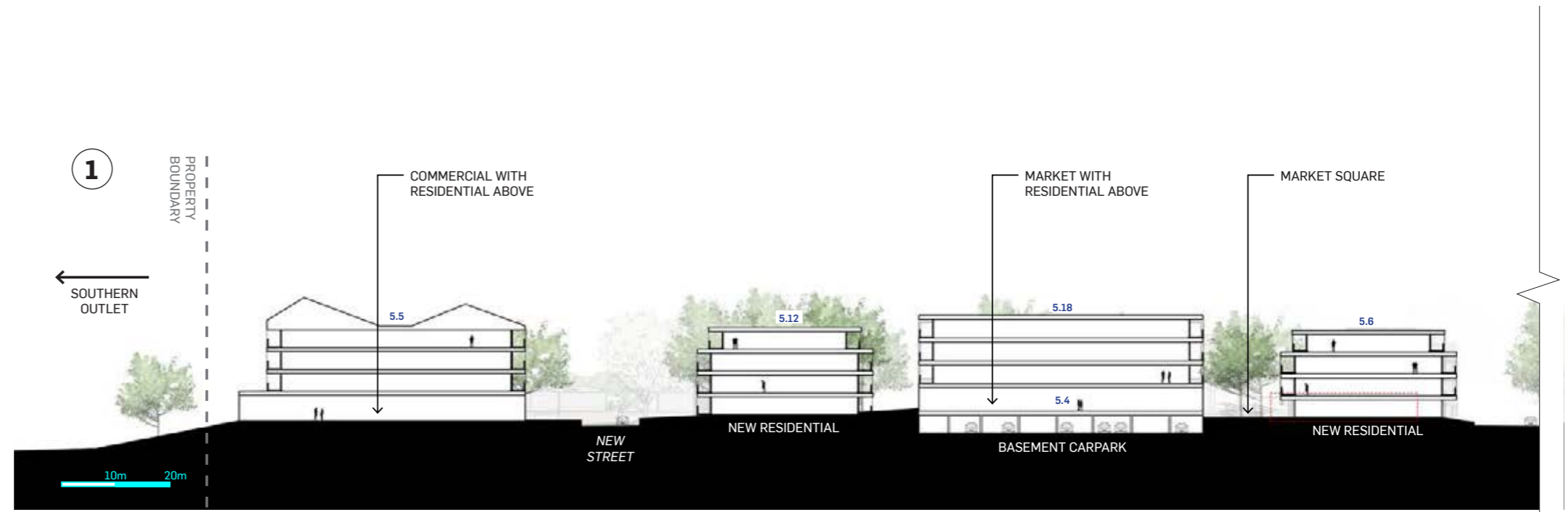


1. A mixed use precinct that has a small-scale civic in centre linked by a well-activated streetscape
2. A eco-tourism hub situated adjacent to the bushlands capturing outlook
3. All uses in this precinct have the benefit of strong landscape and bushlands connections
4. A combination of residential typologies are provided; apartments, townhouses and detached homes

USES & ACTIVATION

- RESIDENTIAL
- RETAIL / COMMERCIAL @ STREET LEVEL
- ECO-TOURISM
- CARPARKING
- LANDSCAPE CONNECTION
- PRIMARY STREET CONNECTION
- SECONDARY/NEW STREET CONNECTION
- PRECINCT OUTLINE

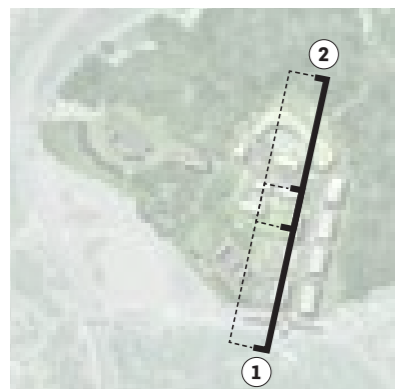




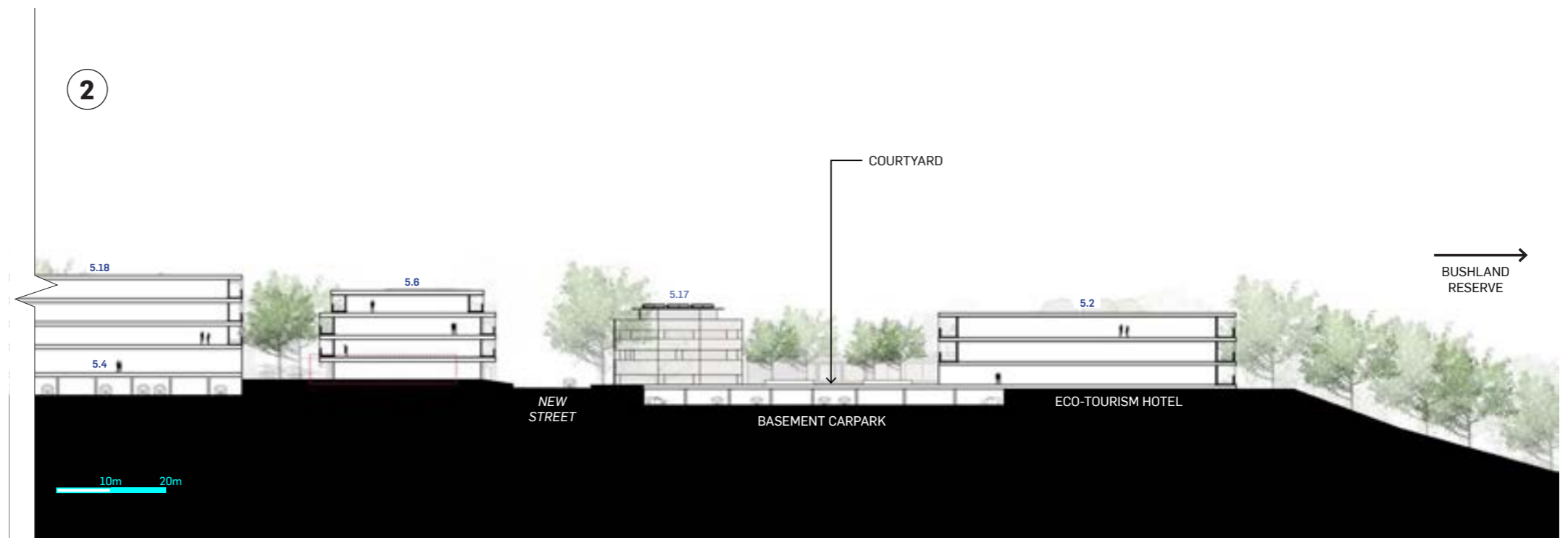
Precinct 5 - Section 1

Precinct 5 is designed to become part of the landscape and emphasise the views out towards the Bushland Reserve, ensuring the built form does not rise beyond the tree canopy heights. The higher forms housing public uses have been designed in the centre to mimic the gradient changes within this Precinct, with the residential and eco-tourism zones in lower and more private locations.

Precinct 5 Sections - Key Plan



--- EXISTING BUILDINGS



Precinct 5 - Section 2

Landscape Strategy - Mt. Nelson Hilltop Neighbourhood



**Design Statement**

Consciously designed as a regenerative landscape, this climate positive precinct embraces regenerative practices at its core. It is sensitive to its location on the wild periphery of the Site and proximity to the Bushland Reserve. A variety of eco-tourism opportunities are proposed to be integrated throughout the precinct and its landscape.

- 1 Eco Village Parklands**  
Two park spaces designed with climate positive principles, natural materials, endemic planting and landscape nodes for rest and reflection.
- 2 Adventure Playground**  
A nature based adventure playground with design form and narrative as an education tool.
- 3 Environmental & Adventure Tourism**  
Promoting beneficial partnerships, Adventure Tourism will encourage visitation and stimulate the Site's economy, whilst creating a platform through which to learn about the Site's ecology and natural systems while working in tandem with bushfire management.
- 4 Hotel and Spa Healing Gardens**  
A regenerative endemic landscape with landscape nodes to emerge in. A space to reconnect with and rediscover the pleasures of nature, positioned on the periphery of the Bushland Reserve.
- 5 Community Gardens**  
A beautiful and productive edible landscape promoting healthy and sustainable living, and encouraging engagement between residents and visitors.
- 6 Woodland Park**  
Open grass with seating areas in an existing woodland setting for rest and reflection.
- 7 Eco Street**  
Possible road surfaces of recycled material, soft edges, flush interfaces, carbon sensitive pavements and rain gardens to clean the water. Endemic planting palette and repurposing recycled materials for street furniture.
- 8 Existing Native Landscape and Loop Trail**  
Retention, protection and enhancement of the existing native landscape and swift parrot habitat with an educational walking loop trail that connects back to the lower precincts.
- 9 Native Revegetation**  
A planted buffer to the Site's boundary, screening the development and creating a generous corridor for wildlife and native flora to thrive.
- 10 Bushland edge**  
A managed planted buffer contributes to existing vegetation communities and ecology of the Bushland Reserve beyond.
- 11 Native Gardens**  
The residential landscapes are intended as a visual continuum of the surrounding landscape, with a planting design and materiality that whispers of the broader Australian landscape while retaining existing tree clusters where possible and a managed understory.

Figure 27 Landscape planting palette table - Precinct Five

## Landscape Strategy - Planting Palette

### Bush Escape

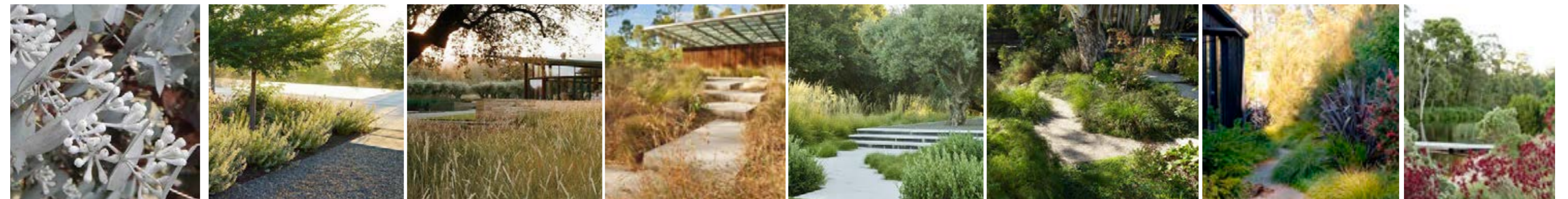
Forming part of the distinctive character of this area will be the use of native planting throughout the precinct. Utilising local seed or plants sourced from provenance to create a landscape that blends with the existing while showcasing the local plants in gardens around buildings. Using a palette designed to respond to the current climatic conditions while also future proofing it for survival will enable a healthy long lived ecosystem to continue to exist. It will also enable the local fauna to continue to inhabit the area most importantly protecting the habitat of the Swift Parrot Final species selection, including cultural uses, will be subject to input from Aboriginal working group.

### Key - Landscape Value



- Canopy Tree
- Habitat Value
- Fire Resistant
- Feature Foliage/Flower
- WSUD
- Green Roofs/Walls Suitable
- Edible
- Cultural
- Threatened
- Unique (Plantings unique to precinct)

Image 75 Landscape character images

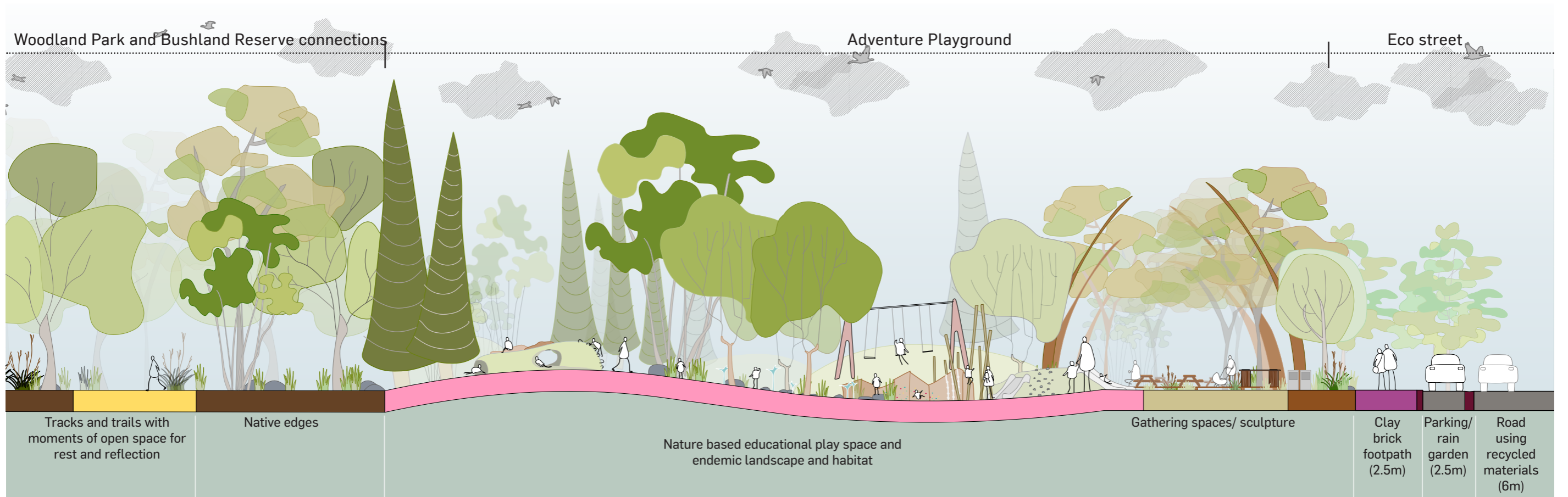


Botanic Name	Common Name	Origin										
<b>Trees</b>												
<i>Allocasuarina littoralis</i>	Black She-oak	TAS		●				●				
<i>Acacia melanoxylon</i>	Blackwood	TAS			●	●						
<i>Banksia marginata</i>	Coastal Banksia	TAS		●	●	●		●	●			
<i>Eucalyptus caesia</i>	Silver Princess	AUS		●		●						●
<i>Eucalyptus globulus</i>	Blue Gum	TAS	●	●		●						
<i>Eucalyptus ovata</i>	Black Gum	TAS	●	●		●						
<i>Eucalyptus pauciflora</i> 'Little Snowman'	Little Snowman	AUS	●	●		●						●
<i>Eucalyptus pulchella</i>	White Peppermint	TAS	●	●		●						
<i>Eucalyptus sideroxylon</i>	Iron Bark	AUS	●	●		●						
<i>Eucalyptus viminalis</i>	White Gum	TAS	●	●		●						
<i>Leptospermum lanigerum</i>	Woolly Tea Tree	TAS				●			●			●
<b>Shrubs, Grasses and Groundcovers</b>												
<i>Acacia cognata</i>	River Wattle	AUS		●		●		●				●
<i>Adenanthos sericeus</i>	Woolly Bush	AUS						●				●
<i>Allocasuarina glauca</i> 'cousin it'	Cousin It	AUS						●				
<i>Anigozanthos spp.</i>	Kangaroo Paw	AUS			●	●		●				
<i>Asplenium australasicum</i>	Birds Nest Fern	AUS						●				●
<i>Austrostipa stipoides</i>	Coastal Spear Grass	TAS		●				●				
<i>Callistemon</i> 'Little John'	Prostrate Bottle Brush	TAS				●		●				●
<i>Dichelachne crinita</i>	Longhair Plume Grass	TAS						●				
<i>Dicondra repens</i>	Kidney Weed	AUS						●				●
<i>Leucophyta brownii</i>	Cushion Bush	AUS						●				●
<i>Myoporum parvifolium purpurea</i>	Purple Creeping Boobialla	TAS				●		●				
<i>Pimelea glauca</i>	Smooth Rice Flower	AUS				●			●			●
<i>Poa labillardieri</i>	Common Tussock Grass	TAS		●				●				
<i>Themeda triandra</i>	Kangaroo Grass	AUS		●				●	●	●		
<i>Viola hederacea</i>	Native Violet	TAS				●		●				
<i>Westringia angustifolia</i>	Coastal Rosemary	TAS						●			●	

Landscape Strategy - Character Sections

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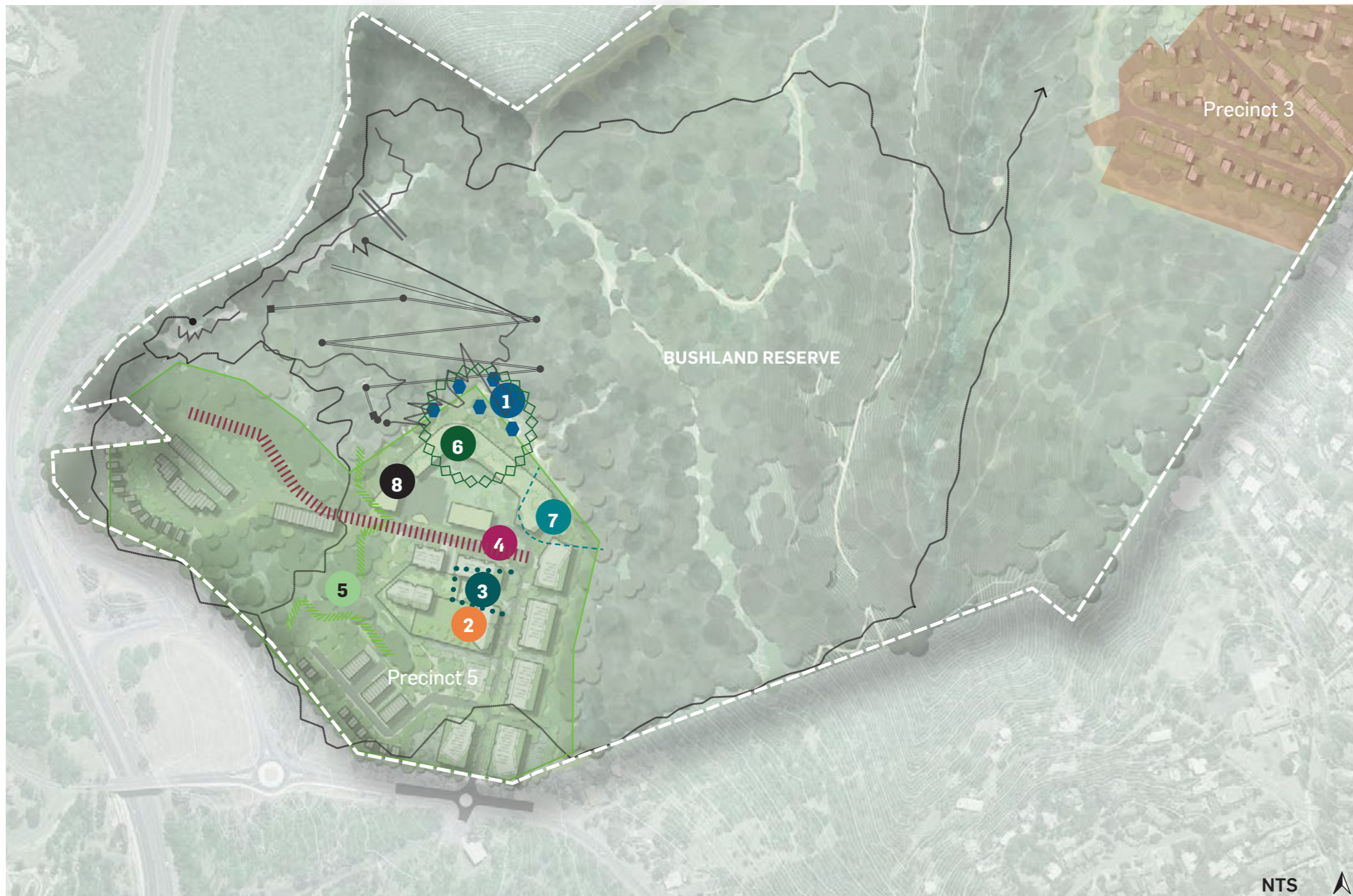
1.



Potential integration of eco-tourism opportunities within the Site



Image 76 Eco tourism precedent images



- 1 Boutique accomodation (Bushland pavilions associated to the hotel + spa)
- 2 Sky-farm and garden
- 3 Outdoor market stalls
- 4 Street events + seasonal/cultural celebrations
- 5 Nature-based learning experiences/trails
- 6 Eco-hotel + spa retreat
- 7 Recreational adventure activity hub
- 8 Potential Community Flex Space/ Chefs Table / Cooking School



# Development yield summary

The overall development yield provides a summary of indicative possible yield supporting the Masterplan, and is subject to further development/review.

## Sandy Bay Masterplan

## Development Summary

COMMERCIAL IN CONFIDENCE

Revision 6B

24.11.21

### Indicative Development Yield

The initial proposal for the Masterplan provides an indicative yield which summarises potential number of units/areas (GFA) delivered across the mix of uses listed in the table adjacent.

This summary is provided to outline early assumptions and is subject to further testing and development.



UTAS Sandy Bay Masterplan Revision 6B	Lower Campus	Mid Campus	Upper Campus			Total
	Precinct 1	Precinct 2	Precinct 3	Precinct 4	Precinct 5	
<b>RESIDENTIAL DWELLINGS</b> <small>Includes Serviced Apartments</small>	266	755	933	305	360	2,700
<b>RETIREMENT LIVING</b> <small>(Apartments)</small>		81				
<b>RESIDENTIAL AGED CARE</b> <small>(Beds)</small>		91				91
<b>HOTEL</b> <small>(Rooms)</small>					120 Rooms	120
<b>STUDENT ACCOMODATION</b> <small>EXISTING (Rooms)</small>				Existing		
<b>COMMERCIAL</b> <small>(GFA m2)</small>	3,600	18,400			800	22,800
<b>RETAIL and F&amp;B</b> <small>(GFA m2)</small>	600	3,500 Supermarket 1,800 Specialty Retail	400		3,500 Market 2,000 Specialty Retail	11,800
<b>HEALTH AND WELLBEING</b> <small>(GFA m2)</small>		3,200 Medical Centre	1,500 Health Services		Spa	5,700
<b>TOURISM + RECREATION</b>					Tourism Centre	500
<b>COMMUNITY / EDUCATION / SPORTS</b>	3,500m2 Indoor Sports Sports Social Clubs Childcare 500m2 Sports pavillion	Community House Performing Arts Theatre Makers Space Library Church/ Theatre	Childcare	Education / School	Eco Living Education	12,970

Figure 28 Development summary yield table



# Transition Management of the University to the CBD

The staging and delivery of the UTAS Sandy Bay Masterplan will form a critical part of the development strategy, informing the sequence of the project build-out, in alignment with the decant of UTAS to the CBD. The transition of the Site will happen over a number of years reaching over decades. It is important that the transition is carefully managed, and opportunities to activate various parts of the Site at key times will support the growth of a lively neighbourhood built from both the character of the existing as it grows into the new.



## A place transition approach to activation

Fundamentally, activation is not an outcome – it is a process. As such, to be successful the redevelopment of the Site and the transition of uses requires a detailed approach that ensures what we do is strategically linked to the vision, opportunities and challenges of the place. The approach to successful early activation is better achieved through place transition - where ongoing, strategic activation is delivered in order to transition a place from where it currently is and what it currently offers (cultural, socially or economically) to where it aims to be and what the redevelopment is striving to achieve.

Place transition responds to the changing circumstances on the ground while long term developments take shape and evolve. The place transition and early activation process has been articulated in three phases, as the Site provides a unique opportunity at each phase of the development.

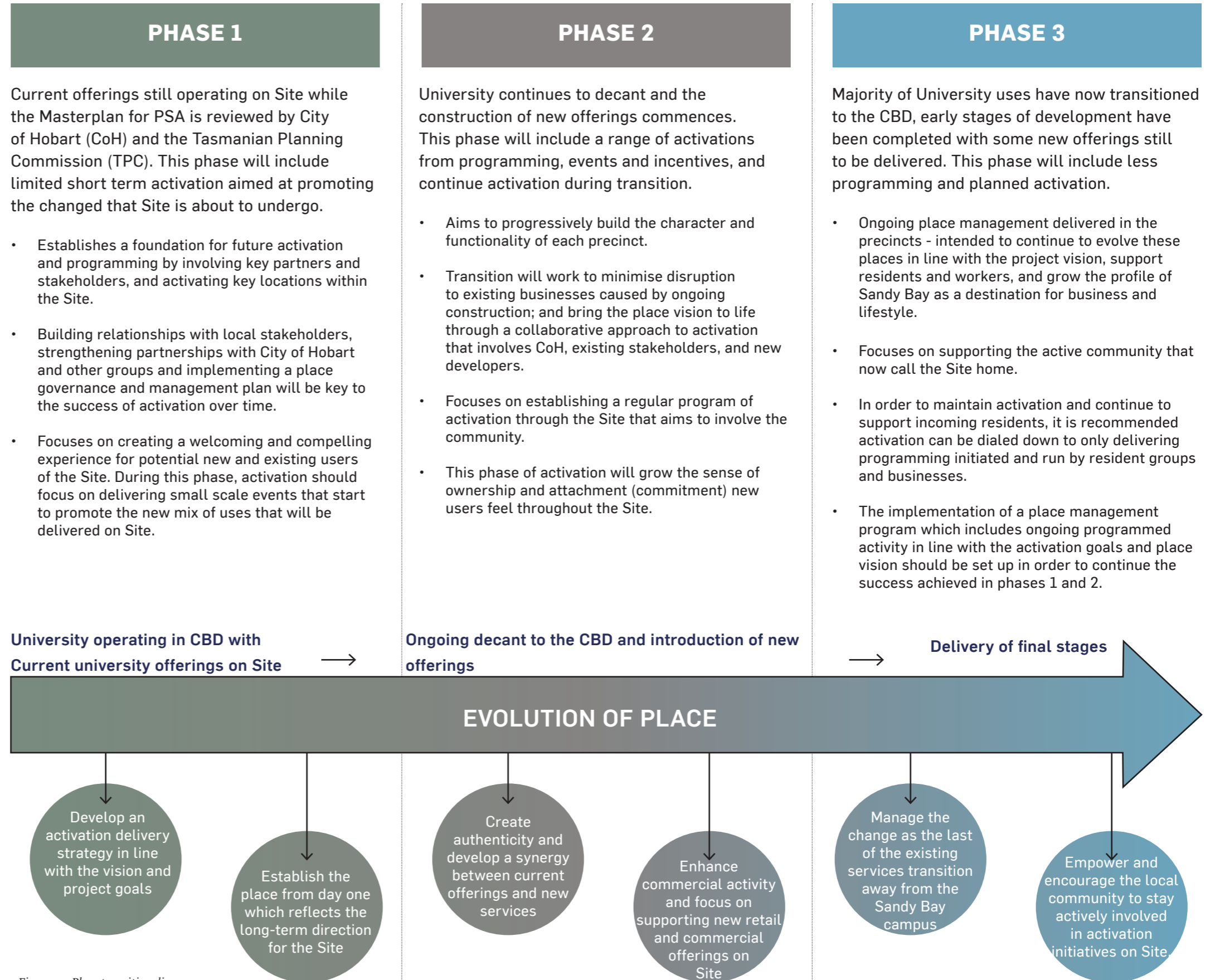


Figure 29 Place transition diagram



# Appendix

*Image 77 Precinct 5 Street View Artists Impression*

SUPPORTING INFORMATION		
Appendix	Document	Author
01	Proposed Building List	ClarkeHopkinsClarke
02	Stakeholders List	ClarkeHopkinsClarke
03	Building Heights and Setback Plans	ClarkeHopkinsClarke
04	Reimagine Sandy Bay: Engagement Summary	ClarkeHopkinsClarke/Village Well/CorComms
BACKGROUND REPORTING TO INFORM THE MASTERPLAN DESIGN		
Appendix	Document	Author
05	Market Assessment Report	Deep End Services
06	Natural Values Assessment + Ecological Impact Assessment	North Barker Ecosystem Services
07	Conservation Management Plan (CMP)	Paul Davies Architect
08	Sustainable Transport Strategy	Complete Streets
09	Civil Engineering Assessment	GHD (Civil)
10	Environmental Site Assessment (Contamination)	GES
11	Aboriginal Heritage Assessment	CHMA
ASSESSING THE DESIGN + IMPACT ASSESSMENTS		
Appendix	Document	Author
12	Economic Impact Assessment	Deep End Services
13	Traffic Impact Assessment	GTA Stantec
14	Landscape Visual Impact Assessment	Orbit Solutions
15	Heritage Impact Assessment	Paul Davies Architect

**SUPPORTING INFORMATION**

# Proposed Buildings List

ClarkeHopkinsClarke Architects

## Proposed Buildings List

This plan outlines the proposed buildings and facilities on Site and highlights the existing buildings which will be adaptively re-used.

### Precinct 1

- 1.1 Commercial - Sports science / Sports Social Clubs / Childcare
- 1.2 Serviced Apartments
- 1.3 Residential - Mixed Use
- 1.4 Residential Apartments
- 1.5 Residential Apartments
- 1.6 Residential Apartments
- 1.7 Residential Apartments
- 1.9 Indoor Sports & Soccer Clubs
- 1.10 Carpark (Above ground under new astro turf soccer fields)
- 1.11 Soccer Field 1 (astro turf)
- 1.12 Soccer Field 2 (natural turf)
- 1.14 Sports Pavillion - Footy Club
- 1.15 Residential Apartments

### Precinct 2

- 2.1a Residential Terraces - Engineering Blg.
- 2.1b Residential Apartments
- 2.1c Residential Apartments
- 2.1d Residential Apartments
- 2.2a Residential Terraces - Geology Blg.
- 2.2b Residential Apartments
- 2.2c Residential Apartments
- 2.2d Residential Apartments
- 2.3 Residential Apartments - Chemistry Blg.
- 2.4 Commercial / Education - Physics Blg.
- 2.5 Commercial - Morris Miller Blg.
- 2.5 Library - Morris Miller Blg. Reuse
- 2.6 Residential Aged Care
- 2.8 Commercial -- Social Sciences Blg.
- 2.9 Retail Centre (inc. supermarket)
- 2.9a Residential townhome / Soho
- 2.9b Residential Apartments
- 2.9c Residential Apartments (over 2.9a)
- 2.9d Residential Apartments
- 2.10 Performing Arts Theatre - Stanley Burbury Blg.
- 2.11 Church / Theatre - Arts Theatre Blg.
- 2.12 Residential Apartments
- 2.13 New Pedestrian Bridge
- 2.14 Basement carpark
- 2.15 Residential - Mixed Use
- 2.16 Residential - Mixed Use
- 2.18 Residential Apartments
- 2.19 Medical Centre
- 2.20 Community House - Relocated Cottage
- 2.21 Retirement Living (apartments)
- \* Community Gardens

### Precinct 3

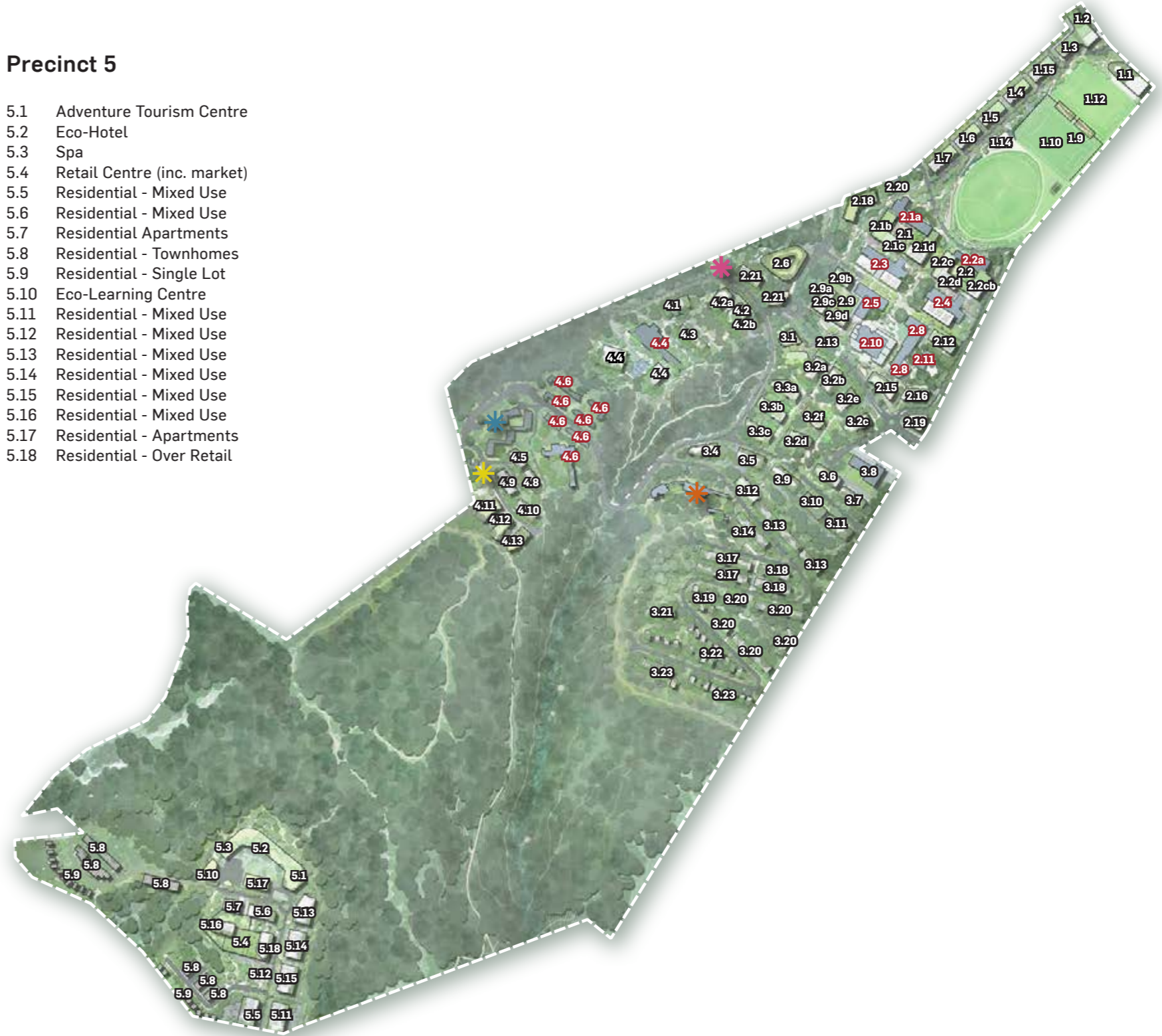
- 3.1 Residential Apartments
- 3.2a Residential - Mixed Use
- 3.2b Residential - Mixed Use
- 3.2c Residential - Mixed Use
- 3.2d Residential - Mixed Use
- 3.2e Residential - Mixed Use
- 3.2f Residential - Apartments
- 3.3a Residential Apartments
- 3.3b Residential Apartments
- 3.3c Residential Apartments
- 3.4 Residential Apartments
- 3.5 Residential Apartments
- 3.6 Residential Apartments
- 3.7 Residential Apartments
- 3.8 Family Health Serv. & Childcare
- 3.9 Residential Apartments
- 3.10 Residential Apartments
- 3.11 Residential Apartments
- 3.12 Residential Apartments
- 3.13 Residential - Townhomes
- 3.14 Residential - Townhomes
- 3.17 Residential - Townhomes
- 3.18 Residential - Townhomes
- 3.19 Residential - Single Lot
- 3.20 Residential - Townhomes
- 3.21 Residential - Single Lot
- 3.22 Residential - Single Lot
- 3.23 Residential - Single Lot
- \* CSIRO (long lease)

### Precinct 4

- 4.1 Residential Apartments
- 4.2 Residential Apartments
- 4.3 Residential - Townhomes
- 4.4 Education / School (Old Commerce)
- 4.5 Residential Apartments
- 4.6 Student Accomodation
- 4.8 Residential Apartments
- 4.9 Residential Apartments
- 4.10 Residential Apartments
- 4.11 Residential Apartments
- 4.12 Residential Apartments
- 4.13 Residential Apartments
- \* Christ College
- \* Heritage building

### Precinct 5

- 5.1 Adventure Tourism Centre
- 5.2 Eco-Hotel
- 5.3 Spa
- 5.4 Retail Centre (inc. market)
- 5.5 Residential - Mixed Use
- 5.6 Residential - Mixed Use
- 5.7 Residential Apartments
- 5.8 Residential - Townhomes
- 5.9 Residential - Single Lot
- 5.10 Eco-Learning Centre
- 5.11 Residential - Mixed Use
- 5.12 Residential - Mixed Use
- 5.13 Residential - Mixed Use
- 5.14 Residential - Mixed Use
- 5.15 Residential - Mixed Use
- 5.16 Residential - Mixed Use
- 5.17 Residential - Apartments
- 5.18 Residential - Over Retail



Proposed Buildings Plan

1:8000 | A3



■ Adaptive re-use of existing buildings

**SUPPORTING INFORMATION**

# Stakeholders List

ClarkeHopkinsClarke Architects

## Stakeholders

A detailed list of stakeholders have been involved in the engagement into the Concept Masterplan. Throughout the stakeholder and community engagement programme various tiers of primary, secondary and tertiary engagement have been undertaken. Formats of engagements were tailored to suit each group and ensure the environment for discussions was well-planned and supported, and wide-ranging feedback was enabled and subsequently incorporated into the Masterplan.

### CITY OF HOBART

CoH - Chief Executive Officer  
 CoH - Elected Members  
 CoH - Planning  
 CoH - Transport / Traffic  
 CoH Assets - Stormwater  
 CoH Assets - Bushland, Parks and Recreation + Open Space  
 CoH Assets - Roads  
 CoH Assets - Waste, Cleaning + Servicing  
 CoH - Community and Placemaking

### KEY STAKEHOLDERS

Robert Morris-Nunn (*TAS Architect*)  
 Leigh Woolley (*TAS Architect/Urban Designer*)  
 Jason Byrne (*Prof. of Human Geography/Planning*)  
 Graeme Lynch (*Primary Health + Planning*)

### HOBART CITY DEAL IMPLEMENTATION BOARD

### STATE GOVERNMENT

Office of the Premier  
 Office of the Minister for Education  
 Office of the Minister for Planning, Environment  
 Office of the Minister for Transport + Housing  
 State Growth

### GOVERNMENT DEPARTMENTS

Department of Health  
 Department of Justice - Bryan Risby (*Justice + Policy*)  
 Department of Education  
 Department of State Growth - Metroplan  
 Department of State Growth - Transport

### UTILITIES

TasNetworks  
 TasWater  
 TasGas

### SCHOOLS

Mt Nelson Primary School  
 Mt Nelson Primary School Association  
 Hobart College  
 Hutchins  
 Tarooma High School  
 Albuera St Primary

### UNIVERSITY OF TASMANIA

University Strategic Forum  
 University Executive Team  
 Riawunna  
 Southern Campus Transformation -Expert Reference Group  
 College divisional engagement  
 Current staff and students -44,740 staff and students  
 Student Union  
 Alumni and former staff

### UNIVERSITY SPORTING GROUPS

UTAS Soccer Club  
 Rugby Club  
 Uni Gym  
 Uni Club facilitator  
 University Cricket Club

### WIDER COMMUNITY

General public

### NEIGHBOURING BUSINESSES

Federal Group  
 Hill St Grocer

### PROFESSIONAL ORGANISATIONS

Tasmanian Property Council  
 Australian Institute of Architects  
 Real Estate Institute of Tasmania

### TENANTS

Hobart Women's Housing  
 CSIRO  
 Tasmanian Herbarium  
 Lady Gowrie  
 Source Wholefoods  
 Chartwells Administration  
 Cianos  
 Pickled Pear / Uni Club  
 National Tertiary Education - Union Edge Radio  
 UniSuper  
 Gemmological Association  
 Australia Post  
 DIF Accommodation (Former SPARK)

### TRANSPORT

Metro  
 Bicycle Network  
 RACT

### COMMUNITY ORGANISATIONS

Aboriginal Land Council of Tasmania  
 Tasmanian Conservation Trust  
 Friends of the Sandy Bay Rivulet  
 U3A

### WIDER COMMUNITY FURTHER STAKEHOLDERS CONTACTED:

State Opposition  
 State Greens  
 State Members for Clark + Legco members  
 Federal members for Clark + senators  
 Colony 47  
 TasCoSS  
 TCCI  
 TasICT  
 The Sustainability Centre  
 UTAS AFL Club  
 Fahan  
 Tarooma Primary  
 Mt Carmel College  
 Princess St Primary School  
 Waimea Heights Primary School  
 Sandy Bay Infant School

### STATE MEMBERS FOR CLARK

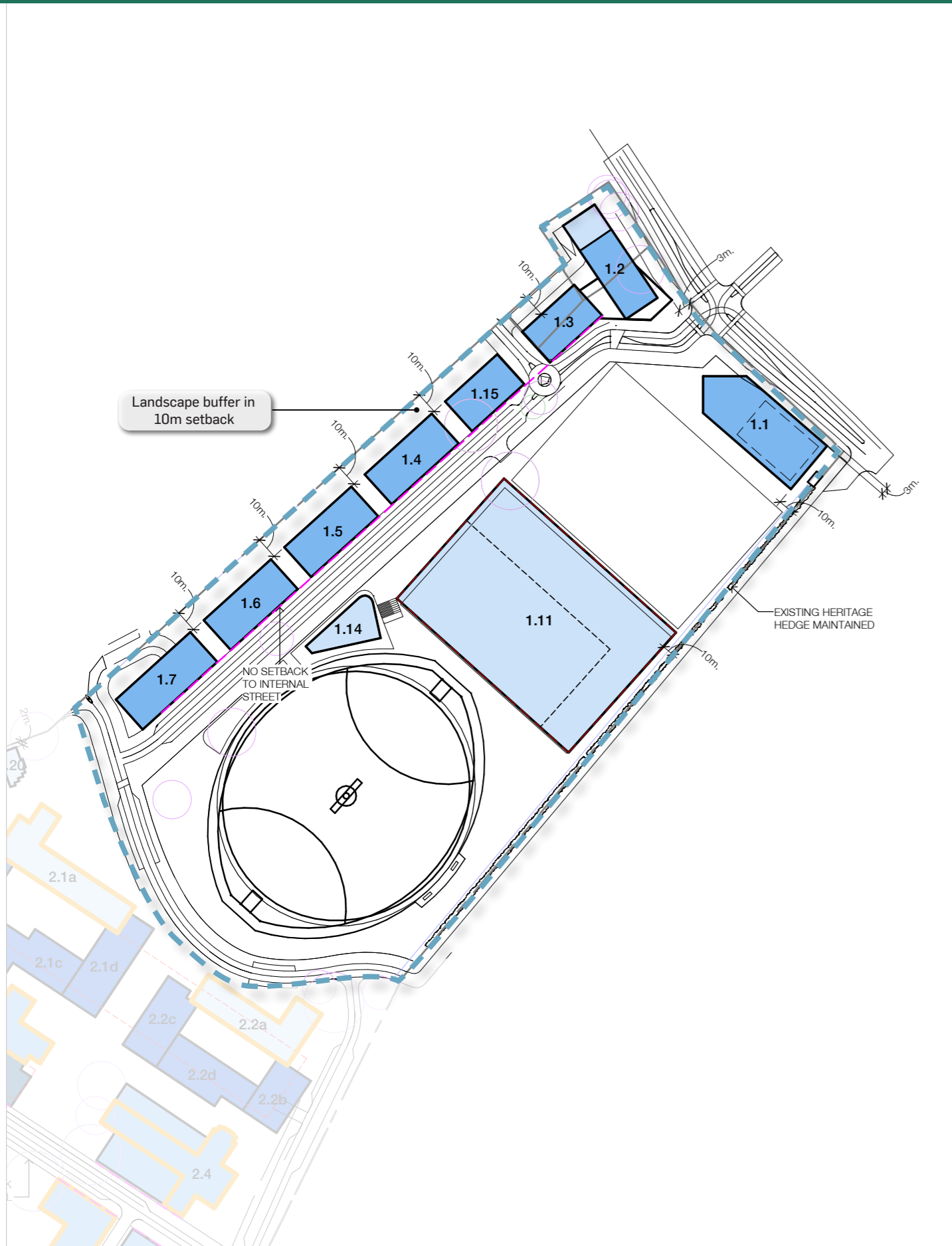
Madeleine Ogilvie

**SUPPORTING INFORMATION**

# **Building Heights + Setbacks Plans**

ClarkeHopkinsClarke Architects





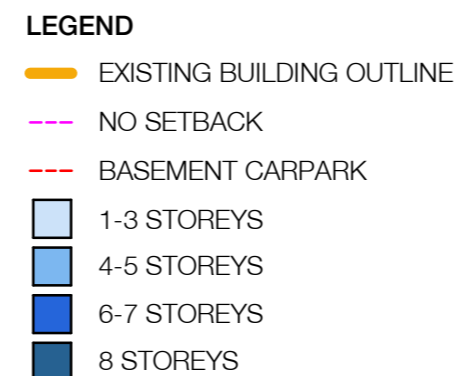
### LEGEND

- EXISTING BUILDING OUTLINE
- NO SETBACK
- BASEMENT CARPARK
- 1-3 STOREYS
- 4-5 STOREYS
- 6-7 STOREYS
- 8 STOREYS

Precinct 1 fronts Sandy Bay Road allowing for a minimum setback of 3 metres with existing trees retained to north side, increasing immediate public interaction with these edge conditions. The residential strip has a ground floor setback of 4 metres and a typical upper setback of 10 metres from the Site boundary, respecting existing surrounding conditions. Along Dobson Road, these apartment buildings have no setback to increase connections towards the sports fields.

The heights in this Precinct respond to the primary and secondary roads on which they sit. Buildings 1.1 and 1.2 are 5-6 storeys high to match the high-movement of traffic and public interaction along Sandy Bay Road, while the apartment buildings (1.3, 1.4, 1.5, 1.6, 1.7, 1.15) sit at 5 storeys framing the pedestrian interface along Dobson Road.

PRELIMINARY



Precinct 2 focuses on the immediate interactions between street and building. Most proposed and existing buildings within this Precinct are positioned directly along the street boundaries, to increase these connections, eliminating the requirement for setbacks.

The heights in Precinct 2 vary from 1-8 storeys. The existing Engineering and Geology Buildings (2.1a and 2.2a) maintain their original 3 storeys, while new buildings are proposed behind (2.1b, 2.1c, 2.1d, 2.2b, 2.2c, 2.2d) that reach 6-7 storeys high to maximise views out across Sandy Bay. This is similar for the existing Chemistry Building (2.3) with an original height of 4 metres with new additions sitting behind at 8 metres. The retail district surrounding the Sir Stanley Burbury Theatre maintains a 1-2 storey structure with evenly balanced buildings being designed on and around this district in regards to height.

PRELIMINARY



**LEGEND**

- EXISTING BUILDING OUTLINE
- NO SETBACK
- BASEMENT CARPARK
- 1-3 STOREYS
- 4-5 STOREYS
- 6-7 STOREYS
- 8 STOREYS

Precinct 3 utilises Churchill Ave to create an immediate connection between the existing road and new built form, with no setbacks along the podium edge. However, the residential buildings above (3.2a, 3.2b, 3.2c, 3.2e) have a minimum setback of 5 metres from the podium edge to relieve the street and not over-dominate. The setbacks to the single lot and townhouses (3.20, 3.23) are 8 metres to respect the existing surrounding conditions, similarly with apartment buildings 3.11 and 3.7.

The heights in Precinct 3 respond to the steep gradient present in this area, with higher apartment buildings (5-6 storeys) proposed at the bottom of the slope. The mid-grade includes 4-storey apartment buildings and further up the hill there are 1-2 storey single lot and townhouse dwellings, ensuring all buildings have maximum views out across the Bay and neighbouring Bushland.



### LEGEND

- ▬ EXISTING BUILDING OUTLINE
- - - NO SETBACK
- - - BASEMENT CARPARK
- 1-3 STOREYS
- 4-5 STOREYS
- 6-7 STOREYS
- 8 STOREYS

Precinct 4 includes minimum setbacks of 3 metres to French Street as this becomes a secondary street off College Road, therefore immediate interactions are not as necessary in this area. The heights at this lower end of Precinct 4 respond accordingly with 1-4 storey buildings/dwellings, also ensuring they integrate with existing surrounding neighbourhood and Bushland Reserve.

The top of the hill in Precinct 4 proposes residential apartments 3-4 storeys in height similarly to not predominate over the adjacent context, with a minimum setback of 10 metres to Building 4.11.

PRELIMINARY



### LEGEND

- EXISTING BUILDING OUTLINE
- NO SETBACK
- BASEMENT CARPARK
- 1-3 STOREYS
- 4-5 STOREYS
- 6-7 STOREYS
- 8 STOREYS

Precinct 5 is an eco-tourism & retail district, to maximise interactions between people and the built form and surrounding environment, there are no setbacks to internal streets or paths. The only setbacks recorded in this Precinct are to the single lot dwellings, with setbacks of 9 and 20 metres.

Due to being positioned at the top of the Site, the buildings in this Precinct require visual sensitivity to the view looking up the hillside, therefore most public buildings are 1-3 storeys with surrounding apartment buildings 4 storeys in height. The residential areas to the west and south of Precinct 5 include 1-2 storey single lot and townhouses, to create immediate interactions with the surrounding Bushland.

PRELIMINARY

**SUPPORTING INFORMATION**

# Reimagine Sandy Bay: Engagement Summary

ClarkeHopkinsClarke Architects

# Reimagine Sandy Bay



**5** Engagement  
Summary 4  
Published  
December 2021

UNIVERSITY of  
**TASMANIA** 

Image 1: Sunrise over the city as seen from kunanyi, Mount Wellington



*We acknowledge with deep respect the muwinina people, traditional owners of Nipaluna Country of Hobart, Lutruwita Tasmania, Aboriginal land.*

*As a reflection of this institution's recognition of the deep history and culture of this island, the University of Tasmania acknowledges the palawa / pakana people, the continuing custodians of the land of our present and future campuses and pay profound respects to Elders past, present and emerging.*

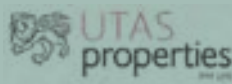


## Purpose

This Engagement Summary is a public document that outlines the outcomes of all four rounds of engagement for the redevelopment of the University of Tasmania's Sandy Bay Campus.

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This report has been prepared for the UTAS Properties Pty Ltd (UPPL), by the appointed engagement team - ClarkeHopkinsClarke, Village Well and Cor Comms. V6 - 2/12/21

Cover image: Aerial view of Hobart from Mt Wellington, Loic Le Gully

Image 2: View of Hobart and the Derwent River from above



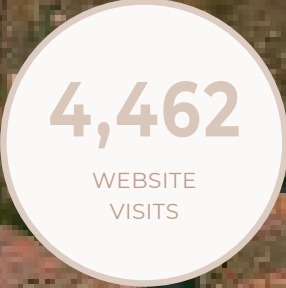
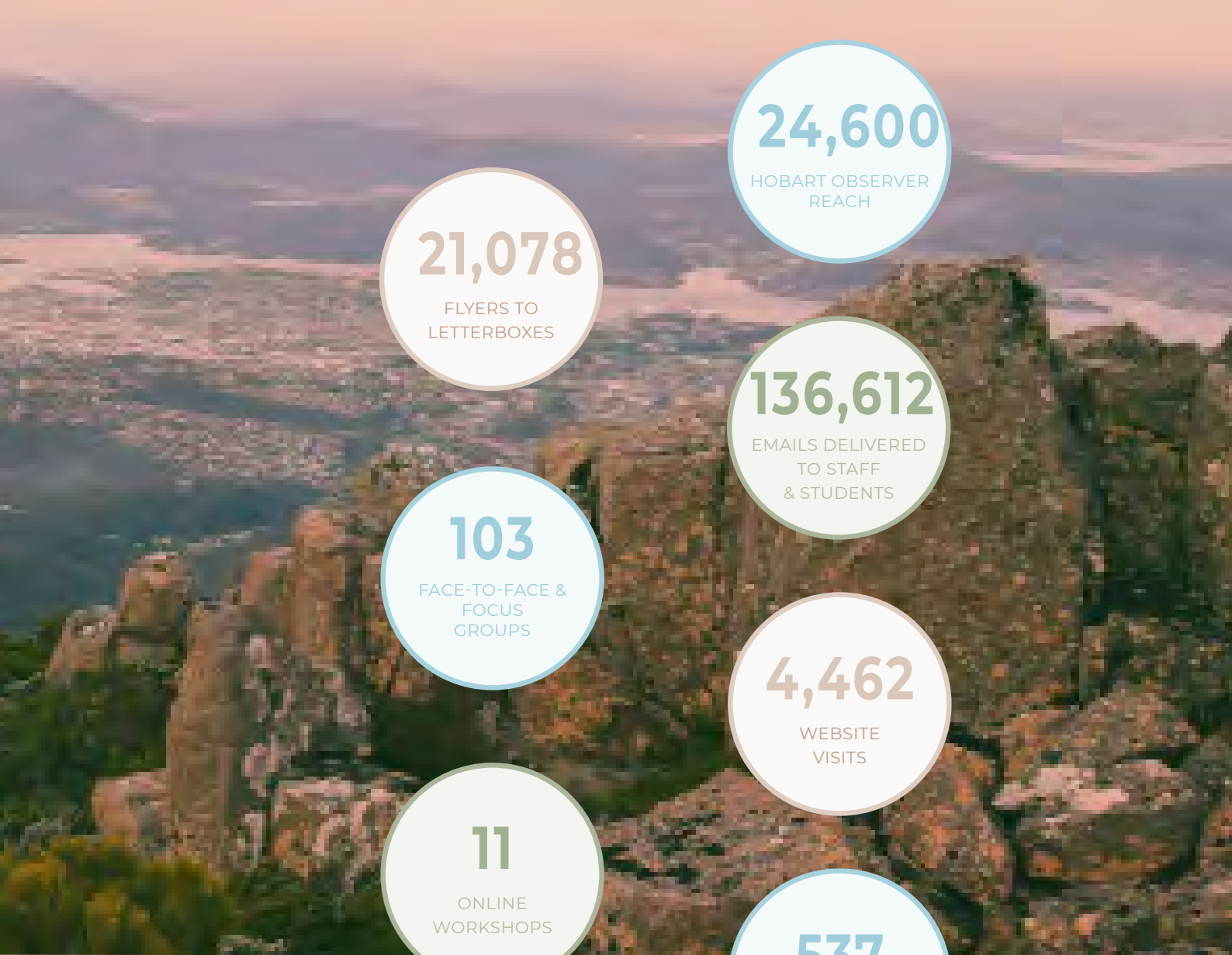
## Executive Summary

The University of Tasmania continues to be delighted by the positive engagement it has had with the community and other stakeholder groups regarding the development of the Sandy Bay Campus Site. We have now conducted four separate engagement rounds since July 2021 with over 830 people participating in face to face conversations, focus group discussions, open house events and contributing to the Reimagine Sandy Bay website.

During the first round of engagement, which ran from 21st July to 22nd August, participants shared their views about the project, their aspirations for the future of the place, and their opinions on the draft Guiding Principles. During the second round of engagement, that ran from 13th September to 2nd October, participants shared their views about the project and opinions on the Shared Vision and Guiding Principles. During the third round of engagement, which ran from 20th -31st October, participants shared their views about the project and opinions on the Concept Masterplan. During the fourth round of engagement, which ran from 17th November to 1st December, participants shared their views and opinions on the Final Concept Masterplan.

A range of engagement methods have been adopted to ensure accessibility and input from a wide stakeholder group, including an advertisement in the Hobart Observer that reached 24,600 people; 136,612 internal email communications through the University; a website that was accessed 4,462 times (the Concept Masterplan was downloaded 1,021 times); open houses and exhibition that were attended by 366 people; 103 focus groups and face-to-face meetings, and 11 online workshops. Stakeholder groups had a wide reach and included groups and tenants such as the City of Hobart CEO, elected members and officers, Riawunna, Members of the House of Assembly, Tasmanian Property Council, Hobart Women's Housing, Tasmanian Herbarium, CSIRO Forestry, TUSA, neighbouring schools, the Bicycle Network and infrastructure providers, as well as the open sessions with the community.

A full list of engaged stakeholders is provided in the Appendix.



Positive feedback was received around the retention of existing buildings, commitment to sustainable transport and upgrade of the sporting facilities.

Criticisms received were around the relocation of the campus itself, as well as concerns for high density infill development and the Site no longer being an educational precinct.

What people most valued about the Site were its natural assets, open and recreational spaces, as well as sporting facilities, with strong memories attached to the Site and some of the existing campus buildings.

The cumulative engagement findings have helped inform the final Guiding Principles, Shared Vision and the UTAS Sandy Bay Masterplan for Planning Scheme Amendment Submission.



# 1.0 Introduction

The University is relocating its Sandy Bay campus to the Hobart CBD as part of the Southern Infrastructure Strategy. The UTAS Properties Pty Ltd (UPPL) entity has been formed to manage its property and infrastructure assets, including the transition and redevelopment of what is currently the Sandy Bay campus.

Reimagine Sandy Bay is an urban renewal project that aims to transform the Site and its surrounding area into a world class mixed-use precinct, while ensuring long-term social, economic, and environmental viability. The redevelopment of the Site will provide ongoing annuity for the University, funding the education of future generations of Tasmanians and ensuring the University remains at the forefront of education in the State.

## Process

A thorough, four-stage engagement process has been developed to capture and translate community values and priorities into the masterplan and design, and to be as sympathetic as possible to its neighbours and the surrounding community. The process has involved various engagement methods including face-to-face meetings, focus group sessions, public open house events, and online forums and surveys.

## Strategy

The project engagement strategy incorporates stakeholder and community input in each phase to inform the Guiding Principles, A Shared Vision, and the UTAS Sandy Bay Masterplan for PSA Submission.

## Objectives

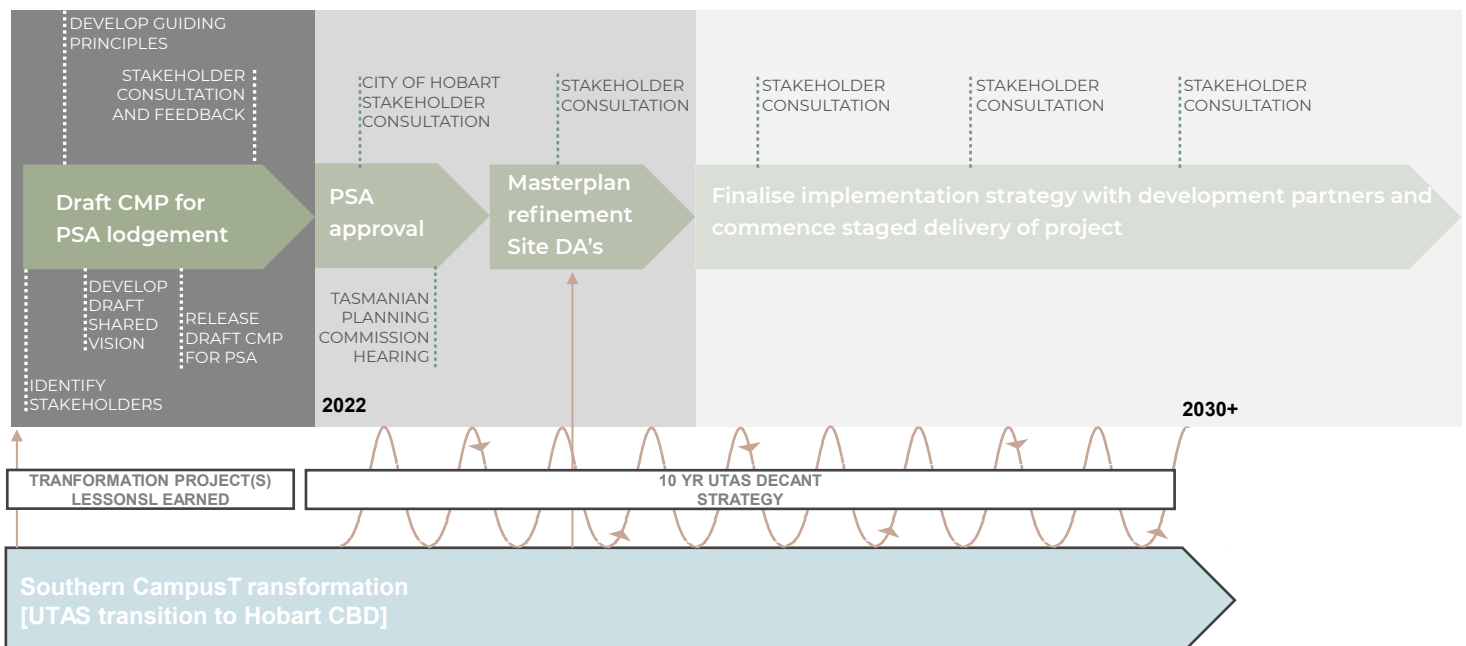
The purpose of engagement is to involve stakeholders, including residents of Sandy Bay and the broader community, in the process so that their views and aspirations for the project are injected into the DNA of the project brief.

## Outcomes

All four rounds of engagement are now complete and summarised in this document. Critical next steps include continuing to raise awareness of the project, its potential benefits, and building support for the redevelopment of the campus.

## Program

This is the first engagement of many, as the program continues after the Planning Scheme Amendment lodgement to beyond 2030. Stakeholder engagement will be ongoing throughout the project's design phases.



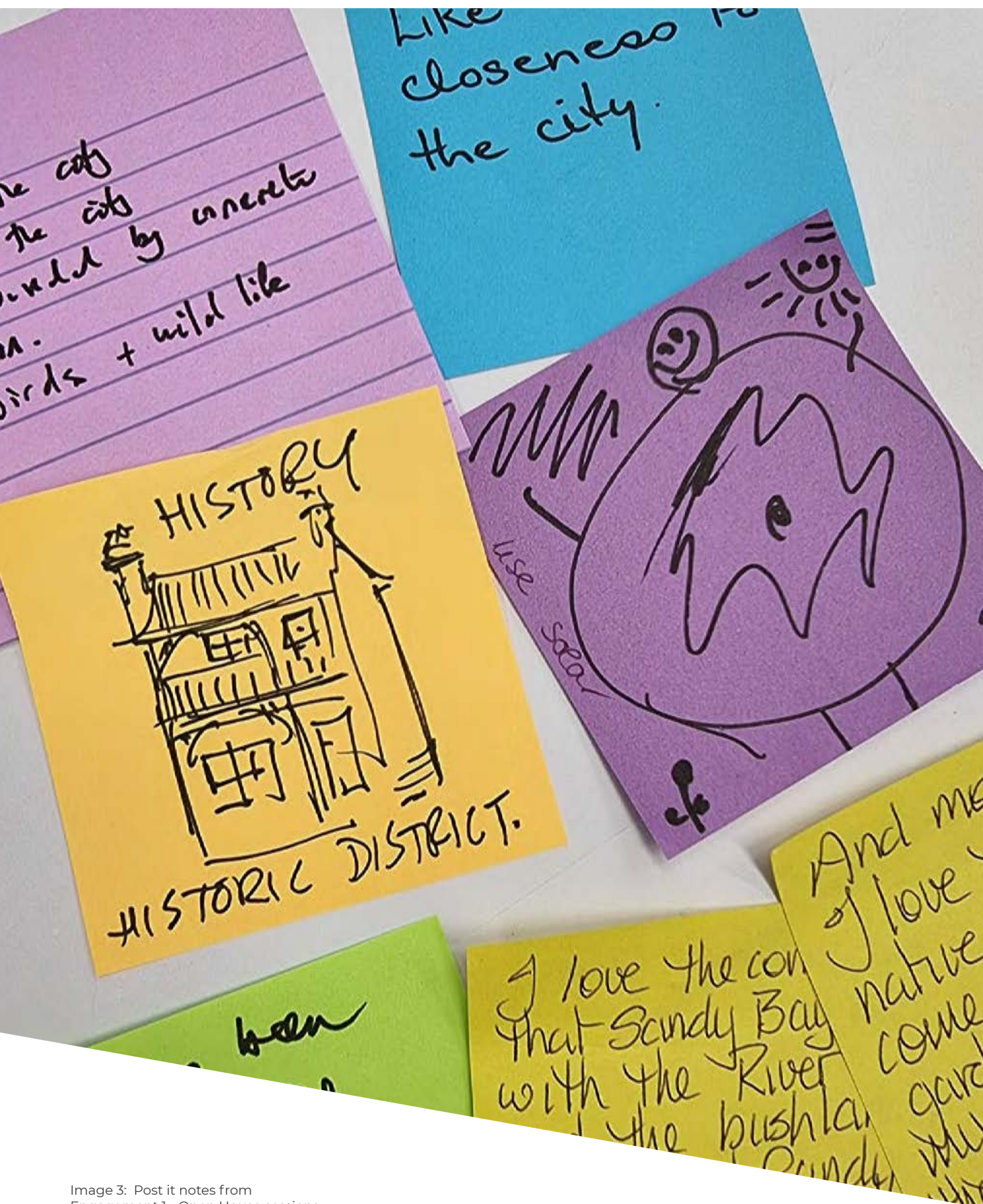


Image 3: Post it notes from Engagement 1 - Open House sessions

## 2.0 Place Context

The unique Site covers approximately 100 hectares and sits south of Hobart's CBD, spanning from the Derwent riverfront to the hilltop of Mount Nelson. It comprises a diverse range of environments including steep hills, dense bush, gullies and rivulets, with small to large-scale interspersed buildings of varying forms.

Pre-colonisation, the area was home to Tasmanian Aboriginal people, with estimates of continued occupation spanning well over 40,000 years. It is likely the Site's shoreline edge was regularly visited by the family groups from the muwinina people for hunting shellfish. The neighbouring hills would have also been prime locations for hunting, foraging and obtaining stone materials.

In the late nineteenth century, the State Government purchased the Site. The University began to use the old Hobart High School (adjacent to the Domain) as its campus in 1892. The University expanded and in 1944, began to transfer to the Sandy Bay site. By the early 1960s, most of the University was located at Sandy Bay. Buildings were added to the Site throughout the following decade, with the core campus continuing to operate from Sandy Bay until the recent decision in 2019 to relocate to the CBD.

The Site is used and valued by many. It is a place for study, work, recreation, play and other events and activities, as well as holding sentimental value by those who have been associated with it throughout its rich and influential history. These uses, narratives and values will be integral to informing what the Site may become.

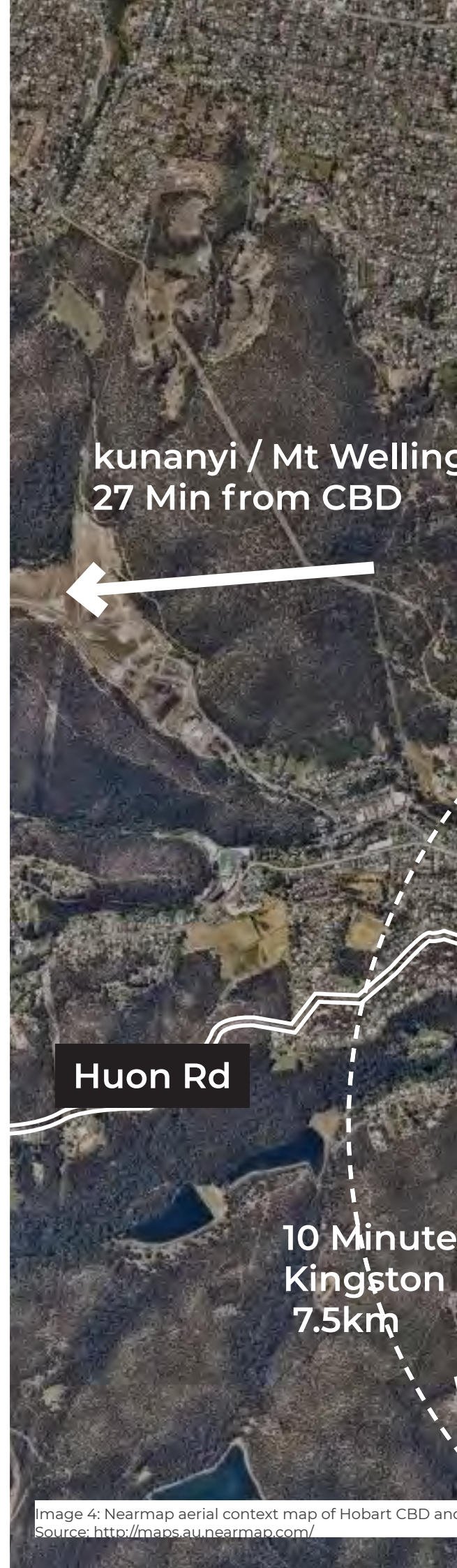


Image 3: The Site Context



gton

Hobart CBD

Salamanca Market

2 KM

1 KM

Southern Outlet

Subject Site

Sandy Bay Rd

s to

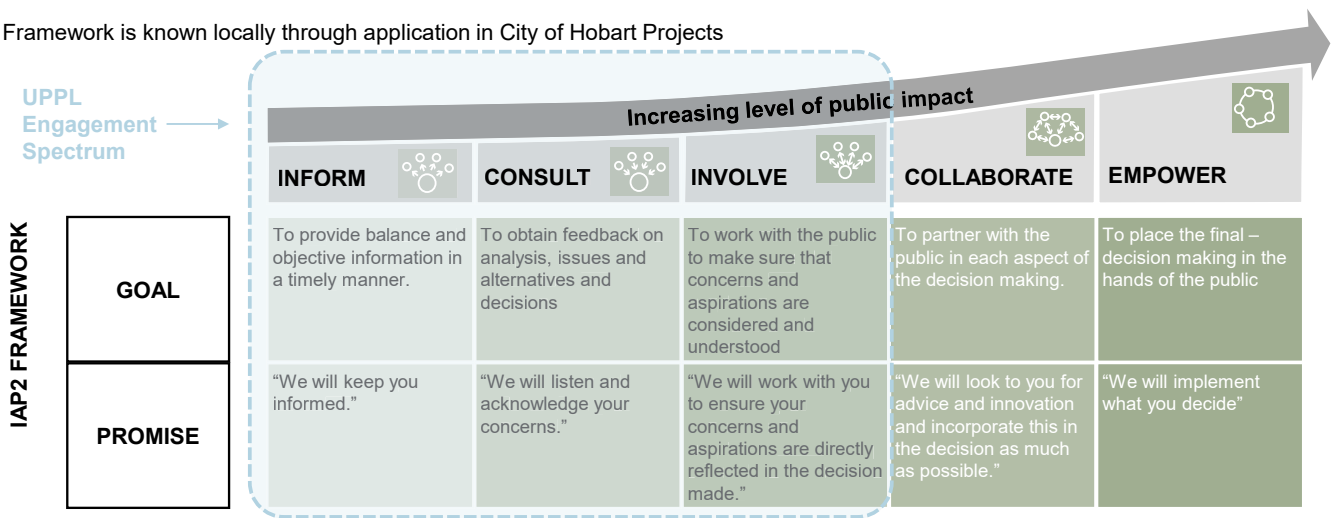
d the Site

# 3.0 Engagement Methodology

## Level of Engagement

The engagement methodology used throughout all stages of engagement is guided by the industry accepted international Association for Public Participation (IAP2) Spectrum. The IAP2 Spectrum identifies the levels of participation that defines the public's role in a community engagement program and sets out the promise being made to the public at each participation level. This engagement utilises three levels - Inform, Consult and Involve from the IAP2 Spectrum, as shown in the diagram below.

Framework is known locally through application in City of Hobart Projects

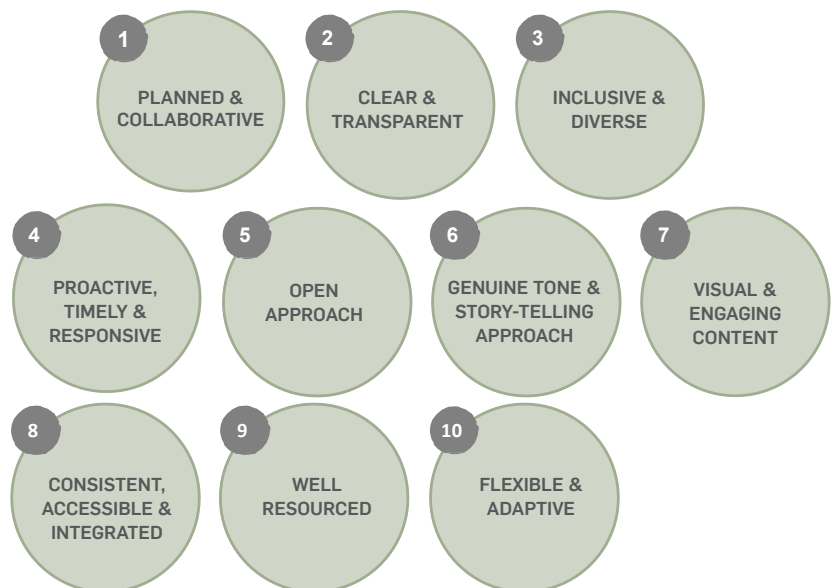


IAP2 Public Participation Spectrum  
Source: <https://iap2.org.au/resources/spectrum/>

## Communication and Engagement Principles

The following communication and engagement principles provide a framework for how the engagement team will approach communication and engagement activities undertaken in relation to the Concept Masterplan.

These principles will help guide the delivery of a best practice communications and engagement approach.





# 4.0 Engagement Process

Community input and feedback has been sought at four critical points during the development of the Concept Masterplan. All four touchpoints of engagement are now complete.

All stages of consultation included a series of face-to-face sessions, focus groups, open house and exhibition events at the Sandy Bay Bowls Club, and online forums and surveys. Engagements 2 and 3 additionally held online workshops.

## Engagement 1

Engagement 1 was designed to introduce participants to the project, understand people's views, and receive feedback on the draft Guiding Principles. Objectives included:

- Involving diverse stakeholder groups and the community in shaping the key directions for the Site
- Understanding key opportunities and challenges within the area
- Outlining the process for preparing the Concept Masterplan for the Site
- Presenting and testing draft Guiding Principles for the Concept Masterplan.

## Engagement 2

Engagement 2 was designed to further understand people's views and receive feedback around the draft Shared Vision and Guiding Principles. Objectives included:

- Communicating the results of the previous engagement
- Presenting and testing the draft Shared Vision for the Concept Masterplan
- Discussing potential uses and key spaces, relating to the Guiding Principles.

## Engagement 3:

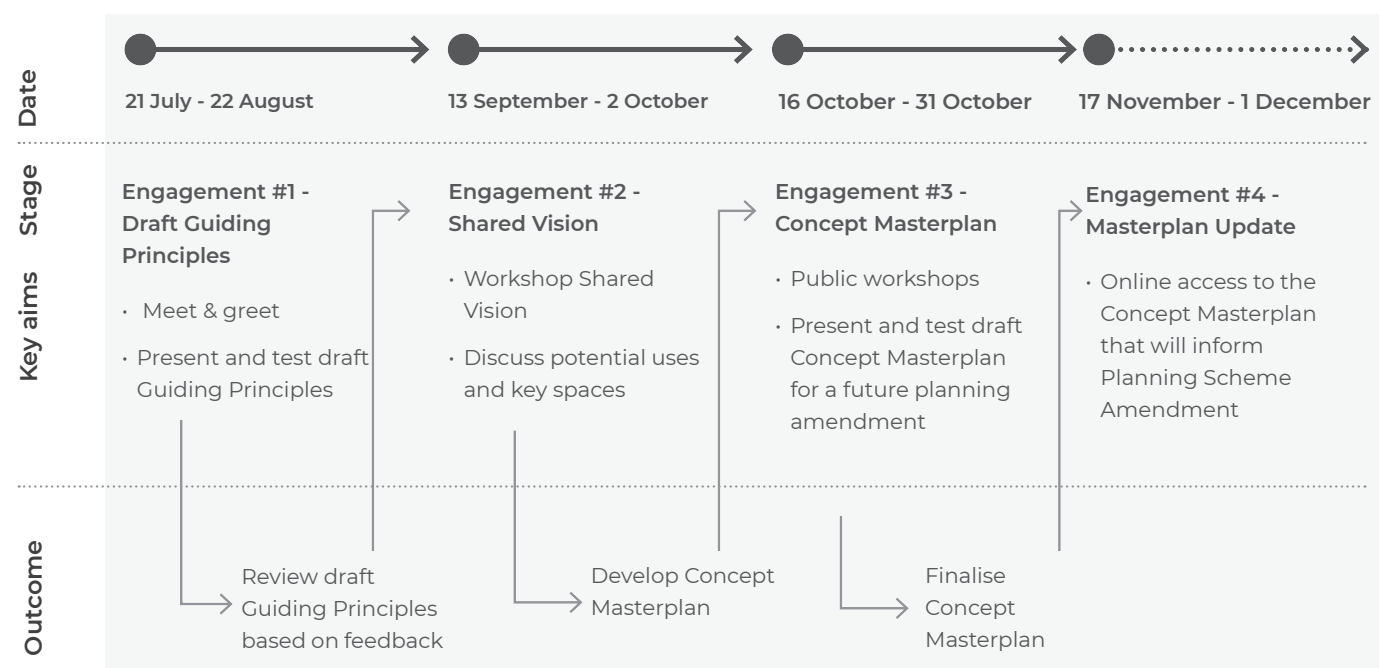
Engagement 3 was designed to further understand people's views and receive feedback around the Concept Masterplan. Objectives included:

- Communicating the results of the previous engagement
- Presenting and testing the Concept Masterplan
- Discussing potential gaps and questions relating to the Concept Masterplan.

## Engagement 4:

Engagement 4 was designed to provide an update on how the final Concept Masterplan has been shaped by engagement and respond to any questions raised in Engagement 3. Objectives included:

- Present the revised Final Concept Masterplan
- Provide public information sessions



Ongoing feedback and project updates at [www.reimaginesandybay.com.au](http://www.reimaginesandybay.com.au)



Image 5:  
Black She-Oaks on site

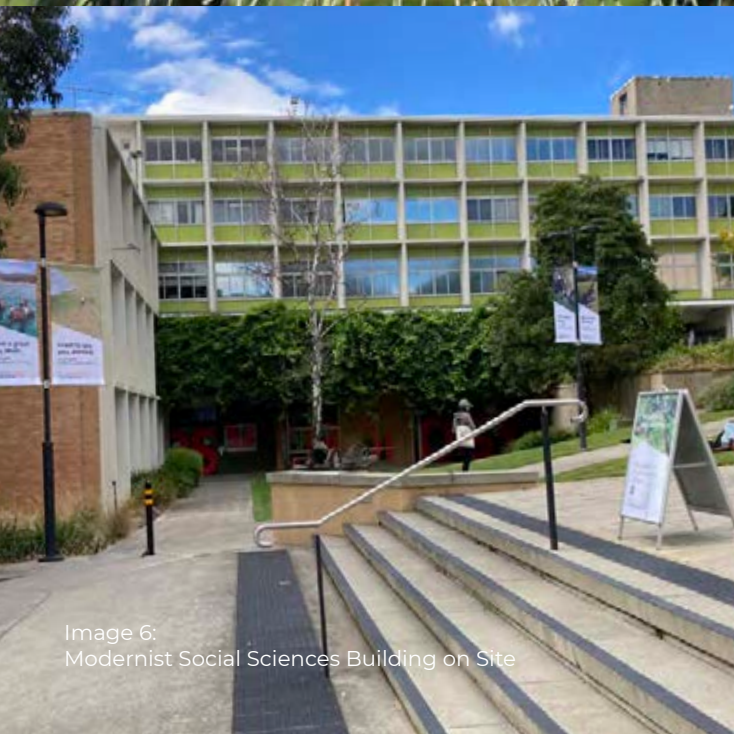


Image 6:  
Modernist Social Sciences Building on Site



Image 7:  
Bushland at the top of the Site

## Methods of Communication and Engagements

A range of communication and engagement methods were adopted for all stages of engagement to ensure accessibility and input from a wide stakeholder group.

### Stakeholder Engagement Email Invitation

- **368** direct emails sent to stakeholders for engagement sessions
- Project information and description of engagement process
- Draft Mission Statement
- Draft Guiding Principles
- Shared Vision
- Invitation to open house events and online workshops.

### Mailbox Drop to Sandy Bay, Mount Nelson, Dynnryne and Tolmans Hill

- Approximately **21,078** flyers to letterboxes
- Project information
- Invitation to open house events and online workshops
- Link to Reimagine Sandy Bay website.

### Hobart Observer Advertisement

- **24,600** Hobart Observer reach
- Project information
- Invitation to Open House events
- Link to Reimagine Sandy Bay website.

### Internal email to the University staff and students

- **136,612** emails delivered to staff and students
- Project information
- Link to Reimagine Sandy Bay website
- Invite to Open House events, exhibition and online workshops.

### Face-to-Face and Focus Groups

- **103** face-to-face and focus group sessions and direct feedback
- Project information and description of engagement process
- General feedback on the project
- Feedback on draft Guiding Principles and Concept Masterplan
- Current uses, key concerns and future needs
- Opportunities for the Site

## Open House Events & Exhibition

- **366** participants
- Project information and description of engagement process
- General feedback on the project
- Feedback on draft Guiding Principles
- Feedback on the Guiding Principles specific to how they would be applied to the Site
- Place specific feedback on site aerial maps
- Introduction to and feedback on the Concept Masterplan.

## Online Workshops

- **11** online workshops
- Project information and description of engagement process
- Feedback on draft Guiding Principles specific to how they would be applied to the site
- Feedback on draft Mission Statement
- Introduction to and feedback on the Concept Masterplan.

## Reimagine Sandy Bay Website

- **4,462** website visits
- **537** registered website visitors
- Project information and description of engagement process
- Feedback on Final Concept Masterplan
- Feedback on Concept Masterplan
- Feedback on draft Guiding Principles
- Feedback on draft Mission Statement
- General feedback on the project (online forum)
- Pin drop tool (place specific feedback)
- Feedback on the Shared Vision
- Registration for online workshops
- Summary of previous engagement
- Background information and FAQs
- Subscribe to project update.

Visitors of the website were asked a broad range of questions across the different forums. Feedback was sought around:

- Feelings towards the project
- Stories of the Site
- Favourite features of Sandy Bay and the Site
- Aspirations, opportunities and challenges for the project
- What they want or don't want to see on the Site
- The Shared Vision, Concept Masterplan and Final Concept Masterplan.

These comprehensive engagement methods are summarised in detail in this report and help inform the key directions for the Site.

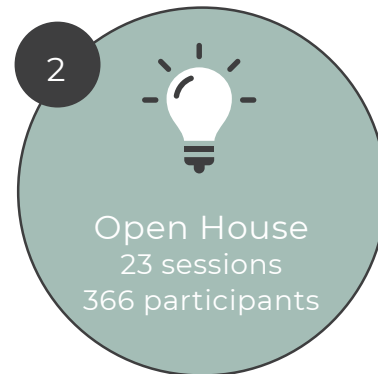




Image8:  
Bushland at the top of the Site

# 5.0 Engagement with Riawunna

Throughout the engagement process, UPPL and the design team have been engaging with Riawunna Centre for Aboriginal Education at the University of Tasmania, as one of the project's primary stakeholders. The University of Tasmania, as a place-based University, wants to ensure that Tasmanian Aboriginal knowledge is embedded into the Sandy Bay Concept Masterplan to respect the past, present, and future of Aboriginal people in Nipaluna, Lutruwita Hobart, Tasmania.

During this early engagement, **the key objectives** have been:

- Build a relationship with Riawunna
- Develop an initial framework to suggest how we may best work with the Aboriginal community throughout the project, with support and facilitation by Riawunna
- Develop an understanding of Country and Aboriginal perspectives

As part of the engagement to date, monthly working group meetings and a Walk on Country have taken place, the first steps of the project working towards the above key aims. Engagement with Riawunna and the Tasmanian Aboriginal community will go beyond the Planning Scheme Amendment into the next stages of the project. This will be guided by the framework that is currently under development. The framework will support the project to develop a strong Aboriginal engagement that will reach beyond the lifespan of the development into the future of the place, by understanding and sharing in Tasmanian Aboriginal perspectives and ideas.

The Walk on Country was held on the 20th August and was an important part of the early engagement to connect, build true relationships and to communicate the depth of what Country means to Tasmanian Aboriginals. Communicating these perspectives and sharing meaning of Country gave the group on the walk a better understanding of embedding Aboriginal knowledge into the Site. Country being inclusive of land, sky, water and all living things and creations.

From this, some **key preliminary themes** emerged:

- Highlighting the cultural landscape
- Continuing the natural flow of water and nature down through the green spine of the Site
- Celebrating and embedding Aboriginal knowledges and spaces for cultural sharing into the design
- Sense of belonging
- Aboriginal people to be included and consulted with throughout the project.

On October 20, as part of the commitment to continue to consult with Aboriginal people throughout the project, the design team met with Riawunna to discuss the Concept Masterplan. Conversations included how an Aboriginal presence could be a part of the Masterplan; awareness of how the proposed additional dwellings will affect what's happening on Country; a need to support cultural sustainability and provide space for Aboriginal people to be welcomed, show culture, and practice culturally significant rituals and events such as celebrating NAIDOC, hosting a Community Gathering, yarning circle, or Reconciliation. Three key themes also came out of this conversation to explore together moving forward – reciprocal relationships, cultural sustainability and holistic sustainability. A final point raised was how to ensure the longevity of engagement, inclusion and participation of Aboriginal people for the next 20 years.

## Aspirations for the Site

- A strong sense of place / spirit of place
- A sense of belonging and connection to Country for Aboriginal community
- Community involvement around changes to landscape
- Space for the Aboriginal community to have input
- Meaningful incorporation of Aboriginal knowledges

## Themes to come out of the Concept Masterplan discussion:

- Cultural sustainability
- Holistic sustainability (economic, environmental and social), e.g. bush management that can support a local business)
- Reciprocal relationships
- Longevity of engagement, inclusion and participation throughout the entire project i.e. next 20 years
- Embedding Aboriginal participation in the project, for example, Aboriginal employment: building supportive pathways for students and the community via reaching out to Aboriginal businesses, traineeships, internships etc, those organisations involved in the project to have a Reconciliation Action Plan
- Participation through building relationships

The above summary has been written with extracts from '*Aboriginal knowledges embed into the Southern Transformation Sandy Bay Campus Master Plan on Country site experience 20 August 2021*' by Caroline Spotswood, Janice Ross and Madelena Ward-Andersen.

# 6.0 Engagement Findings

## Introduction and Overview of Outcomes

Given the variety of engagement methods, including face-to-face interviews, focus groups, open house events and online surveys, there was a very wide range of community feedback and qualitative information that had both breadth and depth.

The findings from each engagement method have been synthesised and consolidated in the following sections of this report, however given the variety of engagement methods and the number of participants for each mode, it is difficult to gauge overall statistics. Below are the key themes that have emerged from the engagement.



Adaptive re-use of existing campus buildings and retention of the sports precinct



Provision of diverse housing options and consideration of appropriate housing density



Protection and enhancement of the Site's natural assets



Redevelopment that is sensitive to the Site and local context



A continued identity of education on the Site



Community facilities and amenities.



Continued public accessibility\*



Improving alternate transport options and connections within and beyond the Site\*

\*Theme emerging from Engagement 2.

It is important to note that a significant proportion of participants expressed their concerns regarding the campus' relocation to the CBD. Comments relating to the campus relocation have been omitted from the following engagement summary as this decision remains out of the scope of this work.



# 6.1 Engagement #1

## Overview of Feedback on Draft Guiding Principles

Engagement 1 saw the introduction of the draft Guiding Principles to community stakeholders. Overall participants viewed the principles positively. What was evident was six clear themes that emerged from all engagement groups, these are the first six themes in green summarised on page 12.

It is important to note that a significant proportion of participants expressed their concerns regarding the campus' relocation to the CBD. Comments relating to the campus relocation have been omitted from the following engagement summary as this decision remains out of the scope of this work.

Participants felt that **these principles captured their aspirations and the key challenges for the site**. Below is a summary of community responses against each of the draft Guiding Principles.

### The five draft Guiding Principles are:

1. Welcoming, diverse and inclusive
2. An evolving and distinct sense of place
3. Towards a climate-positive and regenerative future
4. Opportunities to live, work, play and learn
5. A well-connected place.



## Draft Guiding Principle 1

### Welcoming, diverse and inclusive

#### Inclusive: A Place for Everyone

- Remain open to the community i.e. not gated
- Provide diversity of housing- including attainable housing
- Consider the needs of minority groups: international students, Culturally and Linguistically Diverse (CALD) communities, Indigenous groups
- Address the needs of people with mobility challenges
- A place to connect different ages and abilities

#### Welcoming

- Public space
- Warm and protected from the elements
- Open until late (after work hours)
- Aim to get more people involved

#### Shared activities and ideas exchanges

- Fosters a community spirit that includes people of all ages and walks of life
- A place to develop new ideas
- A place to network



## Draft Guiding Principle 2

### An evolving and distinct sense of place

#### Recognise what's working well on the site

- The importance the landscape, heritage and environment play in place identity
- Maintain valued public spaces e.g. The Stanley Burbury Theatre as a place for public lectures
- Provide connection to existing natural corridors (rivulets and Mt Nelson)
- Don't double up on use/ services in Sandy Bay which would put a strain on existing businesses
- Attention to getting the balance right around density; don't overdevelop
- Housing choices suitable for the site and the community

#### Education and skills building

- Areas for public education and collaboration
- Maintain the site's identity as a place of learning and the relationship with the university
- Education around minimising waste
- Preserve memorable experiences, particularly around learning
- Provide student accommodation

#### Enhance the area for future users

- Increase biodiversity on the site

Growing up with memorable gardens and experiences.

Housing choices need to be suitable to the place.

Got to have community living there

An increase in biodiversity on site, more plant, animal & insect life

Not doubling up on already in Sandy Bay things which would put strain on existing businesses and lead to unbalanced working hours

Areas for education and collaboration for the public, including the site like localing of courses and mixing waste, growing and preparing food, making green cloths and items

An ecological zone, a small place up to meet rules, without being dense and enclosed. That way, there's a little space, but not

Sense of place comes from recognition of landscape quality, heritage & environment.

PUBLIC SPACES and connections to existing Natural Corridors i.e. rivulets + Mt Nelson

Image 10: Draft Guiding Principle 2 feedback





## Draft Guiding Principle 3

Towards a climate-positive and regenerative future

### Preserve and enhance the local ecology

- Protect habitats for native flora and fauna
- Resilience to future natural disasters including floods, rising sea levels
- Explore sustainable housing options
- Preservation of the natural water reserves and bushland

### Renewable Energy

- Greater access to renewable energy like solar energy
- Charging stations for electric bikes, electric cars
- Increased local food production

### Keeping the neighborhood scale small & local

- Retain the heart of Hobart: the Sandy Bay development should not detract from the CBD
- Maintain it's friendly local neighborhood and sense of community
- Optimise space with considered programs i.e. not just housing and retail
- A place to gather
- Convenient public transport
- Sensitive redevelopment



## Draft Guiding Principle 4

Opportunities to live, work, play and learn

### Places for education

- Maintain education amenity: e.g. Public secondary school, inner city high school
- Expand and build new schools or registered training organisation
- Maintain the existing culture of education in Sandy Bay

### Green and open spaces to encourage healthy lifestyles

- The importance of green space
- Protect bushland
- Retain existing sport ground facilities, playing fields and gyms
- Bicycle tracks
- Community gardens and guided walks in bushland
- Playgrounds
- Exercise facilities, classes, sporting events
- Connection of river to the mountain
- Getting to know the wilderness, plants and animals

- Central sport facilities
- Preserve Source Wholefoods
- A big park with water slides please (Harry, aged 5)

### Improved healthcare

- Incorporate different ways to exercise and be healthy
- Areas of improvement around healthcare
- Hospital
- Doctors, dentists

### Commerce

- Artisan Shops
- No shopping centres
- Retain old buildings for Business incubation centres
- Cafes

### Community facilities

- Performance arts areas
- Amenity for children
- Facilities accessible to all ages
- Preserve a sense of community
- Friendly respectful neighbourhood



## Draft Guiding Principle 5

A well connected place

### Human connections

- Provide opportunities to form genuine, meaningful connections and relationships within the local community
- Connect people with the services and amenities they need to thrive
- Foster interactions between elderly, children and animals

### Ecosystem - People/Nature connections

- A place where everything is interconnected - people, flora and fauna, health, culture, food production and intake
- Protect and expand genuine bushland close to the city - opportunities to immerse amongst the bush and natural wildlife
- Beautiful green spaces for everyone to enjoy and relax within

### Draw people into the site - convenient connections

- Make the Site easy to enter
- Bridge the divide above Hill Street
- Create safe spaces to connect and move within
- Creating connections will draw people in and make the Site more vibrant
- Provide adequate parking on Site

### Prioritise active transport connections within, through and around the site

- Best practice street design to encourage people to ride and walk
- Separated, sealed, wide cycling paths so cyclists can get through the Site safely, quickly and easily. For example, fronts of houses and shops are connected by walking and cycling pathways while streets and garages are at the back of houses and shops
- Churchill Avenue divides the campus

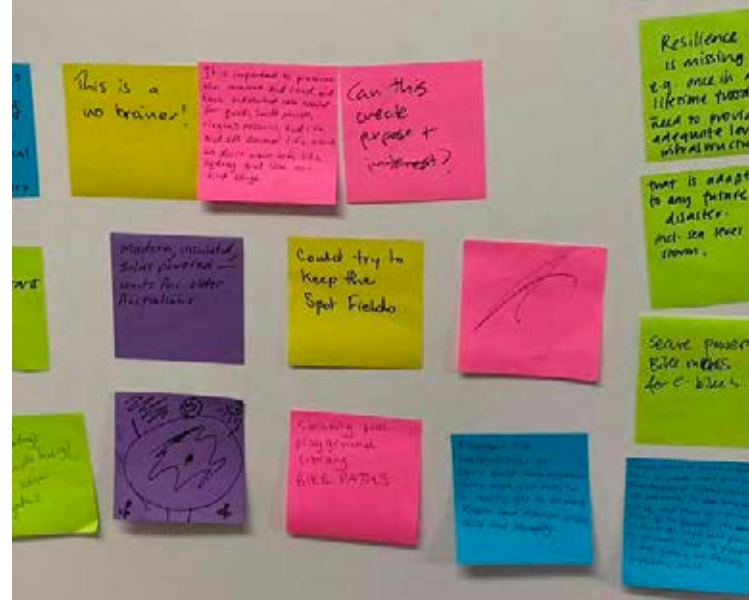


Image 11: Draft Guiding Principle 3 feedback



Image 12: Draft Guiding Principle 4 feedback

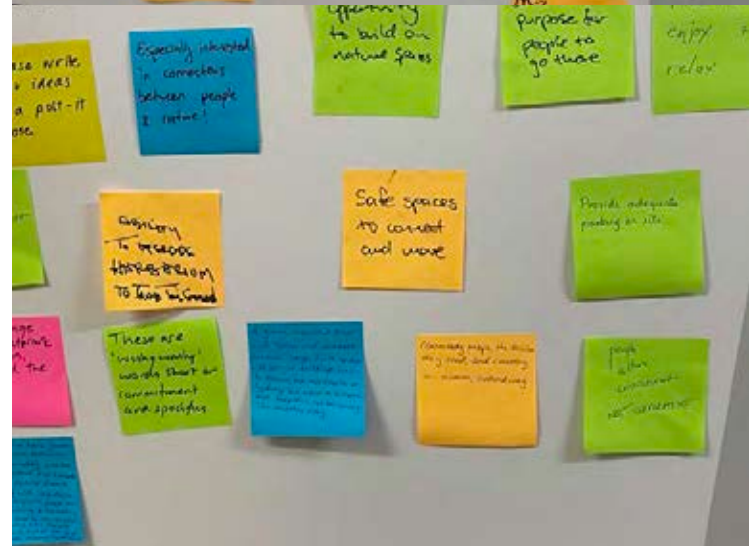


Image 13: Draft Guiding Principle 5 feedback

# 6.1 Engagement #1

## Face-to-Face and Focus Groups

Targeted focus groups and face-to-face conversations were held with 24 key stakeholder groups.


Participants shared what they loved most about the Site, aspirations, what they don't want to see, and some of the challenges and opportunities for the future of the Site. There was also the opportunity for participants to provide feedback on the draft Guiding Principles.

The key findings of these discussions are outlined below.

The face-to-face sessions and focus groups included Riawunna, City of Hobart CEO and elected representatives, Members of the House of Assembly, Federal Liberal Government, Tasmanian Property Council, Tasmanian Chamber of Commerce and Industry, Federal Group, Department of Education, Bicycle Network, Tasmanian ICT, University sporting clubs, and infrastructure providers. This list will continue to increase in the next stages of engagement.

### Most loved about the Site

Much loved aspects of the Site include:



**MOST LOVED**

The memories the Site holds


Sporting ovals & facilities

Built form and heritage spaces - including Morris Miller Library and Stanley Burbury Theatre

Open green spaces

### Aspirations

The strongest aspirations for the Site are captured in the following key themes:



**MOST IMPORTANT**

Improve and utilise existing infrastructure

Enhanced open green spaces and native animal habitats

Temporary uses of vacant sites during transition - Unused vacant sites during transition

Continued educational opportunities

New people moving in

### What people don't want to see:

A cinema, hospital, in-fill development and subdivision of the Site with houses on it were the most frequently cited thing participants did not want to see on the Site in the future.



Challenges	Opportunities
<ul style="list-style-type: none"> <li>• Retaining heritage buildings - difficulty and cost required to bring existing heritage buildings up to standard.</li> <li>• Subdivision of Site for different uses</li> <li>• Unused vacant spaces during staged transition</li> <li>• Noise, traffic and parking due to infill development</li> <li>• Prime real estate - development</li> <li>• Easily accessible</li> <li>• Lack of social amenities ( outdoor sports etc)</li> <li>• Impact on property values, amenity and the appropriateness of any new developments</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial business such as law and IT</li> <li>• Mixed use - education, diverse retail offerings, medical, government and commercial (research, science, innovation, start-ups)</li> <li>• Green spaces and technological parks</li> <li>• Re-use existing buildings &amp; infrastructure</li> <li>• Community and cultural amenities such as a Community Center, Concert Hall &amp; Music Area</li> <li>• Affordable housing</li> </ul>

# 6.1 Engagement #1

## Open House Events

Six open house sessions were held at the Sandy Bay Bowls Club across a two-week period for the local community and people from neighbouring areas. The open house sessions asked what do you

love about the Site, what are the opportunities and challenges, and provided a platform to comment on the draft Guiding Principles.

### Most loved about Sandy Bay

Much loved and valued characteristics and assets of Sandy Bay included:



#### MOST LOVED

Natural beauty - bushland, green recreational spaces, river views, and wildlife.

The sites heritage and colonial architecture

Proximity to the city

Friendly people & Sense of community

Height limit for buildings

Walking paths & Cycle paths

Safe place to live

Diversity



**36.8%** of responses mentioned Sandy Bay's natural beauty

### Most loved about the Site

Much loved aspects of the Site respectively included:



#### MOST IMPORTANT

Natural beauty - bushland and tracks, wildlife, proximity to the beach and mountains

Open space, recreational spaces and sporting ovals

Sense of community

Heritage and other existing buildings - Morris Miller Library, Stanley Burbury Theatre

Walks & dog walking

Embedded Australian values such as a spirit of inclusivity and of generations of people

University gym



**54%** of responses mentioned natural beauty and open recreational spaces as their most loved aspects of the Site.

*“The University campus has been an incredibly meaningful place...to grow, learn, make friends, develop skills and [for] personal growth. It would be great to continue the spirit of inclusivity”*

#### What people want to retain

- Open green spaces and recreation facilities
- Natural assets including bushland and the green wildlife corridor from Mt Nelson to the sea
- Low rise buildings - limit height to current building height
- Surrounding heritage and heritage values - including Golf Links Estate
- Stanley Burbury Theatre and Morris Miller Library

#### What people don't want

- Highrise, high-density buildings
- Social and affordable housing
- Development on green fields and on the area above the Olinda Grove sports grounds.
- Large department stores - eg. Woolworths, Coles, Mitre 10/ shopping

## Aspirations

The strongest aspirations for the Site are captured in the following key themes:

Other emerging themes included more commercial and work opportunities, flexibility and adaptability in response to changing technology and climate change, as well as including aged care and retirement homes.



A multi-faceted cultural and arts precinct including an Arts and Cultural Centre, and Chamber Concert Hall



Ongoing and diverse learning and educational opportunities for all



Community facilities such as a community centre and community garden amphitheatre



Unique and good quality retail, food and beverage offerings



Protect and enhance the natural environment, encourage everyday engagement through bushwalking, relaxation and play



Everyday amenities and services such as a hospital, bank, and childcare



Sense of community that makes you feel safe, connected and a sense of belonging



## Challenges & Opportunities

The following challenges and specific opportunities for the future of the Site were mentioned:

Challenges	Opportunities
<ul style="list-style-type: none"> <li>Improving transportation and managing traffic and parking (public and private)</li> <li>Managing community priorities vs commercial gain</li> <li>Protecting environmental values, habitat and threatened species whilst developing site</li> <li>Efficient re-use of existing buildings</li> <li>Gaining community support and trust</li> <li>Futureproofing the site. Allowing for future changes in use/expansion etc. Especially for technology change, Climate change (protections)</li> </ul>	<ul style="list-style-type: none"> <li>New and improved green space and recreational facilities</li> <li>More permanent community supported by a mixture of attainable housing</li> <li>Cultural facilities such as an Indigenous Cultural Centre, gathering spaces, studio spaces and exhibition space, Science and Arts museum</li> <li>Sustainable &amp; innovative green design that is sympathetic to Sandy Bay's surrounds</li> <li>Educational facilities such as a High School, TAFE and permanent home for the University of the Third Age</li> <li>Community facilities such as a community garden, large central library and childcare</li> <li>Acknowledge, collaborate with and respect Aboriginal people's heritage and values</li> <li>Job opportunities for young people through providing space for start-ups &amp; co-working spaces</li> </ul>

*"A place to come together, have community gatherings, learnings, courses, exhibitions. Enjoy access to a beautiful site and area, [and] greater connection with the community"*

*"If you put in public housing, you must allow space for kids"*

# 6.1 Engagement #1

## Online Engagement

The Reimagine Sandy Bay website sought views from the community and visitors and provided a platform for people to share their ideas, aspirations and perceived challenges for the Site in the future. It also sought feedback on each of the draft Guiding Principles, and participants were also able to put pins on a digital map of the Site. The majority of comments however were made in the open forum, 'Have your say'.



### Most loved about the site

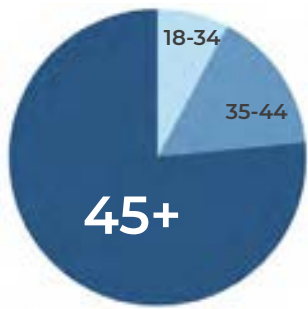
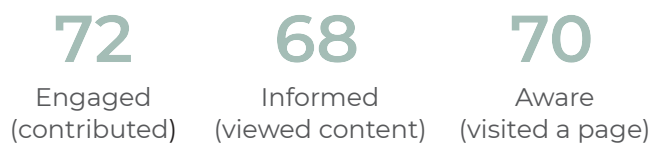
Much loved aspects of the Site include:

- ↑**  
**MOST LOVED**
- Natural beauty - Bushlands, green belt corridor, river views and Native wildlife and birds
  - It is a place for informal meetings and working space with a diverse group of people - a cross exchange of different ideas.
  - An inclusive space with a great sense of community
  - Community events and the easy access to the community
  - Attachment to the campus and the memories associated with it

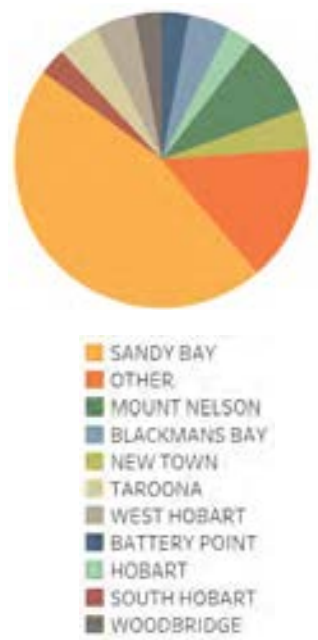
“Obviously it is sad to see the campus moving. It does present an exciting opportunity to contribute to the community in a meaningful way”

“A space ... built for young people to live [and] thrive ... would increase the diversity in the city”

” I would like to see the bushland preserved and retain as much of a green belt as possible.



People who contributed to the 'Have Your Say' forum represented a diverse spectrum of the population, from 18 through to 78 years of age. Over 45's represented 75% of contributors.



Almost half of the contributors were residents of Sandy Bay. The other half of contributors were residents from surrounding neighbourhoods, including Mount Nelson, Tarooona and New Town.

WHAT PEOPLE WANT TO RETAIN	WHAT PEOPLE DON'T WANT
<ul style="list-style-type: none"> <li>• Sporting ovals and sports facilities</li> <li>• Preservation of natural surroundings - bushland, green belt corridor, river views, wildlife</li> <li>• Childcare</li> <li>• Heritage values</li> </ul>	<ul style="list-style-type: none"> <li>• Housing development/ real estate</li> <li>• High-rise and high-density buildings</li> <li>• Large shopping centre - e.g. Woolworths, Coles, Mitre 10</li> <li>• Commercial development</li> </ul>

### Aspirations

The strongest aspirations of the community and visitors as stated on the online platform are captured in the following key themes.



Different kinds of attainable housing options including social, public, affordable and student accommodation



Ongoing and diverse learning and educational opportunities for all



A good mix of retail

### Challenges & Opportunities

The following challenges and specific opportunities for the future of the Site were mentioned:

Challenges	Opportunities
<ul style="list-style-type: none"> <li>• Managing city traffic and parking</li> <li>• Managing community priorities vs commercial gain</li> <li>• Negative impact on student retention, engagement in learning and interactions</li> <li>• Growing population with inadequate number of education facilities</li> <li>• Fragmentation of the community</li> <li>• Traffic management on this site</li> <li>• Making affordable housing affordable to all</li> </ul>	<ul style="list-style-type: none"> <li>• Diversity of housing options such as studio and unit style, affordable housing, student accommodation, low and medium density housing, public housing</li> <li>• Educational facilities such as high school and public schools</li> <li>• Additional sporting facilities and programs</li> <li>• Green spaces including dog parks</li> <li>• Community facilities such as a community centre, function centre, outdoor and indoor theatres, meeting rooms for hire</li> <li>• Aged care/ housing for the elderly</li> </ul>



## 6.2 Engagement #2

### Overview

Engagement 2 presented the emerging Shared Vision for the Concept Masterplan and shared findings from the first round of engagement. Engagement 2 also put forward further developed Guiding Principles for feedback and sought insight into what participants thought they might look like applied to the Site. This type of feedback was mainly received from the open house events and online workshops.

Stakeholder conversations revealed current uses and key concerns for the Site as well as future needs and opportunities. Running in parallel to this, discussions with tenants also gave insight into who wished to remain on the Site and who wished to move to the CBD with the University. General feedback on the project and aspirations and opportunities for the Site continued to be received via the website.



These discussions further reinforced the six key themes from the first round of engagement. An additional two themes were also emphasised - sustainable transport / site connections and site access. These two themes align with the previously established Guiding Principles.

The top five themes that emerged across each format of engagement are summarised below in order of emphasis:



### Overall themes from Stakeholder Discussions



Retaining the Site's bushland, open spaces and sportsgrounds



Community use of existing buildings



More community amenity and facilities



More housing options



The importance of keeping stakeholders and the community updated with plans around the move to the City campus.

### Overall themes from Open House Sessions



Preserving and enhancing natural assets



Limit building height and density that is sensitive to the Site's surroundings



Learning and education opportunities



Community facilities and amenities



Retaining and repurposing existing buildings.

### Overall themes from Reimagine Sandy Bay Website



Preserving and enhancing natural assets



Active transport connections within and beyond the site



Retaining and re-using existing campus buildings



A future exemplar of masterplanning, design and sustainability



Continuing educational opportunities

### Overall themes from Online Workshops



Sustainable multimodal transport connections within and beyond the Site



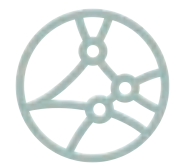
Preserving and enhancing natural assets



A central gathering space that supports a range of activities and events



Retaining and re-using existing campus buildings



Celebrating Aboriginal culture

# 6.2 Engagement #2

## Face-to-Face and Focus Groups

Targeted focus groups and face-to-face conversations were held with a further 30 key stakeholder groups and tenants.

Participants shared their current uses, needs, demands and challenges, as well as what they would like to see happen on the Site and future opportunities. There was also the opportunity for participants to provide feedback on the Guiding Principles.

The key findings of these discussions are outlined below.

The face-to-face sessions and focus groups included tenants, neighbouring schools (Albuera Primary School, Hutchins, Taroona High School, Mount Nelson Primary School and Hobart College), Hobart Women’s Housing, Friends of Sandy Bay Rivulet, Unigym and sporting clubs (soccer, cricket and rugby).

A full list of stakeholder groups who responded to the invitation to participate is provided in the appendix.

### Focus Groups

#### Opportunities for the Site

What participants wished to see on the site:

- ↑**  
**MOST EMPHASISED**
- Retaining existing open spaces and shared use\* of green/ open space, sportsgrounds, and bushland
  - Shared use\* of existing buildings & infrastructure
  - More housing on the Site
  - Continuing educational/ training use
  - Upgrade and adaptive re- use of existing buildings
  - Upgrade existing sportsgrounds and their facilities
  - More community facilities and amenities
  - Greater diversity in community (e.g. via diverse housing options, mixed use)

Other comments were around: affordable housing, whole of lifespan amenity and services and care of native vegetation and management of invasive species on the Site

\* Shared use refers to community use and access from community

What this may look like?

- Another school
- A variety of housing options
- No residential enclaves
- Community hub or library
- Amenity for an ageing population
- Eco tourism at the Mount Nelson end of the Site

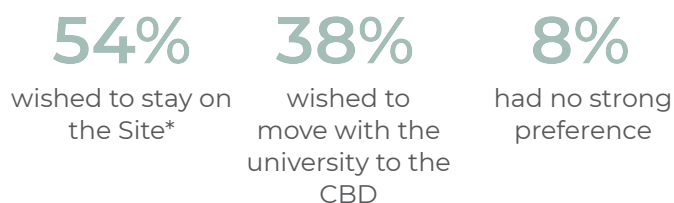


### Tenant Discussions

Discussions were held with 13 current tenants on the Site. Of which:

The majority of respondents appreciated their relationship with the university and looked forward to a continuing relationship as they move to the CBD.

\*The developing Concept Masterplan has provided opportunities for some of these groups to stay on Site



## Open House Events

Four open house sessions were held at the Sandy Bay Bowls Club across a two-week period for the local community and people from neighbouring areas. The open house sessions provided opportunities for participants to comment on the

Guiding Principles, asking what the principles mean/look like to them, which actions could bring the principles to life, and how this could look like on site. Generally, responses were positive to what was presented at the open houses.

### Guiding Principle #1

*Welcoming, diverse and inclusive*

The main themes that emerged regarding Guiding Principle 1 are listed in order of emphasis below.



Providing community facilities and amenities

Preserving and connecting to natural assets

Retaining existing buildings

Preserving existing and providing new recreational and sports facilities

Recognising and valuing Indigenous heritage

Providing diverse housing

Limiting density and building heights



**31%** of responses mentioned community facilities and amenities.

*“Truly develop with community in mind.”*

#### What participants thought this may look like on Site:

- Community facilities, including a library, community garden and orchard
- Preservation of existing sports facilities
- Retaining the Stanley Burbury Theatre
- Indigenous educational facilities and opportunities for learning
- Providing space for community activities and groups
- Diversity of housing, including social housing and aged care
- Maintain bushland and walking tracks

### Guiding Principle #2

*An evolving and distinct sense of place*

The main themes that emerged regarding Guiding Principle 2 are listed in order of emphasis below.



Limiting density and building height

Honouring the educational history of the site

Protecting and enhancing biodiversity and vegetation

Retaining existing sports and recreation facilities

Considering alternative transport options

Creating a village atmosphere

Maintaining existing buildings

Providing housing diversity



**17%** of responses mentioned limiting building density and height.

*“It is beautiful, diverse, functional, fit for purpose and not over developed.”*

#### What participants thought this may look like on Site:

- Retaining existing ovals, tennis courts and open space
- Specific height limits for buildings sensitive to its surrounds
- Affordable housing and housing for older people
- Study spaces and mentoring programs
- Connect existing wildlife corridors and retaining vegetation
- Small village-style shops and cafes
- Preserving the Stanley Burbury Theatre and adjacent art gallery
- Promoting car sharing, public transport, walking and cycling

### Guiding Principle #3

*Towards a climate-positive and regenerative future*

The main themes that emerged regarding Guiding Principle 3 are listed in order of emphasis below.



- Preserving and enhancing natural vegetation
- Protecting and enhancing biodiversity
- Promoting pedestrian access
- Prioritising green space over housing
- Limiting building density



**17%** of responses mentioned preserving and enhancing natural vegetation.

*“Increase biodiversity to support threatened species.”*

#### What participants thought this may look like on Site:

- Preserving and enhancing natural water sources, bushland, wildlife corridors and walking tracks
- Diversity of planting to support native flora and fauna and endangered species
- Medium density buildings
- Flood mitigation.

### Guiding Principle #4

*Opportunities to live, work, play and learn*

The main themes that emerged regarding Guiding Principle 4 are listed in order of emphasis below.



- Providing learning opportunities
- Retaining existing buildings
- Providing diverse housing options
- Limiting building density and height
- Retaining and enhancing walking tracks and access to bushland



**40%** of responses mentioned learning opportunities.

*“Remain an education hub in some capacity.”*

#### What participants thought this may look like on Site:

- Habitat information for school excursions
- Educational facilities, including a high school and research facility
- Retaining the herbarium
- Diverse housing that caters for accessibility
- Adaptive re-use of existing buildings
- Specific height limits for buildings that respect the local character
- Enhanced walking tracks through wayfinding and connectivity

NETWORKS

— walkable  
— renewable

SHELTER

— biophilic  
↳ Living Building Challenge

## Guiding Principle #5

### *A well connected place*

The main themes that emerged regarding Guiding Principle 5 are listed in order of emphasis below.



Providing fresh local food

Encouraging alternative transport options

Connection to nature



**23%** of responses mentioned fresh local food.

*"HEALTH - for the planet, local fresh food and social connection through housing"*

#### What participants thought this may look like on Site:

- Community garden
- Accessibility for all
- Enhanced walkable connections



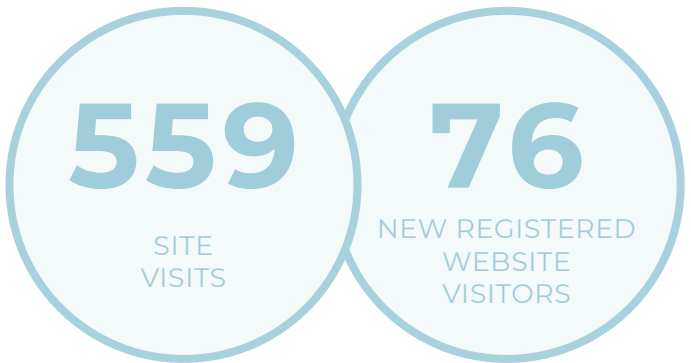
Image 16: Draft Guiding Principles feedback

# 6.2 Engagement #2

## Online Engagement

The Reimagine Sandy Bay website sought views from the community and visitors and provided a platform for people to share their ideas, aspirations and perceived challenges for the Site in the future.

It also sought feedback on each of the Guiding Principles, and participants were able to provide place specific feedback via pins on a digital map of the Site. The majority of comments however were made in the open forum 'Have your say'.



### Top assets of the site

Much loved aspects of the Sandy Bay site respectively included:



#### Natural assets

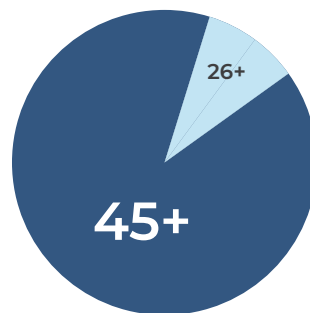
- The natural beauty of the site - bushland, green open space, river views, and wildlife
- Rifle Range Creek Trail
- Thomas Crawford Trail
- Open spaces and public facilities

#### Spirit of Place

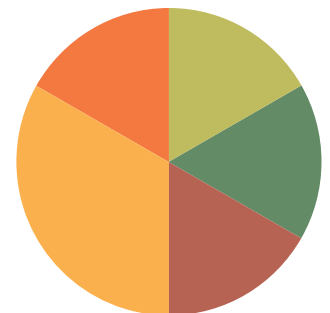
- Sense of community and inclusivity

#### Built Form

- Unique mid-century modernist architecture



People who contributed to the 'Have Your Say' forum and 'place a pin on it' section, represented a diverse spectrum of the population, from 26 through to 75 years of age. People aged 45+ represented 90% of contributors.



- SOUTH HOBART
- SANDY BAY
- MOUNT NELSON
- TAROONA
- WEST HOBART

33.3% of contributors were residents of South Hobart. About 17% were from Sandy Bay and the rest were residents from surrounding neighbourhoods, including Mount Nelson, Tarooona and West Hobart.

*“An amazing opportunity to leave a lasting legacy that builds an alternative model for what is possible in urban development in Tasmania... be bold, be brave, and make the right decisions based on what is right for a more equitable and sustainable city.”*

*“The buildings of the campus contain a lot of embodied energy and resources. So that these are not wasted, the buildings should be retained and refurbished/upgraded...”*

*“The Sandy Bay Campus can be an exciting place of learning and living for all.”*

WHAT PEOPLE WANT TO SEE ON THE SITE	WHAT PEOPLE WANT TO SEE RETAINED
<ul style="list-style-type: none"> <li>• Mixed housing options</li> <li>• Active transport networks (walking and cycling)</li> <li>• Spaces for artists to live and work</li> <li>• Communal gardens and food growing facilities</li> <li>• Business, commercial offices and incubator spaces</li> </ul>	<ul style="list-style-type: none"> <li>• Bushlands and rivulets</li> <li>• An identity around education</li> <li>• Buildings of significance &amp; symbolic site-specific sculptures</li> <li>• Herbarium and science facilities</li> <li>• Sports grounds and facilities</li> </ul>

## WHAT PEOPLE DON'T WANT TO SEE ON THE SITE

A small number of participants mentioned elements that they don't want to see on the Site in the future, such as mass car parking, new commercial buildings that duplicate or compete with existing development, and stand alone housing.

### Opportunities and Aspirations :

The following were the top aspirations and opportunities for the Site



An exemplar of global best practice masterplanning, urban renewal and environmental management



A world-leading teaching and research innovation centre



Sustainable & equitable mixed use housing



Using existing infrastructure to respond to environmental challenges.

The strongest aspirations of the community and visitors as stated on the online platform are captured in the following key themes :

#### *A leader in ecological sustainability*

What participants thought this could look like on Site?

- Protecting bushlands, rivulets and wildlife
- Retaining plant and animal species at the Herbarium
- Advancing ecological awareness through environmental revitalisation, good urban design, informative signage, education and research.

#### *Health and Wellbeing*

What participants thought this could look like on Site?

- Active transport: improved walking and cycling networks within and around the Site as well as adequate bicycle storage
- Communal gardens and food growing facilities
- Plenty of open spaces and amenity for outdoor activities.

#### *An Education identity*

What participants thought this could look like on Site?

- More amenities and facilities for local schools
- Retain and repurpose existing campus buildings.

#### *A sense of community*

What participants thought this could look like on Site?

- A variety of housing options
- Artists, artisans, makers, living and working on Site
- A greater range of amenity from health services to community facilities

### Place your pin:

This section of the website allowed for respondents to identify assets and comment on a map of the Sandy Bay campus site. Participants mainly highlighted the importance of existing natural assets such as the Rifle Range Creek trail bushwalk, Thomas Crawford Trail bushwalk and retaining native trees on site.



# 6.2 Engagement #2

## Online Workshops

Four online workshops were held across a two week period, coinciding with the Open House sessions. The workshops provided an additional opportunity for the community to comment and provide feedback on the Draft Shared Vision and Guiding Principles, and discuss how the Guiding Principles could be brought to life on site.



Feedback from participants on how each Guiding Principle could be brought to life on Site are listed in order of emphasis below.

### Guiding Principle #1

*Welcoming, diverse and inclusive*

Increasing diversity of housing options and density in some areas to improve access to amenity and green space - eg. 5-10 minute neighbourhood

Acknowledging and increasing awareness around Indigenous culture and history

Keeping the legacy of UTAS as a socially and culturally diverse place

Using design to shift negative perception around social housing

Improving uphill links to the sportsground

Providing barbeque and picnic facilities for visitors and residents

Supporting programs and amenities that make the site welcoming for people from different cultural backgrounds.

### Guiding Principle #2

*An evolving and distinct sense of place*

Protecting and enhancing the Site's natural assets and special atmosphere of unique bushland in close proximity to the city

Recognising Indigenous history and culture

Respecting local sentimental attachment to the university through maintenance and adaptive re-use of existing buildings

Commissioning public art for public spaces

Ensuring an authentic sense of place is retained by not overdeveloping or over-commercialising the site.

### Guiding Principle #3

*Towards a climate positive and regenerative future*

Addressing parking and traffic congestion between Sandy Bay and the CBD by encouraging active and sustainable modes of transport - eg. cycling, walking, public transport

Creating a place that is sustainable for future generations

Reusing existing campus buildings for research or education

Retaining and enhancing connections to the natural environment

Creating more visually engaging green spaces by using diverse and seasonal plant species

Celebrating the strong sense of community amongst established residents and existing engagement with bush care and volunteer groups.

### Shared Vision Feedback

Participants were generally supportive of the Shared Vision, however it was suggested that it could be refined into a shorter, sharper and more succinct statement that people can connect with.

### Other comments

Other comments that emerged across the four workshops in relation to the development of the Concept Masterplan were:

- Opportunities to more actively address health and amenity in the Concept Masterplan.
- General support for an innovation precinct within the Concept Masterplan. It was suggested that a startup or incubator hub could attract young people, encouraging innovation and creative pursuits.





Image 17: Walking trails

#### **Guiding Principle #4**

*Opportunities to live, work, play and learn*

Providing a central gathering or public space that supports different activities and programming - eg. relaxing, studying, pop-up events

---

Increasing vitality in Sandy Bay Village by providing niche retail amenities and a food and restaurant hub

---

Creating space for live entertainment - eg. Friday evening performances

---

Providing job opportunities for new graduates

---

Attracting people from different cultural backgrounds through culturally relevant amenities, retail and programming

---

Providing amenities and services that support aging in place.

---

#### **Guiding Principle #5**

*A well connected place*

Providing safe and improved sustainable multimodal transport connections to allow more people to experience Sandy Bay's unique assets - water, nature and mountains, as well as more populated areas - such as:

---

Walkway/cycleway between Sandy Bay and CBD, Macquarie Point and Battery Point

---

Cycleway on Sandy Bay Road, Churchill Avenue and Barkly Point Walkway

---

Connect Sandy Bay to Domain and intercity cycleway

---

Improve accessibility to bushland in general

---

More frequent public transport services

---

Water transport (eg. ferry) which can connect residents and visitors to other places around Hobart.

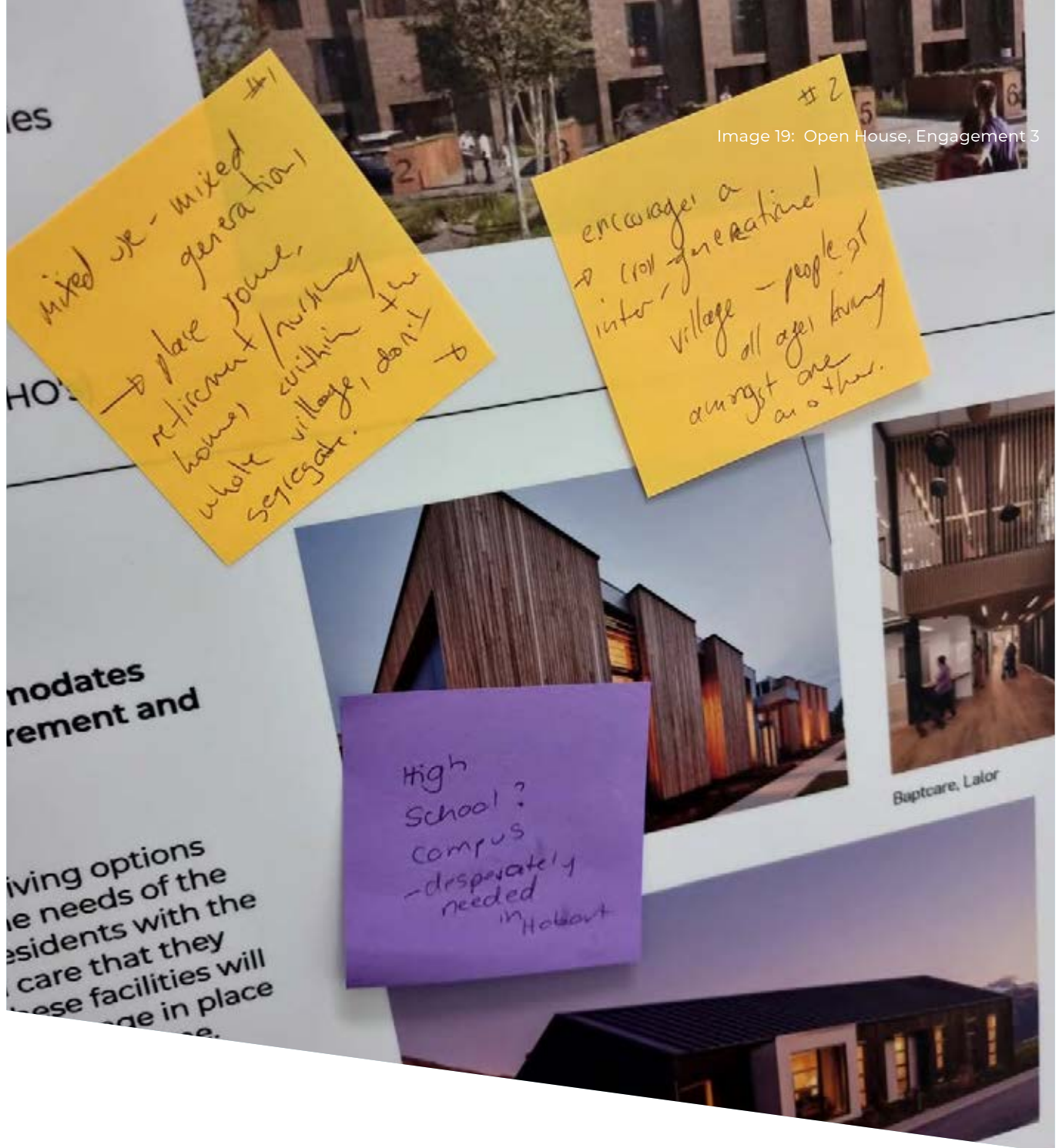
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Providing free wi-fi in public spaces.

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Image 18: Aerial view of Hobart from Mt Wellington, Loic Le Guilly



## 6.3 Engagement #3

### Overview

Engagement 3 showcased the Concept Masterplan, including details around how the key themes that emerged from engagement discussions, have been addressed. The presentation of the Concept Masterplan also included details around the planned precincts for the Site. There were engaging discussions around the Concept Masterplan. Participants contributed by providing their views, suggestions and concerns, including what they liked, what they thought was missing and any queries they had around the Concept Masterplan.

Surveys were prepared that asked questions around what participants liked about the Concept Masterplan; what they thought was missing and whether the Concept Masterplan captured the Shared Vision and Guiding Principles.

Direct correspondence was received around the key themes of building heights, cycling networks, missing sporting facilities, retention of buildings, traffic and the staging of the redevelopment.

The top six themes that emerged across each format of engagement are summarised below. The themes discussed most frequently fall into **five different conversation topics** -

**building heights, density & built form; transport & parking; attainable housing; changes to existing facilities; and delivery & staging that will be addressed in engagement #4:**



## Overall themes from Face-to-Face and Focus group discussions

Expansion of existing services	Staging and rollout of the Masterplan	Traffic impacts	Sporting facilities	Building retention	Attainable housing

## Overall themes from Exhibition

Active and sustainable transport	Traffic management	Building heights and density	Building retention and removal	Natural assets and bushland	Attainable housing

## Overall themes from Reimagine Sandy Bay Website

Integrated and sustainable transport, including cycling and pedestrian infrastructure	Traffic impacts	Building heights and density	Car parking	Building retention and removal	Bushland and tree preservation

## Overall themes from Online Workshops

Building retention and removal	Building heights	Staging and rollout of the Masterplan	Protecting the delivery of the vision in the long term	Car parking	Funding and development models

## Overall themes from Survey

Sensitive and site appropriate large-scale development	Good re-use of land	Repurposing buildings	Retention of sports ovals	Concept of the village-style precincts	Preservation of bushland

# 6.3 Engagement #3



## Face-to-Face and Focus Groups

Targeted focus groups and face-to-face conversations were held with 46 key stakeholder groups and tenants. Participants shared their views on the Concept Masterplan as well as posed any questions they had.

The key findings of these discussions are outlined below.

The face-to-face sessions and focus groups included local council representatives, schools, and tenants such as sporting clubs and a local childcare. Neighbours, including schools were in support of the Concept Masterplan and looked to further explore shared opportunities on-site. Of the tenants, over 87% spoke about the expansion of their services in the Concept Masterplan. Most were trying to understand their place in the proposed plan whilst others were concerned about the certainty of their future tenure and how they would adapt to the changes.

Over 50% of participants (excluding City of Hobart face-to-face conversations) had a positive response to the Concept Masterplan. Housing was a recurring theme in the participants' responses. Feedback was mostly positive, however varied around: surprise at the number of additional residences; some thought it addressed Hobart's housing supply pressure and some thought there should be more housing diversity proposed. Retention of buildings was a recurring theme: many thought it was great to see the buildings retained, some noting there should be more buildings retained.

A full list of stakeholders engaged in the Face to Face and Focus Groups can be referenced in the Appendix.

### Key Themes:

- MOST EMPHASISED** ↑
- Expansion of existing services
  - Staging and rollout of the Concept Masterplan
  - Traffic Impacts
  - Sporting facilities
  - Retention of buildings
  - Housing- Attainable/Diversity/ Supply/Heights
  - Cycling networks

### Most liked aspects of the Concept Masterplan:

Over half of the participants responded positively to the Concept Masterplan. Whilst there was no clear favourite aspect of it, participants mentioned the following aspects were appreciated:

- More dwellings will boost the economy and help existing businesses
- Updated sporting facilities
- Complementary placement of goods and services
- Housing diversity
- Green spaces and amenity
- Retention of buildings

### Key concerns in regards to the Concept Masterplan

- The University's continuing tenure on the site
- Staging of the Concept Masterplan
- Provision of mobility and better connection
- Traffic and parking impacts
- How will the attainable housing goals on the site be achieved?

### FAQs:

- What is the staging of the Concept Masterplan?
- What is the University's ownership of the buildings/ land in the Concept Masterplan? What percentage will be sold off to developers?
- What is the impact of additional traffic in and around the Site?

## Exhibition

An exhibition was held at the Sandy Bay Bowls Club as a series of afternoon drop-in sessions across a two-week period for the local community and

people from neighbouring areas. The exhibition provided an opportunity for participants to provide feedback on the Concept Masterplan.

### Key themes

The following key themes regarding the Concept Masterplan are listed in order of emphasis below..



**MOST  
IMPORTANT**

Active and sustainable transport

Traffic management

Building heights and density

Building retention and removal

Natural assets and bushland

Attainable housing

### Most liked aspects of the Concept Masterplan

The following specific elements of the Concept Masterplan participants liked are listed below:



**MOST  
IMPORTANT**

Retention of existing buildings and sporting fields

Use of natural assets and bushland preservation

Aged residential living opportunities

Learning centre concept

### Key concerns in regards to the Concept Masterplan

- Building heights and density, specifically in Precinct 1
- Traffic impacts
- Vertical childcare

### FAQs:

- Where are the outdoor playgrounds?
- What is build-to-rent?
- What is the ownership structure of the apartments and units?
- What does ecological custodianship entail?
- How is this funded?
- How will traffic be managed?
- Is there a conservation covenant or other constraint on future use of the bushland?



# 6.3 Engagement #3

## Online Engagement

The Reimagine Sandy Bay website sought views from the community and visitors and provided a platform for people to share their ideas, aspirations and perceived challenges for the Site in the future. It also sought feedback on the Concept Masterplan.



### Key themes

Integrated and sustainable transport, including cycling and pedestrian infrastructure

Traffic impacts

Building heights and density

Car parking

Building retention and removal

Bushland and tree preservation



### Most liked aspects of the Concept Masterplan

There was no clear favourite aspect of the Concept Masterplan. Participants mentioned the following things that they appreciated as being:

Sustainable transport focus

Lifestyle and sporting precinct concept

Aged care provision

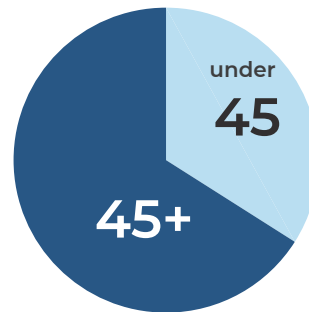
Learning focus

### Key concerns in regards to the Concept Masterplan

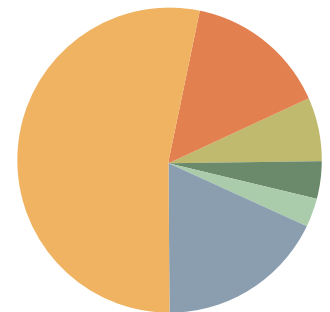
- Transport access, integration and connectivity
- Inadequate car parking provision
- Lack of information around traffic management
- Building heights and density
- Lack of detail and commitment regarding attainable housing
- Vertical childcare
- The need for a public high school in the area
- Lack of information around funding

### FAQs:

- What is the budget for this project and who is paying for it?
- Can you provide more detail on affordable housing?
- To what extent do different modes of transport connect throughout the site?
- What are the strategies to make pedestrians and cyclists a priority?
- Can you provide specific plans showing changes to existing vegetation?



People who contributed to the 'Have Your Say' and 'Leave your comments on the Concept Masterplan' forum represented a diverse spectrum of the population, from 23 through to 78 years of age.



55% of contributors were residents of Sandy Bay, 12% were from Mount Nelson and the remaining were residents from surrounding neighbourhoods such as West Hobart, Hobart and South Hobart.

“Being a resident of Sandy Bay, I was initially quite concerned about this proposal. Looking at the Concept Masterplan, however, I feel reassured that it will offer many great amenities to the surrounding community.”

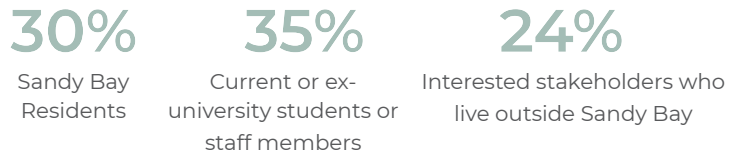
”The visual material provided online illustrates the concept ideas, making it look quite idyllic.”

# 6.3 Engagement #3

## Online Workshops

Seven online workshops were held across a two week period, with sessions held both during the week and on the weekend. The Concept Masterplan was presented by the architects to the community and University staff and students. The workshops provided an opportunity for attendees to ask questions, comment and provide feedback on what they liked about the Concept Masterplan, or elements they were concerned about or thought needed to be considered further in the development of the final Concept Masterplan.

The following section provides an overview of comments captured during these sessions, as well as frequently asked questions which will be addressed further in Engagement #4. There were 35 participants across the 7 online workshops, of which:



### Key themes



- Building retention and removal
- Building heights
- Staging and rollout of the Concept Masterplan
- Protecting the long term delivery of the vision
- Car parking
- Funding and development models.

### Most liked aspects of the Concept Masterplan

Overall, feedback on the Concept Masterplan was generally positive, with the majority of discussion being around clarification of details. Participants acknowledged the challenging nature of the Site, and positive feedback commended the innovative and comprehensive nature of the Concept Masterplan. Most participants enjoyed the workshops and found them informative and thorough. There was no clear favourite aspect of the Concept Masterplan that participants liked, but more specific items that were liked include:

- Focus on the walkability and universal accessibility
- Indigenous storytelling, environmental priorities and respect for Country
- The treatment of the water flowing down the Site
- Sensitive heights of the apartment buildings in Precinct 4

### Key concerns in regards to the Concept Masterplan

Participants raised some concerns, either in relation to the overall Concept Masterplan, or a more specific Precinct. The three main points of concern are captured below:

- Appropriateness of building heights and density, particularly in Precinct 1
- Whether the Concept Masterplan sufficiently addresses current and future car parking and traffic issues
- Desire for more than 5-10% attainable housing, including models such as co-housing,

### FAQs:

- What determines whether an existing building will be retained or removed, and will building materials be recycled from those that aren't repurposed?
- How have building heights, particularly in Precinct #1 been determined? I am concerned about views and overshadowing for neighbouring residents
- How will the staging of the approved Concept Masterplan be rolled out?
- The Concept Masterplan is encouraging and ambitious, but what frameworks will be put in place to ensure the vision and intent remains in the long term / if the VC leaves?
- How does this Concept Masterplan address the pre-existing parking issues in Sandy Bay?
- Who will be paying for this? What do the different development models look like?
- Can you provide more details on the sporting fields and facilities? Eg. dimensions, amenities, whether there are views to the water
- Why is the proposed medical precinct right near the existing medical centre, and the proposed environmental learning centre near the Mt Nelson Sustainability Learning Centre?
- How does this Concept Masterplan address traffic issues in Sandy Bay, and how will the bus services be improved?
- Will any of the sites existing educational uses or bushland reserves be protected in the proposed planning overlay?

# 6.3 Engagement #3

## Survey

An online survey was available on the website and to attendees at the open house sessions. It sought feedback on the overall Concept Masterplan and asked respondents whether they thought it captured the Shared Vision and Guiding Principles.

The following section provides an overview of responses obtained from these surveys.



### Most liked aspects of the Concept Masterplan

Whilst there was no clear favourite aspect of the Concept Masterplan, respondents mentioned the following things that they appreciated as being:

- Repurposing buildings and retention of sports ovals
- Preservation of bushland
- Sensitive and site appropriate large-scale development
- Walkability around the site
- Concept of the village-style precincts

### Key concerns regarding the Concept Masterplan:

- Desire to see more ambitious and integrated transport network (particularly active and public) that supports the proposed reduction in private transport and caters for 2,500 new dwellings
- Inappropriate density and height of development in Precinct 1 and 3
- Need for earlier and further engagement with University staff, students and existing residents who will be affected by the development
- Lack of information around traffic impacts and plans

### Does the Concept Masterplan capture the Shared Vision and Guiding Principles?

- The majority of survey respondents agreed that the Concept Masterplan captured the Shared Vision and Guiding Principles
- Those that didn't agree cited dissatisfaction regarding the University's decision to move to the CBD, or views that the shared vision was more representative of UTAS/UPPL's needs, rather than the community's.

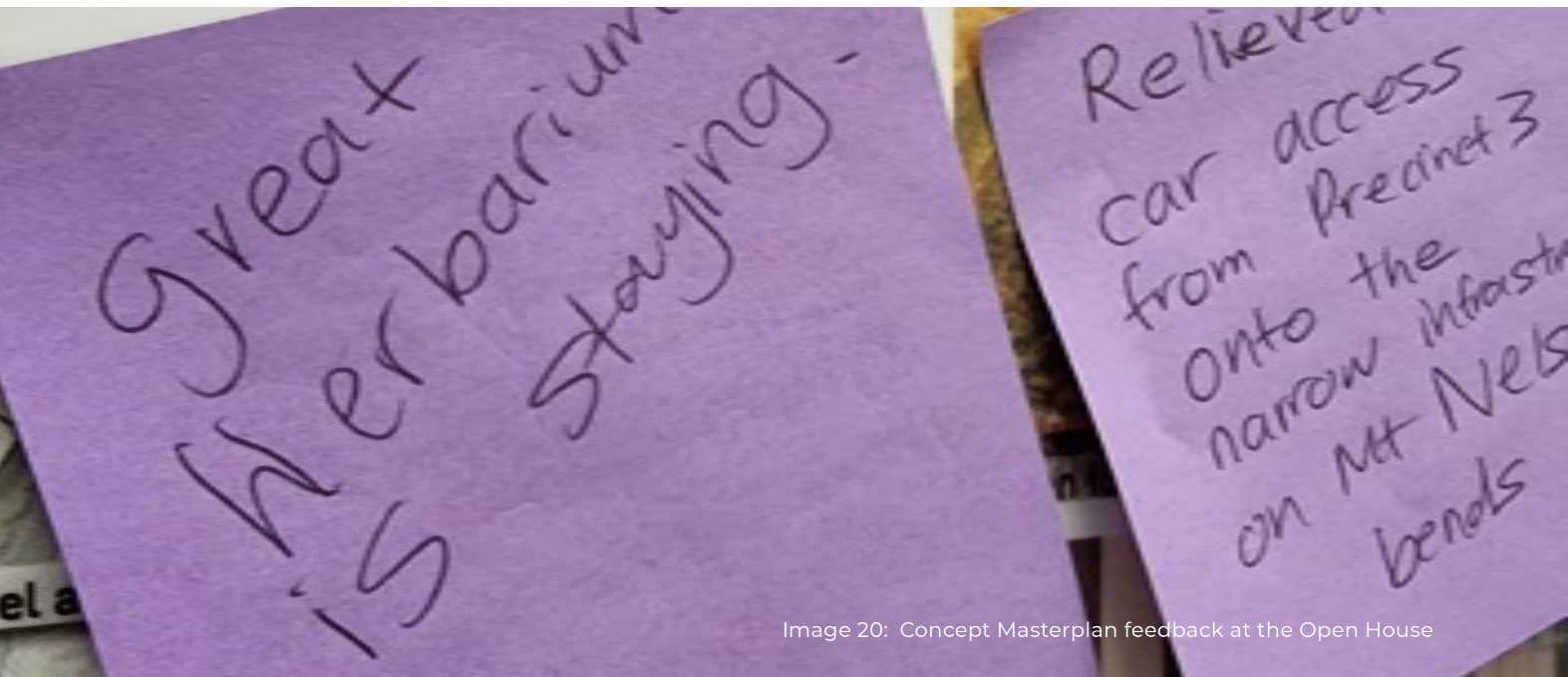


Image 20: Concept Masterplan feedback at the Open House





Image 21: Walking track on Mount Nelson

# 6.4 Engagement #4

## Overview

Engagement 4 was the final stage of engagement before the commencement of the Planning Scheme Amendment process. Engagement 4 presented the Final Concept Masterplan which was updated based on the feedback received and responded to questions asked during Engagement 3.

Participants contributed by providing their views, suggestions and concerns around the Final Concept Masterplan via an online forum, direct email and information drop-in sessions (Open House) at the Sandy Bay Bowls Club.

There were two Open House sessions held on November 17th and 18th.

There was less feedback in this engagement round and the feedback received was quite varied. Some comments were in support of the proposal and some raised concerns, however all feedback received generally continued along the themes of frequently asked questions raised during Engagement 3, and were weighted to the themes as illustrated below. All feedback received has been taken on board and recorded for future stages of the project.



*I hope that UTAS can create a visionary and genuinely inclusive village that is a thriving space for all and that can be a model for future planning*

*Public transport links will need to be greatly improved or the addition of envisaged facilities*

*A great exciting imaginative plan, very well documented*

# 7.0 Next Steps

This report provides an overview of what was heard in the four rounds of engagement for the Reimagine Sandy Bay project. The Planning Scheme Amendment and Concept Masterplan phase is the first of many for this project. In 2022, we hope to obtain approval of the Planning Scheme Amendment, and continue on with concept design and then development applications for individual buildings. There will be extensive engagement with stakeholders including the community throughout the Development Application stage and beyond.

You can leave feedback at:  
**[www.reimaginesandybay.com.au](http://www.reimaginesandybay.com.au)**  
or send an email direct to the team at:  
**[engagement@corcomms.com.au](mailto:engagement@corcomms.com.au)**

For any further information, please contact the engagement team on telephone 6210 5200 during office hours or email [engagement@corcomms.com.au](mailto:engagement@corcomms.com.au)



## Image Credits

Cover image: Aerial view of Hobart from Mt Wellington, Loic Le Guilly  
Image 1&2: <https://unsplash.com/>

Image 22: Open House session

# Appendix

A full list of stakeholders that have actively participated in engagement to date:

## City of Hobart

City of Hobart Chief Executive Officer  
City of Hobart Elected Members  
City of Hobart Planning  
City of Hobart Transport / Traffic  
City of Hobart Assets - Stormwater  
City of Hobart Assets - Bushland, Parks and Recreation and Open Space  
City of Hobart Assets - Roads  
City of Hobart Assets - Waste, Cleaning & Servicing  
City of Hobart Community and Placemaking

## State Government

Office of the Premier  
Office of the Minister for Education  
Office of the Minister for Planning , Environment  
Office of the Minister for Transport & Housing  
State Growth

## State Members for Clark

Parliamentary Secretary to the Premier,  
Member for Clark

## Government Departments & Agencies

Department of State Growth - Metroplan  
Department of State Growth - Transport  
Department of Health  
Department of Justice  
Department of Education  
  
Hobart City Deal Implementation Board  
  
Tasmania Fire Service

## University of Tasmania

University Strategic Forum  
University Executive Team  
Riawunna  
Southern Campus Transformation Expert Reference Group  
College & divisional engagement  
Current staff and students - 44,740 staff and students  
Student Union  
Alumni and former staff

## University Sporting Groups

UTAS Soccer Club  
Rugby Club  
Uni Gym  
Uni Club facilitator  
University Cricket Club

## Utilities

TasNetworks  
TasWater  
TasGas

## Professional Organisations

Tasmanian Property Council  
Tasmanian Chamber of Commerce and Industry (TCCI)  
Real Estate Institute of Tasmania

## Community Organisations

Aboriginal Land Council of Tasmania  
Friends of the Sandy Bay Rivulet  
U3A

## **Transport**

Metro

Bicycle Network

RACT

## **Neighbouring Businesses**

Federal Group

Hill St Grocer

## **Tenants**

Hobart Women's Housing

CSIRO

Tasmanian Herbarium

Lady Gowrie

Source Wholefoods

Chartwells Administration

Cianos

Pickled Pear / Uni Club

National Tertiary Education Union

Edge Radio

UniSuper

Gemmological Association

Australia Post

DIF Accommodation (Former SPARK)

## **Schools**

Mt Nelson Primary School

Mt Nelson Primary School Association

Hobart College

Hutchins

Taroona High School

Albuera St Primary

## **Wider Community**

General public

## **Key Stakeholders**

Leigh Woolley - Architect & Urban Design Consultant

Robert Morris-Nunn - Architect

Graeme Lynch - Chair, Primary Health Tasmania

Professor Jason Byrne - Professor of Human Geography and Planning

## **Further stakeholders contacted:**

State Opposition

State Greens

State Members for Clark & Legco

Federal members for Clark and senators

## **Organisations**

Architects Institute of Australia

Tasmanian Conservation Trust

Colony 47

TasCoSS

TasICT

## **Sporting**

UTAS AFL Club

## **Schools / education**

Sustainability Learning Centre

Fahan School

Taroona Primary

Mt Carmel College

REPORTING TO INFORM THE MASTERPLAN DESIGN

# Market Assessments Report

DeepEnd Services

# UTAS Sandy Bay Masterplan for PSA Submission

Market Assessment Report

Prepared in association with Clarke Hopkins Clarke  
for UTAS Properties Pty Ltd

3 December 2021

COMMERCIAL IN CONFIDENCE



### Deep End Services

Deep End Services is an economic research and property consulting firm based in Melbourne. It provides a range of services to local and international retailers, property owners and developers including due diligence and market scoping studies, store benchmarking and network planning, site analysis and sales forecasting, market assessments for a variety of land uses, and highest and best use studies.

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### Document Name

UPPL report - Sandy Bay Master Plan market assessments - 3  
Dec 21

### Assumptions and data sources

All data sources and assumptions are documented in relevant sections of this report.

### Document control

Version	Author	Date	Review	Date
Revision A	CM, ML	15/7/2021	ML	22/7/2021
Revision B			ML	8/8/2021
Revision C			ML	17/9/2021
Revision D			ML	1/12/2021
Revision E			ML	3/12/2021

### Report reliance

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This report contains forecasts of future events that are based on numerous sources of information as referenced in the text and supporting material. It is not always possible to verify that this information is accurate or complete. It should be noted that information inputs and the factors influencing the findings in this report may change hence Deep End Services Pty Ltd cannot accept responsibility for reliance upon such findings beyond six months from the date of this report. Beyond that date, a review of the findings contained in this report may be necessary.

This report should be read in its entirety, as reference to part only may be misleading.



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## Executive summary

### Background

The purpose of this report is to undertake market assessments to identify potential land use development opportunities as input to the preparation of the *Sandy Bay Master Plan*, which is being prepared by a team led by Clarke Hopkins Clarke (CHC) on behalf of UTAS Properties Pty Ltd (UPPL).

The Masterplan has been prepared to guide future development of the existing campus at Sandy Bay (Subject Site) as the University transitions to the Hobart CBD.

The vision for the Site is for it to be developed as an urban regeneration project that would become a truly mixed-use place with opportunities for commercial offices, residential dwellings, aged care, medical services, sports and recreation along with supporting retail and other uses.

This Market Assessment Report is the first of a two-stage process, with a further Economic Impact Assessment report prepared to consider the potential economic effects associated with development of the Site in accordance with the final Masterplan.

Economic analysis presented in this report draws on a previous Highest and Best Use Analysis prepared on behalf of UPPL in October 2019, and has been updated and extended to provide advice on potential development opportunities.

### Context

The Subject Site is a property of 105ha occupying a strategic position overlooking the Derwent River and situated just 3km from Hobart CBD.

The Site enjoys a range of attributes as a location for urban regeneration, including excellent accessibility, synergies with other nearby uses, views over the Derwent River, an attractive natural setting and regional access via the Southern Outlet.

### Precinct-based approach

Development of the Masterplan is being undertaken using a precinct-based approach. Five precincts are identified, broadly delineated by Sandy Bay Road, Grosvenor Crescent, Churchill Avenue, the gully that traverses the Upper part of the Site, and the extent of the landholding to the south at Proctor Road/Olinda Grove.

### Market assessments

Assessments have been undertaken to examine development opportunities across a wide range of potential land use types, drawing on and updating previous analysis conducted on behalf of UPPL in 2019.

#### *Residential*

Opportunities for accommodating residential development on the Site are examined with reference to underlying population and dwelling growth trends and projections within Greater Hobart and in a Core Study Region consisting of Sandy Bay and other parts of Inner Hobart.

The analysis considers trends that were evident prior to the COVID-19 pandemic in early 2020, with an expectation that underlying population growth will revert to previous trends over time.

Other factors have also been examined, such as historical trends in dwelling structure that are leading to more diversity in housing formats, current building approval data and trends in house and unit prices.

The analysis concludes that the Subject Site has potential to absorb around 70-95 dwellings per year, mostly in medium and high-density formats. This translates to up to 2,000 dwellings over the next 20 years, or greater volume if development occurs over a longer time period.

Housing product should be delivered over a range of formats to meet the needs of different households and to provide greater housing choice. Built-to-rent may be an

appropriate tenure model to ensure delivery of product that is attainable for prospective purchasers.

#### *Commercial office*

The Subject Site could become an attractive office opportunity for small businesses that value the local setting and are seeking office space close to their place of work.

However, the opportunities are likely to be limited to small and micro businesses and organisations across professional, technical and scientific sectors. Larger corporate style tenants, and government departments, would continue to focus on the Hobart CBD as the preferred location for office space.

The opportunity in the small business sector is underpinned by relatively high rates of business ownership in the local area, particularly ones that operate in sectors that typically generate demand for office floorspace.

Having regard to the future growth in the office workforce, and the implied level of commercial office demand, the opportunity at the Subject Site is likely to be in the order of 12,500 sqm to 18,800 sqm over a 20-year period, which is equivalent to a 10-15% share of demand across the wider economy.

The types of formats offered at the Site could include co-work space, smaller tenancies for micro businesses, innovative live-work formats such as SOHO, or space marketed to innovation firms.

### *Retail*

Retail development opportunities have been examined by considering the population base and demand for retail facilities generated in a relevant catchment extending across the surrounding area in Sandy Bay and Taroona.

The analysis highlights the fact that the local catchment has a significant under provision of supermarket floorspace, with just 6,450 sqm of supermarket floorspace compared with demand for around 9,450 sqm.

Over time this deficit in the provision of supermarket shopping for local residents will widen, especially with the additional population base moving into the Site.

The analysis identifies an opportunity to establish a new local centre in the Middle part of the Site (Precinct 2), anchored by a full-line supermarket and with a small array of specialty retailers and café and dining options for local residents and workers.

Other retail uses could be established elsewhere on the Site, including in Precinct 1 where they would focus on serving people visiting the sports and recreation facilities, and in Precinct 5 where a local retail node could serve a residential base and tourist visitors.

### *Accommodation and tourism*

Tourist visitation is an important component of the Tasmanian economy, and although this sector has been severely disrupted by COVID-19, there are strong ongoing growth prospects.

Currently the focus for tourism accommodation is within central Hobart, and there are several new hotel developments that will add new bed supply into this area.

The opportunities at the Site are likely to comprise an eco-tourism resort in Precinct 5, reflecting the bushland setting of the Upper part of the Site and opportunity to co-locate with adventure tourism, and a mid or higher budget offer within Precinct 1 in the medium to long-term, which would have a role in serving an expanded sports and recreation precinct and introduce additional tourism product for the coastal area along the Derwent River frontage.

Precinct 5 has an opportunity, given the bushland setting and existing recreation use of the area, to attract an adventure tourism facility similar to the Hollybank Wilderness Adventure park in Launceston.

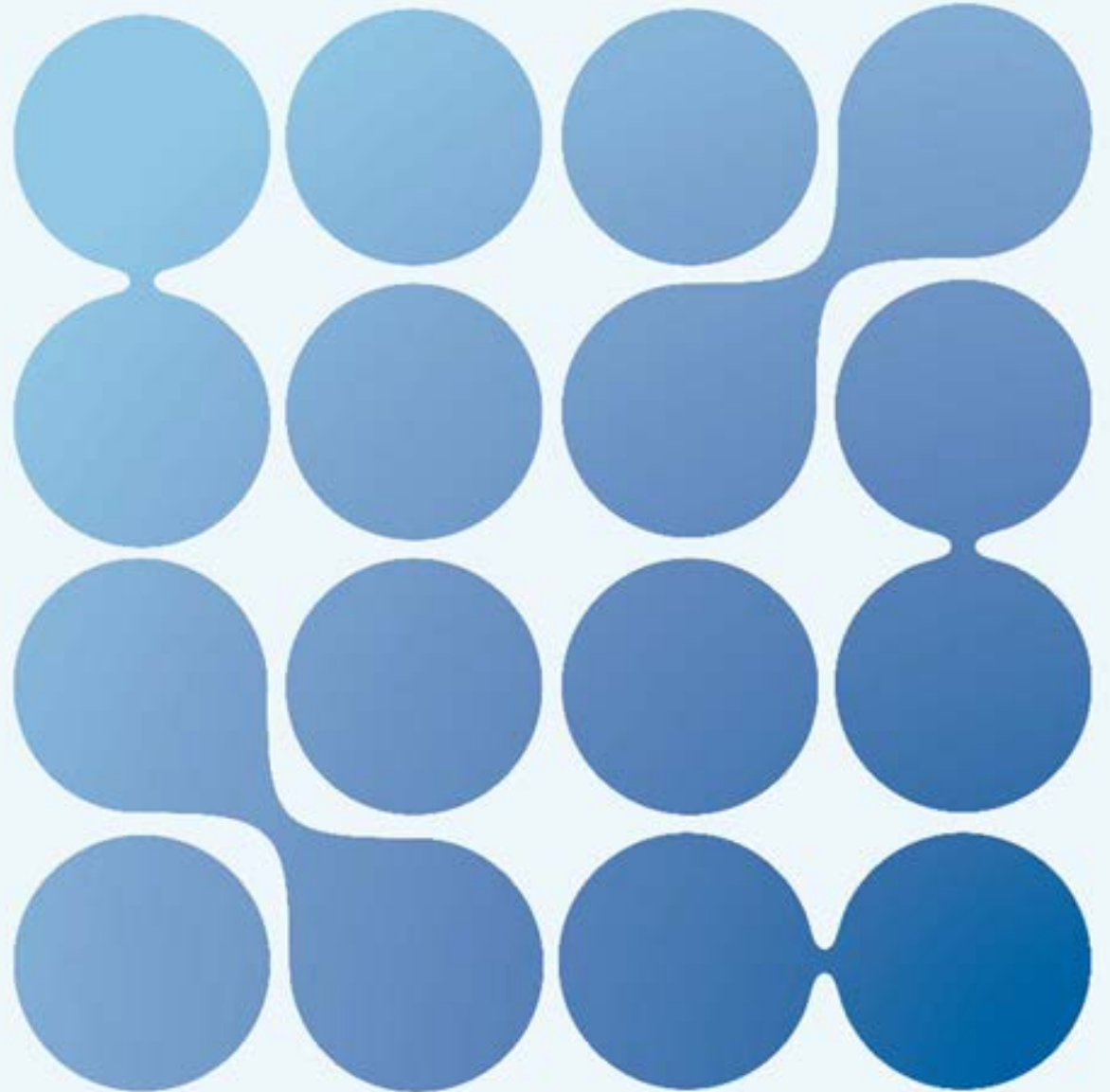
### *Other uses*

A range of other uses have been examined as potential opportunities having regard to the existing and future demand and supply context.

The identified opportunities comprise:

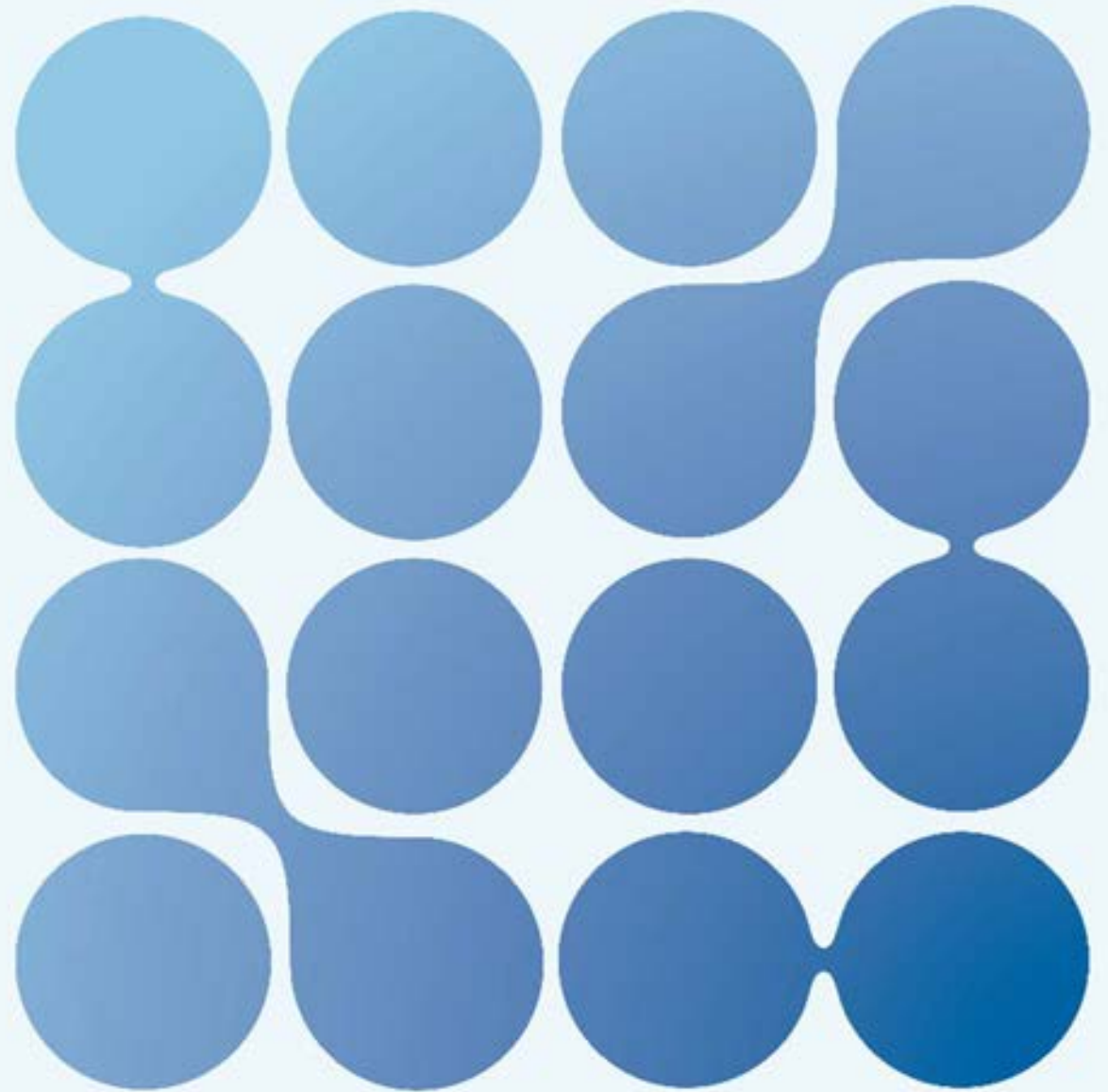
- Enhancement and expansion of the sports and recreation functions within Precinct 1, and with the possible inclusion of sports administration and sports science uses activities and the attraction of a range of allied uses such as health and wellness and specialised health professionals.
- Additional medical facilities including GP-based and specialised health services, with potential locations including Precinct 1 (as above), Precinct 2 (as part of local mixed use node), and Precinct 5 (local facility).
- Expanded and/or additional childcare places to serve a growing residential base and to reflect an increase in the usage of childcare services in the future.

## A. BACKGROUND CONTEXT



# 1

Introduction



## 1.1 Background

### Purpose of the report

The purpose of this report is to provide analysis of potential land use development opportunities as input to the preparation of the *UTAS Sandy Bay Master Plan*, which is being prepared by a team led by Clarke Hopkins Clarke (CHC) on behalf of UTAS Properties Pty Ltd (UPPL).

### Study context

The Master Plan will provide a long-term visionary plan to guide the staged regeneration of the Subject Site as the University transitions to the Hobart CBD.

The Site is a property of more than 105 hectares overlooking the Derwent River, extending from the frontage on Sandy Bay Road southwards up Mount Nelson. The Site has enormous strategic importance given its physical size, proximity to central Hobart and attractive setting.

The transition to a CBD campus reflects the University's Southern Infrastructure Strategy and is described in more detail in the *Southern Campus Transformation – Preliminary Urban Design Framework*.

### Site vision

The University's vision for the Site is “*A vibrant, re-imagined and active place that is a leading example for sustainability, liveability and a diverse well connected mixed use precinct*”.

The Site is expected to become a truly mixed-use place with opportunities for commercial offices, residential dwellings, aged care, medical services, sports and recreation along with supporting retail and other uses.

The University intends to have a strong stewardship and placemaking role as the Site is developed; the implications of this on land tenure arrangements are considered in this report.



## 1.2 Scope

Deep End Services has been commissioned to provide expert services in market assessment and economic analysis, with this work provided in two phases.

This report (Phase 1) presents market assessments to inform preparation of the Masterplan and to ensure that the proposed land uses and development staging are an appropriate response to market conditions.

A subsequent Economic Impact Assessment (Phase 2) will examine the likely economic outcomes to support a submission for a planning scheme amendment to give effect to the Masterplan.

## 1.3 Highest and Best Use Assessment

The *Sandy Bay Highest and Best Use Study* (HBU) was undertaken by MacroPlan in October 2019 on behalf of UPPL to provide advice on potential development opportunities.

The HBU study has been used to provide a research base in this report, with more detailed analysis undertaken to expand the range of potential uses or to reflect various constraints and opportunities that have been identified.

The additional analysis includes:

- More detailed consideration of the opportunity for retail development within the Site, including within particular sub-precincts;
- Consideration of different tenure arrangements on residential development formats and opportunities, including a review of the build to rent sector;
- Further analysis of the opportunity for commercial office development, including prospects for adaptive reuse of buildings for small start-ups, innovation/research businesses, co-work hub(s) and other formats;

- Examination of identified opportunities for adventure tourism and an eco-resort style commercial accommodation offering; and
- Consideration of the introduction of a sporting precinct in the lower part of the Site that may house sports administration and sports science functions.

## 1.4 This report

### Background context

Chapters 2 to 4 of this report present contextual information, including details of the Site, its planning context, implications for development prospects arising from the COVID-19 pandemic, a description of the Site and its attributes for mixed use development, and a summary of the recommendations arising from the HBU report.

### Market assessments

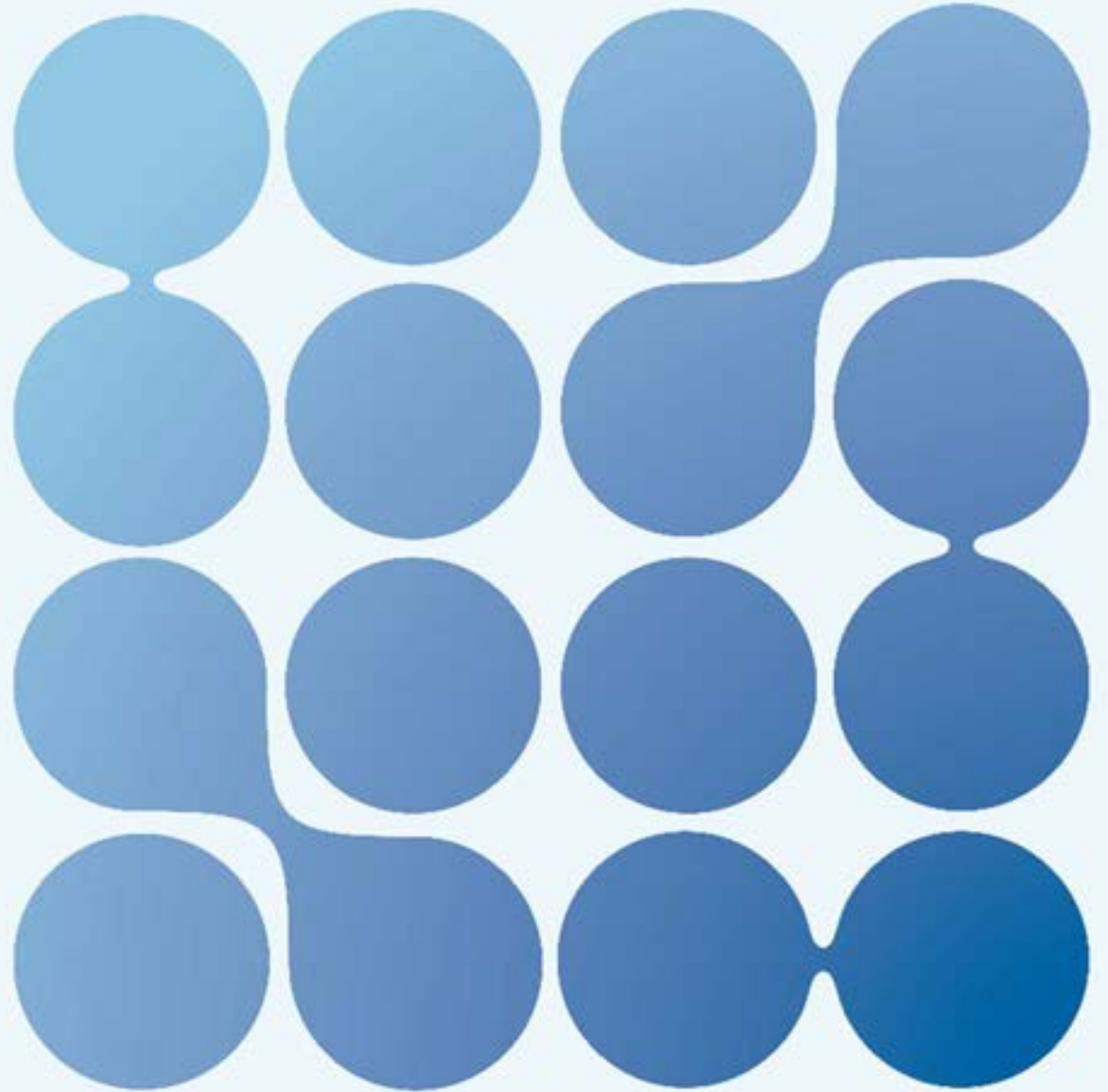
Chapters 5 to 9 present assessments of a range of use opportunities in residential, office, retail, commercial accommodation and other sectors.

### Recommendations

Chapter 10 summarises the results of the analysis including identifying appropriate uses to be considered in preparing the Masterplan, and providing guidance on location, scale and staging.

# 2

Context



## 2.1 Regional context

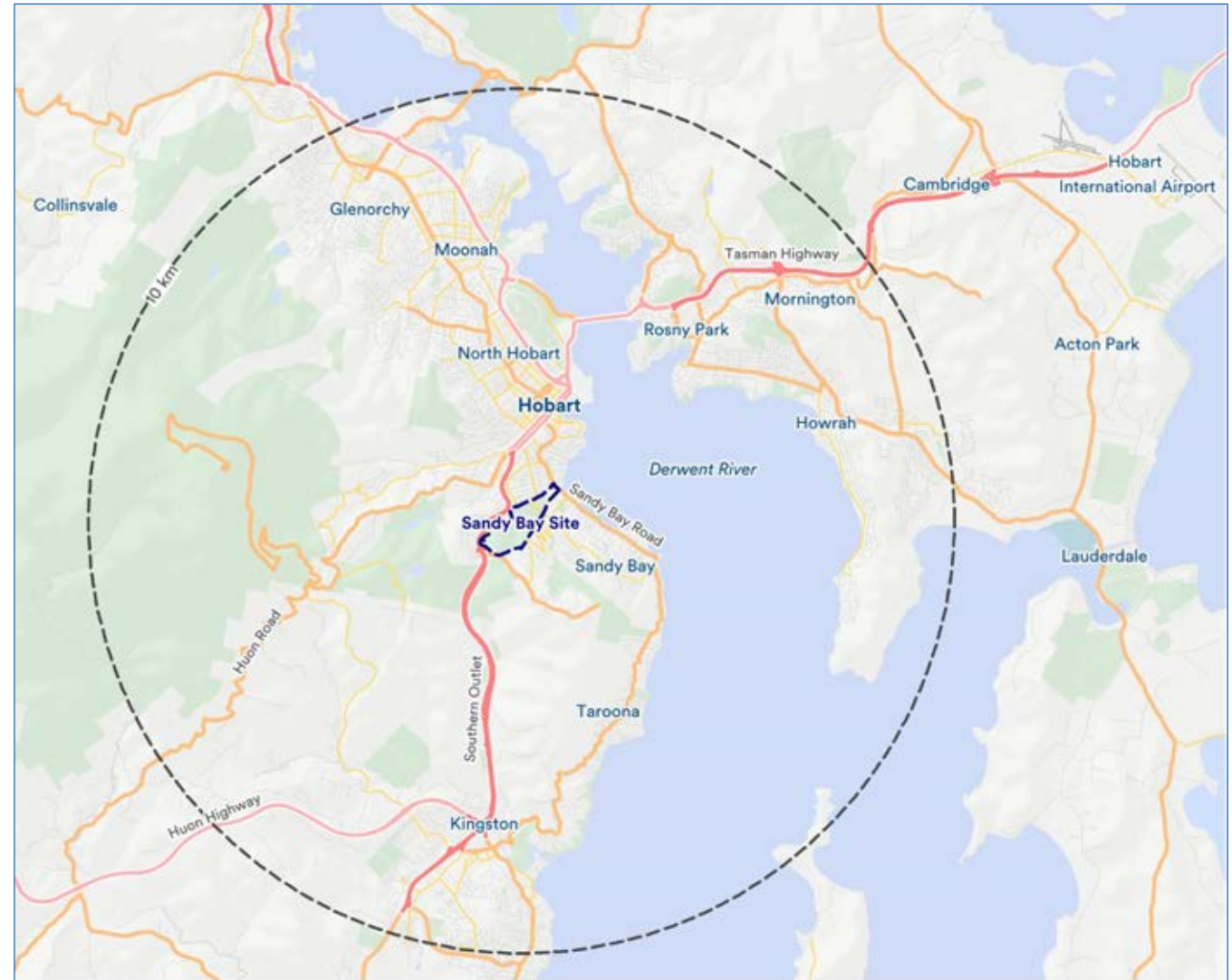
The Sandy Bay Site is situated in the southern Hobart suburb of Sandy Bay, around 3km (8 minutes travel time) from the Hobart CBD, and 20km (20 minutes travel by car), from Hobart Airport.

The Site extends from Sandy Bay Road along the Derwent River frontage, south-west towards Tolmans Hill and Mount Nelson.

Sandy Bay Road serves local communities in the suburb of Sandy Bay and southwards to Taroona along the Channel Highway, while Southern Outlet on the Site's south-western boundary is the major north-south arterial for people travelling to Hobart from Kingborough Local Government Area (LGA) and south-western Tasmania, carrying approximately 36,750 vehicles per day according to RoadsTas Traffic Stats for 2020.

Annual traffic data published by RoadsTas shows that traffic along Southern Outlet has grown by an average rate of 1% per annum over the past decade.

Figure 1—Regional context



Source: Deep End Services; Land Tasmania; MapInfo.

## 2.2 Local context

The Subject Site has a total area of approximately 105ha and occupies a strategic position overlooking Hobart and the Derwent River, surrounded by desirable residential communities in Sandy Bay and close to tourist destinations such as Battery Point and Salamanca Place northwards towards central Hobart, and Wrest Point Casino close to the northern part of the Site on Sandy Bay Road.

Surrounding features include:

- Affluent inner-city residential communities to the north between Proctors Road and Sandy Bay Road, and lower density housing to the south-east on the hilly sections of Nelson Road and along the coastline.
- The main retail node at Sandy Bay Town Centre which has around 15,000 sqm of occupied floorspace including mid-sized Coles and Woolworths supermarkets.
- A small shopping precinct to the east at Long Beach.
- Tourism and visitor destination uses along the foreshore, including the Royal Yacht Club of Tasmania and Wrest Point Casino.

Figure 2—Local context



Source: Deep End Services; Nearmap; Land Tasmania

## 2.3 Planning context

The Site is within the *Particular Purpose Zone 3 – University of Tasmania (Sandy Bay Campus)* under the Hobart Interim Planning Scheme (2015) where the purposes are for development to reflect the Site’s role as a major tertiary educational centre.

A planning scheme amendment will be required to enable redevelopment of the Site for non-educational purposes.

Assessment of any amendment request will require consideration of various factors, including demonstrating that the new planning provisions:

- Have strategic merit given the proposed uses, market conditions and land use opportunities
- Are consistent with the *Southern Tasmania Regional Land Use Strategy 2010-2035* (STRLUS)
- Are consistent with other State policies, including with respect to growth and development.

Of particular relevance in the context of the types of development likely to be suitable for the Subject Site are provisions in the STRLUS in relation to anticipated growth and settlement patterns and activity centre hierarchies.

STRLUS anticipates that the defined planning region (incorporating Greater Hobart and adjacent areas) will grow from a population of around 246,000 people in 2008 to 327,000 by 2035, necessitating an additional 36,000 new dwellings. Most growth, accounting for an additional 26,500 new dwellings, is projected to occur in Greater Hobart.

The settlement strategies within STRULS at SRD 2.0 specifies that 50% of the new dwelling demand in Greater

Hobart is expected to occur as infill development, with the remainder as greenfield development in growth areas.

SRD 2.7 specifies that 25% of the growth target, or around 3,300 new dwellings, should occur as infill development within Hobart LGA. However, it is noted that STRLUS will be reviewed following completion of the Greater Hobart Vision 2050, which forecasts population growth of around 7,900 persons in Hobart LGA to 2040, implying a need for nearly 4,000 new dwellings.

Under strategies AC 1 and AC 2, STRLUS provides strong support for a hierarchy of centres, with Hobart CBD nominated as the Primary centre serving the region, supported by a network of smaller centres including the Principal centre at Kingston and the Neighbourhood centre at Sandy Bay.

The provisions in relation to activity centres are relevant in the context of the need for proposed development within the Site to be supportable without adversely affecting the role of existing centres. Further assessment of impacts associated with the final Masterplan are provided in the Economic Impact Assessment report.

## 2.4 COVID-19 effects

The COVID-19 pandemic has resulted in major social and economic disruption in Australia and internationally.

The effects are being felt unevenly by state and across various industry sectors. There are short and potential long-term effects which could play out in many ways and are still unknown; however, cities and communities can expect to see changes in the following areas:

- National population growth
- Interstate and intrastate population shifts
- Where and how people live and work
- Where and how people shop.

In broad terms the patterns of change which might be anticipated are in the following areas:

- A fall in population growth due to lower net overseas migration, influencing future population levels and make-up and overall housing demand
- A shift from high-density inner-city living to middle and outer suburbs and regional areas
- A re-evaluation of the workplace with more people seeking to work from home, particularly in white-collar professions and creative occupations
- Companies developing new location and operating strategies for workplace safety and to retain and attract key staff including establishing regional or suburban working hubs, potentially leading to lower CBD floorspace demand
- Greater individual and family self-reliance which could be expressed in many ways including increased home cooking and meal preparation

- An aversion to large regional shopping complexes combined with a shift to neighbourhood and local level retailing close to home
- For some, convenience will be more important than ever, driving demand for services close to home and the ability to quickly park and shop without negotiating long, busy malls or public areas
- Consumers travelling less to shop and seeking more local and simplified shopping formats and experiences
- Changes to the way retailers engage with customers, manage their businesses and rebalance their physical stores and on-line strategies, including potential closure of underperforming stores, more cautious network roll-outs, and expansion of click & collect infrastructure
- Retail and service businesses with personal contact and close interactions (eg gyms) will adapt their business models to COVID-safe practices.

While on-line retailing is likely to grow – potentially to 15-20% of retail sales from its current level of 10% – bricks and mortar retailing will still be an essential and universally preferred means of shopping as it enables the important function of social interaction and satisfies the consumer's need to physically browse and inspect products.

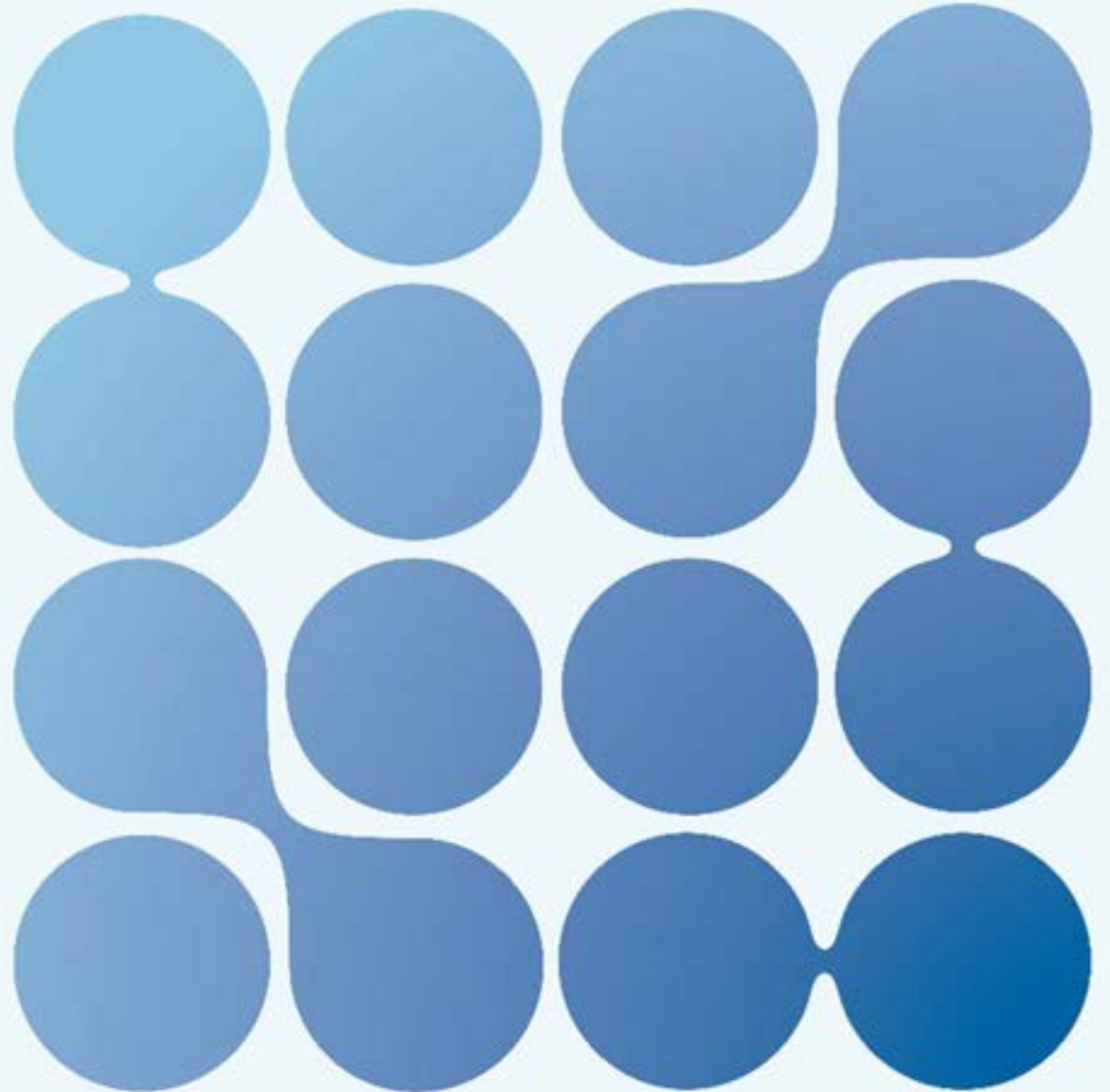
In relation to the implications for development opportunities at the Subject Site, the following observations are made:

- Sandy Bay is one of the key destinations for incoming overseas migrants in Tasmania, having attracted net overseas migration of more than 1,300 since 2016. This is likely due to its role as a location for overseas students, as well as attracting professional migrants seeking high quality housing. There will likely be a short-term adverse effect at least over the period to 2024.
- Sandy Bay generally experiences a significant annual loss in net interstate migration (-555 since 2016), also likely due to its role as a tertiary location focus with students moving out of the area on graduation. In the short-term this may be offset as a result of COVID-19 by a reduction in numbers of people moving away, coupled with an increase in people moving into Hobart for lifestyle reasons.
- Commercial development opportunities within the Site are likely to be stimulated by some of the effects of COVID-19, including encouraging working from home and the establishment of suburban office hubs that are easily accessible for workers and business owners.
- Retail development opportunities will also be supported by the trend to limit travel and undertake more purchases close to home. Over time this will underpin improvements in existing centres such as Sandy Bay, as well as supporting new retail services such as supermarkets where demand warrants.
- The trends also favour delivery of a range of population-serving activities such as medical services, childcare, recreation and other uses to be provided close to new residential areas.
- COVID-19 will continue to have significant short-term impact on tourism visitation, but this is expected to recover somewhat once travel restrictions ease, with Tasmania well-placed to serve a pent-up domestic tourism market. The longer-term effects on business travel and the events and conferences sector is more uncertain, particularly with greater emphasis on on-line meetings and presentations.



# 3

Site attributes



### 3.1 Sandy Bay Site

For the purposes of further analysis of development opportunities, the Site has been divided into five sub-precincts:

- Precinct 1 consists of the Lower part of the property that extends from Sandy Bay Road to Grosvenor Crescent
- Precinct 2 consists of the Middle part of the property between Grosvenor Road and Churchill Avenue
- Precincts 3 to 5 are situated in the Upper part of the property from Churchill Avenue up Tolmans Hill and Mount Nelson, culminating in the soccer facilities on Olinda Grove.

The Upper part of the Site also includes significant bushland that is used for a variety of recreation activities such as bushwalking and cycling. Rock-climbing also occurs as the quarry on Proctors Road.

Further commentary on the attributes of each precinct is provided on the following pages.

Figure 3—Masterplan precinct layout



Source: UPPL; Clarke Hopkins Clarke

### 3.2 Development precincts

#### Precinct 1

Precinct 1 occupies a strategic position with frontage to Sandy Bay Road, opposite the Derwent sailing squadron and the Royal Hobart Yacht Club, with West Point Casino further east.

A large at-grade car park is situated adjacent to the rugby ground, accessed from Grace Street to the west.

Precinct 1 contains a range of existing sports and recreation facilities including rugby and AFL/cricket pitches, Unigym, and tennis courts. The existing faculty of law building is situated close to Grosvenor Crescent.

Relevant attributes that could influence future development opportunities include:

- The location adjacent to Sandy Bay Road with a strong road frontage
- Potential synergies with tourism functions including the casino
- Potential to build on the existing focus for sports and recreation
- Opportunities generated by excellent views across the Derwent River.

Figure 4—Precinct 1 context



Source: Deep End Services; UPPL; Nearmap

## Precinct 2

Precinct 2 extends from Grosvenor Crescent and the Centenary building upwards through the Site to Churchill Avenue, with an attractive pedestrian link through the Site.

This precinct contains the bulk of the existing education facilities and has the densest concentration of staff and student activity, which is supported by existing cafés including within the Centenary Building and at the University Centre and student lounge.

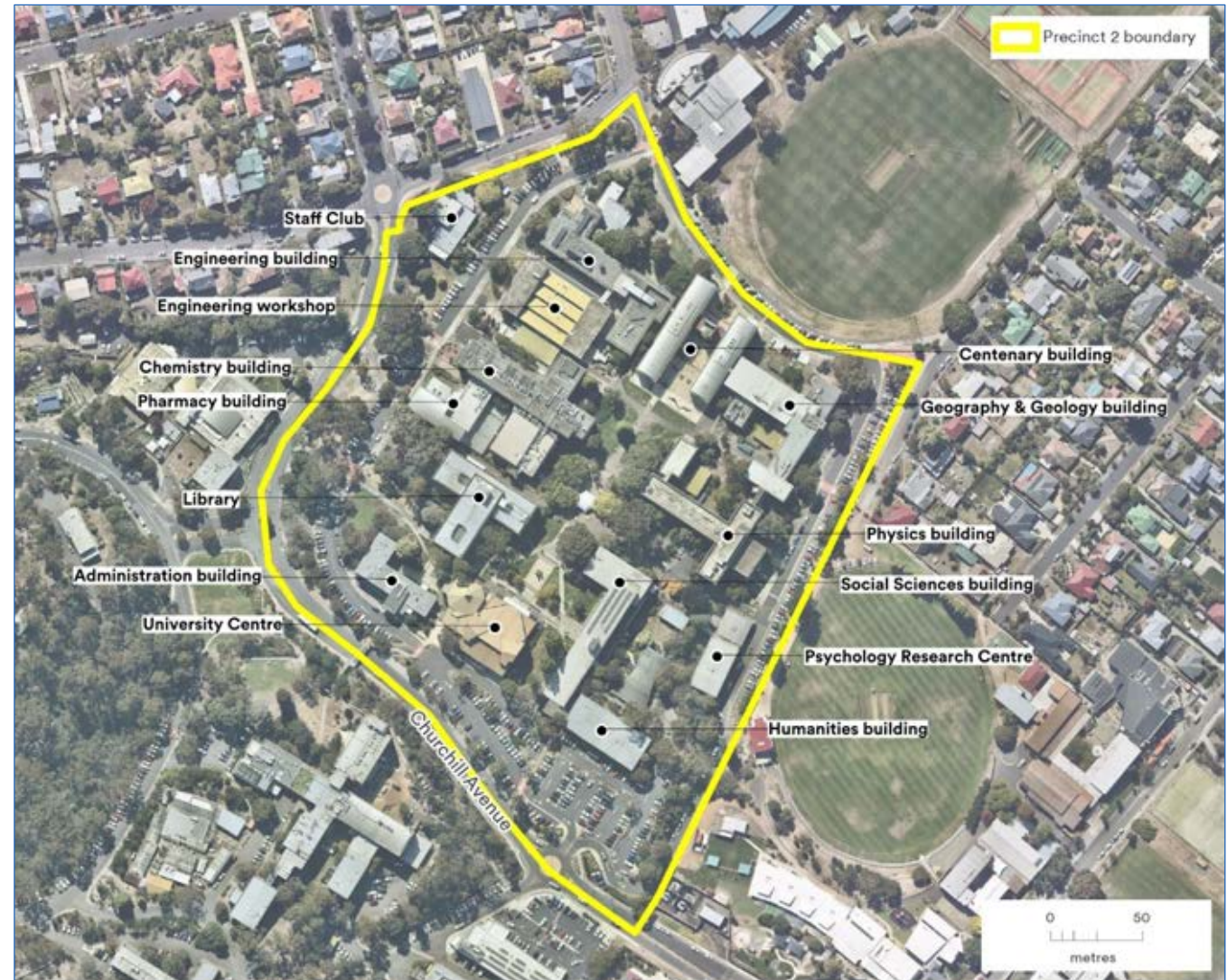
This part of the Site is also adjacent to the Hutchins School, a traditional Anglican private school that is well-regarded for its academic results and extensive facilities.

Churchill Avenue provides a strong ‘address’ for this precinct and access from the residential community on the upper slopes of Sandy Bay.

Future development prospects within this precinct would occur through the reuse and redevelopment of existing buildings and construction of new buildings.

Potential use opportunities would draw on the precinct’s central position and the opportunity to attract incoming usage from nearby residents via Churchill Avenue.

Figure 5—Precinct 2 context



Source: Deep End Services; UPPL; Nearmap

### Precinct 3

Precinct 3 extends southwards up Mt Nelson from Churchill Avenue, south-east of the gully that traverses the Upper part of the Site.

The precinct accommodates a range of existing buildings including CSIRO and the Hill Street Grocer which is a successful small supermarket situated on the south side of Churchill Avenue, with an attractive offer that serves students and staff as well as drawing people from the surrounding residential neighbourhood. A medical centre is attached to the Hill Street Grocer.

The development outcome in this area is associated with the reuse of some of the existing buildings and construction of new buildings.

Relevant attributes include the position close to the central part of the Site that is accessible via Churchill Avenue, and the natural setting to the south as the land rises towards Mt Nelson.

Figure 6—Precinct 3 context



Source: Deep End Services; UPPL; Nearmap

## Precinct 4

Precinct 4 extends from Churchill Avenue south-westwards up Tolmans Hill, on the north-western side of the gully that traverses the Upper part of the Site.

Existing uses include student accommodation, Hytten Hall and Old Commerce, and the Student Union. It is understood that student accommodation on this part of the precinct would be retained.

This part of the Site is characterised by a significant level change upwards towards the student accommodation. To the north (external to the Site) the land uses comprise residential dwellings in an inner-city format.

Relevant attributes that may influence future development outcomes include the presence of the student housing, proximity to established residential areas, the attractive setting to the north and south-east across the gully, and location close to Churchill Avenue.

Figure 7—Precinct 4 context



Source: Deep End Services; UPPL; Nearmap

## Precinct 5

Precinct 5 is situated at the highest point of the Site where access is from Olinda Grove which connects to the Southern Outlet and Proctors Road to the west, and to Nelson Road further to the south.

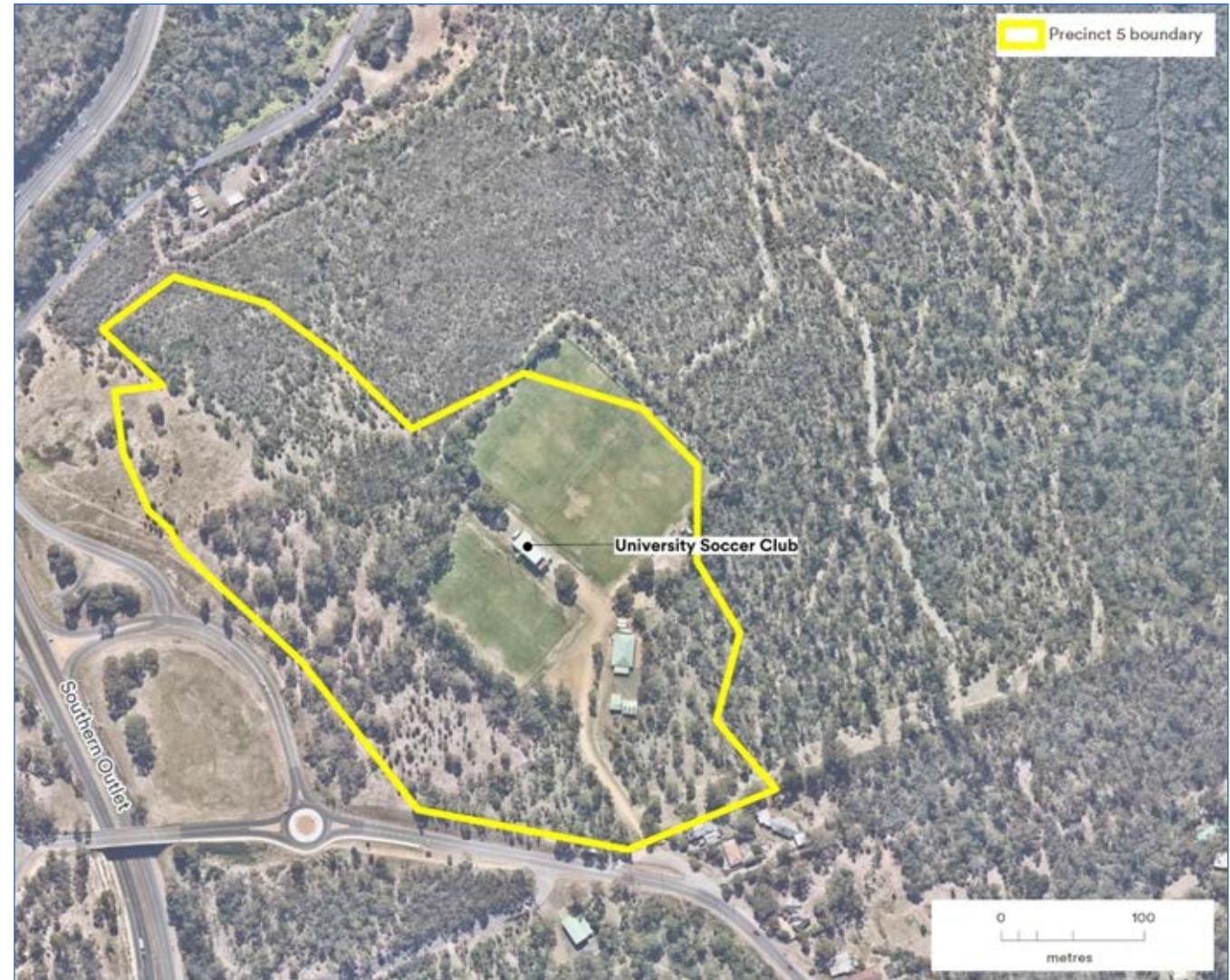
The area is characterised by extensive bushland across this part of the Upper part of the Site, with walking tracks and bicycle paths providing connections north-east to the rest of the existing campus. A former quarry site is located on the northern boundary off Proctors Road.

The Site currently accommodates the University Soccer Club and other recreation facilities including storage areas for the University White Water Rafting Club.

Attributes relevant for potential future uses include:

- Relatively flat land where existing soccer pitches are located
- Good regional access from the Southern Outlet
- Attractive bushland setting
- Existing use of the precinct for recreation activities including mountain-biking, bushwalking, and rock-climbing (associated with the quarry).

Figure 8—Precinct 5 context



Source: Deep End Services; UPPL; Nearmap

### 3.3 Summary

The Sandy Bay Site has a range of attributes that make it suitable for a wide variety of potential future land uses as UTAS transitions its tertiary education functions to the CBD. These are summarised to the right.

#### Lower Site

- Excellent access and exposure to Sandy Bay Road and the Derwent River frontage
- Potential to leverage from the existing sporting and recreation uses already established on this precinct (rugby grounds, AFL, cricket)
- Close proximity to tourism and other visitor destination activities including Wrest Point Casino
- Attractive outlook across the Derwent River.

#### Middle Site

- Focus for existing activity from students and staff, underpinning existing uses including Hill Street grocer
- Good connectivity to Sandy Bay residential community from Churchill Avenue
- Significant opportunity for repurposing existing buildings in attractive setting and extending the mix of uses
- Central position to serve the wider area.

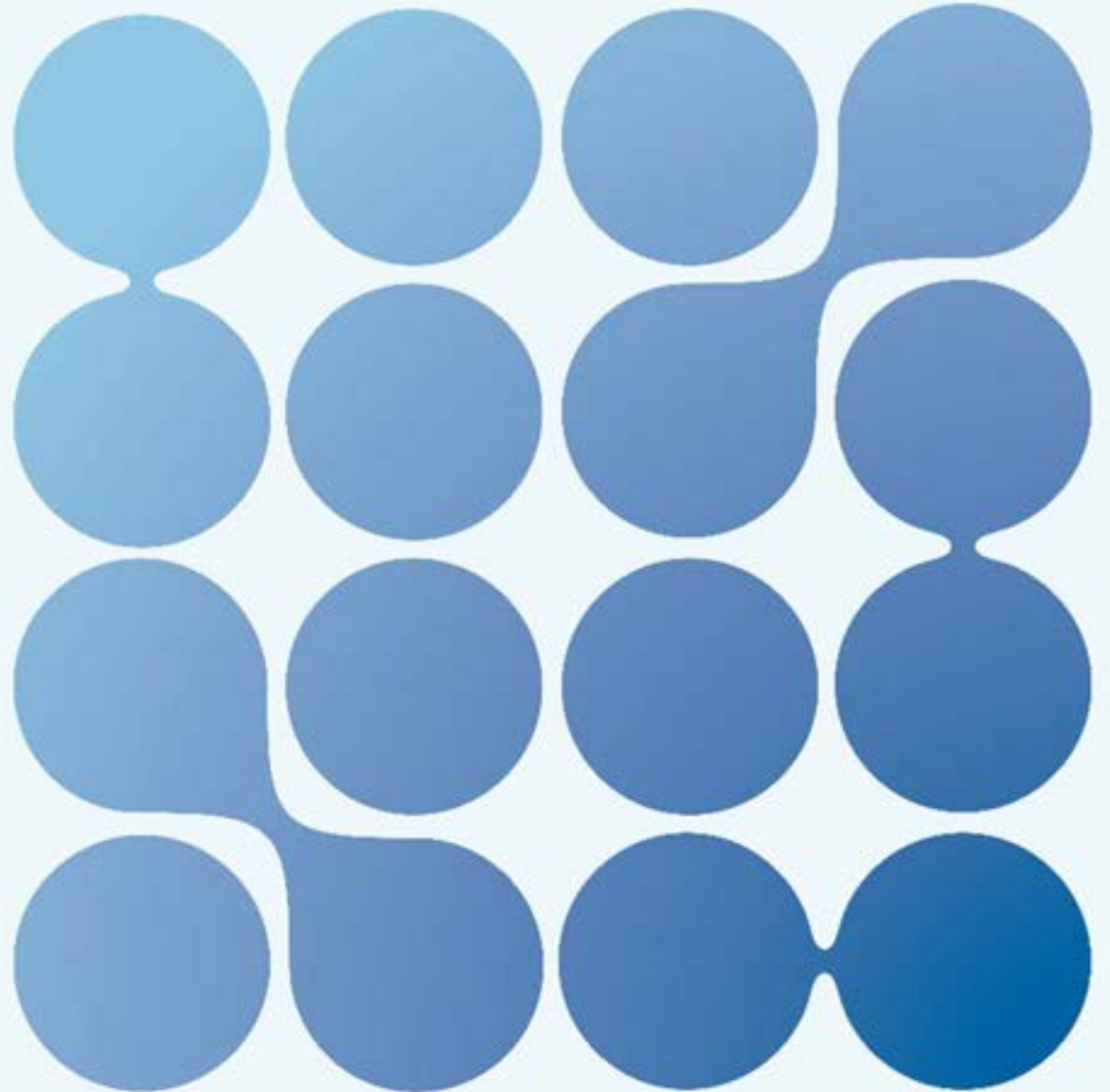
#### Upper Site

- Excellent access to the regional road network via Southern Outlet
- Parts of the precinct are flat and easily developable
- Attractive bushland setting
- Existing focus for recreation and outdoor pursuits.



# 4

Identified development opportunities



#### 4.1 Recommendations from HBU report

The HBU assessment undertaken by Macroplan in 2019 provides a baseline of research and analysis that has been used as a key input to the market assessments provided in this report.

Recommendations with regard to development opportunity in the main property sectors are summarised to the right. Note that some of the recommendations and findings are significantly different to the results of the market assessments presented in Part B of this report.

##### Residential

- Demand for residential product is based on forecast growth in the number of local residents (population growth), and as a result of opportunities to serve a downsizer market; however, in reviewing these assessments, it is unclear how the downsizer opportunity is in addition to the underlying demand from population growth.
- The recommendation with respect to residential outcomes do not consider potential tenure arrangements including prospects for built to rent product.
- Key target segments likely to include pre-retired and retired age downsizers, families and first home buyers and investors that are largely uncatered for in Hobart and Sandy Bay.
- Other development opportunities are in dedicated subsectors such as independent living units (ILUs) and aged care.
- In terms of scale, the HBU identifies a supply gap ('opportunity') for around 800-1,000 new dwellings over the period to 2041 associated with population growth and downsizers under a medium population forecast, with a high forecast of up to 1,570 new dwellings to 2041.
- Up to 370 ILUs and aged care beds are recommended.

##### Retail

- Analysis of retail opportunity is undertaken on the basis of an examination of retail spending trends and supportable new floorspace.

- The identified opportunity is for local retail node of 2,000 sqm underpinned by small supermarket of 1,000 sqm.

##### Commercial office

- Demand will be generated by growth in office-based workers, while recognising that most traditional commercial office floorspace will continue to be directed to Hobart CBD.
- Identified opportunity for around 16,000 sqm of office space including co-work format under medium scenario, with up to 22,000 sqm under high scenario.

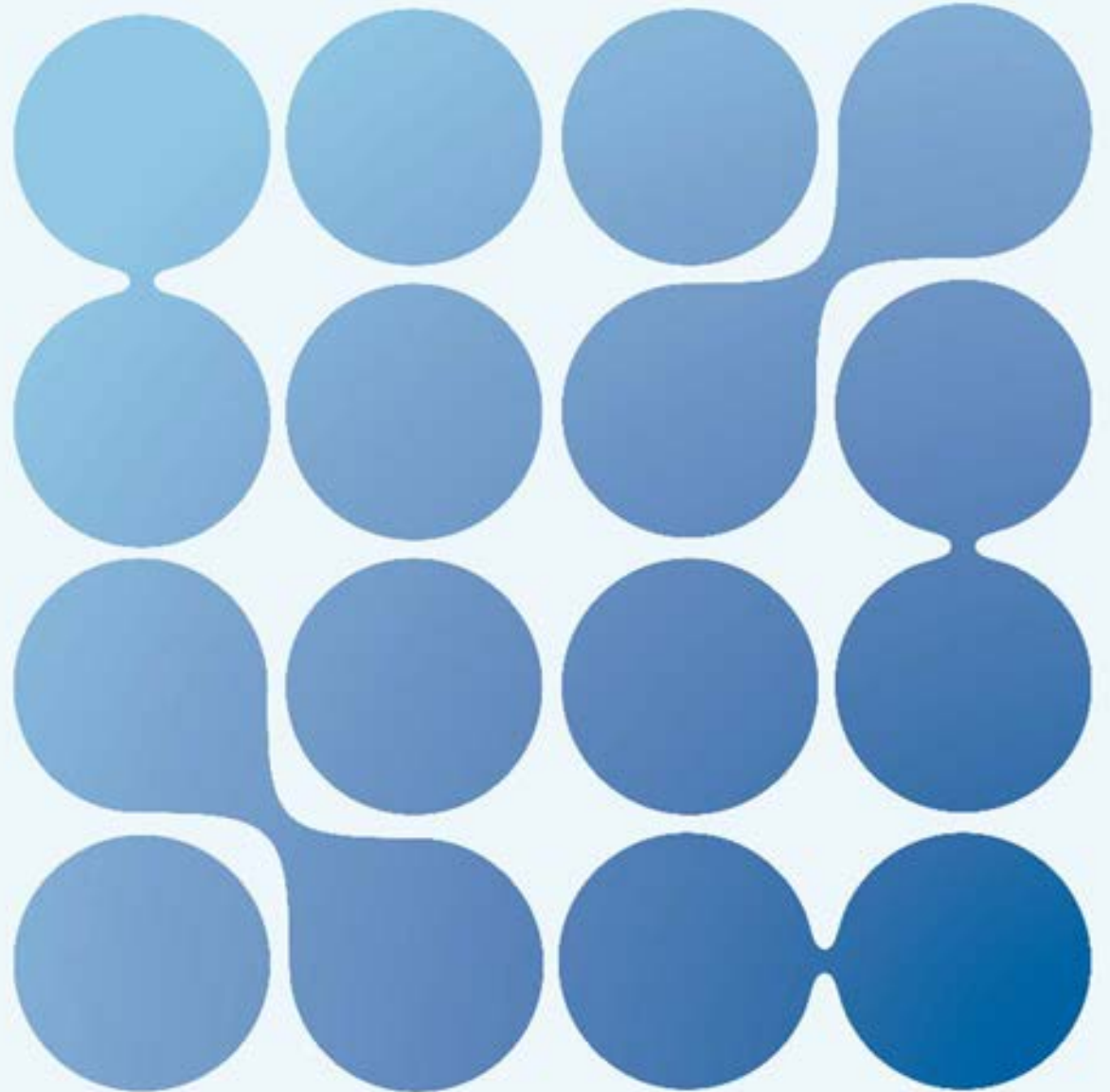
##### Commercial accommodation

- Increasing demand for new accommodation beds, but also several approved projects in or close to the Hobart CBD that will absorb much of this demand in the short-term.
- Longer-term opportunity for around 135 rooms having regard to demand and projected additional supply.

##### Other uses

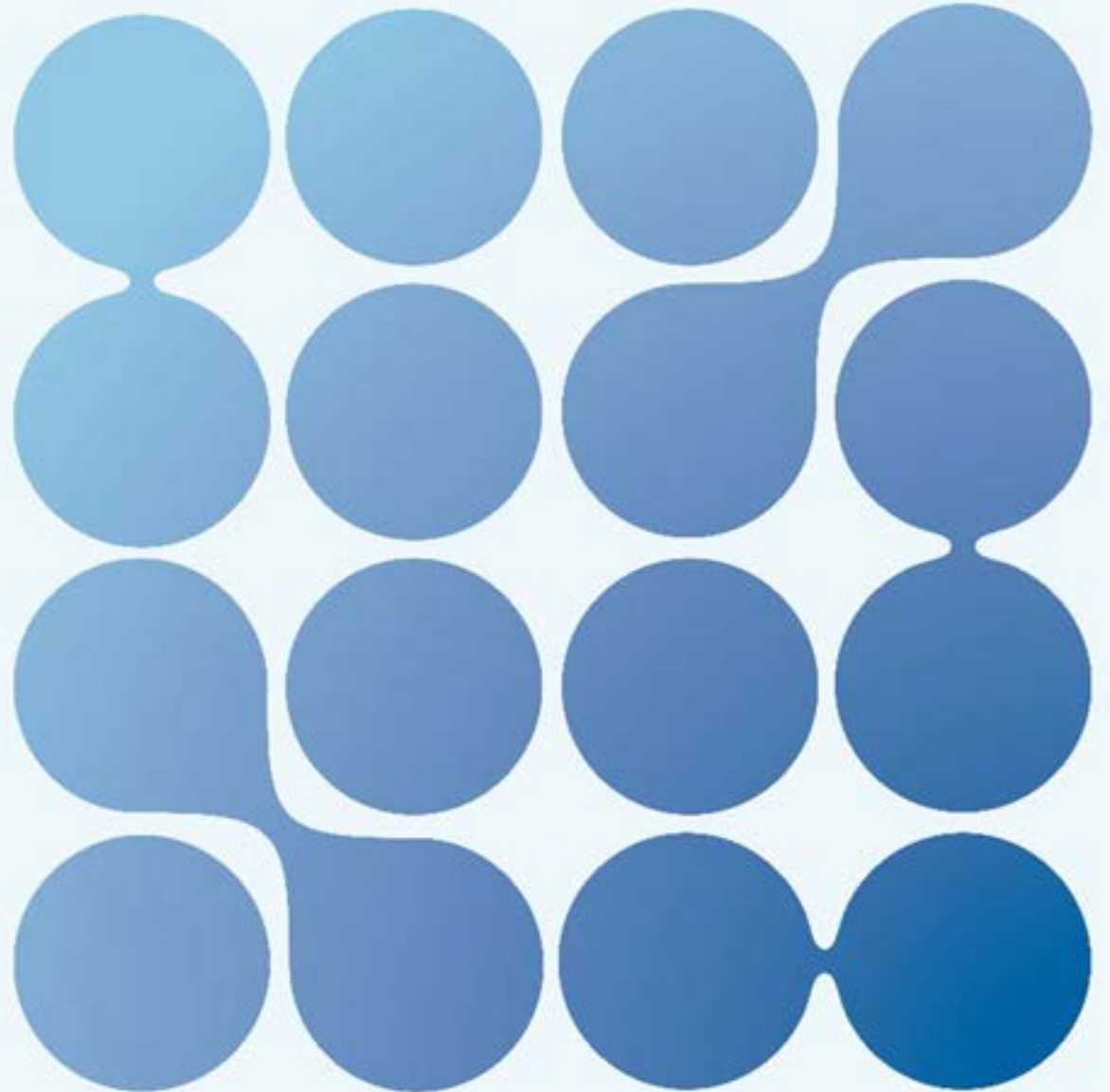
- Range of medical services and allied health facilities to cater to new residents and workers
- Ancillary uses such as gym, recreation and community services.
- No identified demand for additional childcare services.

## B. MARKET ASSESSMENTS



# 5

Residential



## 5.1 Introduction

This chapter reviews the HBU analysis with regard to the residential development sector, provides analysis of the underlying demand for new dwellings within the surrounding region, and examines the opportunity for new residential product to be delivered on the Subject Site, focussing on medium and higher density residential product and with consideration of a build to rent model.

As noted in section 4.1, the HBU assessment finds that there will be potential for up to 1,540 or so new residential dwellings (under the High scenario) to be developed on the Site by 2041, along with retirement living product and a small component of aged care.

According to the HBU, the key potential market segments are likely to comprise:

- Older demographic groups (pre-retirees and those of retirement age) seeking to downsize
- Families and first home buyers
- Investors.

It is noted that the HBU assessment does not consider how different tenure arrangements may influence the future market opportunity. To fill this gap, the analysis in this chapter includes consideration of the potential for build to rent product to form part of the local Hobart market.

The approach adopted for this analysis of the residential market opportunity involves:

- Consideration of regional trends in population, including effects of COVID-19
- Definition of a relevant residential study region
- Summary of historic and projected population growth trends and implications in terms of projected underlying dwelling demand
- Summary of demographic features relevant in assessing the residential market opportunity
- Analysis of relevant data to examine the opportunity for different housing typologies, including consideration of:
  - ABS Census data on housing stock changes by type
  - ABS building approval data by location and type
  - Property sales data and median prices for houses and apartments
  - Recent development examples in the local Hobart context for higher density apartments
  - Build to rent case studies and key market segments targeted, with commentary on the opportunity for this sector in Hobart.
- Implications with respect to the scale, type and location of residential development within the Site.

## 5.2 Regional growth trends and projections

### Historic trends

Population growth in Hobart LGA and within the other local government areas that constitute the Greater Hobart region (comprising Brighton, Glenorchy, Clarence, Kingborough and Sorell) has been accelerating in recent years prior to the COVID-19 effects commencing from March 2020.

As shown in Table 1 and Figure 9, the annual population growth in Hobart LGA was close to 1,000 per year in 2019, having progressively increased since 2011-12 when it was just 110 persons per year.

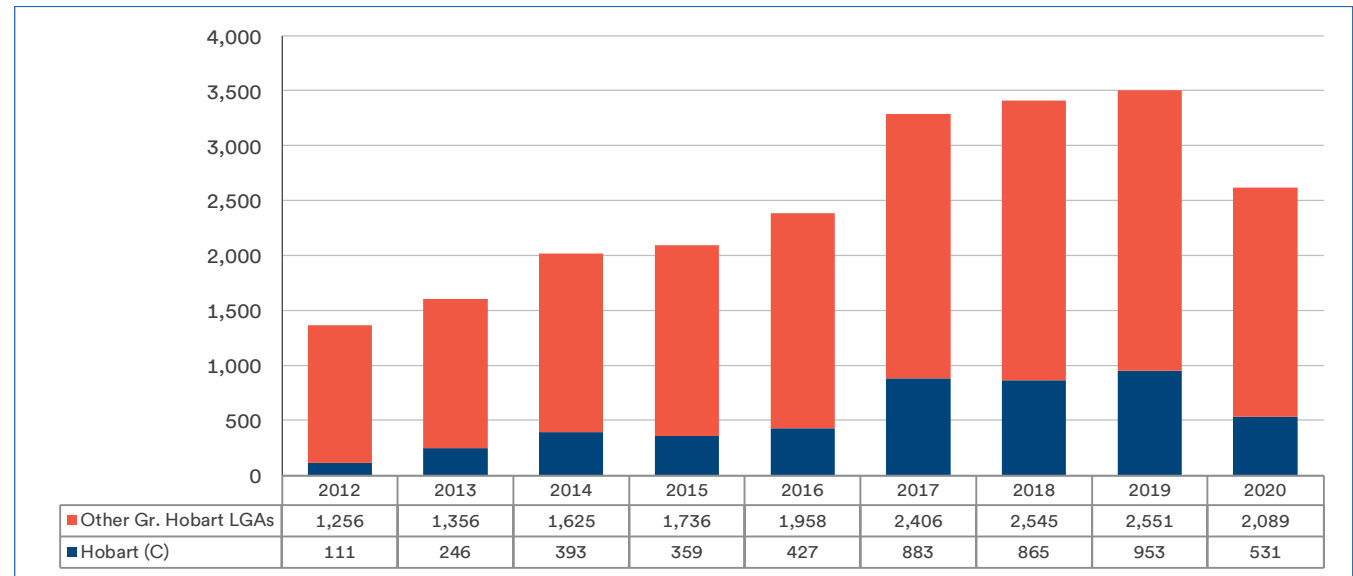
Growth trends in other Greater Hobart LGAs have similarly accelerated over this period, with the region as a whole attracting 3,500 new residents over 2018-19, a significant increase from 2012-12 when the population increase was just 1,370 residents.

Table 1—Population growth trends Greater Hobart

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Population</b>										
Hobart (C)	50,482	50,593	50,839	51,232	51,591	52,018	52,901	53,766	54,719	55,250
Other Gr. Hobart LGAs	161,951	163,207	164,563	166,188	167,924	169,882	172,288	174,833	177,384	179,473
Total Gr. Hobart	212,433	213,800	215,402	217,420	219,515	221,900	225,189	228,599	232,103	234,723
<b>Population growth</b>										
Hobart (C)		111	246	393	359	427	883	865	953	531
Other Gr. Hobart LGAs		1,256	1,356	1,625	1,736	1,958	2,406	2,545	2,551	2,089
Total Gr. Hobart		1,367	1,602	2,018	2,095	2,385	3,289	3,410	3,504	2,620

Source: ABS Regional Population Growth

Figure 9—Annual population growth Hobart (C) and Greater Hobart LGAs



Source: ABS Regional Population Growth

## COVID-19 effects

Population growth trends have been significantly impacted by COVID-19, leading to much lower growth since March 2020, as displayed in Figure 10 which shows quarterly changes in population across Tasmania, including the contributions from natural increase, net overseas migration (NOM) and net interstate migration (NIM).

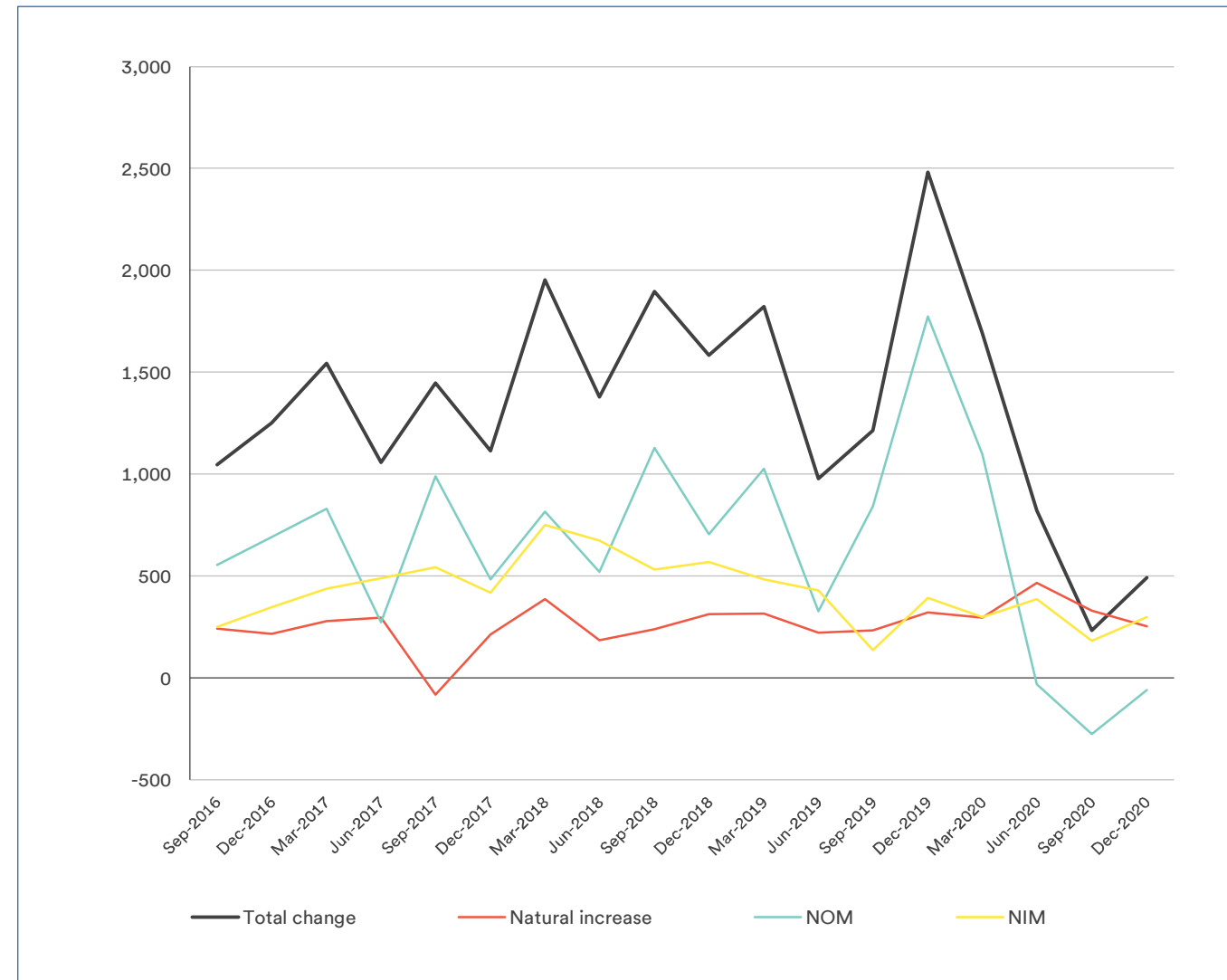
Figure 10 shows that the impact of COVID-19 has been largely on net overseas migration (NOM) which has declined from a peak of +1,773 persons in the December 2019 quarter, to -276 persons in the September 2020 quarter.

The effect has been to reduce quarterly population growth to just +234 persons across Tasmania in the September 2020 quarter, down from the pre-COVID peak of nearly +2,500 persons in December 2019.

Interstate migration is generally holding up relatively strongly compared to pre-COVID, assisted by restrictions on interstate travel during parts of this period.

Some recovery is already evident in the data for December 2020, however it is generally agreed that a full recovery to pre-COVID population growth will not occur until 2024.

Figure 10—Components of annual population growth in Tasmania, by quarter



Source: ABS Cat No. 3101

### Population projections

Tasmanian population projections are prepared by the State Department of Treasury and Finance (DTF), with the latest set released in 2019. The data is available for individual LGAs and includes low, medium and high scenario projections.

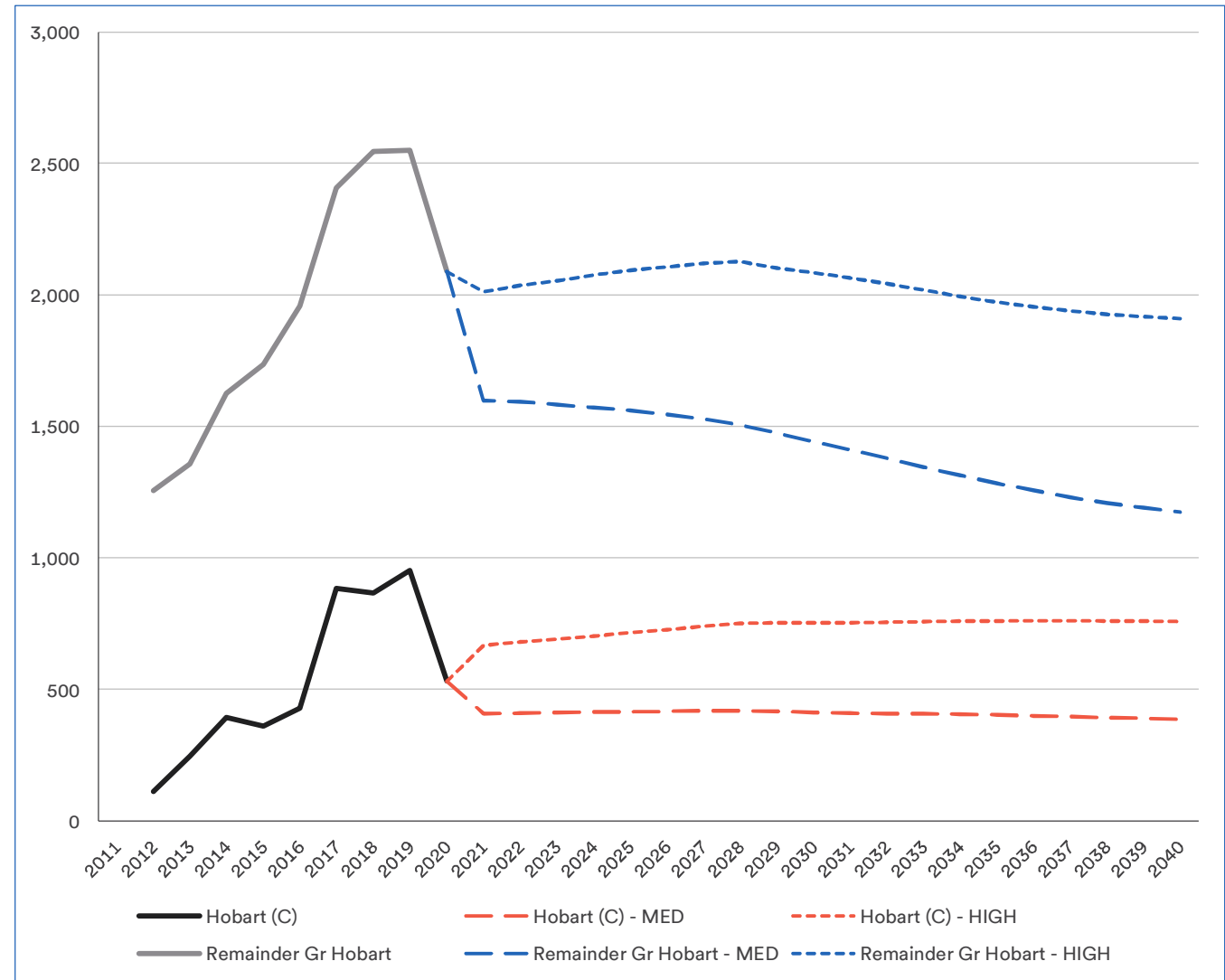
Figure 11 illustrates the implications of the DTF projections for Hobart LGA and for other LGAs within Greater Hobart, noting that the projections shown in the chart have not been adjusted for COVID-19 effects other than by incorporating the ABS base population estimates for 2020.

The chart shows that the Medium series prepared by DTF implies a significant slowing of population growth throughout Greater Hobart when compared against the pre-COVID trends seen over the period 2016 to 2019.

The implication is that the Medium projections may under-state the underlying demand from people willing to move to the region if recent trends (pre-COVID) are any guide.

Subsequent forecasts for the study area adopt the DTF High growth projections as they better reflect the likely underlying dwelling demand evident during the 2016-2019 period, and are more likely to reflect Tasmania’s attractive position as a lifestyle interstate migration destination. It is noted that even these projections may understate growth prospects given recent trends.

Figure 11—Annual population growth projections, DTF forecasts (rebased)



Source: ABS (to 2020); DTF LGA projections (rebased to 2020)



### 5.3 Study region definition

For the purposes of examining the residential market relevant to housing development on the Subject Site, data is presented for a core study region based on Statistical Area 2 (SA2) geographic units that together generally align with the City of Hobart.

Information is also presented for other LGAs within the Greater Hobart region; however, these areas are mainly characterised by low density separate house development within greenfield growth fronts, rather than medium and high-density development of the kind likely to evolve within the Subject Site.

Trends across the whole of Greater Hobart have been considered in the context of formulating projections of underlying dwelling demand.

Figure 12—Residential study region



Source: Deep End Services; Australian Bureau of Statistics; MapInfo

## 5.4 Population and dwellings

### Population trends and projections

Table 2 presents population forecasts within each of the defined study area sectors, with these forecasts generated with reference to recent growth trends and adopting the High forecast scenario prepared by DTF.

The forecasts incorporate projected impacts from COVID-19, which have been modelled at the local area level by considering the components of population change within each SA2 (ie NOM, NIM etc) and applying impacts derived from Federal Government assessments of state-level effects on population as published in budget papers.

Based on this analysis, the study area as a whole has a current population of 236,606 persons (as at June 2021) and is projected to reach 260,607 persons in 2030 and 277,193 persons in 2036.

The Core study area, which aligns with the City of Hobart, has an estimated population of 55,536 persons in 2021 and is forecast to reach 60,958 persons in 2030 and 65,497 persons in 2036.

As described on p31, these projections may understate actual population growth if trends revert to their pre-COVID levels during the period 2016-2019.

Table 2—Study region population, 2016 - 2036

Study area sector	2016	2018	2021	2024	2027	2030	2036
<b>Population</b>							
Sandy Bay	12,256	12,639	12,845	12,935	13,371	13,775	14,593
Hillside SA2s	11,046	11,550	11,997	12,272	12,852	13,458	14,683
Inner Hobart	28,839	29,723	30,694	31,310	32,491	33,725	36,221
<b>Core study region</b>	<b>52,141</b>	<b>53,912</b>	<b>55,536</b>	<b>56,517</b>	<b>58,714</b>	<b>60,958</b>	<b>65,497</b>
Glenorchy-Brighton	63,012	64,524	66,106	67,950	70,447	73,015	78,151
Clarence-Sorell	69,956	72,191	75,924	78,869	81,508	83,986	88,555
Kingborough	36,516	37,702	39,040	40,093	41,379	42,648	44,990
<b>Total</b>	<b>221,625</b>	<b>228,329</b>	<b>236,606</b>	<b>243,429</b>	<b>252,048</b>	<b>260,607</b>	<b>277,193</b>
<b>Population growth (no. per annum)</b>							
Sandy Bay	-	192	69	30	145	135	136
Hillside SA2s	-	252	149	92	193	202	204
Inner Hobart	-	442	324	205	394	411	416
<b>Core study region</b>	<b>-</b>	<b>886</b>	<b>541</b>	<b>327</b>	<b>732</b>	<b>748</b>	<b>757</b>
Glenorchy-Brighton	-	756	527	615	832	856	856
Clarence-Sorell	-	1,118	1,244	982	880	826	762
Kingborough	-	593	446	351	429	423	390
<b>Total</b>	<b>-</b>	<b>3,352</b>	<b>2,759</b>	<b>2,274</b>	<b>2,873</b>	<b>2,853</b>	<b>2,764</b>
<b>Population growth (% per annum)</b>							
Sandy Bay	-	1.6%	0.5%	0.2%	1.1%	1.0%	1.0%
Hillside SA2s	-	2.3%	1.3%	0.8%	1.6%	1.5%	1.5%
Inner Hobart	-	1.5%	1.1%	0.7%	1.2%	1.3%	1.2%
<b>Core study region</b>	<b>-</b>	<b>1.7%</b>	<b>1.0%</b>	<b>0.6%</b>	<b>1.3%</b>	<b>1.3%</b>	<b>1.2%</b>
Glenorchy-Brighton	-	1.2%	0.8%	0.9%	1.2%	1.2%	1.1%
Clarence-Sorell	-	1.6%	1.7%	1.3%	1.1%	1.0%	0.9%
Kingborough	-	1.6%	1.2%	0.9%	1.1%	1.0%	0.9%
<b>Total</b>	<b>-</b>	<b>1.5%</b>	<b>1.2%</b>	<b>1.0%</b>	<b>1.2%</b>	<b>1.1%</b>	<b>1.0%</b>

Source: Deep End Services; Australian Bureau of Statistics; Tasmanian Government population projections – High series (2019)

## Dwelling demand forecasts

Forecasts of underlying dwelling demand implied by the population projections shown in Table 2 are displayed to the right in Table 3.

These forecasts use Census data to estimate the number of occupied dwellings (with an assumption that average household size will decline into the future), and to account for unoccupied dwellings.

Overall, the modelling estimates that there are currently 110,810 dwellings within the study area, including 27,525 within the Core study region and 6,100 within the local Sandy Bay SA2.

Recent dwelling demand is estimated at 1,655 dwellings pa across the study area in the period 2016-18, with substantial decline expected due to COVID-19 effects.

Over the forecast period post-COVID, underlying dwelling demand across the study area is forecast to reach around 1,450 new dwellings per annum, including demand for 400 within the Core study region and 70-75 dwellings pa within Sandy Bay.

Development within the Subject Site has potential to compete for a share of the local underlying dwelling demand as well as a share of demand that might otherwise be expected to occur elsewhere in the study area, especially within other parts of the Core study region.

**Table 3— Underlying dwelling demand, 2016 to 2036**

Study area sector	2016	2018	2021	2024	2027	2030	2036
<b>Dwellings</b>							
Sandy Bay	5,795	5,985	6,100	6,155	6,380	6,590	7,015
Hillside SA2s	5,130	5,370	5,595	5,735	6,025	6,325	6,935
Inner Hobart	14,820	15,300	15,840	16,195	16,850	17,535	18,930
<b>Core study region</b>	<b>25,745</b>	<b>26,655</b>	<b>27,535</b>	<b>28,085</b>	<b>29,255</b>	<b>30,450</b>	<b>32,880</b>
Glenorchy-Brighton	28,275	29,000	29,790	30,700	31,905	33,155	35,665
Clarence-Sorell	32,750	33,855	35,695	37,175	38,515	39,785	42,165
Kingborough	16,570	17,135	17,790	18,315	18,950	19,585	20,765
<b>Total</b>	<b>103,340</b>	<b>106,645</b>	<b>110,810</b>	<b>114,275</b>	<b>118,625</b>	<b>122,975</b>	<b>131,475</b>
<b>Dwelling growth (no. per annum)</b>							
Sandy Bay	-	95	40	20	75	70	70
Hillside SA2s	-	120	75	45	95	100	100
Inner Hobart	-	240	180	120	220	230	235
<b>Core study region</b>	<b>-</b>	<b>455</b>	<b>295</b>	<b>185</b>	<b>390</b>	<b>400</b>	<b>405</b>
Glenorchy-Brighton	-	365	265	305	400	415	420
Clarence-Sorell	-	555	615	495	445	425	395
Kingborough	-	285	220	175	210	210	195
<b>Total</b>	<b>-</b>	<b>1,655</b>	<b>1,390</b>	<b>1,155</b>	<b>1,450</b>	<b>1,450</b>	<b>1,415</b>

Source: Deep End Services; Australian Bureau of Statistics; Tasmanian Government population projections – High series (2019)

## 5.5 Market context

The following sections present a range of underlying data relevant to understand the dwelling typologies and purchaser profiles that might support housing development within the Site.

### Demographic profile

The study region's demographic profile is shown in Table 4, with the key features as follows:

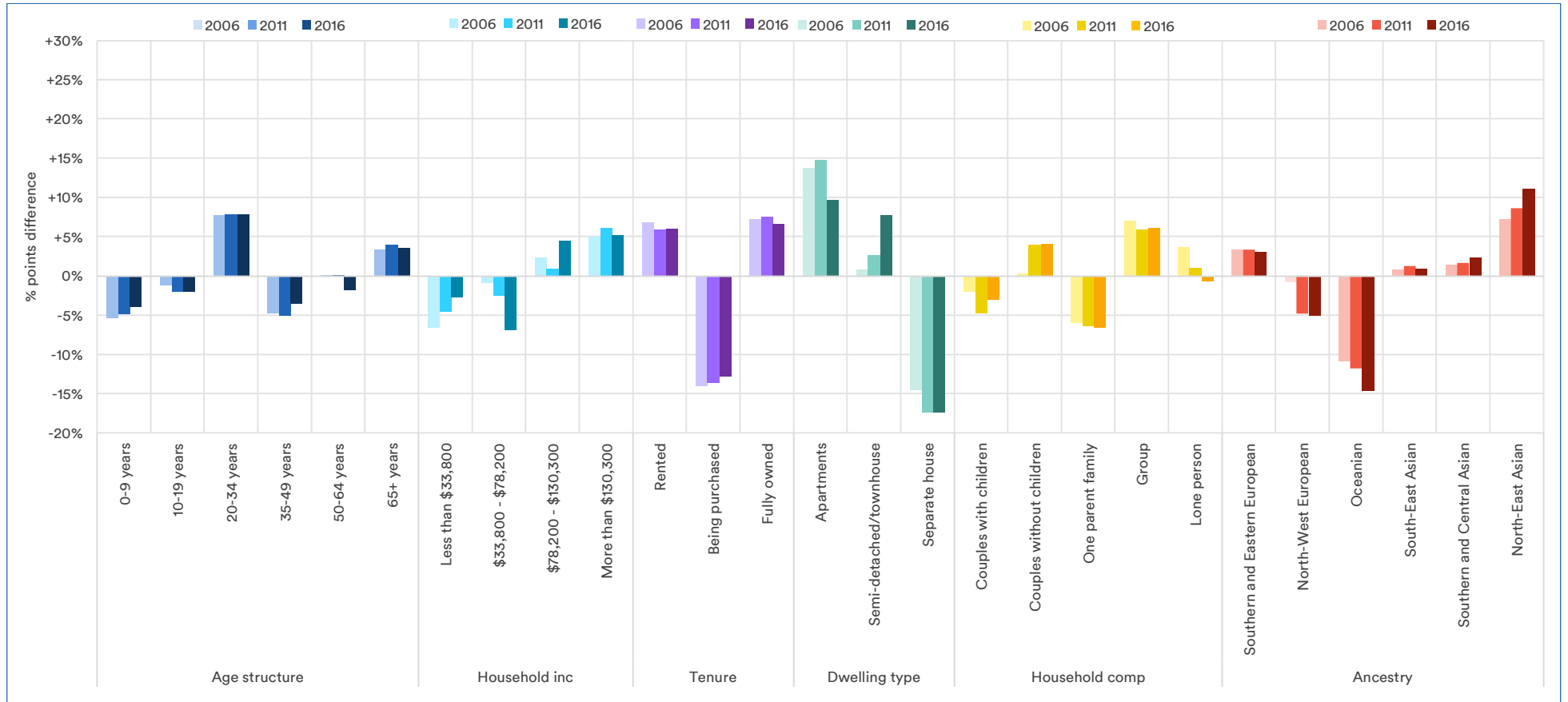
- Sandy Bay is characterised by larger family households and group households containing students and younger adults, with high incomes (on average) and more diverse birthplaces. The rental market is slightly higher than average.
- Hillside SA2s are generally similar but less likely to contain students and greater emphasis on separate family homes.
- Inner Hobart has a distinct profile reflecting the role of the CBD for younger professionals with a larger rental market and a higher proportion of lone households, but also containing some affluent areas close to CBD.
- The remainder of the Greater Hobart region is less affluent and with a more blue-collar focus by comparison (and especially in Glenorchy-Brighton), and is more ethnically homogenous.

Table 4—Study region demographic profile, Census 2016

Demographic characteristic (Census 2016)	Sandy Bay	Hillside SA2s	Inner Hobart	Glenorchy-Brighton	Clarence-Sorell	Kingborough	Greater Hobart LGAs	TAS
<b>Dwellings</b>								
Total private dwellings	5,357	4,641	13,681	27,449	30,980	15,826	97,934	241,742
Average household size	2.38	2.37	2.17	2.39	2.39	2.51	2.38	2.34
<b>Economic indicators</b>								
White collar workers	64%	67%	63%	37%	49%	55%	50%	45%
Bachelor degree or higher	44%	43%	37%	9%	17%	26%	22%	16%
<b>Age profile</b>								
0-9	8%	11%	9%	13%	12%	13%	12%	12%
10-19	10%	13%	10%	13%	12%	13%	12%	12%
20-34	27%	23%	24%	20%	17%	15%	19%	17%
35-49	15%	21%	20%	19%	19%	20%	19%	18%
50-64	18%	18%	20%	19%	21%	21%	20%	21%
65+	21%	15%	16%	16%	19%	18%	18%	19%
Average age	41.8	38.3	40.2	38.6	41.2	40.4	40.1	41.2
<b>Annual household income</b>								
Average household income	\$103,239	\$97,524	\$92,908	\$66,497	\$82,053	\$87,801	\$81,867	\$73,878
Variation from Tas average	+40%	+32%	+26%	-10%	+11%	+19%	+11%	-
<b>Country of birth</b>								
Australia	67%	78%	82%	90%	91%	84%	87%	87%
England	5%	5%	4%	2%	4%	6%	4%	4%
China	10%	3%	2%	0%	0%	1%	1%	1%
Other	18%	14%	13%	7%	5%	9%	8%	8%
<b>Occupied private dwelling tenure</b>								
Fully owned	41%	36%	31%	29%	37%	39%	34%	37%
Being purchased	24%	36%	29%	36%	40%	39%	36%	35%
Rented	35%	28%	39%	35%	23%	22%	29%	28%
<b>Dwelling type</b>								
Separate house	68%	78%	67%	84%	95%	93%	85%	88%
Townhouse/semi-detached	14%	10%	10%	5%	4%	5%	6%	6%
Apartment	18%	12%	23%	11%	1%	2%	9%	6%
<b>Household composition</b>								
Couples with children	24%	28%	23%	26%	28%	32%	27%	26%
Couples without children	31%	27%	26%	23%	29%	30%	27%	29%
One parent family	6%	9%	9%	16%	13%	11%	12%	12%
Lone person	29%	29%	35%	31%	28%	24%	29%	30%
Group	10%	7%	7%	3%	2%	2%	4%	3%
<b>Model of passenger vehicle (2019 Motor Vehicle Census)</b>								
Luxury	21%	14%	9%	5%	7%	9%	8%	7%
Non-luxury	79%	86%	91%	95%	93%	91%	92%	93%

Source: Deep End Services; Australian Bureau of Statistics

Figure 13—Sandy Bay SA2 – demographic comparisons against Greater Hobart 2006 to 2016



Source: Australian Bureau of Statistics (Census 2006, 2011, 2016)

## Dwelling structure

Table 5 presents information on the dwelling stock including housing typologies in the Core study region and across Greater Hobart, taking Census data in 2011 and 2016.

The data shows that separate houses account for most dwelling stock (73%) in the Core study region, with this proportion not changing significantly since 2011.

Medium density product (consisting of semi-detached, townhouses and units in blocks less than 3 storeys) accounts for 26% of stock, with high density (units in blocks 3 or more storeys) accounting for just 8% or around 2,000 units in the Core study region.

Medium and high-density product is clustered in Inner Hobart and Sandy Bay where this product accounts for around 36% of all dwellings.

Almost all high-density product (1,325 of 2,144 units across all of Greater Hobart) is located in Inner Hobart, with some also in Sandy Bay (459 units).

Table 5—Dwellings by type, Census 2011 & 2016

SA2	Dwelling type			Total	Dwelling type % of total		
	Separate house	Medium density	High density		Separate house	Medium density	High density
<b>Census 2011</b>							
Sandy Bay	3,404	1,399	475	<b>5,278</b>	64%	27%	9%
Inner Hobart	8,335	3,535	1,177	<b>13,047</b>	64%	27%	9%
Hillside SA2s	3,442	993	105	<b>4,540</b>	76%	22%	2%
<b>Core study region</b>	<b>15,181</b>	<b>5,927</b>	<b>1,757</b>	<b>22,865</b>	<b>66%</b>	<b>26%</b>	<b>8%</b>
Greater Hobart	76,473	15,212	1,864	93,549	82%	16%	2%
Tasmania	198,809	28,466	2,231	229,506	87%	12%	1%
<b>Census 2016</b>							
Sandy Bay	3,492	1,317	459	<b>5,268</b>	66%	25%	9%
Inner Hobart	8,580	3,657	1,325	<b>13,562</b>	63%	27%	10%
Hillside SA2s	3,525	943	157	<b>4,625</b>	76%	20%	3%
<b>Core study region</b>	<b>15,597</b>	<b>5,917</b>	<b>1,941</b>	<b>23,455</b>	<b>66%</b>	<b>25%</b>	<b>8%</b>
Greater Hobart	82,417	13,508	2,144	98,069	84%	14%	2%
Tasmania	209,264	26,357	2,627	238,248	88%	11%	1%

Note: Medium density = semi-detached and units less than 3 storeys, High density = units 3 storeys or more

Source: Deep End Services; Australian Bureau of Statistics;

## Change in dwelling structure

The tables to the right present information on changes in dwelling stock shown by data from the 2011 and 2016 Census.

Note that this information is difficult to interpret because of changes in the way that Census collection agents were instructed when recording dwellings as separate houses, townhouses and certain types of units. This has led to anomalous changes in dwellings stock defined as 'flats, units or apartments in a one or two storey block' and 'semi-detached, row or terrace house, townhouse etc with one storey', and likely over-estimates of growth in separate houses as a result.

Notwithstanding these limitations, the data suggests that most additions to stock were for separate homes, but that locally there was an increase in medium and high-density product in Inner Hobart.

Overall, this data highlights the fact that Hobart's higher density residential market was relatively immature at the time of the 2016 Census, particularly given that more examples of higher density development have occurred since then.

Table 6—Dwelling type growth, Census 2011-2016

SA2	Dwelling type			Total
	Separate house	Medium density	High density	
<u>Change 2011-2016</u>				
Sandy Bay	+88	-82	-16	<b>-10</b>
Inner Hobart	+245	+122	+148	<b>+515</b>
Hillside SA2s	+83	-50	+52	<b>+85</b>
<b>Core study region</b>	<b>+416</b>	<b>-10</b>	<b>+184</b>	<b>+590</b>
<b>Greater Hobart</b>	<b>+5,944</b>	<b>-1,704</b>	<b>+280</b>	<b>+4,520</b>

Table 7—Change in dwelling stock (% pts), Census 2011-2016

SA2	Dwelling type % of total (Census 2016)			Dwelling type change % pts (Census 2011-16)		
	Separate house	Medium density	High density	Separate house	Medium density	High density
Sandy Bay	66%	25%	9%	+2%	-2%	0%
Inner Hobart	63%	27%	10%	-1%	0%	+1%
Hillside SA2s	76%	20%	3%	0%	-1%	+1%
<b>Core study region</b>	<b>66%</b>	<b>25%</b>	<b>8%</b>	<b>+0%</b>	<b>-1%</b>	<b>+1%</b>
Greater Hobart	84%	14%	2%	+2%	-2%	+0%
Tasmania	88%	11%	1%	+1%	-1%	+0%

Note: Medium density = semi-detached and units less than 3 storeys, High density = units 3 storeys or more  
Source: Deep End Services; Australian Bureau of Statistics

### Building approvals

Building approvals data is presented in Figure 14 which shows the relative number and proportion of approvals by type since January 2019.

The chart below provides additional information on the annual trends in approvals within the Core study region, underlining the growth in development activity since 2016.

As indicated in the map, recent building approvals are focussed on broad hectare development in growth areas such as Rokeby in Clarence, with more diverse product delivered in inner city areas.

Since January 2019, a total of 689 dwellings were approved within the Core study region, of which 236 (or 34%) were for medium and high-density product, including 104 high density apartments in Inner Hobart, mainly within the CBD.

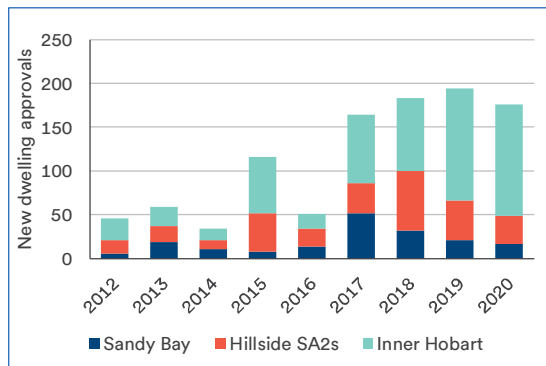
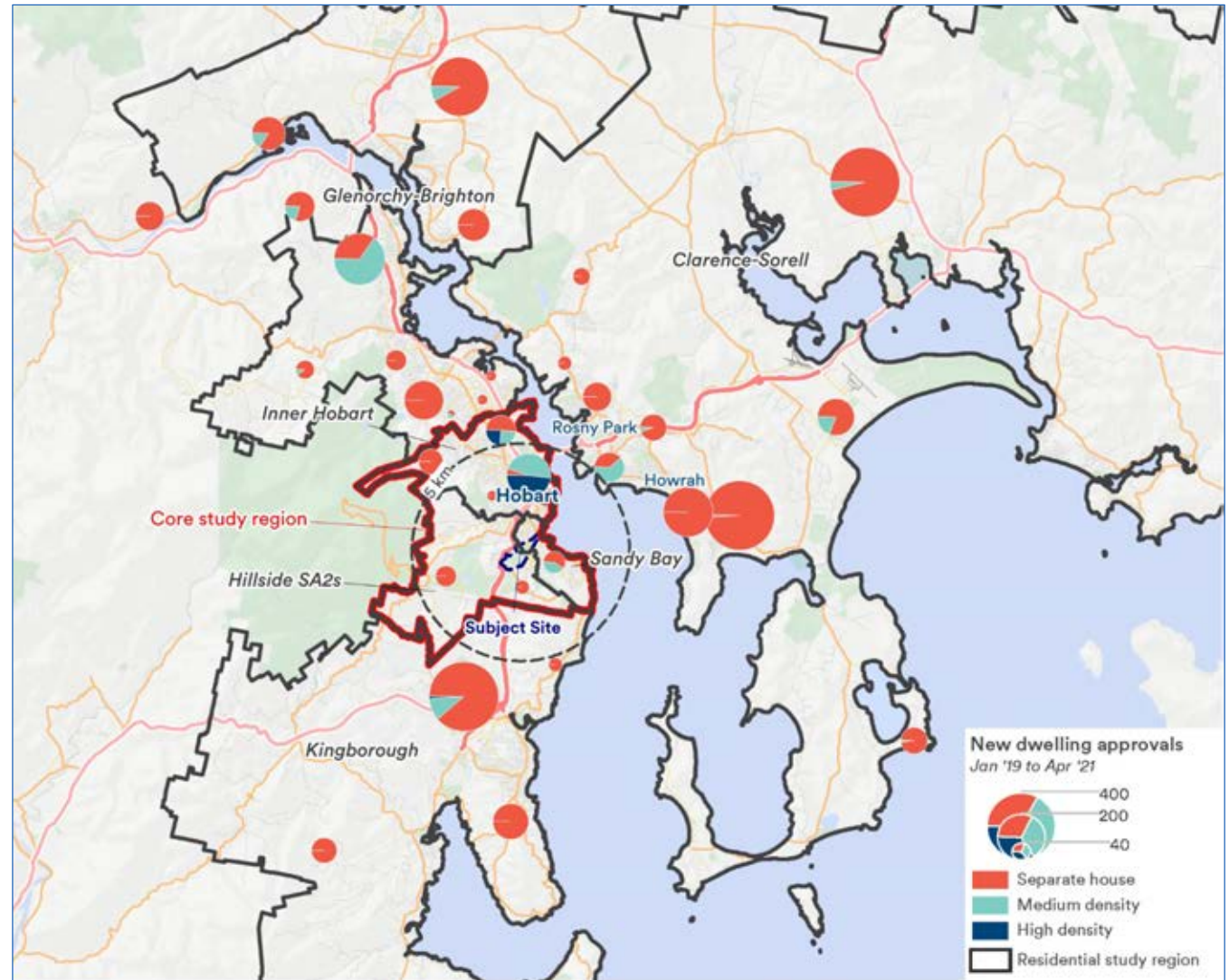


Figure 14—Residential dwelling patterns, January 2019–April 2021



Source: Deep End Services; Australian Bureau of Statistics, MapInfo



## House and unit price trends

Figure 15 and Table 8 present property transaction data for Sandy Bay and other relevant suburbs, drawn from information released by the Real Estate Institute of Tasmania (REIT).

The data shows that Sandy Bay is the second most expensive suburb in Hobart for both houses and units, with only Battery Point achieving higher prices.

Sales volumes for both houses and units has declined appreciably since 2017, which reflects wider trends as well as the fact that Sandy Bay is a tightly held suburb. This is likely contributing to price growth.

The median house price in 2020 was \$980,000 in Sandy Bay, but more recent data is understood to put the median in excess of \$1.2 million.

The median unit price was in excess of \$600,000, indicating potential to deliver an apartment product at reasonable price differential to underlying house prices.

Overall, price information indicates that house price movements are likely to be pushing home ownership out of reach of some demographic segments, increasing the opportunity for rental product to be delivered in formats and locations where people trade off location against dwelling size.

Figure 15—Sandy Bay suburb house and unit median price and sales volume, 2010 - 2021

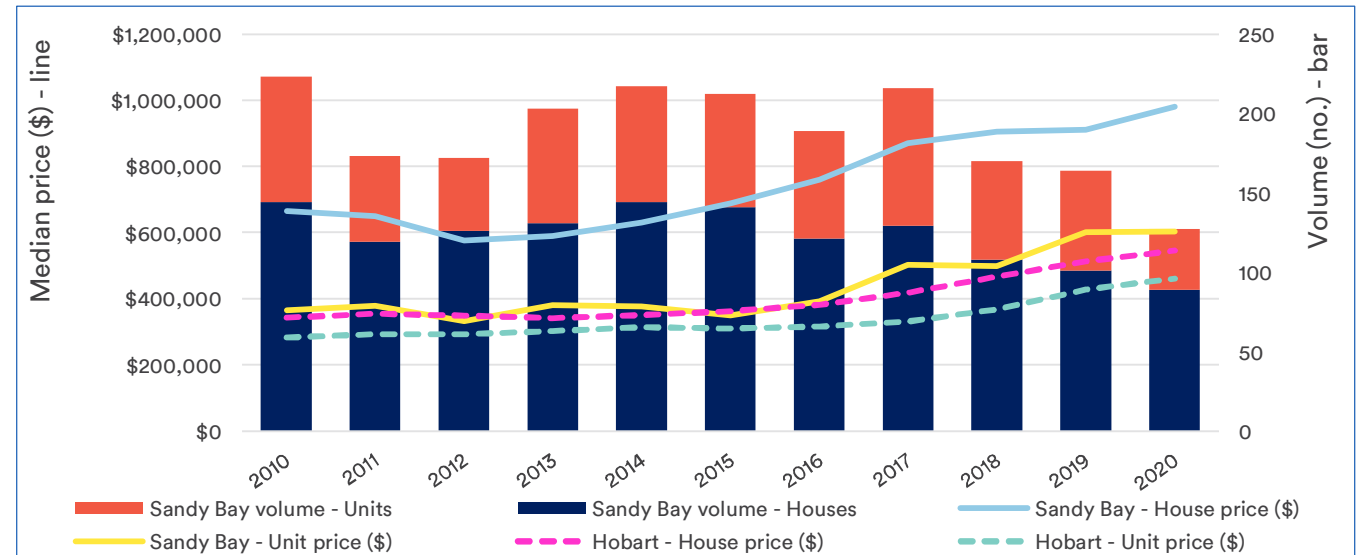


Table 8—Surrounding suburb profile, median house and unit prices, 2010 - 2021

Year	Sandy Bay		Battery Point		South Hobart		Mt Nelson		Dynnyrne	
	Houses	Units	Houses	Units	Houses	Units	Houses	Units	Houses	Units
2010	\$665,000	\$365,500	\$890,000	\$457,500	\$440,000	\$317,750	\$470,000	\$265,500	\$562,500	\$390,000
2011	\$650,000	\$377,500	\$638,000	\$340,000	\$410,000	\$295,000	\$541,000	\$222,750	\$465,000	\$280,000
2012	\$577,500	\$332,500	\$728,000	\$405,018	\$406,000	\$260,028	\$477,500	\$250,000	\$415,000	\$270,000
2013	\$590,099	\$379,500	\$850,000	\$400,000	\$436,000	\$328,000	\$503,750	\$261,000	\$460,100	\$282,500
2014	\$630,000	\$377,000	\$767,500	\$512,000	\$425,250	\$297,500	\$457,500	\$225,000	\$600,000	\$315,000
2015	\$688,000	\$350,000	\$910,000	\$405,500	\$445,000	\$288,000	\$490,000	\$260,000	\$476,000	\$285,000
2016	\$760,000	\$391,500	\$916,000	\$584,500	\$465,500	\$332,875	\$502,500	\$261,000	\$586,500	\$336,500
2017	\$870,000	\$503,000	\$943,000	\$560,500	\$615,000	\$399,000	\$650,000	\$300,000	\$700,000	\$383,000
2018	\$905,000	\$498,000	\$1,088,000	\$482,500	\$657,675	\$500,000	\$682,500	\$347,500	\$837,000	\$630,000
2019	\$910,000	\$600,000	\$1,250,000	\$665,000	\$685,000	\$392,000	\$678,000	\$395,000	\$795,000	\$395,000
2020	\$980,000	\$603,750	\$1,300,000	\$932,500	\$707,500	\$355,500	\$770,000	\$348,500	\$685,000	\$587,000

Source: Deep End Services; Real Estate Institute of Tasmania

### House and unit rents

The charts to the right show information from the REIT with respect to rental properties in selected suburbs, noting that 2021 data is only for the 6 months to June 2021.

The charts show that units are the dominant rental type, accounting for around 70% of rental stock across the selected suburbs as a whole. Within Sandy Bay, units typically account for a lower 65-70% while units are much more predominant in Hobart (90%) and Battery Point (75-85%).

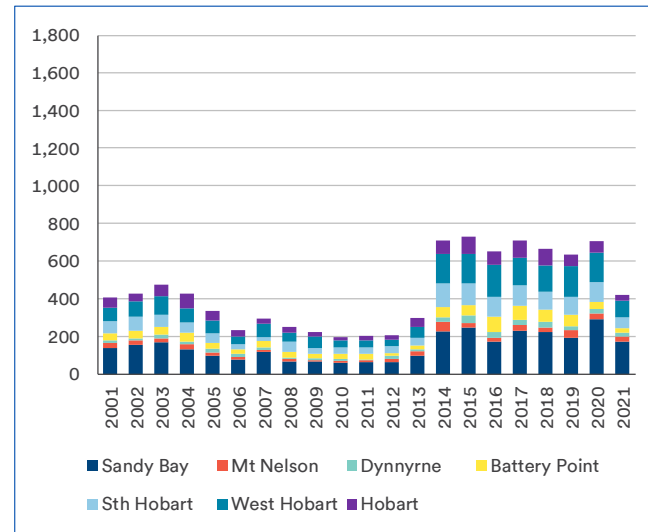
The overall number of rentals has averaged around 2,200 across these suburbs since 2014, and around 700 within Sandy Bay, peaking at 785 rentals during 2020, likely due to the net loss of overseas migrants associated with COVID-19.

Over the 2001-2020 period rental rates for both houses and units have risen strongly, at average annual rates of around 4.5-6.0% for houses and 5.5-6.0% for units.

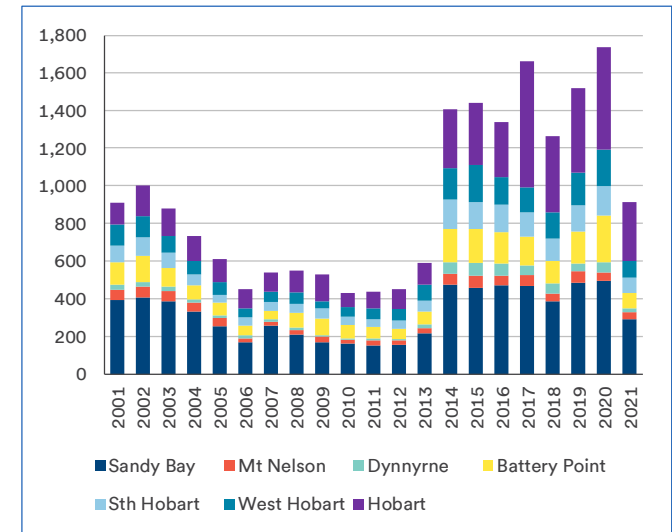
Rental growth for houses has been more consistent throughout the period, while variability is evident in unit rentals. However, there is an evident 'flattening' in rental rates over the period 2010 to 2015.

These levels of rental growth, while being healthy from a property market perspective, are much higher than income growth, leading to worsening rental affordability.

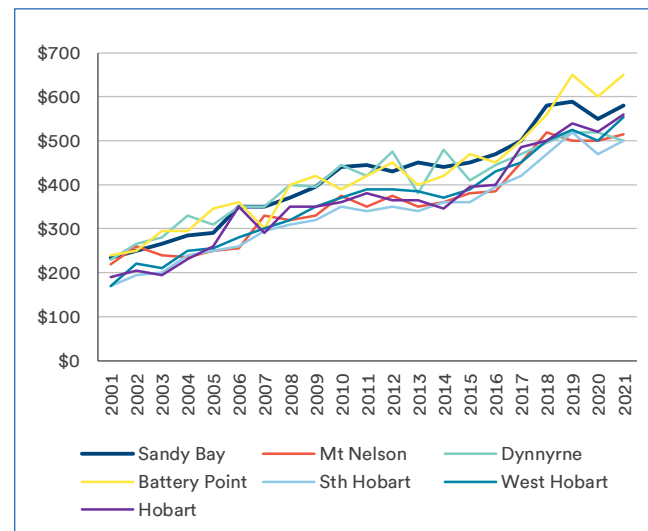
Number of house rentals



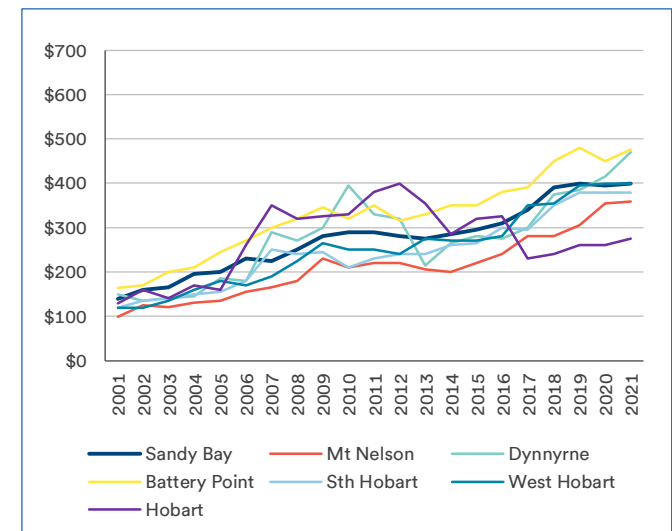
Number of unit rentals



Median house rents



Median unit rents



## Rental affordability

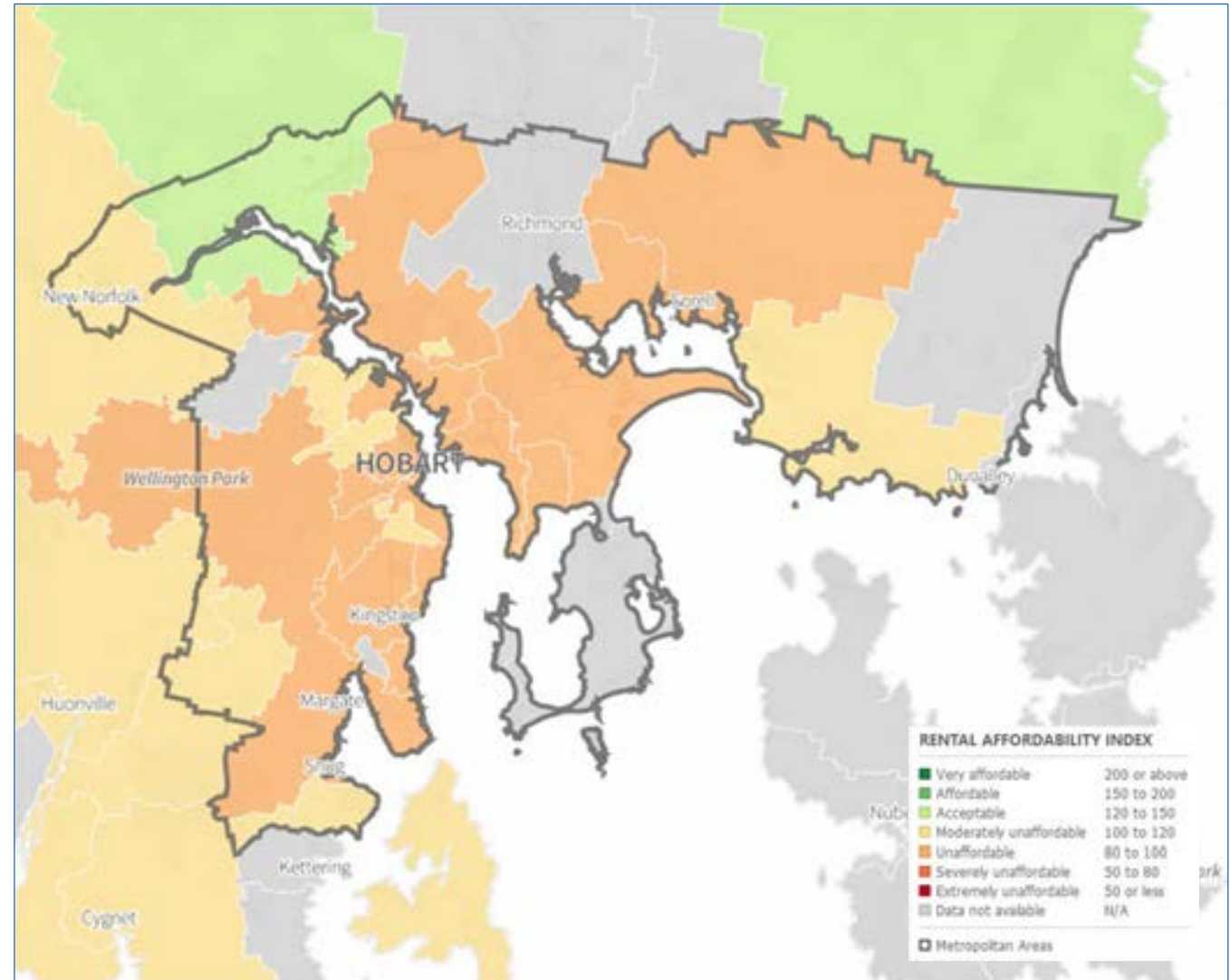
Figure 16 presents an illustration of rental affordability across the Hobart region which has been developed by SGS Economics and Planning in association with National Shelter, Bendigo Bank and the Brotherhood of St Laurence.

The map presents an index of affordability based on a calculation of the proportion of household income spent on rent, using the average rental household income of \$66,000 per annum in Greater Hobart.

According to the Rental Affordability Index (RAI) report, Greater Hobart is the least affordable metropolitan area in Australia, although affordability has improved slightly during COVID-19 due to downward pressure on rents.

The RAI report states that “*low incomes and an inadequate supply of rental housing continue to drive this decline in rental affordability in Hobart*”.

Figure 16—Rental affordability Hobart region



Source: SGS Rental Affordability Index (based on Hobart median annual household income for renters at \$65,000 ps)

## Apartment profile

Table 9 presents additional information on the size of unit dwellings within the Core study region, in terms of number of bedrooms.

The data shows that units in Sandy Bay tend to be larger, on average, than those in Inner Hobart where 1-bed and 2-bed product is more prevalent. In Sandy Bay higher density units in 3+ storey blocks account for a larger share of 2+ bedroom product.

Although this information is somewhat dated and not necessarily associated with recent apartment developments, the underlying message is that apartment delivery in a location such as Sandy Bay should be diverse to be attractive to some family households as well as to smaller lone person and couple households.

**Table 9— Number of bedrooms by dwelling type, Census 2016**

SA2	Units (1 - 2storeys)			Units (3+ storeys)			Total units		
	1 br	2 br	3+ br	1 br	2 br	3+ br	1 br	2 br	3+ br
Sandy Bay	37%	51%	13%	18%	71%	11%	28%	60%	12%
Inner Hobart	38%	46%	16%	36%	45%	19%	38%	46%	17%
Hillside SA2s	40%	46%	14%	33%	52%	15%	38%	48%	14%
<b>Core study region</b>	<b>38%</b>	<b>47%</b>	<b>15%</b>	<b>28%</b>	<b>57%</b>	<b>15%</b>	<b>35%</b>	<b>49%</b>	<b>15%</b>

Source: Deep End Services; Australian Bureau of Statistics

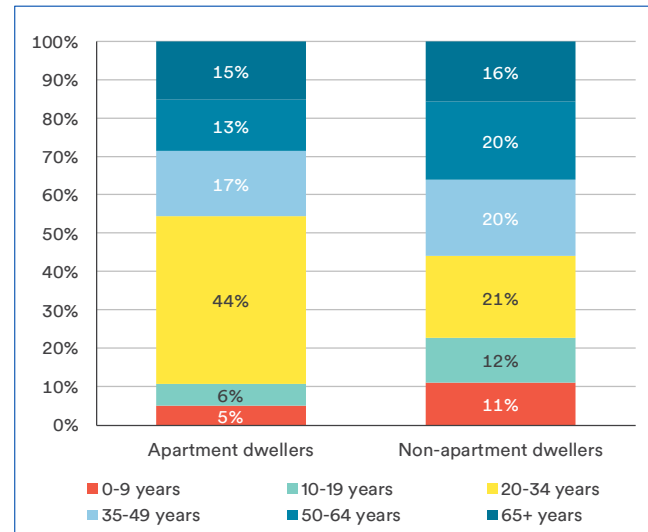
### Profile of apartment dwellers

The charts to the right provide information on differences in the demographic features of Core study area residents living in apartments compared to those living in detached dwellings or townhouses.

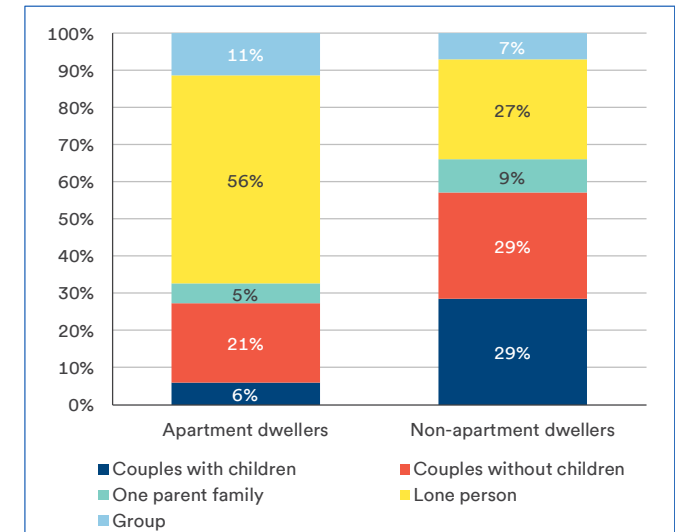
Of relevance are the following results:

- Apartment dwellers are younger on average, with a skew towards those in pre-family /higher education age groups (20-34 years)
- Average household income is lower for apartment dwellers, reflecting their price point (in terms of sale and rentals) and incidence of students
- Significant skew towards lone person and group households
- Overwhelming majority of apartment dwellers rent, at 78% compared to 25% for non-apartment dwellers.

Age structure



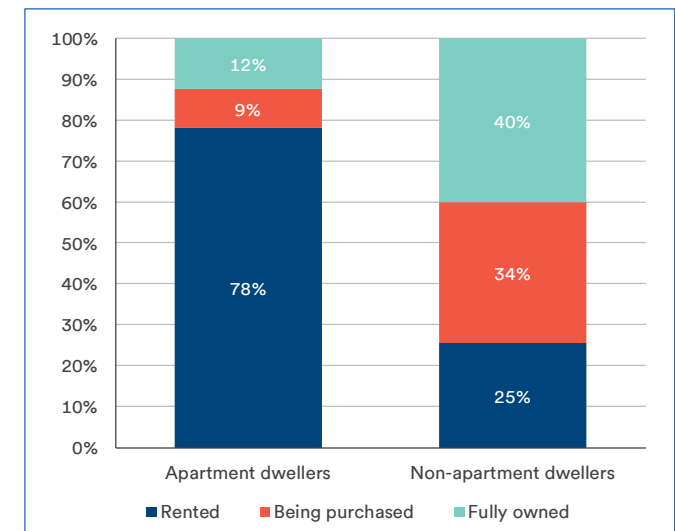
Household composition



Average household income



Tenure type



### Recent developments

Although the high-density apartment sector in Hobart is still somewhat immature, several projects are in various stages of development, bringing a new level of sophistication to the local residential market.

Examples are discussed to the right, noting that these are not directly comparable to the type of product likely to be released within the Subject Site.

#### *The Elliott*



Currently being marketed and with construction imminent, Elliot Apartments is located at 62 Patrick Street in the eastern edge of the CBD, and delivers 68 apartments with a mix of sizes including 23 3-bed units and 5 4-bed units.

#### *Ingomar Residences*



Ingomar includes 8 units within a converted heritage house and with 18 further boutique apartments, all in a mix of 2-, 3- and 4-bed configurations.

#### *The Commons*

The Commons is a 7-storey apartment development on Bathurst Street, 126 Bathurst Street, Hobart, completed during 2020 and offering 30 apartments in 1, 2 and 3-bed configurations.

The development has an emphasis on environmental efficiency with a net positive carbon footprint, and includes various amenities as well as ground floor café and commercial tenancies.



## 5.6 Development opportunity

### Dwelling demand

Residential development on the Site has potential to serve underlying demand generated from the Sandy Bay local area, as well as competing for a share of demand generated elsewhere throughout the identified Study area.

Analysis presented in section 5.4 shows that the Study area is forecast to generate average dwelling demand of around 1,450 new dwellings per annum in the longer term using the DTF High population scenario, including underlying demand for around 450 dwellings pa in the Core study area and 75 dwellings pa within Sandy Bay.

### Dwelling typology

Much of the forecast dwelling demand across the study area will be for affordable detached dwellings located elsewhere across Greater Hobart. A minority of future dwelling requirements will be for the types of homes likely to be suitable for delivery at the Subject Site.

These opportunities will include:

- Apartments targeted to younger professional renters willing to trade location against size of residence or seeking to enter the Sandy Bay market without being able to afford existing product on offer.
- Older people wishing to downsize from larger existing homes in the area.
- Families that may be living in Hobart on shorter-term arrangements and may be seeking high quality residences.

Most of the product delivered on the Site will be medium or high-density development. This type of product has historically only accounted for a small proportion of dwelling development in Sandy Bay and across most of Hobart, but there are few opportunities to deliver additional small-scale detached dwellings in Sandy Bay, so that most of the future growth is likely to comprise multi-unit formats.

Moreover, building approvals data shows that a large share of new development in Inner Hobart consists of apartments and medium density developments, and there is strong potential for the Subject Site to compete for a share of this market, emphasising the attractive local aspect.

Having regard for current approvals by type (with 35% of approvals in medium and high-density formats in the Core study region) and with potential for this share to increase over time, the underlying demand for dwellings of the type that may be constructed at the Site is forecast to be approximately 270-290 new dwellings per year, representing 20% of dwelling demand across the study area.

Development at the Site has potential to capture a substantial share of this market given its attractive attributes. This is sufficient to support an average 'roll-out' of approximately 70-95 dwellings per year, or around 1,400 to 2,000 dwellings over a 20-year project horizon (or more over a longer development period).

### Build to rent sector

Residential development on the Site has potential to incorporate build to rent (BTR) product; this is a new and emerging asset class in the property sector that is currently gaining significant momentum in Sydney and Melbourne.

The sector is characterised by larger projects delivering single ownership managed rental properties with a very high degree of amenity and property management and an emphasis on shared features such as dining areas and kitchens, recreational facilities, gardens, and so on.

In its current model as it applies to the Australian context, the BTR sector tends to target a younger Millennial demographic who may be unable or unwilling to enter the property market and places a high value on locational attributes and the community aspects of the shared amenities. Delivery of these features is generally at the expense of apartment size and extent of private open space, and this is also reflected in the rental price being more affordable given the location of the product.

Other opportunities are likely to emerge that target other demographic groups, including older downsizers who might value a secure, managed property with a wide range of shared amenities.

Throughout Australia, more than 40 BTR projects have emerged in the pipeline, totalling over 15,000 apartments, according to research by EY. The average size and scale of each of these projects is 365 apartments, highlighting the requirement for sufficient scale to support the level of

shared infrastructure (although there are some smaller co-living projects being delivered, for example by UKO).

Examples of BTR projects include:

#### *LIV Indigo, Sydney*

- Developed by Mirvac at Sydney's Olympic Park.
- Part of a wider \$460 million mixed-use development, with a total of 700 apartments.
- Two of the blocks (or 315 apartments) have been allocated for BTR.
- One bedroom apartment weekly rental starts at \$535 per week, while two and three bedrooms start at \$615 and \$900 per week, respectively.

#### *Union Quarter, Melbourne*

- In Spotswood, 7 km west of the Melbourne CBD.
- Developed by Suleman Group and comprises 300 purpose-built BTR units across several buildings, with heights between three and eight storeys.
- Housing mix will include one and two-bedroom apartments, with a selection of larger loft-style homes.
- Part of mixed use development with Woolworths, Dan Murphys and other ground floor specialty retail, cafes and health and fitness.



### *Northbank, Melbourne*

- A Mirvac development in the Melbourne CBD at 7 Spencer Street.
- The project will comprise a 20-storey office building with 45,000 sqm of office floorspace, and a 32-level BTR tower with 472 apartments.
- The BTR tower will be known as ‘LIV Aston’.
- Northbank will begin construction in late 2021, with project completion expected in 2024.
- The BTR component will include a selection of studio, one, two and three bedroom apartments, as well as a suite of amenity for residents and visitors including “a pool, gym, co-working spaces, multimedia and wellness rooms, business lounges, entertaining spaces and a dog park”.

### *Pitt Street, Sydney*

- Developed by Oxford Properties Group and located on Pitt St in the heart of Sydney, this BTR development will include 234 apartments with a range of one, two and three-bedroom options.
- Oxford Properties has a built to rent portfolio of 12,000 apartments globally, with Pitt Street being the company’s inaugural BTR development in Australia.
- The project is scheduled for completion in 2023.

### *Summary*

Although in its nascent form the BTR sector has focussed on younger age groups, there is likely to be increased scope to deliver product to people later in the family lifecycle, particular older couples and singles who may wish to unlock equity in their traditional home and move into a more ‘managed’ model of living.

Overall, the BTR model has some applicability to Sandy Bay, particularly having regard to factors such as:

- Strong price growth for traditional housing formats, meaning that an increasing section of the market is effectively ‘priced-out’ of home ownership in attractive locations such as Sandy Bay, and may be attracted by a rental model where other amenity features are available.
- Healthy rental market with strong growth in rental rates.
- An ability to deliver a range of community-enhancing shared infrastructure and amenities, which is consistent with the range of facilities planned to be on offer at the Site as it develops.

While BTR has some opportunity at the Site, it is noted that the depth of the market is relatively untested in a smaller market like Hobart.

### Other product types

A detailed analysis of the retirement living and aged care sectors is included within the HBU report based on examination of older age groups and their accommodation needs later in life.

This section reviews the analysis presented in the HBU and draws out the implications for the Site.

### Retirement living

In terms of the opportunity for retirement units (‘independent living units, or ILUs’) to be developed, the following analysis is presented in the HBU study:

- Growth in demand is likely to eventuate due to ageing of the population across most of the study area, including in Sandy Bay
- There are currently around 455 ILUs across Hobart (C) including 199 within Sandy Bay
- Many of these are full and have waiting lists, potentially indicating latent demand
- Retirement living ‘penetration rates’ are generally fairly high in the local area
- Penetration rates are expected to increase in the future, leading to an emerging opportunity for additional ILU provision

Based on our review of the HBU analysis, over the longer term there is strong potential for additional ILUs to be delivered at the Site, with potential for up to an additional 200-250 delivered to serve the emerging demand.

### Aged care

The HBU report provides an assessment of the opportunity for aged care beds based on:

- Projected population growth in key age cohorts
- Application of standard aged care provision rates to determine future bed demand
- Existing supply of residential aged care beds within Hobart (C).

Based on our review of the HBU analysis, we confirm that there is an opportunity to add to aged care bed provision at the Subject Site given its attractive features and planned improvements in local amenity (medical, retail, services, etc). Given these attributes, the opportunity could involve in the order of 50-100 beds delivered on the Site over time.

### Affordable housing

Although not examined in the HBU report, there is likely to be potential for housing development within the Site to respond to current affordability pressures by delivering some affordable housing. This could be in the form of lower rental product such as would be delivered under a BTR format, or could include other forms of social or affordable housing.

## 5.7 Findings and implications

Overall, the analysis presented in this section provides support for the following residential development outcomes:

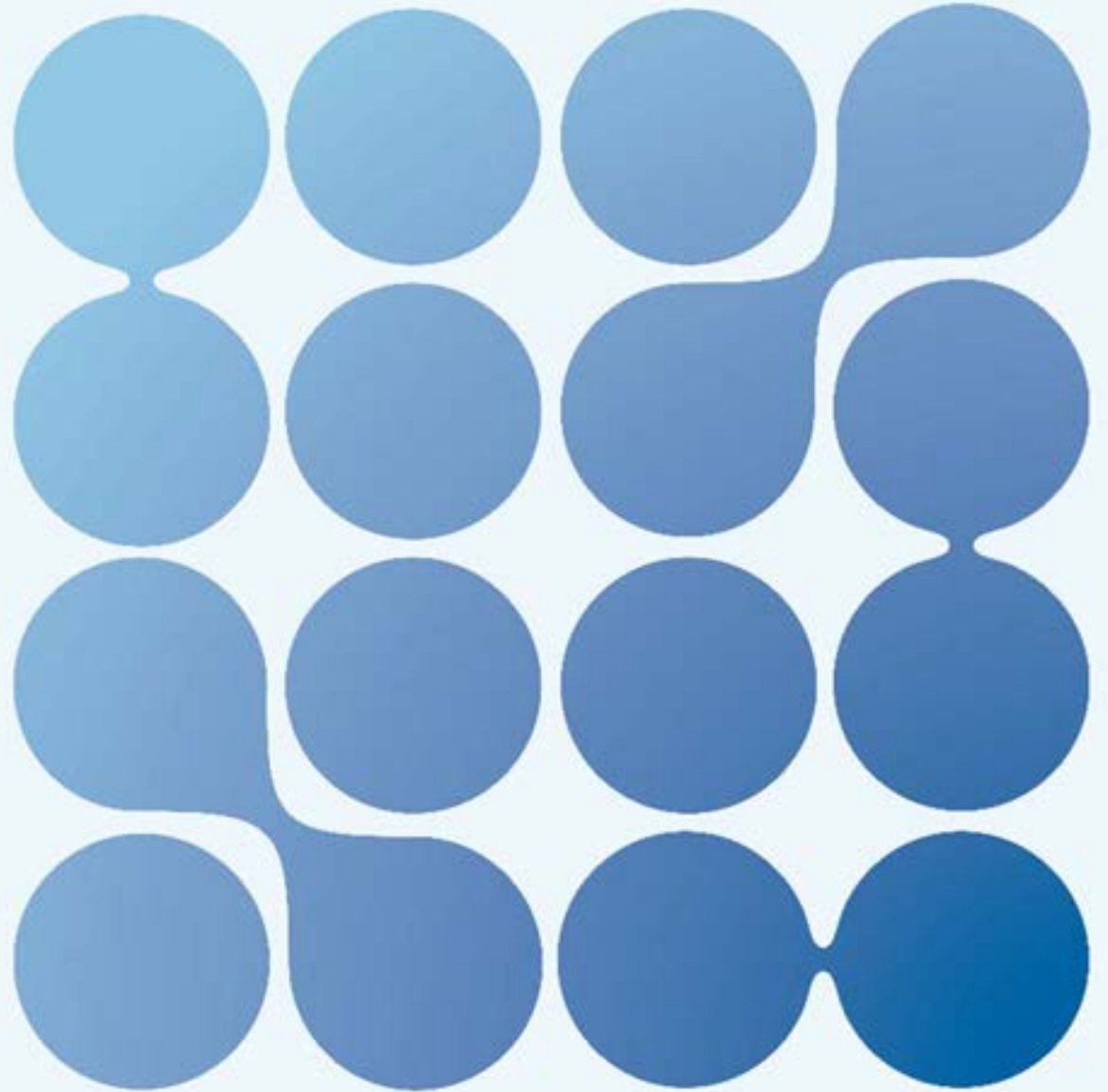
- A significant residential component consisting mainly of medium and higher density housing formats ranging from townhouses to mid-rise or even high-rise apartment blocks.
- Modelling indicates an average dwelling absorption rate of around 70-95 dwellings per year, supporting in the order of 1,400 to 2,000 residential dwellings over a 20-year project, or greater volume if the delivery timeframe is longer.
- Note that this figure is presented as an overall guide to development rates, and could be influenced by the particular tenure arrangements and the depth of demand within markets such as BTR if that was a product class targeted in the delivery model.
- The housing product should be as diverse as possible, ranging from studio apartments (or even smaller BTR formats) through to townhouses with 3 and 4-bed configurations for high quality professional family homes.
- The residential product could also incorporate some retirement housing, with potential for up to around 250 ILUs to be included across the Site.
- A component of aged care would also be appropriate, with around 50-100 beds accommodated over time as demand warrants.
- The Site has potential to deliver affordable housing through a BTR model, or possibly in more traditional formats including through some social housing.

In terms of the spatial delivery of residential housing across the Site, opportunities include:

- Some mid-rise apartments within Precinct 1 where such development can leverage from the excellent position close to the Derwent River and other nearby amenities.
- Redevelopment of some of the buildings within Precinct 2 for mixed use including potentially apartments above commercial ground floor offices, or purpose-built SOHOs for modern live-work formats.
- A strong residential component within Precinct 3 where existing and expanded retail and community services can be delivered close by, and with potential for medium density product and townhouses to be incorporated on the lower slopes of Mount Nelson.
- Redevelopment of some of the buildings within Precinct 4 for mid-rise apartments, especially close to Churchill Avenue, and the retention of the student accommodation.
- Range of potential housing formats within Precinct 5 within an attractive setting.

# 6

Commercial office



## 6.1 Approach

The Site is envisaged to become a truly mixed-use precinct incorporating a range of employment-generating uses including commercial offices, in the form of refurbished tenancies and new builds.

Commercial office development generally comes in the following forms:

- Corporate-style office floorspace, generally involving larger floorplates often over multiple levels, either leased or purchased
- Government departments and agencies, ranging from local municipal branch offices, state government agencies, federal offices such as ATO or Services Australia, or employment agents
- Smaller floorplates typically made available as strata purchases, or leased, and mainly taken up by local or regional firms, often in legal and accountancy sectors
- Micro offices suited to smaller users taking up space in strata developments or as small leased tenancies, typically run by local small business owners.

Opportunities for attracting investment in each of the above office sub-markets in any location depends on factors including:

- The underlying attributes of the Site as a locality for office development, including road and public transport access, connections with other business districts, etc
- The size of the skilled white-collar workforce in the surrounding region
- The competitive context, including existing established office precincts and approved or planned developments.

The following sections provide discussion on these underlying factors, along with commentary and analysis of the strength of demand for development on the Subject Site.

These assessments are prepared in the context of the HBU recommendation for 16,000 sqm to 22,000 sqm of office floorspace, including co-working space, within the Site.

## 6.2 Site attributes

The Subject Site has the following attributes as a location for office development:

- An attractive precinct in a mixed use setting that might suit small businesses seeking boutique local offices
- New businesses created as the local population grows and people move into the Site and seek to live and work in proximity
- Firms relocating from shop-top or street-front tenancies or expanding out of a home-based location
- Mid-sized organisations attracted by the local environment and the style of offer likely to be presented
- Firms seeking lower-cost entry into refurbished space as an alternative to CBD corporate leases.

Having regard to these attributes, the opportunities at Sandy Bay are likely to be limited to small and micro businesses and organisations across professional, technical and scientific sectors.

The Site is unlikely to attract corporate style offices, which are better suited to a CBD location, and would not be a contender for regional or sub-regional offices for government departments and agencies.

## 6.3 Commercial office demand

### Office workforce growth

An indicative analysis of the underlying future demand for new floorspace to accommodate white collar workers is set out in Table 10 based on the following inputs:

- DTF population projections under the High scenario
- Expected decline in the ‘crude’ participation rate (employed workforce as a proportion of population) as the population ages
- Expected increase in the share of the workforce employed in white collar industry sectors.

The analysis shows that the white-collar workforce in the study region is forecast to increase by nearly 5,000 people over the period 2021 to 2036 at a rate of around 300 new white-collar workers per year.

If the growth in the white-collar workforce is translated into office floorspace requirements, using a broad average of 20 sqm per worker, this implies an average requirement for around 6,000 sqm of office floorspace per year, or a cumulative total of 94,000 sqm from 2021 to 2036.

Development on the Subject Site has potential to compete for a share of this market, although mainly limited to the small business sector.

**Table 10—White collar office floorspace projections**

Study region	2016	2021	2026	2031	2036
Greater Hobart LGAs population	221,900	237,404	251,291	265,541	279,316
Crude participation rate	44.5%	43.9%	43.4%	42.9%	42.3%
Resident workforce	98,750	104,300	109,050	113,800	118,200
White collar %	14.6%	15.3%	16.0%	16.7%	17.5%
White collar workers	14,430	15,940	17,430	19,020	20,660
<b>Growth</b>					
Additional white collar resident workforce	-	280	310	330	330
<b>Annual growth in floorspace requirement (sqm)</b>	-	<b>+5,600</b>	<b>+6,200</b>	<b>+6,600</b>	<b>+6,600</b>
<b>Cumulative</b>		<b>+30,200</b>	<b>+29,800</b>	<b>+31,800</b>	<b>+32,800</b>

Source: Australian Bureau of Statistics; Department of Treasury and Finance; Deep End Services

### Small business opportunities

Research conducted by Deep End Services on behalf of other clients has found that the major demand for small-scale commercial offices (including leased and strata titled product) comes from small businesses employing fewer than 20 workers and operating in particular industry sectors (finance, real estate, professional and technical services, etc). These people seek premises within around 10-15 minutes travel time from their residential address.

### Residence of small business owners

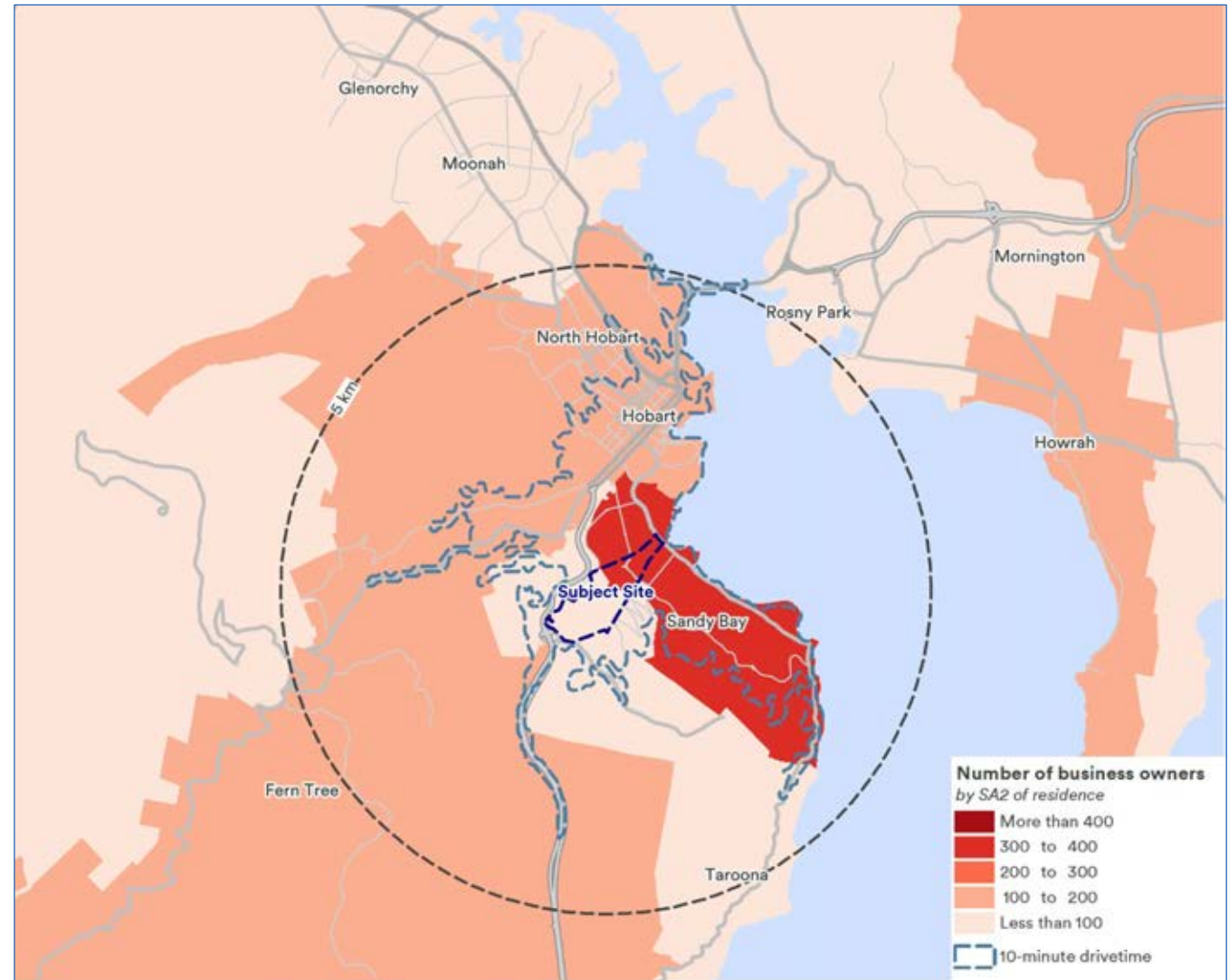
Figure 17 shows the numbers of owners of small businesses operating in the key industry sectors that generate most demand for commercial office space.

The map shows that Sandy Bay has the largest concentration of these key small business owners in the Greater Hobart region.

These business owners represent an opportunity to provide well-located small office premises close to their residence.

The Site's prominence and attractive features means that it has potential to attract office demand from small business in a wider region surrounding the Site.

Figure 17—Residential location of key small business owners (2016)



Source: Deep End Services; Australian Bureau of Statistics



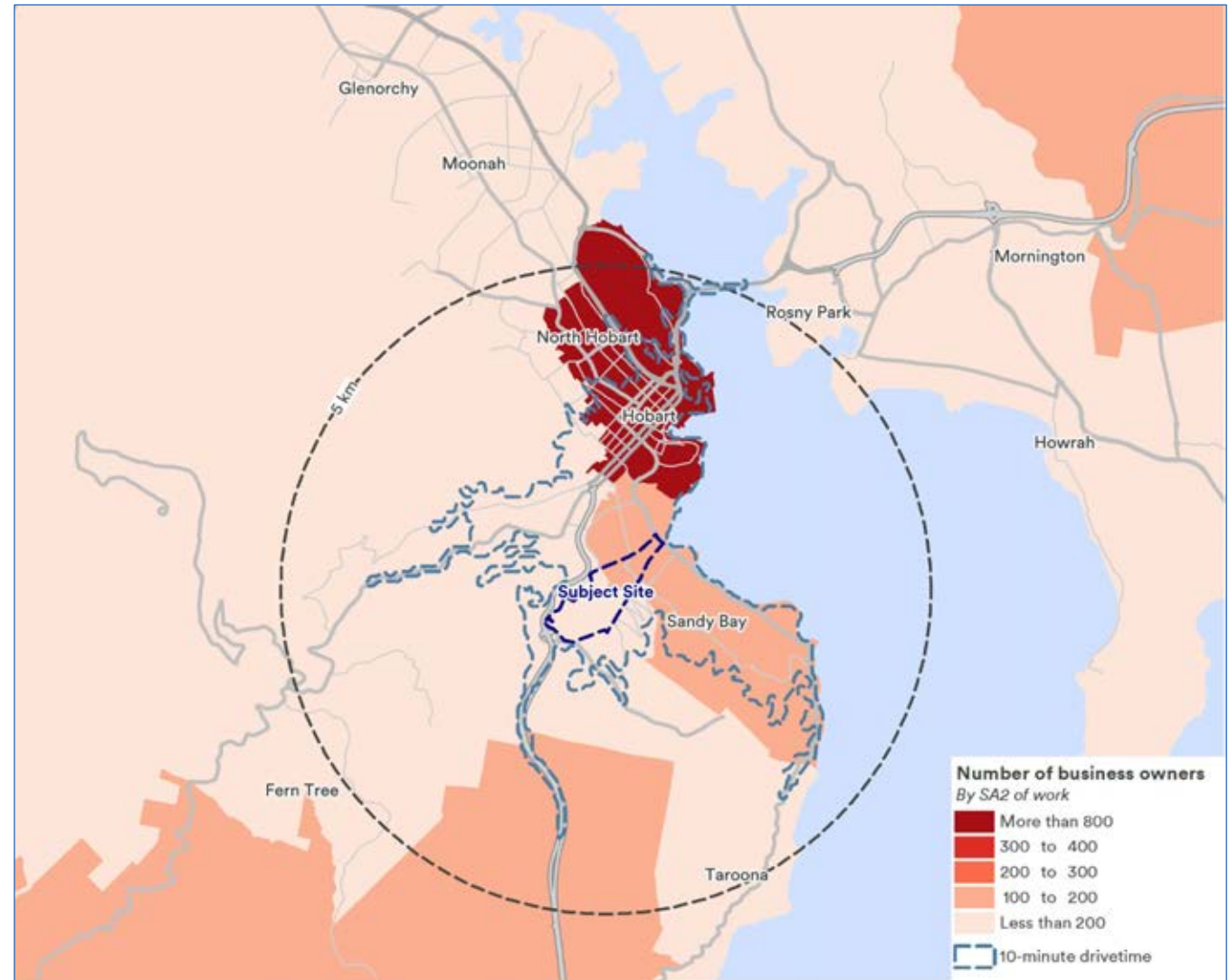
### Place of work of small business owners

Figure 18 shows the location of work for small business owners in key industry sectors.

The relatively small number of business owners that work in Sandy Bay and surrounding areas outside the CBD indicates that few suitable office tenancies are being provided locally to meet the needs of such businesses, with office space within the Hobart CBD the only option. Importantly, this may not be the preferred location or model for many of these businesses, highlighting a market segment that may generate demand for office space delivered on the Subject Site.

This analysis confirms that the Site is likely to be an attractive office sub-market for a small business sector seeking attractive premises in a mixed-use precinct with a range of amenities nearby and potential to live and work within the Site.

Figure 18—Location of work for key small business owners (2016)



Source: Deep End Services; Australian Bureau of Statistics

## 6.4 Commercial office provision

Commercial office provision is concentrated within the Hobart CBD where total available office space is in the order of 360,000 sqm (noting that this figure does not include smaller premises that do not fall within the Property Council of Australia Office Market Report coverage).

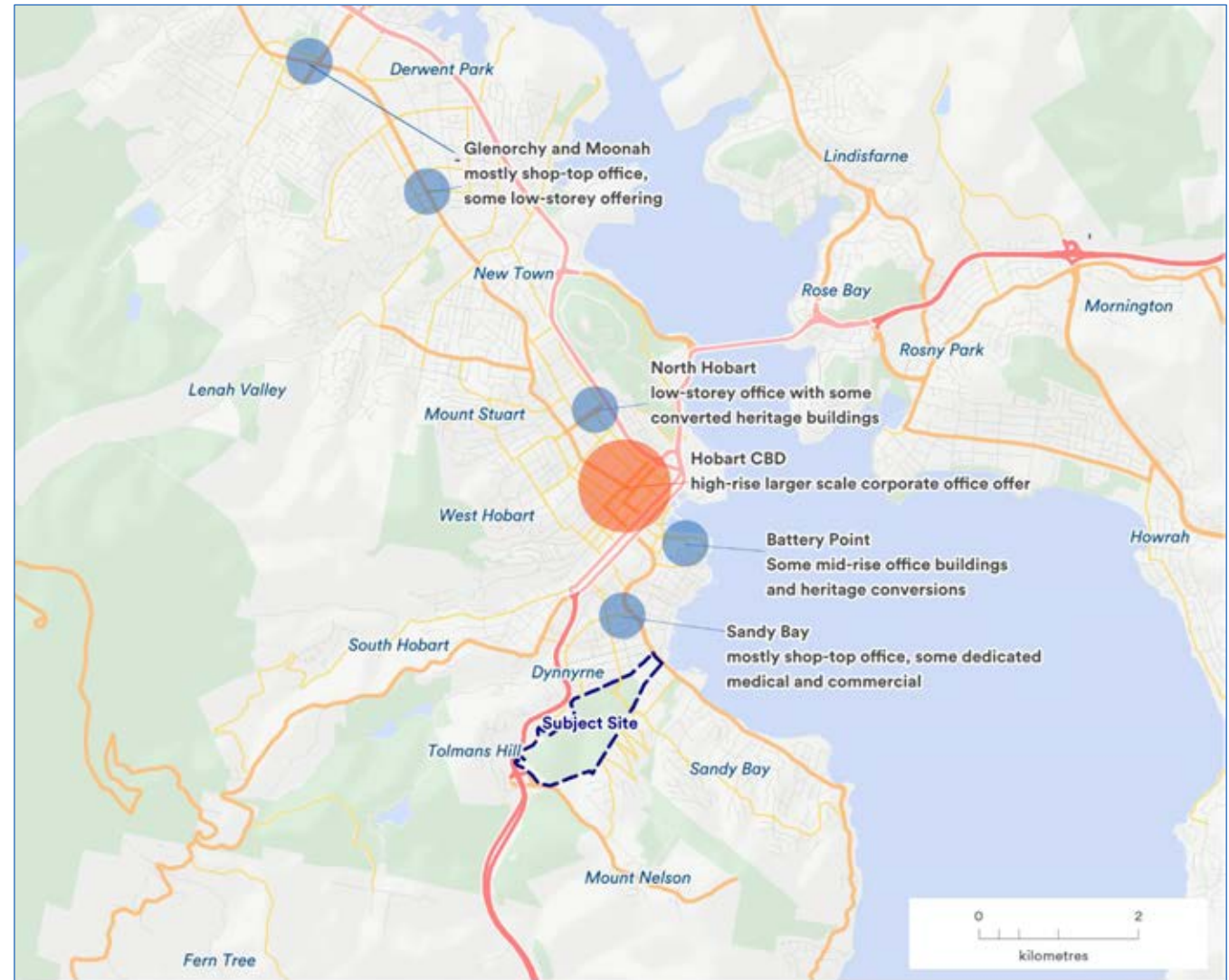
Hobart's office sector is heavily weighted towards government departments and agencies, with the recent completion of Parliament Square (around 17,000 sqm of floorspace) the main addition to supply in recent years.

The lack of recent supply has led to a significant tightening of occupancy rates, with vacancies at just 5.1% in 2021, the tightest CBD market in the country according to PCA.

Notwithstanding these low vacancy rates, no significant additional supply is identified other than a range of refurbishments, although approval was previously granted for 20,000 sqm of office space at 155-167 Liverpool Street (this project is now being reformulated with input from Mona and DarkLab).

Future commercial office space will also be delivered within the Macquarie Point precinct, although this is expected to have a focus on Antarctic research and science organisations.

Figure 19—Commercial office precinct distribution



Source: Deep End Services; MapInfo; realcommercial.com.au

## 6.5 Office development opportunity

As noted in the discussion above, the main commercial office opportunity for the Subject Site will be for small and micro business owners that are seeking more attractive suburban locations rather than a position within B or C grade CBD offices, and who might value the mixed-use setting on offer within the Site.

The formats relevant in attracting these types of businesses is likely to range across:

- Introduction of co-work office space, which suits businesses requiring flexibility and which do not wish to invest in longer commercial leases
- Individual small premises made available for lease, noting that in the normal course of events the small and micro office market is also provided with strata title product which can suit some businesses in terms of their investment and superannuation strategies
- More innovative mixed-use models which might comprise SOHO and other live-work formats that suit some segments of the micro business market, particularly those in creative and professional industries.

Consideration has also been given to establishing an innovation or research hub. This may have potential from the perspective of the physical setting, which would be expected to attract these types of uses. However, an innovation hub is often underpinned by institutional uses such as Universities, and with the transition of UTAS to the CBD the prospects for establishing an innovation hub are likely to be somewhat lower.

In terms of the scale and delivery of office development, workforce modelling suggests that there is an ongoing opportunity for in excess of 6,000 sqm per annum of new office floorspace across various geographies and formats in Greater Hobart over the forecast period. This is equivalent to around 120,000 sqm or so over the next 20 years (or more if a longer time frame were considered).

Given the limited role that the Site would have for most traditional office types, the volume of development within the Site over that period might be in the order of 10-15% of the total market, which is equivalent to approximately 12,500 sqm to 18,800 sqm of floorspace delivered over the next 20 or so years. This conclusion is generally consistent with the recommendations from the HBU study.

## 6.6 Findings and implications

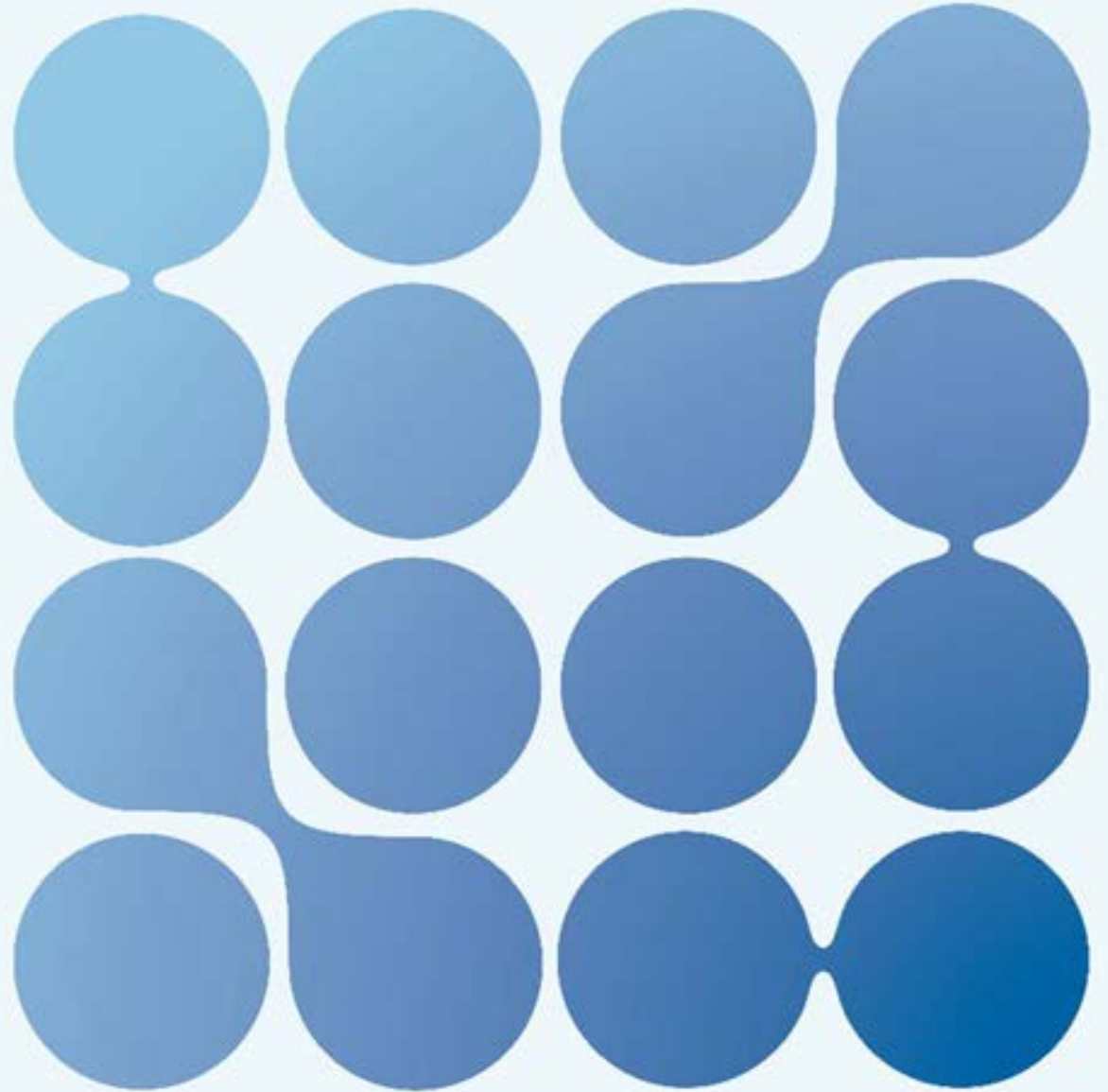
In summary, the analysis provides indicative support for approximately 12,500 sqm to 18,800 sqm of office floorspace to be accommodated on the Site over a 20-year project horizon.

In terms of the spatial distribution of office development, our recommendation is that the large majority is centred within Precinct 2 where office workers are provided with a range of amenities including local retail services, community facilities and other uses that help to support the attractiveness of the location for small office businesses. There may also be some offices within Precinct 1 as part of a mix of potential uses in that part of the Site.

Note that these recommendations with respect to commercial office opportunities are in addition to any of the opportunities examined later in this report with respect to sports administration functions, professional medical suites and other uses that could potentially occupy commercial space within the Site.

# 7

Retail



## 7.1 Approach

This section presents market analysis to assess the opportunity and potential scale of retail uses to be incorporated across the Site.

The analysis is undertaken in the context of the HBU assessment which identifies a relatively small retail opportunity of just 2,000 sqm across the Site, including a supermarket of 1,000 sqm.

The approach adopted in reviewing the retail opportunity includes the following:

- Definition of an appropriate study area on which to examine the retail demand and supply context
- Summary of existing retail provision in the surrounding area, examining their role in the broader market context
- Analysis of population growth trends throughout the study area
- Estimates and forecasts of retail spending by residents in the study area
- Analysis of the supermarket sector, which is critical in establishing the type and scale of development that might occur within the Site
- Review of the attributes of each of the precincts for retail development
- Based the above, estimates of supportable retail floorspace across the Site as a whole and within individual precincts.

A key part of the analysis is an examination of support for new supermarket floorspace provision in the local area. This is important because the attraction of a supermarket would help to establish a local grocery shopping node, with a larger supermarket anchor providing support for a wider range of complementary retail and non-retail activities.

In the absence of a supermarket the retail opportunity across most of the Site would be relatively small, limited to local convenience stores, food and dining establishments and other services supported by local residents and workers.

## 7.2 Retail context

Figure 20 illustrates the study area adopted for the purposes of subsequent retail analysis.

The study area describes a region in which the local residential population, along with tourists and other visitors, supports existing retail provision at Sandy Bay Town Centre and in the other smaller shopping strips and scattered individual stores within the area.

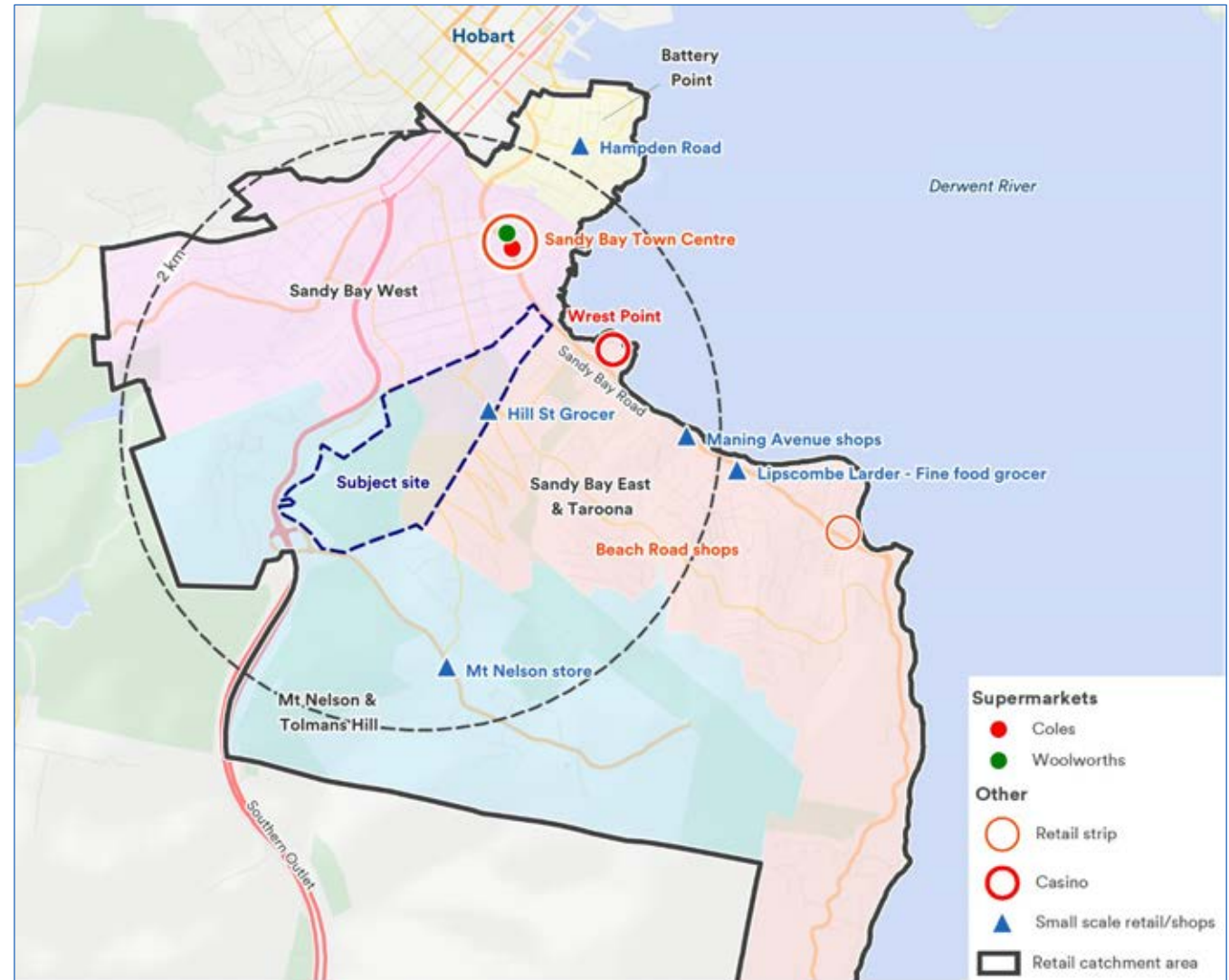
The study area extends from the southern edge of the Hobart CBD southwards to include all or parts of Battery Point, South Hobart, Sandy Bay, Dynnyrne, Tomans Hill and along Channel Highway to Tarooma.

This region is relevant because it represents the geographic area from which retail spending may be directed to existing or new retail businesses within the Site, and also because it represents an appropriate region to assess existing provision rates and to determine significant gaps in retail provision, particularly for supermarket floorspace.

Any retail development within the Site would also be supported by other sources of spending, including by workers and other incoming visitors.

Figure 20 shows that most existing retail is clustered to the north of the Site, other than at the small centre on Beach Road and other scattered shops.

Figure 20—Retail context study area



Source: Deep End Services; MapInfo

### 7.3 Existing retail supply

#### Sandy Bay Town Centre

Existing retail provision within the identified study area is dominated by Sandy Bay Town Centre, which has total estimated occupied retail floorspace of around 15,000 sqm, along with a wide range of non-retail businesses such as doctors' surgeries (GPs), specialist health suites, commercial offices and recreational and entertainment uses (gyms, hotel/taverns, etc).

Sandy Bay Town Centre is identified as a 'minor or neighbourhood centre' in STRLUS. The role of these centres is to serve the daily needs of the surrounding community, with uses including supermarkets and other retail, along with commercial, community health and other services, and night time dining.

The retail components of Sandy Bay include:

- Woolworths supermarket, estimated at 2,900 sqm which means that it is slightly smaller than would normally be expected for a full-line supermarket (the typical requirement is around 3,200-4,000 sqm for a modern full-line store). The supermarket achieves very high average sales levels from this sized store, notwithstanding the lack of at-grade parking (which is provided in basement and rooftop format).
- Coles supermarket of 1,800 sqm, which is a small format store with a mix of at-grade and undercroft/basement parking. The store is also understood to be trading well-above average from an under-sized box.
- Several other retail businesses in the food & groceries sector including small Asian supermarkets/grocers and a bulk discount drygoods store. In total, businesses in

the food and groceries sector account for 7,800 sqm, or more than 50% of total occupied retail floorspace, emphasising the convenience retail role of the centre.

- A large café and dining sector which extends across a range of cuisine types, accounting for almost 30% of all occupied floorspace (4,230 sqm).
- A relatively limited non-food sector with few national branded outlets, accounting for just 2,400 sqm.
- A total of around 675 sqm of vacant shopfront floorspace, representing a low vacancy rate of around 4%.

Overall, Sandy Bay presents as a relatively healthy neighbourhood centre which has two under-sized but high performing supermarkets, both of which have limited expansion opportunity. The vacancy rate is low, although it is likely that some of the shops are under stress given the effects of the COVID-19 pandemic on spending patterns in some retail segments.

Total retail sales at the centre is estimated at around \$125m, including more than \$90m associated with the two supermarkets and other stores within the food, liquor and grocery sector.



### Other retail

Other concentrations of retail are scattered throughout the study area, including:

- A small collection of businesses on Hampden Road, Battery Point, which serve local residents, tourists staying locally, and other visitors to the area.
- A small local centre at Little Sandy Bay (Beach Road), which consists of around 1,250 sqm of occupied floorspace, with a vacant premises (former convenience store 'Fresco') of 500 sqm.
- The Hill Street Grocer on Churchill Avenue within the Site, which is an attractive and successful local supermarket of around 800 sqm that stocks a wide variety of quality fresh foods and dry goods.
- The Mt Nelson Store, which is a small general store of around 250 sqm on Nelson Road.
- Lipscombe Larder, a small grocery store of around 400 sqm which specialises in 'fine foods' including cakes and bakery items, deli products and pre-prepared meals, wines and a limited range of groceries.
- A collection of shops in South Hobart containing Hill Street Grocer store (250 sqm), a butchers, newsagent and small group of shops with around 2,000 sqm of floorspace.

Most of the retailing described above serves a more localised role, other than some particular businesses such as Hill Street Grocer Sandy Bay and Lipscombe Larder which are well-known as attractive destinations for high quality groceries and are likely to attract visitors from a wider area.

## 7.4 Population and spending

### Catchment population

The identified catchment has a total residential population of nearly 27,000 people in 2021, with the largest concentration (11,865 persons or 44%) living in Sandy Bay East stretching along the coastline to Tarooona.

Population forecasts are based on the High series produced by DTF (refer section 5.2), noting that these are consistent with the base-line projections presented in Chapter 5 and do not account for the Subject Site attracting a share of residential dwelling demand for medium and high-density housing that might otherwise occur elsewhere in the region.

The catchment population is projected to increase by around 4,000 people over the next 15 years to be nearly 31,000 people in 2036.

### Retail expenditure per capita

Table 12 displays average retail spending rates in 2021, by retail spending category, for the study area sectors, highlighting the affluent nature of the catchment with average spending well above the Hobart benchmark.

**Table 11—Retail context study area population, 2016 - 2036**

Catchment area sector	2016	2021	2024	2028	2032	2036
<b>Population</b>						
Sandy Bay East & Tarooona	11,273	11,865	12,000	12,480	13,005	13,545
Sandy Bay West	9,170	9,705	9,734	10,064	10,434	10,834
Mt Nelson & Tolmans Hill	2,791	3,142	3,268	3,548	3,828	4,108
Battery Point	2,110	2,252	2,246	2,329	2,411	2,473
<b>Total</b>	<b>25,344</b>	<b>26,963</b>	<b>27,248</b>	<b>28,421</b>	<b>29,679</b>	<b>30,961</b>
<b>Population growth (no. per annum)</b>						
Sandy Bay East & Tarooona	-	118	45	120	131	135
Sandy Bay West	-	107	10	83	93	100
Mt Nelson & Tolmans Hill	-	70	42	70	70	70
Battery Point	-	28	-2	21	21	16
<b>Total</b>	<b>-</b>	<b>324</b>	<b>95</b>	<b>293</b>	<b>314</b>	<b>321</b>
<b>Population growth (% per annum)</b>						
Sandy Bay East & Tarooona	-	1.0%	0.4%	1.0%	1.0%	1.0%
Sandy Bay West	-	1.1%	0.1%	0.8%	0.9%	0.9%
Mt Nelson & Tolmans Hill	-	2.4%	1.3%	2.1%	1.9%	1.8%
Battery Point	-	1.3%	-0.1%	0.9%	0.9%	0.6%
<b>Total</b>	<b>-</b>	<b>1.2%</b>	<b>0.4%</b>	<b>1.1%</b>	<b>1.1%</b>	<b>1.1%</b>

**Table 12—Retail spend per capita rates, 2020/21**

Spending category	Sandy Bay East & Tarooona	Sandy Bay West	Mt Nelson & Tolmans Hill	Battery Point	Total study area	Hobart
Food & groceries	\$6,534	\$6,256	\$6,097	\$6,557	\$6,385	\$6,342
Liquor	\$1,039	\$1,010	\$969	\$1,297	\$1,042	\$913
Dining out/takeaway	\$2,513	\$2,517	\$2,211	\$3,020	\$2,522	\$1,910
Non-food	\$8,966	\$8,214	\$8,190	\$9,063	\$8,613	\$6,938
Retail services	\$926	\$779	\$753	\$1,001	\$859	\$629
<b>Total</b>	<b>\$19,978</b>	<b>\$18,776</b>	<b>\$18,218</b>	<b>\$20,938</b>	<b>\$19,422</b>	<b>\$16,732</b>
<b>Comparison to Hobart average</b>						
<b>Total</b>	<b>19.4%</b>	<b>12.2%</b>	<b>8.9%</b>	<b>25.1%</b>	<b>16.1%</b>	<b>-</b>

Source: Deep End Services; ABS; Tasmanian Government population rojections (2019); Market Data Systems; Deloitte Access Economics

## Retail market size

Residents within the study area generate a total of \$523.6m in spending on retail goods and services, of which a large share (\$172.2m or 38%) is associated with food & groceries and liquor categories. Spending on non-food items accounts for a larger share of total spending but is less relevant for convenience-related retail development.

Although retail spending is projected to remain depressed until 2024 (largely as a result of a reaction to the high spending on certain goods associated with the imposition of lockdowns on travel), over the longer-term retail spending is projected to increase to \$628.8m in 2028 and reach \$814.6m in 2036. The growth in spending over this period is equivalent to an additional \$290m in annual expenditure, which has potential to support a large increase in retail provision.

Of most importance for future development within the Site is that the volume of retail spending on Food & groceries and Liquor is forecast to increase by a combined \$200m in annual terms. This has potential to support a significant expansion in provision for supermarkets and grocery stores.

Note that these figures are in nominal dollars and therefore incorporate inflation.

**Table 13—Retail context study area, market size 2016 - 2036**

Spending category	Spending market (\$m)						Average change (%pa)			
	2016	2021	2024	2028	2032	2036	2021-24	2024-28	2028-32	2032-36
<b>Sandy Bay East &amp; Tarooma</b>										
Food & groceries	60.0	77.5	78.2	90.5	100.5	113.7	0.3%	3.7%	2.7%	3.1%
Liquor	9.6	12.3	14.1	17.6	21.3	26.1	4.7%	5.6%	4.9%	5.2%
Dining out/takeaway	28.4	29.8	36.4	41.6	47.7	54.8	6.9%	3.4%	3.5%	3.6%
Non-food	89.4	106.4	104.3	119.9	133.1	152.5	-0.7%	3.6%	2.6%	3.5%
Retail services	9.0	11.0	12.4	14.7	17.1	20.2	4.0%	4.5%	3.9%	4.2%
<b>Total</b>	<b>196.3</b>	<b>237.0</b>	<b>245.4</b>	<b>284.3</b>	<b>319.8</b>	<b>367.4</b>	<b>1.2%</b>	<b>3.7%</b>	<b>3.0%</b>	<b>3.5%</b>
<b>Sandy Bay West</b>										
Food & groceries	46.5	60.7	60.2	69.1	76.1	85.6	-0.3%	3.5%	2.5%	3.0%
Liquor	7.6	9.8	11.2	13.8	16.6	20.3	4.4%	5.4%	4.8%	5.1%
Dining out/takeaway	23.1	24.4	29.6	33.6	38.3	43.9	6.6%	3.2%	3.4%	3.5%
Non-food	66.4	79.7	77.6	88.9	98.3	112.4	-0.9%	3.5%	2.5%	3.4%
Retail services	6.1	7.6	8.4	10.0	11.5	13.5	3.8%	4.3%	3.7%	4.1%
<b>Total</b>	<b>149.7</b>	<b>182.2</b>	<b>187.0</b>	<b>215.3</b>	<b>240.9</b>	<b>275.8</b>	<b>0.9%</b>	<b>3.6%</b>	<b>2.8%</b>	<b>3.4%</b>
<b>Mt Nelson &amp; Tolmans Hill</b>										
Food & groceries	13.8	19.2	19.7	23.8	27.3	31.7	1.0%	4.8%	3.5%	3.8%
Liquor	2.2	3.0	3.6	4.7	5.8	7.4	5.7%	6.7%	5.8%	6.0%
Dining out/takeaway	6.2	6.9	8.7	10.4	12.3	14.6	7.9%	4.5%	4.4%	4.3%
Non-food	20.2	25.7	25.9	30.9	35.4	41.7	0.2%	4.6%	3.4%	4.1%
Retail services	1.8	2.4	2.7	3.4	4.1	5.0	5.0%	5.6%	4.7%	4.9%
<b>Total</b>	<b>44.2</b>	<b>57.2</b>	<b>60.6</b>	<b>73.2</b>	<b>85.0</b>	<b>100.4</b>	<b>1.9%</b>	<b>4.8%</b>	<b>3.8%</b>	<b>4.2%</b>
<b>Battery Point</b>										
Food & groceries	11.2	14.8	14.6	16.8	18.5	20.5	-0.5%	3.6%	2.4%	2.7%
Liquor	2.3	2.9	3.3	4.1	4.9	6.0	4.2%	5.5%	4.8%	4.8%
Dining out/takeaway	6.4	6.8	8.2	9.3	10.6	12.0	6.4%	3.3%	3.3%	3.2%
Non-food	16.8	20.4	19.8	22.8	25.2	28.6	-1.0%	3.6%	2.6%	3.2%
Retail services	1.8	2.3	2.5	3.0	3.4	4.0	3.6%	4.3%	3.6%	3.7%
<b>Total</b>	<b>38.5</b>	<b>47.2</b>	<b>48.3</b>	<b>56.0</b>	<b>62.7</b>	<b>71.0</b>	<b>0.8%</b>	<b>3.7%</b>	<b>2.9%</b>	<b>3.2%</b>
<b>Total catchment</b>										
Food & groceries	131.4	172.2	172.7	200.1	222.4	251.6	0.1%	3.8%	2.7%	3.1%
Liquor	21.8	28.1	32.2	40.1	48.7	59.7	4.6%	5.7%	5.0%	5.2%
Dining out/takeaway	64.0	68.0	82.9	94.9	109.0	125.4	6.8%	3.4%	3.5%	3.6%
Non-food	192.8	232.2	227.5	262.6	292.1	335.2	-0.7%	3.6%	2.7%	3.5%
Retail services	18.7	23.2	26.1	31.1	36.2	42.6	4.0%	4.5%	3.9%	4.2%
<b>Total</b>	<b>428.6</b>	<b>523.6</b>	<b>541.4</b>	<b>628.8</b>	<b>708.4</b>	<b>814.6</b>	<b>1.1%</b>	<b>3.8%</b>	<b>3.0%</b>	<b>3.6%</b>

Source: Deep End Services; ABS; Market Data Systems; Deloitte Access Economics

## 7.5 Supermarket assessment

Table 14 presents an assessment of the opportunity for additional supermarket floorspace within the catchment.

Estimates of demand for supermarket floorspace generated by residents are calculated by applying typical average provision rates across Hobart (which are expected to continue to increase marginally over time), and allowing for incoming demand from workers and other visitors. Current demand is for 9,450 sqm of supermarket floorspace, increasing to 12,400 sqm in 2036.

Existing supermarket floorspace provision is estimated at 6,850 sqm within the study area.

The analysis shows that there is an undersupply of 2,600 sqm of supermarket floorspace provision available to serve the needs of study area residents.

The undersupply of supermarket floorspace is projected to widen: by 2036 the undersupply would be equivalent to more than 5,500 sqm.

The effect of this undersupply is that local residents are either forced to shop at the under-sized stores in Sandy Bay Town Centre (thereby leading to very high average sales performance for these stores), or they are required to undertake supermarket shopping elsewhere, possibly in combination with travel to work and other trips.

**Table 14—Supermarket demand analysis**

Study area	Unit	2021	2026	2031	2036
<b>Supermarket floorspace demand</b>					
Population	no.	26,960	27,840	29,350	30,960
Hobart average provision rate	sqm/1,000 pop	316	324	332	340
Catchment area demand for supermarket floorspace	sqm	8,500	9,000	9,750	10,550
Incoming demand (workers, students, visitors)		10.0%	11.6%	13.1%	15.0%
<b>Total effective demand</b>	<b>sqm</b>	<b>9,450</b>	<b>10,200</b>	<b>11,200</b>	<b>12,400</b>
<b>Supermarket floorspace supply</b>					
Coles Sandy Bay	sqm	1,900	1,900	1,900	1,900
Woolworths Sandy Bay	sqm	2,900	2,900	2,900	2,900
Hill St Grocer	sqm	800	800	800	800
Lipscombe Larder	sqm	400	400	400	400
Shiploads	sqm	850	850	850	850
<b>Total supermarket supply</b>	<b>sqm</b>	<b>6,850</b>	<b>6,850</b>	<b>6,850</b>	<b>6,850</b>
Total supermarket provision rate	sqm/1,000 pop	254	246	233	221
<b>Undersupply(-ve)/oversupply(+ve)</b>	<b>sqm</b>	<b>-2,600</b>	<b>-3,350</b>	<b>-4,350</b>	<b>-5,550</b>

Source: Deep End Services

Note: supermarkets defined as 400 sqm and above

## 7.6 On-site retail demand

According to Section 5 of this report, there is an opportunity to accommodate a significant residential population as dwellings are constructed on the Site.

Depending on the final volume and timeframe for residential development on the Site, the additional population living in these dwellings could be in the order of another 3,000 to 4,500 people over the next 20 years (or more over a longer timeframe), applying on an average household size of around 2.1 to 2.3 persons per dwelling.

A residential population of this size would generate demand for approximately 6,500 sqm to 10,000 sqm of retail floorspace, based on the typical Australian average provision rate of 2.2 sqm per capita.

If a supermarket-anchored retail node were established within the Subject Site, it could potentially capture up to around 20% of the retail demand generated by these residents. The remaining retail demand would be directed to existing centres such as Sandy Bay Town Centre and central Hobart, among others.

This implies that the residential population within the Site itself has potential to support in the order of 1,250 sqm to 2,000 sqm of retail floorspace.

Of course, in the event that a supermarket is established at the Subject Site, the centre as a whole would also be supported by incoming spending by residents elsewhere within the study area, reflecting the current under-provision of supermarket floorspace.

Further retail provision would be supported by the local workforce. Assuming office floorspace of 12,500 sqm to 18,800 sqm, this implies a local workforce of around 600 to 1,000 persons. Other uses across the Site would also contribute to demand for local retail provision.

Demand from workers is not as significant as that generated by residents, and usually only accounts for a relatively small share of retail demand associated with lunch-time purchases. In this case, the contribution from workers would support the addition of 2-5 small food dining and related shops.

## 7.7 Site attributes for retail

Different sub-precincts within the Subject Site are more suitable for accommodating retail development.

In terms of a supermarket-based concentration of shops with a local or neighbourhood convenience function, the most appropriate location is the central part of the Site at Precinct 2 where it can leverage the existing role of the Hill Street Grocer on the south side of Churchill Avenue and provide a key node for the delivery of local services for surrounding residents and workers.

Precinct 5 has been examined as a possible location for a supermarket-based centre which would be able to attract shoppers travelling along the Southern Outlet. However, in this case the local residential catchment is relatively small when compared to the size normally required to support a new supermarket.

Precinct 1 is also an attractive location for retail development given the exposure from Sandy Bay Road, and location close to visitor uses including the Wrest Point Casino. This precinct has potential to accommodate a smaller range of retail that provides services to local users within the precinct, which are likely to include some residential apartments, sports and recreation functions, and health and community uses (including the retention of the existing childcare centre).

## 7.8 Findings and implications

Analysis in this chapter provides support for the following retail development opportunities within the Subject Site.

### Precinct 1

A small range of convenience retailing along with an array of dining establishments could be incorporated into Precinct 1 to serve residents in this part of the Site, along with people visiting this area for sports and recreation functions or to visit medical centres and community services, and people travelling along Sandy Bay Road.

An indicative scale of around 500 sqm to 1,250 sqm is appropriate, but this would depend on the scale and type of associated activities proposed for this precinct.

### Precinct 2

Opportunity to deliver a supermarket-based retail node of approximately 4,000 sqm to 5,000 sqm, consisting of a supermarket of 2,500 sqm to 3,500 sqm and a small range of complementary businesses focussing on convenience retail (chemist, newsagent, bakery, hairdresser, etc) and a collection of eateries that serve residents and workers within the precinct and surrounds.

It is acknowledged that there are challenges in designing a site to accommodate a retail node of this size, particularly given the slope of the land, the operator preference for immediate at-grade car parking and the potential traffic issues along Churchill Avenue.

### Precinct 3

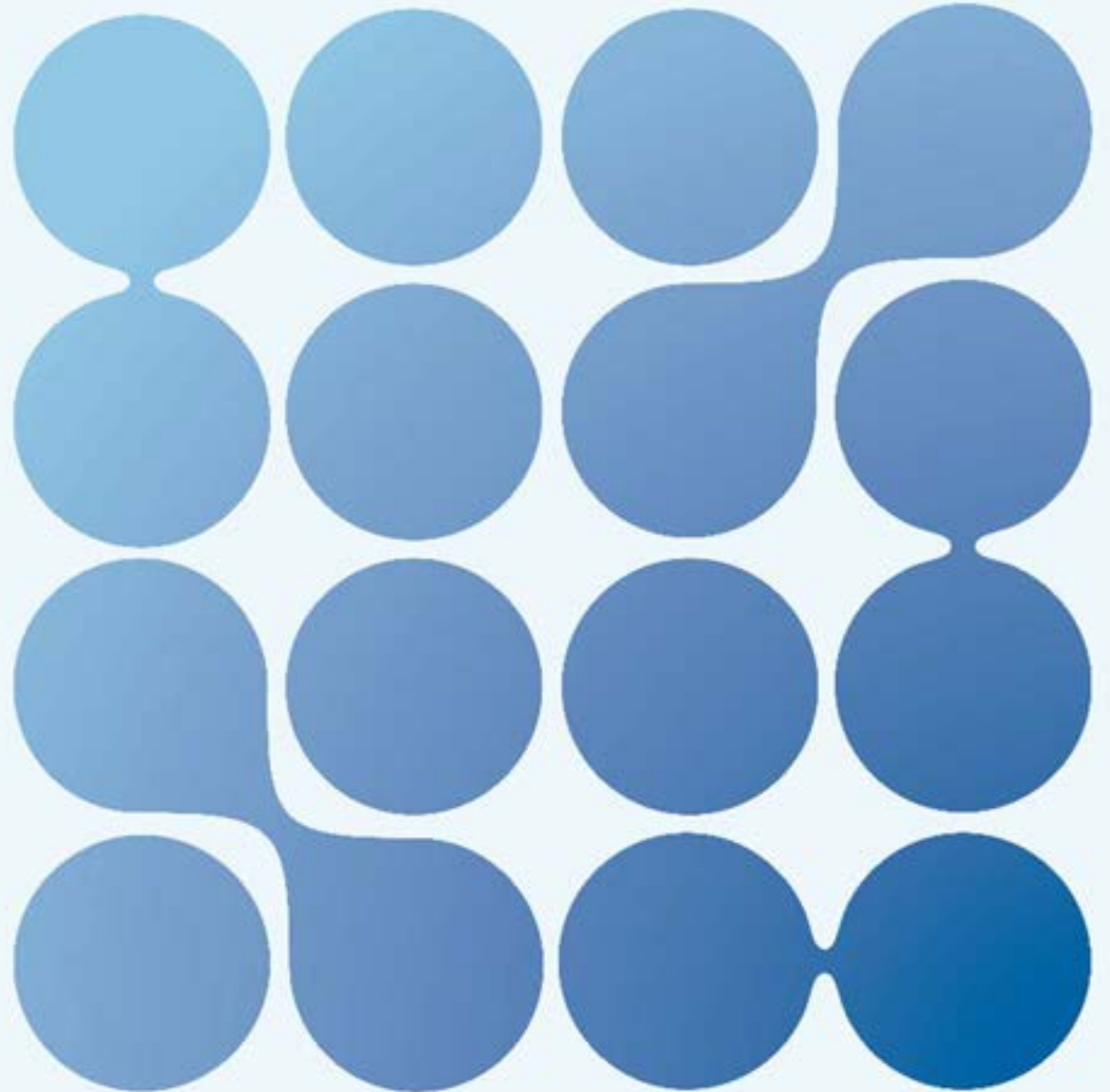
This precinct would continue to have a retail role with the retention of the Hill Street Grocer and medical centre on the south side of Churchill Avenue, opposite an expanded retail node within Precinct 2.

### Precinct 5

Ancillary retail tenancies may be incorporated into tourism and nature-based activities within the Upper part of the Site or to serve a local population base if residential housing is incorporated into this precinct (and with a small surrounding catchment at Tolmans Hill and Mt Nelson). However, the extent of supportable retail floorspace would be relatively small in this location.



Commercial accommodation and tourism





## 8.1 Approach

This section investigates development opportunities within the tourism sector, including potential for new commercial accommodation establishments as well as other tourism-related uses.

The assessment is prepared in the context of the HUB assessment which identifies a longer-term opportunity for an additional 135 hotel or serviced apartment rooms.

Analysis in this section includes:

- A summary of the Tasmania tourism market, examining visitor numbers, visitor nights, purpose of trip, expenditure and activities undertaken
- Historical trends and indicative visitation forecasts, taking into account potential impacts from COVID-19
- Information on existing commercial accommodation throughout Hobart and in the area surrounding the Site
- Analysis and commentary on opportunities for a range of accommodation types (including eco-resort style facilities) and other adventure tourism facilities.

## 8.2 Tourism in Tasmania

### Introduction

Tasmania has historically had a very strong tourism market, with domestic and international passengers visiting year-round to experience a wide range of attractions including, world heritage areas, national parks, food and wine destinations and a thriving art culture.

The tourism industry is a vital component of the Tasmanian economy, with the latest data published by Tourism Tasmania for the year ending December 2020 showing that tourism employment is the highest of any state in Australia, accounting for almost 8.5% of total employment.

The data also highlights that Tasmanian tourism directly and indirectly supports almost 37,500 jobs and contributes around \$3 billion annually (or 9%) to Gross State Product.

Tourist visitation has been increasing up to the end of 2019, at which time a total of 1.35 million visitors spent a total of 10.9 million visitor nights in the State.

COVID-19 has had a significant effect on visitor numbers with the introduction of border restrictions for non-essential domestic travel, the halting of cruise ship visitation and international holiday travel still suspended. According to data for March 2021 from Tourism Tasmania, visitation levels are not just 25% of pre-COVID levels.

Impacts on tourism are expected to continue until travel restrictions ease once vaccination levels are much higher, but the long-term forecast is uncertain, especially with regard to international visitor numbers.

### Tourism Tasmania visitation survey

A summary of tourism visitation data from the Tourism Tasmania visitation survey is shown in Figure 21 to the right, highlighting the steep decline in visitor numbers after ongoing growth until then.

Southern Tasmania including Hobart is the most visited location by tourists, attracting almost half of all visitors to the State.

Figure 21—Tourism summary, Tourism Tasmania



Source: Tourism Tasmania visitation survey

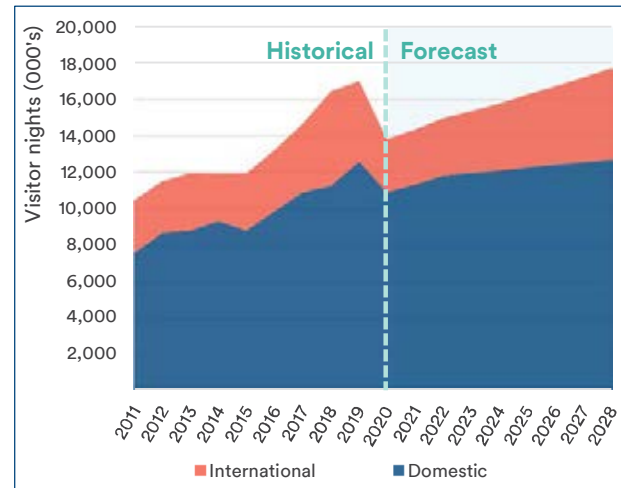
### 8.3 Tourism visitation trends

The figures to the right provide analysis of the potential recovery in tourism visitation, drawing on visitor numbers and forecasts published by Tourism Research Australia (ie not using the Tasmania Tourism visitation survey).

Note that the modelled recovery in tourism is based on indicative estimates of the recovery period over the next few years.

According to this broad analysis, tourism numbers in Tasmania are likely to recover to pre-COVID levels by around 2025 or 2026.

Tasmania historical and projected visitor nights

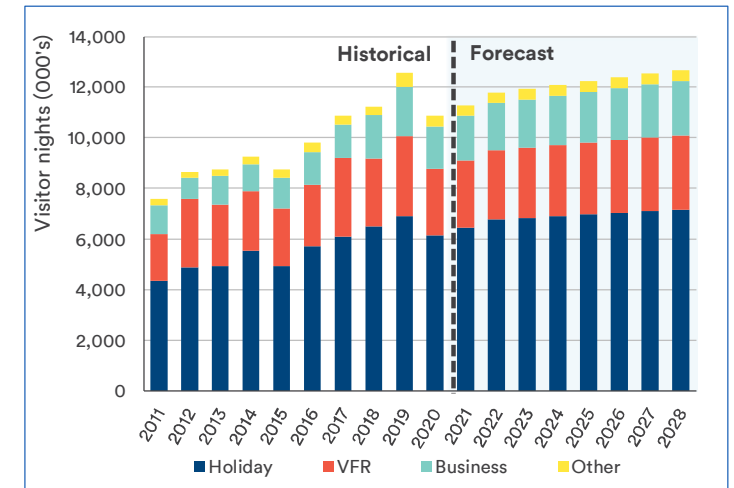


Note: Simulated COVID-19 impact has been applied to forecasts  
Source: Deep End Services; economy.id; Tourism Research Australia

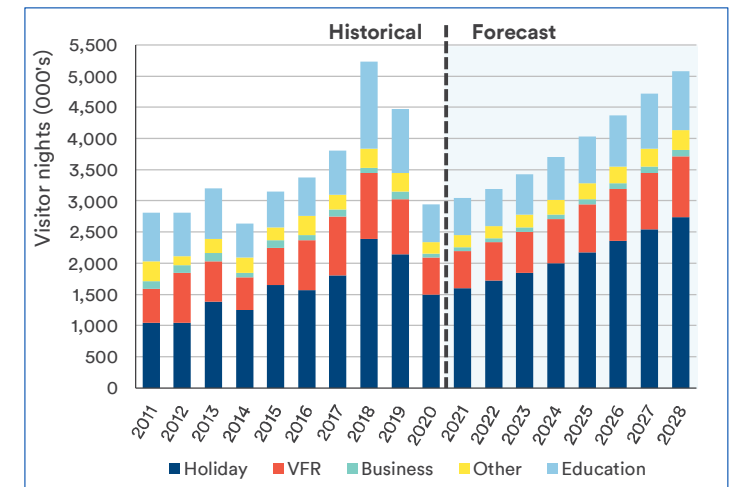
Tasmania overnight tourism trends and forecasts

	2011	2016	2019	2024	2028
<b>Visitor nights (000's)</b>					
Domestic	7,586	9,815	12,561	12,076	12,676
International	2,812	3,376	4,472	3,704	5,081
<b>Total</b>	<b>10,398</b>	<b>13,191</b>	<b>17,032</b>	<b>15,780</b>	<b>17,757</b>
<b>Growth (%/p.a.)</b>					
Domestic	-	5.3%	8.6%	-0.8%	1.2%
International	-	3.7%	9.8%	-3.7%	8.2%
<b>Total</b>	-	<b>4.9%</b>	<b>8.9%</b>	<b>-1.5%</b>	<b>3.0%</b>

Tasmania domestic visitor nights by purpose, 2011-2028



Tasmania international visitor nights by purpose, 2011-2028



Note: Simulated COVID-19 impact has been applied to forecasts,  
VFR = visiting friends & relatives  
Source: Deep End Services; economy.id; Tourism Research Australia

## 8.4 Activities undertaken

Figure 22 provides details of the activities undertaken by visitors, based on the Tourism Tasmania visitation survey.

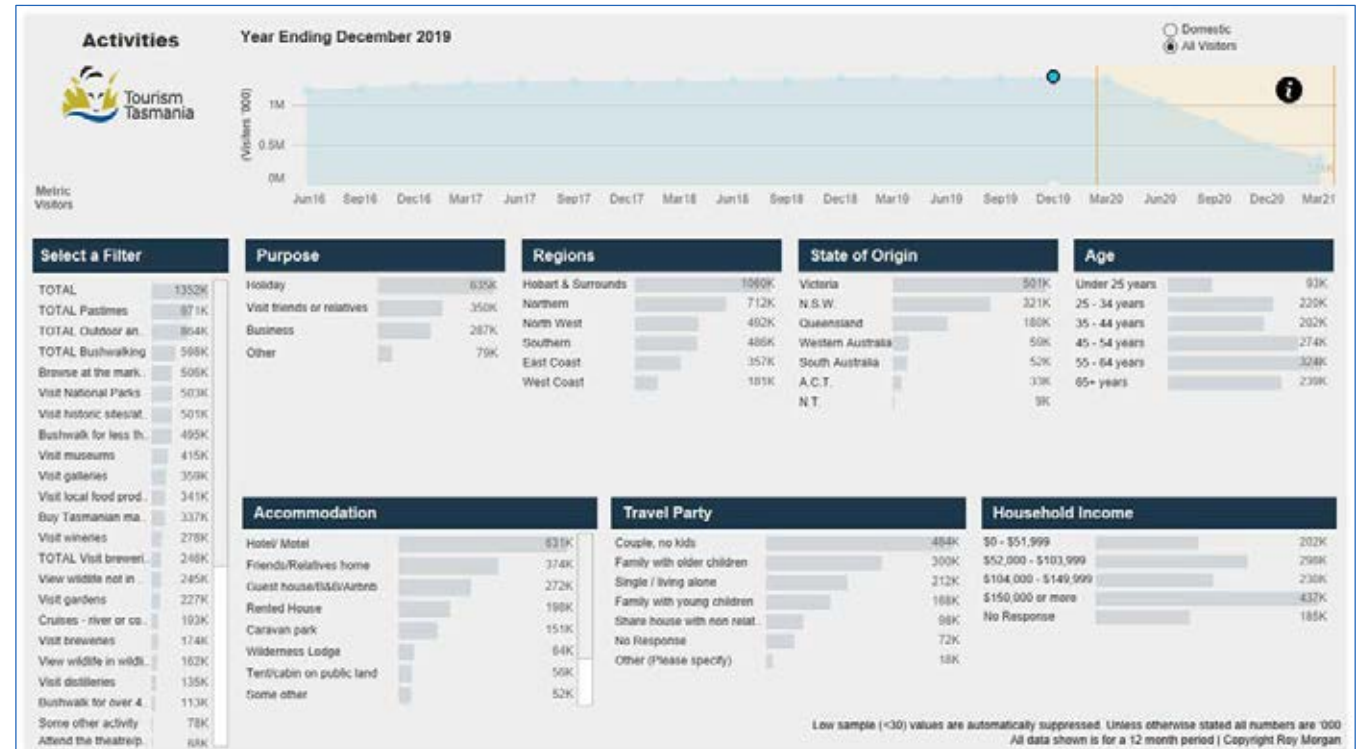
The data highlights the importance of a range of activities (shown in the filter column on the right side of the side) that fit within the Tasmanian tourism brand that encapsulates bushwalking, visiting areas of scenic beauty, visiting national parks, and undertaking other outdoor activities.

In terms of activities that might reflect the nature of the Subject Site and particularly the Upper part of the Site, the data identifies the following numbers of visitors undertaking outdoor-related activities:

- Visit National parks – 503,000
- Short bushwalks – 495,000
- View wildlife – 245,000
- Long bushwalks – 113,000
- Cycle or mountain bike – 45,000
- Overnight bushwalk – 45,000

The total number of visitors undertaking some kind of outdoor activities was 864,000 in 2019, with most of these visiting Hobart and surrounds (82%) and almost half staying in standard commercial accommodation (hotels or motels).

Figure 22—Visitor activities, Tourism Tasmania



Source: Tourism Tasmania visitation survey

## 8.5 Tourism accommodation

The table to the right summarises information on the supply of commercial accommodation throughout Tasmania based on data published by the ABS for 2016.

At that time there were a total of 151 commercial accommodation establishments in Tasmania that offer 15 or more rooms. The majority of the supply was within the hotels and motels category, comprising 118 establishments, or 78% of the total. Serviced apartments account for the remaining accommodation supply.

The majority of the establishments (94, or 62%) were classified in the Budget/Midscale category, with only 2 establishments classified as Luxury.

The highest available room nights available was within the Upscale category, with over 1.2 million available nights (or 71% of the total). Subsequent room occupancy rates result in a healthy 76% for across both hotels/motels and serviced apartments, with a lower occupancy rate (52%) seen in the Budget/Midscale category.

More detailed information at the SA2 geography level show that average room occupancy rates within Hobart and Sandy Bay were 83% and 76% respectively.

Table 15—Tasmania accommodation data by class of service

Accommodation class	Budget/Midscale	Upscale	Luxury Scale	Total
<b>Establishments</b>				
Hotels/motels	79	37	2	118
Serviced apartments	15	18	-	33
<b>Total</b>	<b>94</b>	<b>55</b>	<b>2</b>	<b>151</b>
<b>Rooms nights occupied</b>				
Hotels/motels	257,647	675,370	-	933,017
Serviced apartments	-	264,058	-	264,058
<b>Total</b>	<b>257,647</b>	<b>939,428</b>	-	<b>1,197,075</b>
<b>Rooms nights available</b>				
Hotels/motels	495,271	876,233	-	1,371,504
Serviced apartments	-	347,487	-	347,487
<b>Total</b>	<b>495,271</b>	<b>1,223,720</b>	-	<b>1,718,991</b>
<b>Occupancy rate (%)</b>				
Hotels/motels	52.0%	76.0%	-	64.0%
Serviced apartments	-	76.0%	-	76.0%
<b>Total</b>	<b>52.0%</b>	<b>76.0%</b>	-	<b>64.0%</b>

Source: Deep End Services; ABS—Tourist Accommodation, 2015/16

## 8.6 Commercial accommodation provision

The geographic distribution of Hotels, Motels and Serviced Apartments are shown in Figure 23, highlighting the large concentration of facilities in or on the edge of the CBD. A scattering of smaller scale hotels and motels are situated throughout Battery Point and along Sandy Bay Road.

The largest establishment in proximity to the Subject Site is the Wrest Point Casino which has approximately 270 available rooms.

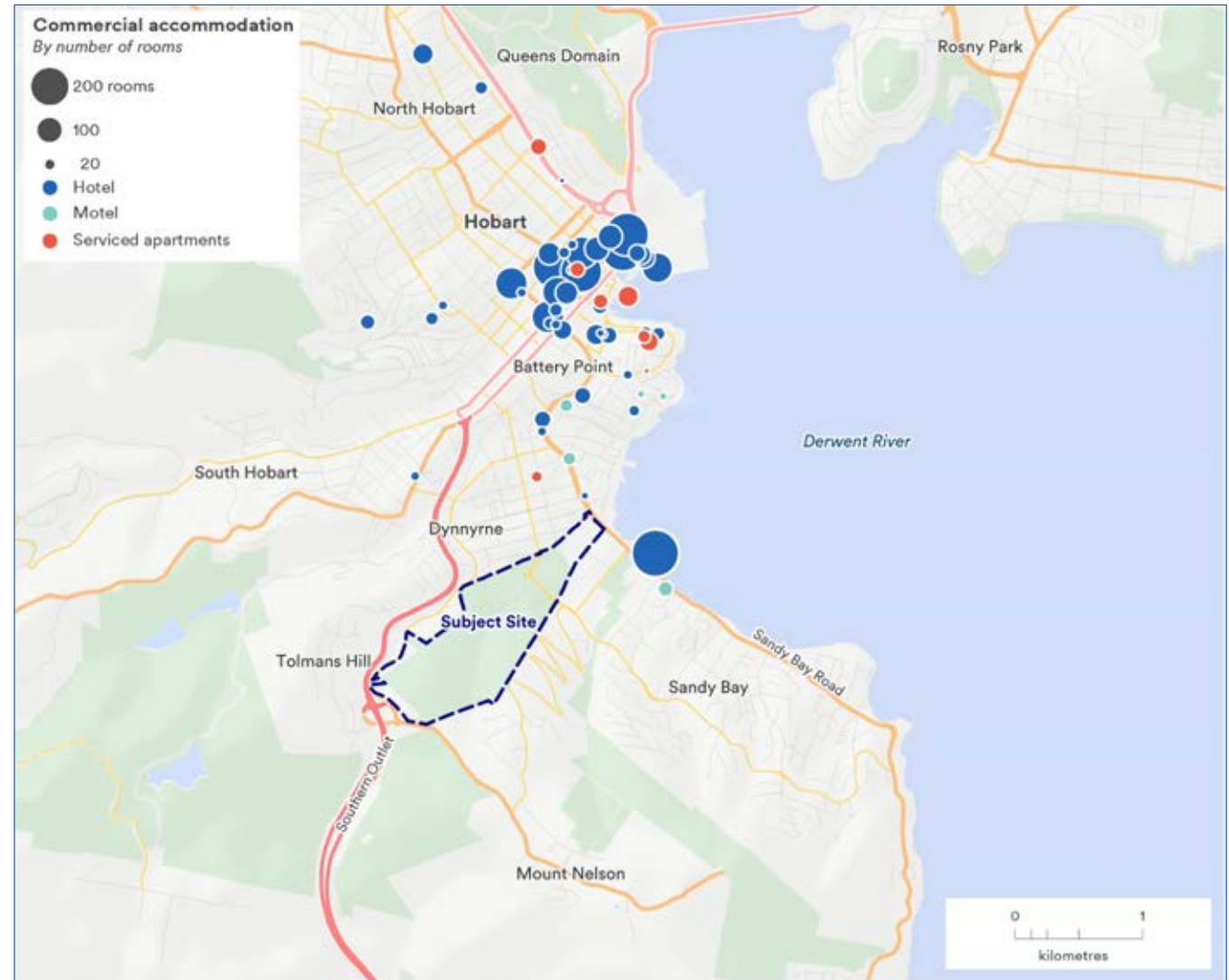
Several new hotel developments are in various stages of planning, including:

- An application for 175 rooms in a 14-storey development at 79 Collins Street in CBD east
- A nine-storey 206-room hotel at 179 Macquarie Street, currently under development
- Approval for a 68-room hotel at 125 Bathurst Street
- Serviced apartment project of 57 rooms under development in North Hobart.

In addition, the Mac Point precinct would be expected to include a new hotel.

Notwithstanding these new projects, the map shows that there are relatively few accommodation options in and around Sandy Bay, where the emphasis is on Airbnb and private rentals.

Figure 23—Commercial accommodation distribution



Source: Deep End Services; MapInfo

## 8.7 Ecotourism

Tasmania's tourism strategies provide strong support for an expansion in environmentally responsible tourism development, which complement the overarching focus on natural environment and outdoor settings.

The T21 priorities for recovery after COVID emphasise the need to growth visitation associated with Tasmania's natural environment and 'clean & green' image.

Much of the existing ecotourism accommodation on offer is situated in more remote areas and consists of smaller-scale facilities within wilderness areas.

The Upper part of the Site provides an opportunity to establish environmentally responsible commercial accommodation within a bushland setting but close to the wider range of tourism destinations available close to Hobart, as well as within relatively comfortable access to the Tasmanian Wilderness World Heritage Area.

Development of eco-resort accommodation would be consistent with other use opportunities in this part of the Site (refer below).



## 8.8 Adventure tourism

With a strong focus on outdoor and adventure activities, there is potential to establish an adventure tourism precinct within Precinct 5, taking advantage of the bushland setting and the existing use of the Site for bushwalking, cycling and rock-climbing at the quarry on Proctors Road.

The likely opportunity would be similar to that provided at Hollybank Wilderness Adventures in Launceston, which offers ziplining, mountain biking, Segway tours, and a tee rope course.

It is understood that the City of Hobart has expressed interest in facilitating the establishment of a similar facility. In this context the Site represents an attractive opportunity given its characteristics and the potential to complement an eco-resort commercial accommodation offer.

## 8.9 Findings and implications

Based on the analysis presented in this section, the opportunity to introduce commercial accommodation and other tourism-related uses can be summarised as follows.

### Commercial accommodation

Hobart's tourism sector is under stress due to the COVID-19 pandemic, with recovery likely to take some years, particularly with regard to international visitors.

At the same time, there are several new hotels proposed or under construction that are likely to absorb demand over the next few years.

Notwithstanding this, there are some opportunities to introduce various commercial accommodation formats on the Site over the medium to longer-term:

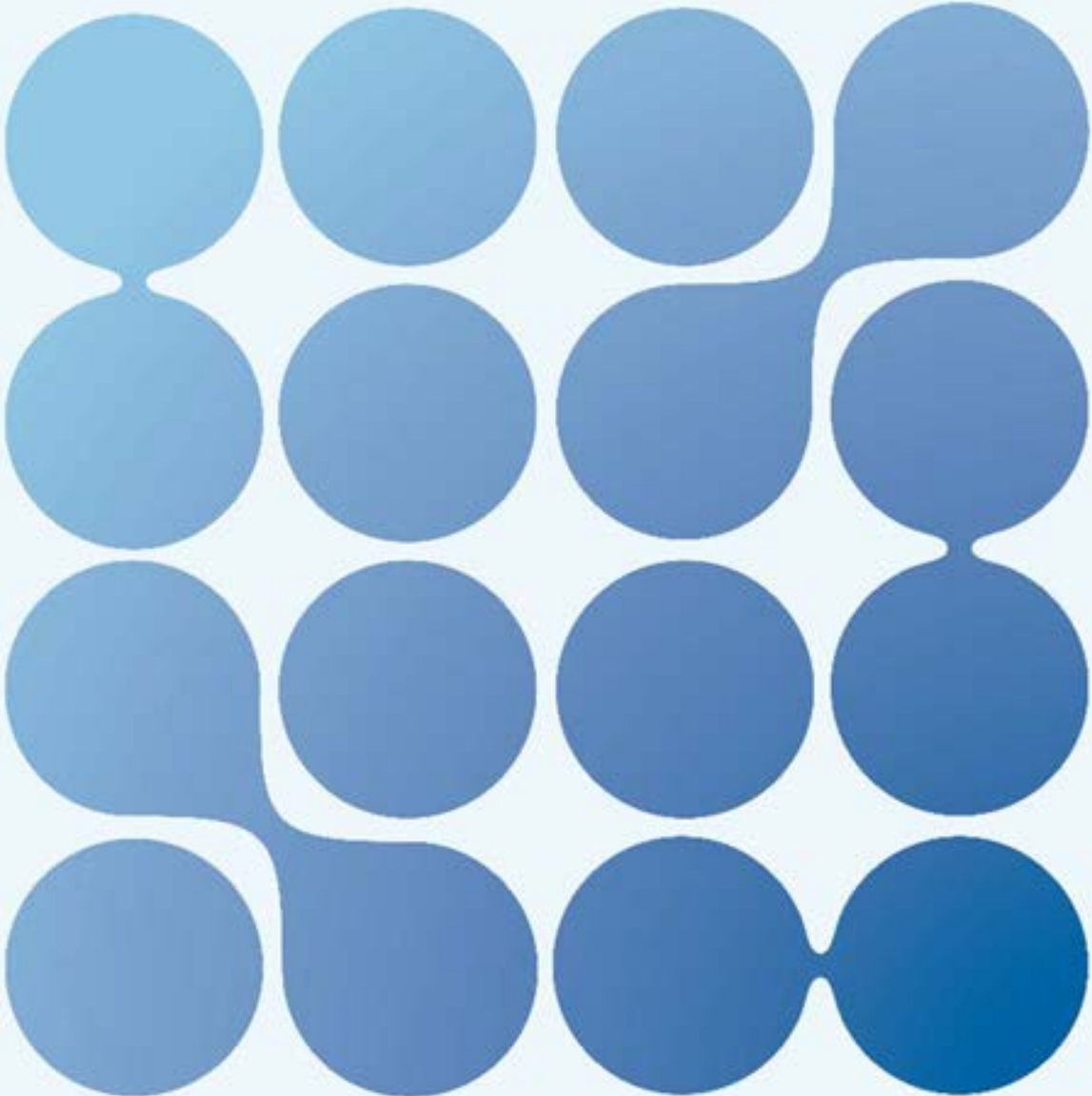
- Introduce an eco-tourism resort in Precinct 5, reflecting the bushland setting of the Upper part of the Site and opportunity to co-locate with adventure tourism (see below)
- Possible inclusion of a mid or higher budget offer within Precinct 1 in the medium to long-term, which would have a role in serving an expanded sports and recreation precinct and introduce additional tourism product for the coastal area along the Derwent River frontage.

### Adventure tourism

Precinct 5 has potential to include an adventure tourism facility similar to the Hollybank Wilderness Adventure park in Launceston. This is an opportunity that has been previously identified, and the Site represents a suitable location for this type of use.

# 9

Other uses



## 9.1 Approach

This chapter presents a review of the opportunity for a range of other uses to be accommodated across the Site, drawing on analysis presented in the HBU assessment.

For many of these uses, the HBU report presents an appropriate examination of the demand and supply conditions; in those cases we have adopted the recommendations from that report.

The types of uses examined in this section are generally grouped under the following:

- Sports and recreation:
  - Expanded sports functions
  - Potential sports science and sports administrative precinct
  - Gyms and other recreation activities
- Health and community services:
  - Medical centre (GPs)
  - Specialist health suites
  - Childcare.

## 9.2 Sports and recreation

### UTAS sports and recreation functions

Precinct 1 already operates as a focus for sports and recreational activities. Consideration of future redevelopment opportunities has already been undertaken internally by UPPL, with identified opportunities including:

- Conversion of the rugby fields with the relocation of the soccer facilities from the Upper Campus
- Upgrades to the AFL/cricket pitch so that it meets the specifications in case the ground might become available for a future AFL club or Premier League cricket club
- Significant improvement in associated club rooms, amenities, sports viewing stands, and other requirements to support an expanded sports role
- Expansion and improvements in sports-excellence infrastructure such as dedicated synthetic cricket practise nets, etc
- Expanded/improved gym facilities
- Potential expansion of the sports hall into a home for an NBL team and to introduce other indoor activities.

### UTAS sports science

An improved and expanded range of sports and recreation activities within Precinct 1 could also attract sports science education and research facilities.

### Sports administration

There is potential for major state and national sporting bodies to establish a new sports administrative precinct within Precinct 1 which might include the need for office/administrative space to house some functions undertaken by these organisations.

### Allied uses

With an improved and expanded array of sports and recreation activities and the possibility of sports administrative functions, the Sports Green precinct has potential for a wide range of allied health functions. Examples might include wellness uses such as yoga, Pilates, acupuncture or spa, and allied health functions such as physio, sports rehab, etc housed in professional suites.

Although the space requirements for sports administrative functions is unknown, these allied uses could generate demand for in the order of 2,000 sqm to 3,000 sqm.

### 9.3 Health and community services

#### Medical

Existing medical centres are focussed on Sandy Bay Town Centre and further west into inner Hobart, and in particular close to the Calvary St Johns Hospital in South Hobart.

The closest medical centre is above the Hill Street Grover, with an estimated 13 GPs. Another centre is on Grosvenor Street just to the north-west of the Site.

The HBU assessment indicated no emerging demand for medical services. Our view is that the introduction of 4,500 new residents over the next 20 years plus an emerging office workforce, along with the creation of a new sports science precinct, would support additional GP provision.

Potential locations for new medical clinic(s) could include within Precinct 1 as part of a sports and recreation precinct, co-located with new retail facilities in the middle part of the Site (eg Precinct 2), or possibly within Precinct 5 although this would be a smaller opportunity.

#### Specialist health

Other than the pathology lab at the Churchill Avenue Medical Centre and one or two physiotherapists in the local area, the majority of specialist health services are located at Sandy Bay Town Centre or further north close to the CBD.

The opportunity for specialist health services within the Site is likely to comprise a range of sports-related health services that were identified above in section 9.2, and the possibility of a small number of opportunities for professional suites to be provided as part of a retail node in Precinct 2.

#### Childcare

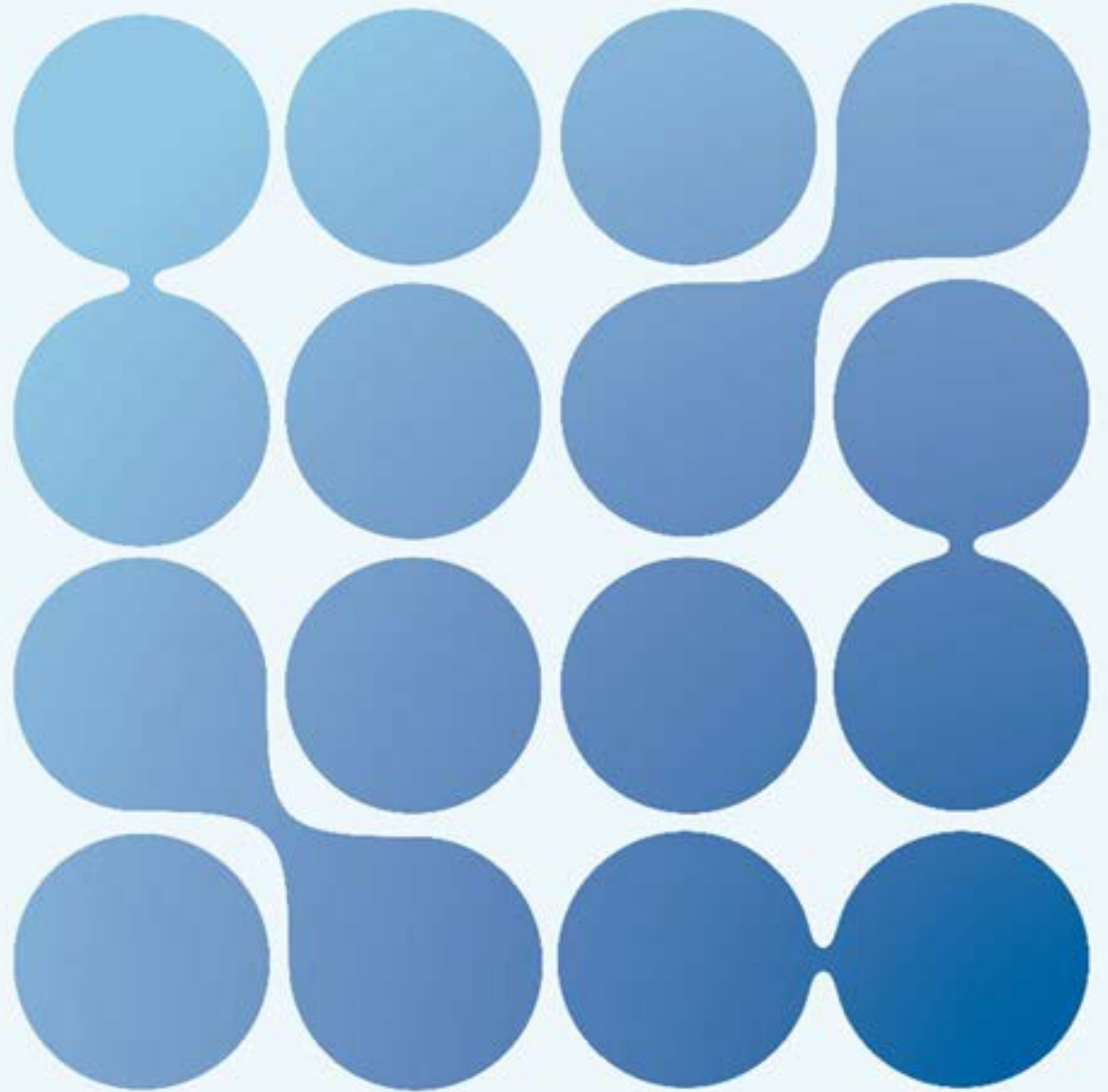
The HBU analysis concluded that with relatively low growth in the younger age cohorts within the surrounding area, and a fairly strong provision of places within the area, the prospects for additional childcare place demand were low.

We also note that childcare search websites indicate at least some availability in existing centres.

Nevertheless, future childcare demand will also be generated as a result of ongoing increases in the rate of participation, with this potentially accelerating post-COVID depending on policy support.

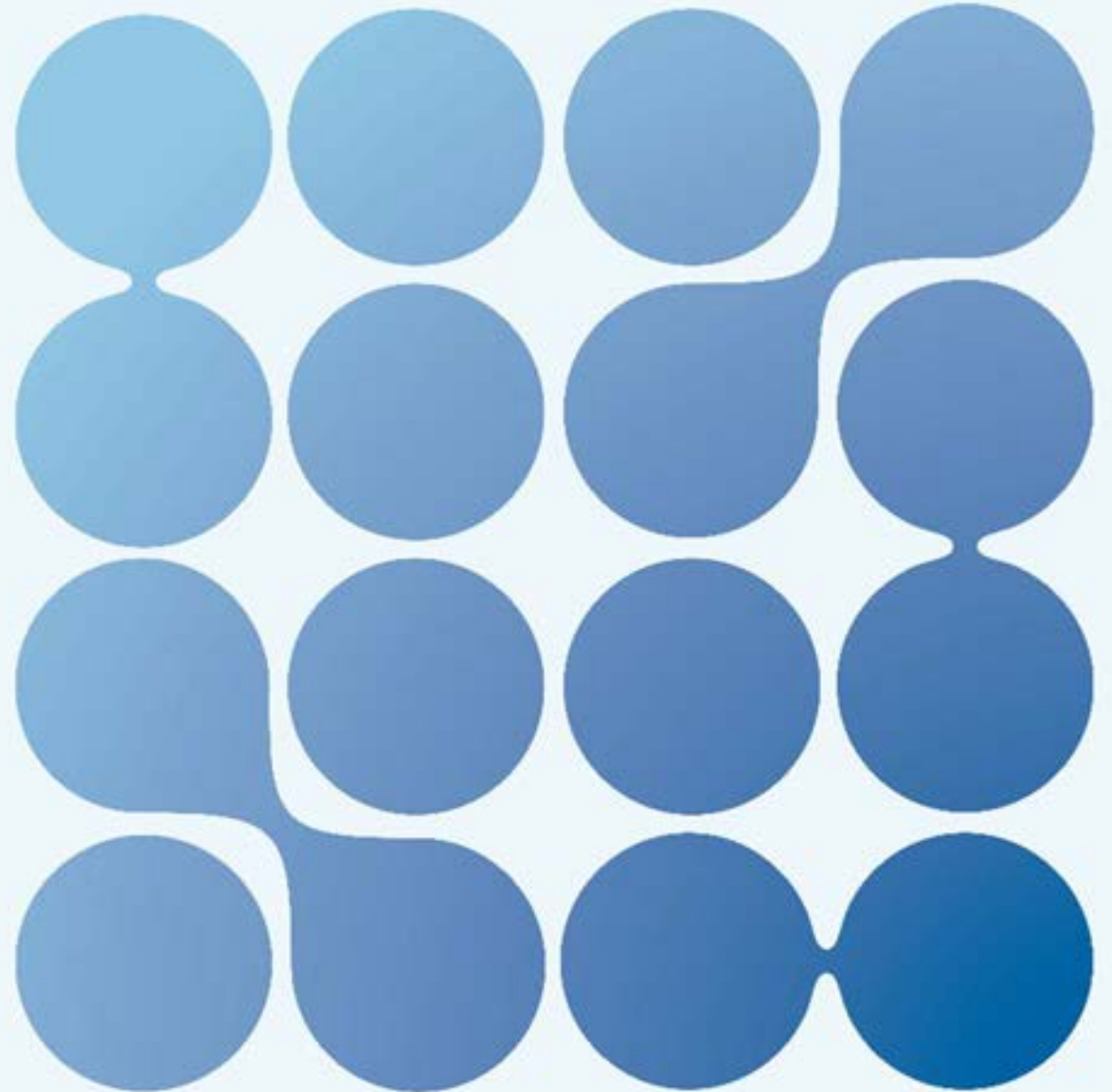
Our view is that there may be a medium to long-term opportunity for additional childcare provision, which may be provided through the introduction of a new centre within Precinct 2 or 3, or the expansion of the Lady Gowrie centre in Precinct 1 as part of the redevelopment of this part of the Site.

## C. RECOMMENDATIONS



# 10

Conclusions





## 10.1 Summary of land use opportunities

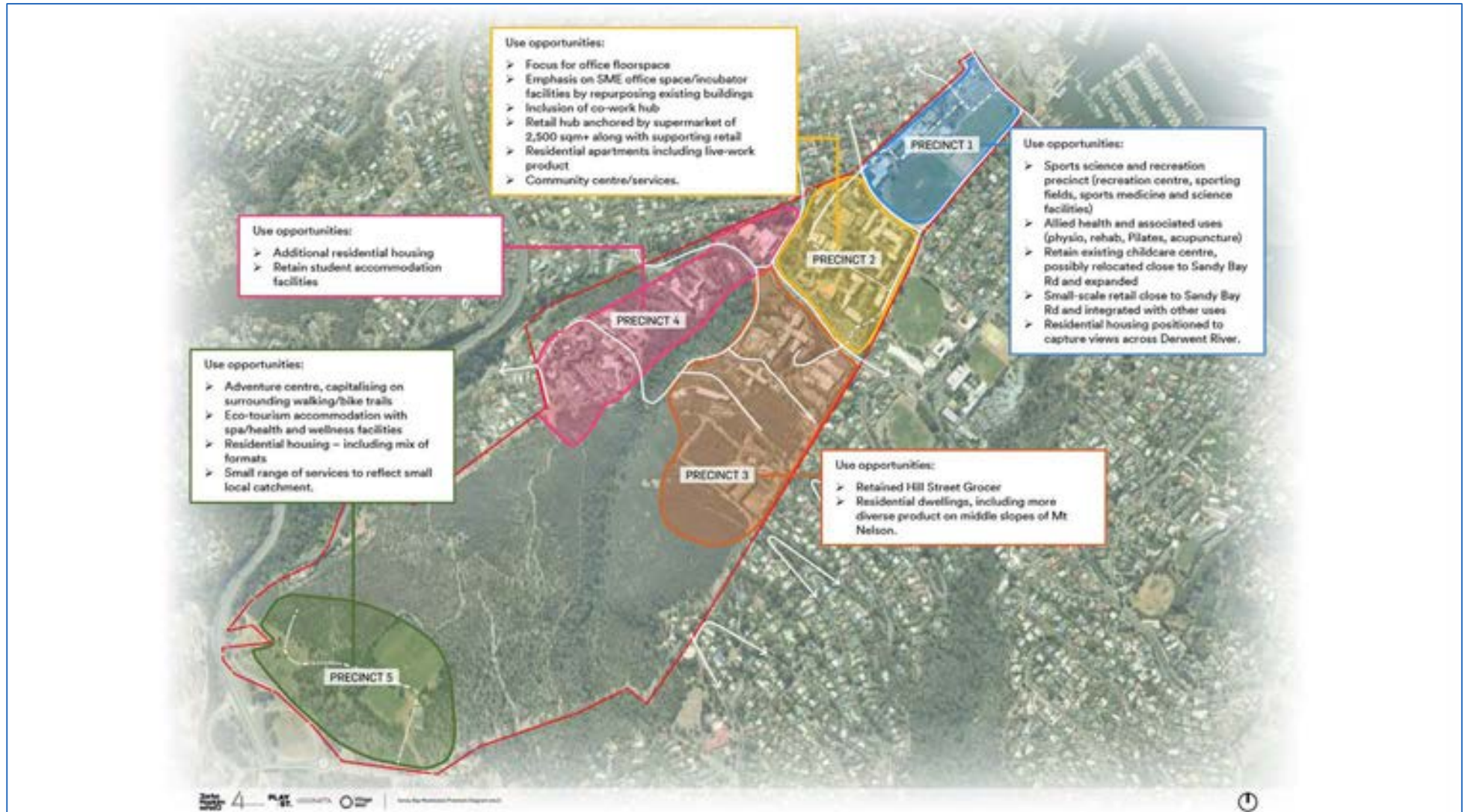
Table 16 presents a summary of the land use recommendations across the Subject Site, reflecting the market demand analysis and commentary presented in the body of the report.

Figure 24 over the page provides additional information on the recommended spatial position of these recommended uses.

**Table 16—Land use recommendations**

Use type	Commentary	Scale	Precinct location
Residential dwellings	Potential for residential dwellings across a range of formats from townhouses to mid and high-rise apartments. Opportunity for BTR projects and other tenure arrangements.	Indicative volume of 1,400 to 2,000 over 20-year project horizon, with absorption averaging around 75-90 per year. A larger volume could be accommodated over a longer time period.	Variety of formats delivered across the Site. Higher density in Precinct 1 and in parts of Precincts 2 and 4, possibly in Precinct 5. Opportunity for townhouses and/or single lots in Precinct 3 and 5.
Retirement ILUs	Could be potential for a component of retirement living (or alternative pre-retirement BTR product) in medium to long-term.	Indicative scale of 250 ILUs but will also depend on design factors (eg vertical-integration).	Precinct 3 or Precinct 2 close to local retail and community node.
Aged care	Possible opportunity for aged care component over the longer term as demand warrants.	Indicative scale of around 50-100 beds.	Precinct 3.
Commercial office	Opportunity is for small and micro businesses seeking attractive setting close to residence of business owner. Formats could include co-work hubs, individual leased premises, and live-work configurations.	Potential demand for around 12,500 sqm to 18,800 sqm over a 20-year project period.	Focus for commercial office in Precinct 2 where local retail and community services and transport infrastructure can help create critical mass for office sector.
Retail	Significant undersupply of supermarket floorspace in the region creates an opportunity to establish a supermarket-anchored retail hub centrally located with respect to the Site as a whole and expanding on Hill St Grocer role. A centre of this type would support a small range of convenience-oriented specialty retail, cafes and restaurants and other uses. Small-scale retail elsewhere in the Site would serve local residential, worker and visitor needs.	Central retail hub in Precinct 2 could comprise in the order of 4,000-5,000 sqm of retail, incorporating a supermarket of 2,500 sqm+. Small range of convenience retail of 500-1,250 sqm in Precinct 1, depending on configuration with respect to other uses. Local retail component in Precinct 5 associated with tourism functions and reflecting size local population base.	Precinct 2  Precinct 1  Precinct 5
Accommodation and tourism	Opportunity to establish an eco-resort in Precinct 5 which provides a base for exploring Tasmania's wilderness for nature-loving tourists. Col-location opportunity with adventure tourism park. Possible longer-term opportunity for mid-range of serviced apartment offer in Precinct 1 depending on scale of uses within Sports Green.	Eco-resort scale could potential be in the range 80-150 rooms depending on operator type and preferences. Serviced apartment offer would be in the order of 40-80 rooms given typical scale in suburban setting.	Precinct 5  Precinct 1
Sports and recreation	Opportunity to expand and improve sports and recreation offer within Precinct 1, possibly incorporating sports administrative offices. If successful, this would likely generate interest in a range of health and sports-medicine related uses, wellness centre, etc.	Sports administrative requirements unknown. Allied health uses could account for an additional 2,000-3,000 sqm of floorspace in professional suite setting.	Precinct 1
Community uses	Opportunity for additional GP provision later in development staging. Possible longer-term opportunity for expanded childcare place.	Small medical clinics typically require approx. 300-600 sqm. Possible expansion of Lady Gowrie to 150 places as part of redevelopment, or new centre elsewhere on the Site.	Precincts 1 or 2, possibly 5  Precincts 1 or 2

Figure 24—Site development opportunities



Source: Deep End Services; UPPL; Clarke Hopkins Clarke

REPORTING TO INFORM THE MASTERPLAN DESIGN

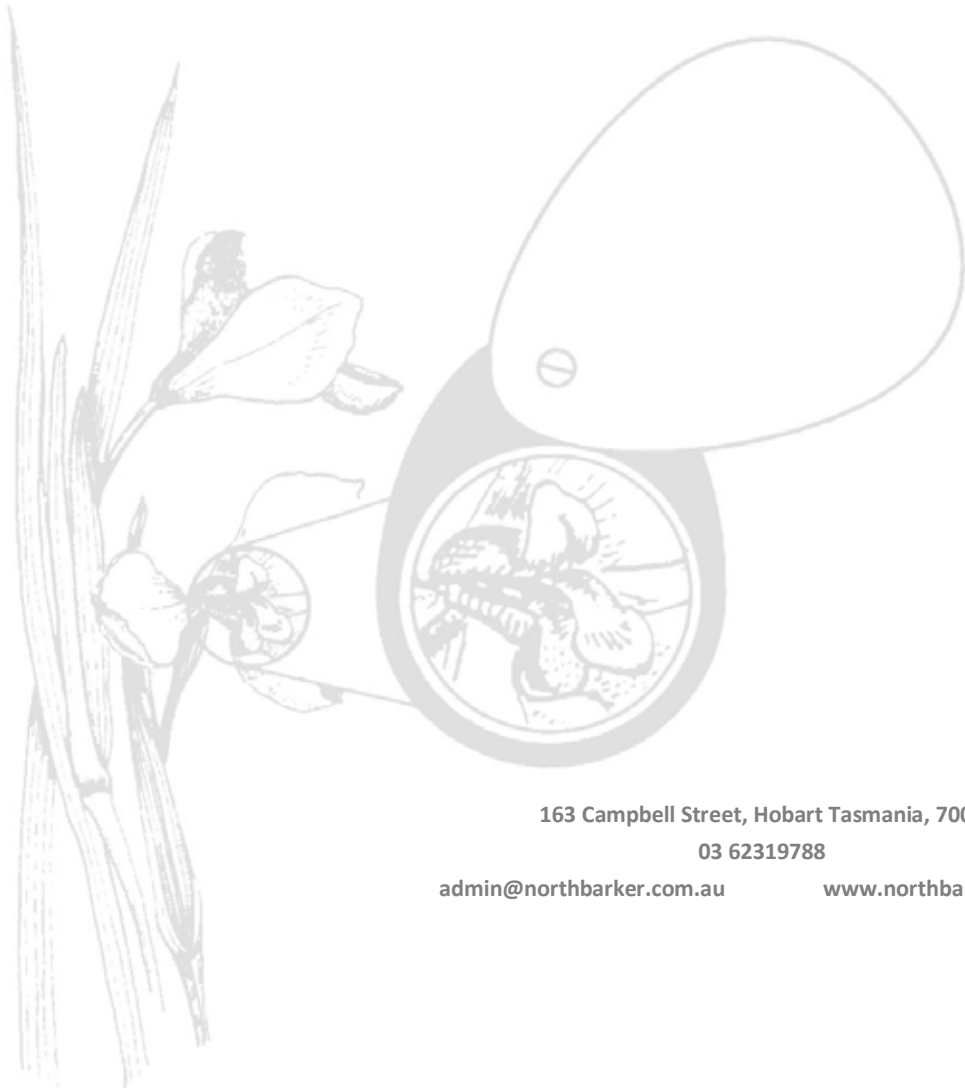
# **Natural Values Assessment + Ecological Impact Assessment**

North Barker Ecosystem Services

## UTAS Sandy Bay Masterplan for PSA Submission

### **Natural Values Assessment**

3<sup>rd</sup> December 2021  
For CHC (UNI002)  
Commercial in Confidence  
(Final)



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## Executive Summary

This report includes findings and impacts based upon the UTAS Sandy Bay Masterplan for PSA submission and includes the findings of recent Spring surveys for threatened flora. The Masterplan has been revised significantly, particularly around the Precinct 5 to avoid areas of high quality swift parrot habitat as well as areas of higher quality DOV.

A summary of the findings and recommendations are provided below by precinct:

### Precinct 1

- No threatened vegetation impacted
- No threatened flora impacts anticipated
- Contains 11 swift parrot foraging and/or potential nesting trees including one potential Hollow Bearing Tree (HBT)
- Avoid foraging and nesting trees where possible. Priority to retain should be given to large mature blue gums and black gums (>70cm dbh).

### Precinct 2

- No threatened vegetation impacted
- No threatened flora impacts anticipated
- Contains 26 swift parrot foraging and/or potential nesting trees including one HBT and two potential HBTs
- Includes eleven trees (nine blue gums and two white peppermints) listed on the City of Hobart (CoH) significant tree register. Five are proposed for removal based upon the Masterplan
- Avoid foraging, nesting and COH significant trees where possible. Priority to retain should be given to large mature blue gums and black gums (>70cm dbh).

### Precinct 3

- No threatened flora impacts anticipated.
- 0.61ha of threatened *Eucalyptus globulus* dry forest and woodland (DGL) to be impacted. Reduce impact where possible. Significance considered to be low given the young age of trees, small patch size and fragmented nature
- Contains 55 swift parrot foraging and/or potential nesting trees including two HBTs and one potential HBT
- Avoid swift parrot habitat trees where possible. Priority to retain should be given to large mature blue gums and black gums (>70cm dbh).

### Precinct 4

- No threatened flora impacts anticipated.
- 0.07ha of *Eucalyptus globulus* wet forest (WGL) to be impacted. WGL is listed as medium priority under the COH Interim Planning Scheme (IPS). It is not a threatened community under state or federal legislation. Minimise impacts where possible. Investigate options to retain larger blue gums in this community.
- Contains 63 swift parrot foraging and/or potential nesting trees including 2 HBTs and 6 potential HBTs
- Avoid swift parrot habitat trees where possible. Priority to retain should be given to large mature blue gums and black gums (>70cm dbh).

### Precinct 5

- No threatened flora impacts anticipated.
- Threatened vegetation: 0.27 ha of DGL and 0.33 ha of *Eucalyptus ovata* forest and woodland (DOV) to be directly impacted and 0.92 ha in a bushfire Hazard Management Area (HMA). Both are listed as threatened under the *Nature Conservation Act 2002* (NC Act) and DOV is listed as critically endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Both are high priority under the COH IPS.
- Reducing impacts to DOV and DGL would reduce impacts to swift parrot high quality habitat.
- Contains 57 swift parrot foraging and/or potential nesting trees including 3 HBTs and 3 potential HBTs
- Approximately 0.16 ha of high quality swift parrot foraging habitat to be impacted.

- Approximately 0.2 ha high-medium quality swift parrot nesting habitat to be impacted.
- If impacts to DOV and swift parrot habitat are not avoided then referral under the EPBC Act will be required.

It is important to note that the construction of buildings within areas supporting swift parrots brings with it a risk of creating bird strike hazards. Collision with fences, windows and vehicles is recognised as a key cause of mortality in swift parrots. The level of risk would be determined by the architectural details of the proposed development and other infrastructure such as fences. Large windows, reflective glass and chain link fences are particularly hazardous and should be avoided. Development design should be in accordance with recognised best practice. To minimise this risk standard practise for infrastructure development as outlined in the Tasmanian Bird Collision Code (Pfennigwerth (2008)) should be applied.

### **Hobart Interim Planning Scheme 2015**

The proposal is unable to meet the COH Interim Planning Schemes Acceptable Solutions and thus must rely on the Performance Criteria for impacts on low, medium and high priority biodiversity values. The iterative development of the Masterplan in response to natural values demonstrates that the Performance criteria can all be met including the Special Circumstances required for high priority biodiversity values. The Special Circumstances being a significant long term social and economic community benefit and there is no feasible alternative location for the proponent to undertake the development.

### **EPBC Act 1999**

*Flora:* No impacts are anticipated on threatened flora species and so no offsets are required.

*Vegetation:* An area of *Eucalyptus ovata* forest (DOV) (1.4 ha) meets the condition thresholds (Category B3) of the critically endangered community *Tasmanian Forests and Woodlands Dominated by Black Gum or Brookers Gum*. However, the direct impact on 0.33 ha is not considered to meet the significant impact criteria for ecological communities. The fuel management of 0.92 ha will not substantially reduce the quality or integrity of the community and so too is unlikely to cause a significant impact. Nevertheless, due to the conformity of the stand of forest with the description of the listed ecological community the proposal should be referred to determine if the proposal should be a controlled Action.

*Fauna:* A number of nationally listed fauna species may utilise the habitat on the property for foraging. These include the eastern barred bandicoot, spotted quoll, eastern quoll, wedge-tailed eagle, masked owl, forty-spotted pardalote, and Tasmanian devil. The likelihood of constraint mapping based upon fauna habitat assessment has indicated that this proposal is unlikely to cause a measurable decline to these species based upon the loss of foraging habitat.

The Master Plan for PSA submission will reduce the available habitat for the swift parrot within the survey area. The proposal would affect 1.25 ha of medium to high quality forest habitat and at least 30 foraging and/or nesting trees for this species outside of stands of forest.

Based on the likely impact on swift parrot habitat the proposal should be referred to the Commonwealth to determine if the proposal should be a controlled Action. The EPBC offset calculator suggests that somewhere in the order of 4 ha of swift parrot habitat will be required to offset the impact. Additionally, the loss of at least 30 habitat trees will be required to be offset at a ratio yet to be determined.

There are 13.5 ha of high quality swift parrot habitat located outside the development footprint in the bushland reserve. As such the balance of the land within the bushland reserve supports the swift parrot values that require offsetting. However, additional tenure security such as a conservation covenant under the *Nature Conservation Act 2002* and a management plan to sustain the habitat values of Matters of National Environmental Significance (MNES) would be a minimum requirement for the offset proposal to meet the requisite standard.

Additionally, a range of possible actions to offset impacts are potentially acceptable under the EPBC offset policy. These include rehabilitation of degraded habitat or establishing plantings to expand habitat, as well as education and research aimed at improving the management and conservation status of the habitats.

If efforts to offset the impact are acceptable then it is possible that the proposal could be permitted to proceed in the particular manner provisions under Section 77A of the Act rather than be a controlled Action.

***Bushfire hazard management***

The Masterplan for PSA submission is demonstrated to be able to meet the deemed to satisfy requirements for bushfire Hazard Management Areas based on BAL 19 and BAL 12.5 minimum distance of separation between all building types and the fire prone vegetation. There remains further potential to mitigate the hazard in conjunction with the Community Bushfire Mitigation Plan 2016 and additional landscape management.

Additional information regarding the design of access and regress, particularly emergency escape and the provision of water supply, is required to satisfy the objectives of the code and to meet the certification requirements of a Bushfire Hazard Management Plan. Further engagement with the Tasmanian Fire Service (TFS) during the development of the BHMP will assist in gaining support for the Masterplan from the TFS.

**Field assessment** Kelly Simpson and Fiona Walsh

**Report & mapping:** Kelly Simpson and Linda Drummond

**Review:** Philip Barker

Project	UTAS Sandy Bay Masterplan for PSA submission	
Location	Hobart	
Proponent	CHC on behalf of UPPL	
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NBES job code	UNI002	
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Field observation	Kelly Simpson and Fiona Walsh	
Field dates	May to November 2021.	
Reporting	Kelly Simpson and Philip Barker	
Mapping	Linda Drummond	
External consultations		
Version	Date	Author / Comment
Draft 0.1	29/07/2021	Philip Barker incomplete draft Stage 2
Version 1.0	5/08/2021	Philip Barker Draft Stage 2
Version 2.0	25/08/2021	Philip Barker Draft Stage 2 v2 (update following additional tree/drone survey)
Version 3.0	17/09/2021	Kelly Simpson Draft Stage 2 v3 (updated DOV area)
Version 4.0	28/10/2021	Kelly Simpson/Phil Barker Draft(Stage 3b rev 2) (update following den survey/initial spring threatened flora survey)
Version 5.0	15/11/2021	Kelly Simpson/Phil Barker Final (Rev 6 dated 1 <sup>st</sup> Nov 2021) (finalise threatened flora surveys and update report based upon Rev 6 masterplan)
Version 6.0	23/11/2021	Kelly Simpson (revision of trees to be retained)
Version 7.0	01/12/2021	Revision Rev 6B Master Plan for PSA Submission Kelly Simpson and Philip Barker
Version 8.0 FINAL	3/12/2021	Revision Rev 6B Master Plan for PSA Submission Kelly Simpson and Philip Barker (FINAL)

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## 1. Project Details

### 1.1. Background

The University of Tasmania are proposing to relocate all university faculties located at the Sandy Bay Campus to the Hobart CBD over the next ten years. A Masterplan for the Sandy Bay site (Site) has been developed as part of a planning scheme amendment to rezone, repurpose and subdivide specific parcels of land within the Site.

North Barker Ecosystem Services undertook a Natural Values Constraint report (2019) as part of the preliminary development planning phase. This report was primarily desktop based and provided preliminary advice on biodiversity constraints across the Site in the context of the existing legal and regulatory framework including the Hobart City Council Interim Planning Scheme 2015, The Tasmanian *Threatened Species Protection Act 1995* (TSPA) and the Commonwealth *Environment Protection and Biodiversity Conservation Act* (EPBC Act) 1999.

### 1.2. Purpose of the report

This report provides a detailed account of natural values and biodiversity constraints across the Site, based upon field investigations between May and November 2021. Detailed mapping of constraints has been undertaken as part of this assessment to inform the development of the Masterplan for PSA submission. This report includes assessment and quantification of potential impacts on natural values associated with the Masterplan and includes advice as to the likely extent of impacts of bushfire hazard management.

### 1.3. Subject site

The extent of the survey area is shown in Figure 1. It includes University owned land from Sandy Bay Road up to the Mount Nelson sports field. The land being considered here is zoned under the Hobart City Council Interim Planning Scheme 2015 (IPS) as Particular Purpose (PP). The entire UTAS PP Zone is an Informal Reserve within the Tasmanian Reserve Estate. The land is dominated by two uses; the University of Tasmania built infrastructure and playing fields and the retention of native vegetation in the bushland reserve. The bushland reserve is a significant land parcel of about 50 ha that is predominantly covered by native vegetation. The Site has been split into five separate precincts based upon the Masterplan for PSA submission and the intended future purpose of each precinct area. These precincts are discussed further in Section 1.5. The majority of the bushland reserve is located outside these precinct areas and will be retained as a public reserve.

### 1.4. Landscape context

The existing UTAS PP Zone (PPZ) is situated on the margins of the vast area of predominantly native forest that extends west up the slopes of Mount Wellington, and from there, west through continuous forest on State Forest and then the extensive Tasmanian reserve system. To the north and east is the City of Hobart and to the south are more significant stands of forests fragmented by rural and residential development in the adjacent Kingborough Municipality.

The land lays between the Southern Outlet, a major highway and the suburban arterial roads of Olinda Grove and Sandy Bay Road and Mount Nelson Rd to the south east. The land is dominated in the south by two ridgelines running downslope east north east and bisected by a relatively deep gully that drains the reserve into Sandy Bay. The mid and lower slopes are developed. The reserve has numerous tracks throughout and is utilised by the public for recreational purposes.

### 1.5. Proposed development

The Masterplan for PSA submission has been divided into five precinct areas based upon the overall vision for each area. An outline of precinct areas is shown in Figure 2.

#### **Precinct 1**

Precinct 1 includes the lower part of the Site between Sandy Bay Road and Grosvenor Crescent. It covers two sports fields, tennis courts, car parking area, childcare centre, Faculty of Law as well as other university buildings. The Masterplan proposes development of this area as the 'Lifestyle and Sporting Precinct'.

### ***Precinct 2***

Precinct 2 includes the middle part of the Site between Grosvenor Crescent and Churchill Avenue. This precinct includes a number of major university faculties with some car parking and grassed areas. Individual native and exotic trees occur throughout this precinct. The Masterplan proposes development of this area as the 'Innovation and Civic Quarter'.

### ***Precinct 3***

Precinct 3 includes the southern portion of the upper Site, on the eastern side of Rifle Range Creek. The precinct is bound by College Road, Grosvenor Crescent and the eastern site boundary. This area includes the Tasmanian Institute of Agriculture, Plant Sciences Department, CSIRO, Hill Street Grocer, Old Medical Sciences Building, Corporate Services Building and the Horticultural Research Centre. The Masterplan proposes development of this area as the 'Peri-Urban Neighbourhood'.

### ***Precinct 4***

Precinct 4 includes the northern portion of the upper Site, on the western side of Rifle Range Creek. The precinct is bound by Churchill Avenue to the east and extends up to Baintree Avenue above the university student accommodation. This area includes the TUU – Student Union Building, Research House, Hytten Hall, Commerce building and the area comprising student accommodation. The Masterplan proposes development of this area as the 'Learning Precinct'.

### ***Precinct 5***

Precinct 5 includes the Mount Nelson sports field and areas of surrounding vegetation, primarily to the south and west towards Olinda Grove and Proctors Road. The Masterplan proposes development of this area as the 'Mount Nelson Hilltop Neighbourhood'.



Figure 1: Site locality

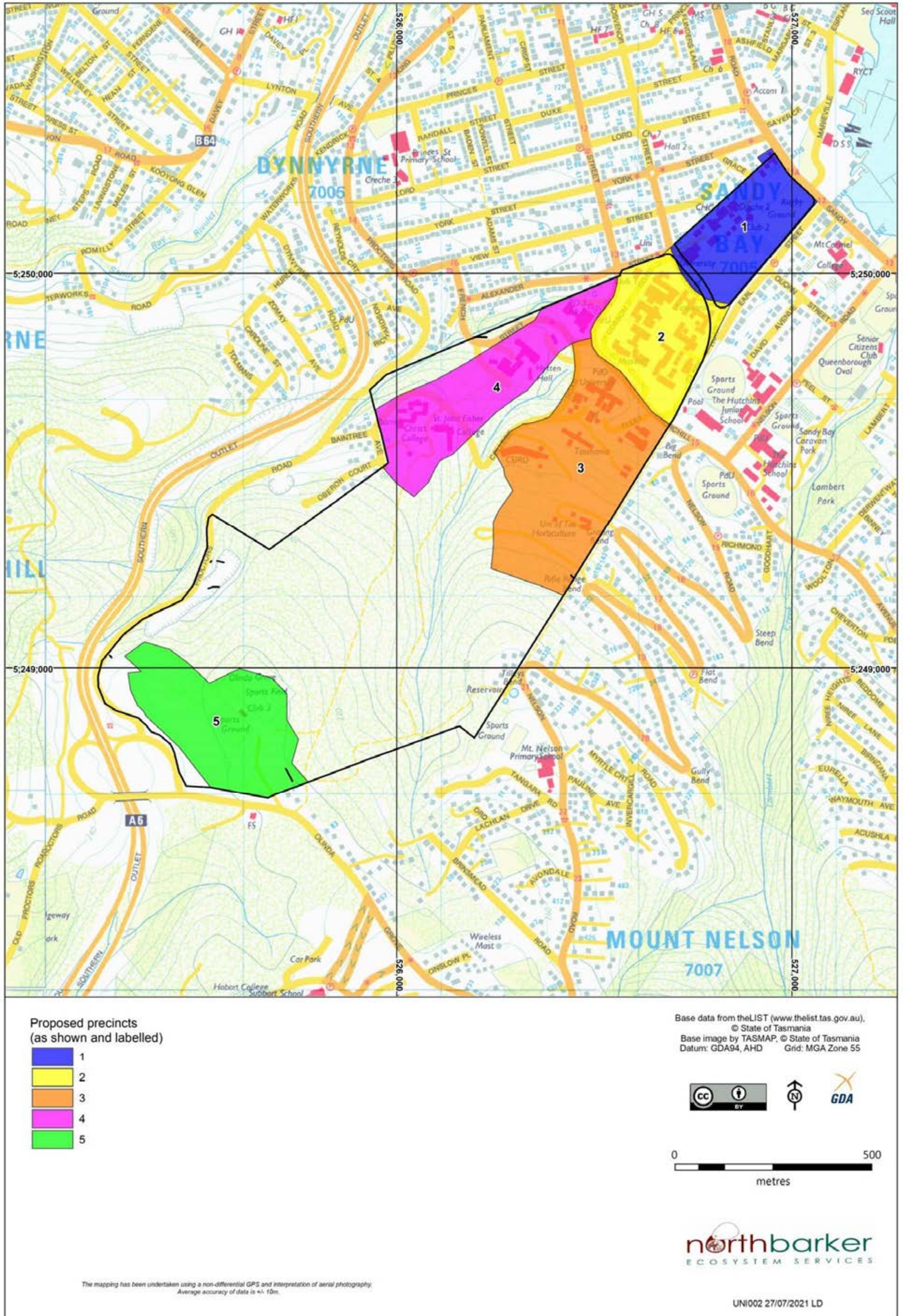


Figure 2: Outline of precinct areas

## 2. Methodology

### 2.1. Literature review

A number of management plans and biodiversity studies have been undertaken within the bushland reserve, each for a different purpose, but most related to broad scale management, either generally or for fire fuel reduction. The following were reviewed as part of the literature review for this assessment:

#### ***Biodiversity Management Plan: University Reserve, Sandy Bay Campus (Anon, Draft 2012)***

This report provides some history on the bushland reserve, particularly relevant to fire, as well as a map of vegetation and a list of vascular plants and birds which have been recorded. According to the Plan the survey data does not include systematic flora or fauna surveys. The most intensive flora surveys have not been repeated in different seasons to target ephemeral and annual species, such as orchids. According to the Plan, threatened plants previously recorded within the bushland reserve include doublejointed spear grass (*Austrostipa bigeniculata*) and leafy fire weed (*Senecio squarrosus*). The listed plant species are generally concentrated in disturbed places on the margins of the bushland of the property. The report mentions the following threatened fauna as previously being recorded within the bushland reserve, swift parrot (*Lathamus discolor*), eastern-barred bandicoot (*Perameles gunnii gunnii*) and the forty-spotted pardalote (*Pardalotus quadragintus*). However, the latter is not included on the bird list in Appendix 2 of the Plan and no previous records of this species occurring within 500m of the site are shown on the Natural Values Report<sup>1</sup>. A map of woody weeds across the bushland reserve is illustrated in the plan and includes gorse, blackberry, cotoneaster, hawthorn, broom and pittosporum.

#### ***Natural Space Management Strategy (Anon, Draft, undated)***

This report covers all natural spaces owned by the University across Tasmania. The report lists the same threatened biota as detailed in the Biodiversity Management Plan with the exception of the forty-spotted pardalote which is not listed as being known from the Sandy Bay Site. The report outlines Weeds of National Significance (WONS) and Weeds of State Significance (WSS) occurring on the Sandy Bay campus including Chilean needle grass (*Nassella neesiana*) and gorse (*Ulex europaeus*). The NVR shows four records of Chilean needle grass, including two near Hytten Hall, one below university accommodation and one near the student union building.

The report notes that the bushland reserve on the Sandy Bay Site fills a gap between Bicentennial and Ridgeway/Wellington Parks (both extensive council-controlled reserves) and is adjacent to significant bushland at Hobart College on Mount Nelson. The strategy highlights the importance of University properties that border reserves as having an opportunity to extend wildlife corridors and increase the habitat available to a variety of native plant and animal species.

#### ***Previous assessments undertaken by NBES (2017-2019)***

North Barker Ecosystem Services (NBES) have undertaken a number of natural values assessments and bushfire hazard management plans across the Sandy Bay Site. The most recent assessments have been undertaken around Hytten Hall, John Fisher College and the UTAS Mt Nelson Villas. Mapping and floristic survey data from these assessments have been incorporated into this report where applicable.

#### ***Hobart City Council Significant Tree Register (COH, updated March 2020)***

A total of eleven trees (nine blue gums and two white peppermints) listed on the COH significant tree register occur within the survey area. Six blue gums are located between Churchill Avenue and Dobson Road (Plate 1) with the remaining three blue gums and two white peppermints located within the central part of the Site (Plate 2). These trees also provide potential foraging and nesting habitat for the swift parrot and have been mapped as such and included in this assessment.

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<sup>1</sup> nvr\_1\_20-Jul-2021.pdf





Plate 1: Six blue gums located between Churchill Ave and Dobson Rd (NBES Tree ID 18, 19, 21, 25, 26 and 27) (CoH Ref C5).

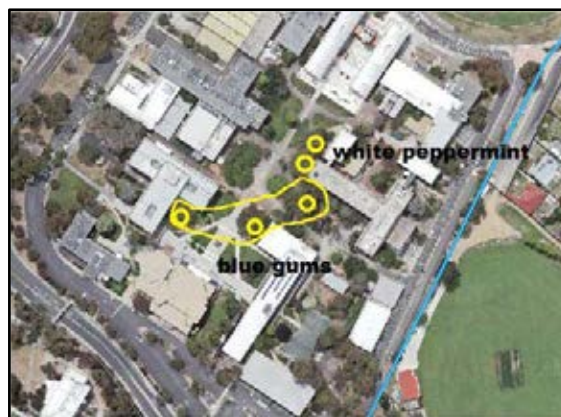


Plate 2: Blue gums and white peppermints located within the main campus area (NBES Tree ID 51, 55, 56, 57 and 58) (CoH Ref C6).

## 2.2. Survey methods

This assessment has been undertaken in accordance with the Guidelines for Natural Values Surveys<sup>2</sup>. Site surveys were completed by Kelly Simpson and Fiona Walsh of North Barker Ecosystem Services. Surveys were undertaken between May and November 2021.

The field investigation focused on potential impact areas within each precinct zone. A hand-held GPS with pre-loaded footprints of proposed development and associated HMA was utilised to allow accurate navigation in the field. Additional effort was also made to map threatened fauna habitat outside the precinct zones in order to establish constraint areas and provide a broad overview of the extent of significant habitat across the entire Site.

### Flora survey

Existing floristic data from previous surveys undertaken by NBES within the Site was utilised and expanded upon during the course of the investigation. Flora species were recorded by vegetation type using an area search technique based on the Timed Meander Search Procedure<sup>3</sup>. Additional incidental observations of flora species were recorded during the course of the surveys.

Exotic species were recorded and larger infestations of exotic species were recorded by polygon area. Isolated occurrences of declared weeds encountered during the survey were recorded with a GPS.

### Spring orchid survey

An initial survey was undertaken on the 12<sup>th</sup> and 13<sup>th</sup> October 2021. A total of 24 person hours were spent traversing areas of suitable habitat within the proposed development footprints and associated HMAs. This initial survey focused on those threatened flora which were identifiable at the time. A second survey was undertaken on the 27<sup>th</sup> October to check for flowering of *Thelymitra* sp. (sun orchids) which were identified during the initial survey. A final survey for later flowering threatened orchids and threatened grasses was undertaken on the 11<sup>th</sup> November 2021.

### Threatened fauna habitat assessment

Site habitats were assessed in terms of their value for native fauna species. The assessment focused on identifying habitat features associated with Threatened species known from the locality and predicted to occur. Particular attention was paid to habitat features such as:

- The presence of mature trees with hollows, fissures and/or other suitable roosting/nesting places.

<sup>2</sup> DPIPWE 2015

<sup>3</sup> Goff et al. 1982

- Presence of hollow logs/debris, tussock grasses and areas of dense leaf litter.
- Presence of suitable den/nesting sites for devils, quolls and bandicoots.
- Areas of dense vegetation with structural and floristic diversity.
- Vegetation connectivity and proximity to neighbouring areas of vegetation.
- Presence of swift parrot and forty-spotted pardalote foraging trees.
- Presence of chaostola skipper habitat (namely *Gahnia radula* (thatch sawsedge)).

Any signs of threatened fauna including scats, pellets, droppings etc were noted throughout the course of the surveys.

Significant survey effort was spent mapping foraging and nesting habitat for the swift parrot. This is discussed further in Section 2.3.

### **Drone survey**

Potential hollow bearing trees located within the development footprint were surveyed with use of a drone on the 12<sup>th</sup> August 2021.

### **Masked owl**

Two songmeters (Song Meter Micro) were placed at two separate locations within the bushland reserve for a three month period (refer to Figure 3). The locations were selected based on their proximity to large mature trees ( $\geq 100\text{cm dbh}$ ) which could provide suitable nesting habitat for the masked owl. All large mature trees encountered during the survey were inspected from ground level for potential large hollows (with entrances  $> 15\text{cm}$ ) suitable for the masked owl. However, it should be noted that hollows can be difficult to identify from the ground and it is generally not possible to determine if a hollow has dimensions suitable for use by masked owls. Hollows are more likely to be found in large mature trees, so tree diameter is a useful surrogate for hollow availability. Trees less than 100 cm dbh are unlikely to contain hollows suitable for masked owls<sup>4</sup>. Signs of masked owl pellets below old mature trees were undertaken.

### **Targeted den survey**

A targeted den survey was undertaken in conjunction with the threatened flora survey on the 12<sup>th</sup> and 13<sup>th</sup> October 2021. A total of 24 person hours were spent traversing the proposed development footprints and HMAs in precincts 3, 4 and 5, looking for potential den sites suitable for devils and quolls.

## **2.3. Mapping**

### **Vegetation mapping**

A number of studies have mapped the vegetation within the bushland reserve (Davis 1999, AVK 2009 and UTas 2012). Only AVK 2009 uses the TASVEG mapping units as a basis for mapping but there is strong agreement among the studies as to the dominant trees in each vegetation type. These maps were reconciled as part of the Natural Values Constraint report (NBES 2019) to provide a single correct assessment of the vegetation. As part of this detailed assessment, specific effort was made to verify this vegetation map with emphasis on the precinct areas and clarifying the extent of threatened vegetation communities within these areas. Classification of vegetation communities was undertaken in accordance with TASVEG 4.0 communities.

Reference is also made to priority vegetation classification detailed in Table E.10 of the Hobart City Council (CoH) IPS. The extent of vegetation units within the CoH LGA is utilised for comparison purposes and quantification of impacts on a landscape scale.

### **Swift Parrot habitat mapping and tree survey**

Mapping of swift parrot foraging and nesting habitat was undertaken across the Site and was undertaken in accordance with the Forest Practices Authority (FPA) technical note on assessing

<sup>4</sup> Forest Practices Authority (2014) *Fauna Technical Note No. 17*

swift parrot habitat<sup>5</sup>. Each area of mapped vegetation within the Site was classified as high, medium, low or negligible foraging/nesting habitat based upon the criteria detailed below in Table 1 and Table 2. Outside of the mapped vegetation communities, all potential foraging trees (*Eucalyptus globulus* and *E. ovata* ≥40cm dbh) were surveyed using an Emlid Reach RS2 GNSS which provides 2-3 cm accuracy location. In addition, all potential nesting trees (eucalypts with dbh ≥70cm) were also surveyed where they occur outside of the mapped vegetation units or units too small to apply the FPA quality criteria. Tree species, dbh and height range was recorded for each tree surveyed.

Similarly, where overlaps between the forest type and the Masterplan occur, it is proposed to also locate and map the foraging trees and the potential habitat trees so that impacts on habitat trees can be more precisely identified. Where impacts on potential nest trees are likely a nest hollow survey will be undertaken using a drone to determine if the trees actually support potential nest hollows.

**Table 1: Potential foraging-habitat density class definition (adapted from FPA technical note 3)**

Foraging habitat density class	Description
High	≥ 50% of the stems over 40cm dbh in any one hectare patch are foraging trees*
Medium	20-49% of the stems over 40cm dbh in any one hectare patch are foraging trees*
Low (dry forest)	1-19% of the stems over 40cm dbh in any one hectare patch are foraging trees*
Low (wet forest)	10-19% of the stems over 40cm dbh in any one hectare patch are foraging trees*
Negligible	All areas that do not meet the above definitions

\* foraging trees are *Eucalyptus globulus* and/or *E. ovata* ≥40cm dbh

**Table 2: Potential nesting-habitat density class definition (adapted from FPA technical note 3)**

Nesting habitat density class	Dry forest	Wet forest
High	At least 8 trees/ha are over 100cm dbh	At least 15 trees/ha are over 100cm dbh or 8 trees/ha over 150cm dbh
Medium	At least 8 trees/ha are greater than 70cm dbh	At least 8 trees/ha are greater than 100cm dbh
Low	Trees over 70cm dbh are present, but comprise less than 8 trees/ha	Trees over 100cm dbh are present, but comprise less than 8 trees/ha
Negligible	There are no eucalypt trees over 70cm dbh	There are no eucalypt trees over 100cm dbh

### **Masked owl forest maturity mapping**

The Forest Practices Authority (FPA) have compiled a Mature Habitat Availability Map (Figure 3). The mature habitat availability map identifies areas as high, medium, low or negligible mature habitat availability, based on aerial photograph interpretation of mature crown density and senescence. Significant habitat for the masked owl is considered to be all areas of dry forest (TASVEG dry eucalypt forest and woodland) with at least 20% mature eucalypt crown cover.

### **Biodiversity constraints mapping**

The biodiversity constraints mapping is based upon vegetation type, including threatened communities as well as threatened species habitat. Vegetation constraints are shown in Table 3 and are based upon federal and state listing as well as the priority listing under the CoH IPS.

<sup>5</sup> Forest Practices Authority (2014) *Fauna Technical Note No. 3*

**Table 3. Vegetation constraints**

Vegetation	COH IPS Priority	NCA	EPBC	Constraint Class
DOV	H	Threatened	Critically endangered	1
DGL	H	Threatened	-	2
WGL	M	-	-	3
NAV	L	-	-	4
DPU	L	-	-	4
DVG	L	-	-	4

Threatened species constraints are based upon the Biodiversity Asset Class (BAC) of each species and their likelihood of occurrence based upon the results of the site surveys. An expert judgement has been made in classifying the BACs and is detailed in Table 4. EPBC Matters of National Environmental Significance (MNES) pose the highest protection status with constraint declining through Tasmanian TSPA E, V and R species and Nature Conservation Act' "threatened" vegetation types. However, other considerations such as the type of MNES habitat (foraging versus nesting) or the viability of habitat can stratify the judgment.

**Table 4: Biodiversity Asset Classes: CR, critically endangered; EN, endangered; NH, World and National Heritage; VU, vulnerable; e, endangered; T, Threatened; v, vulnerable; r, rare and at risk.**

BAC	EPBC Act	TSP Act/NC Act
1	CR, EN, NH	
2	VU	e/T
3		v, r
4		NCA - protected

The BAC's of fauna species reflect the habitats importance as either foraging or nesting habitat. The following rules are applied to distinguish between foraging and nesting habitat for the species listed.

- Eastern-barred Bandicoot – This species is BAC 2 based upon its listing as Vulnerable under the EPBC Act. However, given its prevalence within SE Tasmania, nesting habitat demoted to BAC 3 and foraging habitat demoted to BAC 4.
- Spotted-tailed Quoll – Natal den sites and vegetation types offering potential denning habitat are BAC 2. Foraging habitat within the site is BAC 4.
- Eastern Quoll – Natal den sites and vegetation types offering potential denning habitat are BAC 1. Foraging habitat within the site and other small habitat patches within the existing developed area are BAC 4.
- Tasmanian Devil - Significant den sites and vegetation types offering potential denning habitat are BAC 1. Foraging habitat within the site is BAC 4.
- Wedge-tailed Eagle – Nest sites and suitable nesting habitat is BAC 1. Potential nest habitat demoted to BAC 4 when proven not to support nests.
- Grey Goshawk - Nest sites and suitable nesting habitat is BAC 2. Potential nest habitat demoted to BAC 4 when proven not to support nests.
- Masked Owl – Nest sites and suitable nesting habitat is BAC 2. Potential nest habitat demoted to BAC 4 when proven not to support nests.

A two-way constraint matrix (Table 5) has been constructed using the Biodiversity Asset Class e.g. EPBC – nesting habitat or TSPA rare flora habitat, versus the likelihood of the species occurring within each vegetation type based upon the field assessment. Table 5 combines the implications of the level of constraint with respect to the regulations of the Acts in Table 4 and the likelihood of the value occurring. So, the implications of a value actually occurring remain the regulations of either the EPBC, TSPA or NC Acts.

Red being high BAC and high likelihood of occurrence and green being low BAC and or low likelihood of occurrence. For example, a significant Tasmanian devil den site has a BAC of 1, but if it has a low likelihood of occurrence then the likelihood of constraint within that habitat type would be 3. A lower constraint class is assigned to some small patches of vegetation which occur within the developed areas of the campus, where dens and foraging use by threatened mammals is considered to be very unlikely.

It should be emphasised that den and nest sites, while having a high level of constraint (BAC), will generally occupy a small area. However, because locations are not yet known we are forced to assign a constraint level across an entire potential habitat unit even though the actual spatial constraint of an actual den/nest site would be much more localised. The targeted den survey undertaken across precincts 3, 4 and 5 has been undertaken to confirm the presence or absence of dens and so potentially reduce the constraint associated with this habitat type within the development footprint.

**Table 5: Constraint matrix based upon BAC and likelihood of constraint**

BAC	Likelihood of constraint based upon field assessment				
	Present	High	Moderate	Low	Nil
1	1	1	2	3	4
2	2	2	3	4	4
3	3	3	3	4	4
4	4	4	4	4	4

### 2.4. Bushfire Hazard Management Areas

The advice provided below reflects the requirements of the COH Bushfire-Prone Areas Code, the Planning Commissions PD 5.1 and or the Directors Determination 2.2 (transitional) for building in bushfire prone areas. The Hazard Management Areas (HMA) are based on Method 1 of AS3959. No reduction to the HMA's has been applied by considering mitigating influences such as the likely fire path or by applying Method 2. Method 2 utilises additional environmental, fuel and fire behaviour data to predict the likely radiant heat exposure of a building. Consequently, the indicative HMA's are likely to be a worst case scenario with respect to the extent of fuel/vegetation management that could be required.

The Masterplan for PSA submission includes new buildings and extensions to existing buildings. The buildings will have different uses; predominantly residential but with some vulnerable uses. Indicative HMA's have been developed to reflect the relevant minimum distance of separation required based on a particular buildings use. The minimum distance of separation defines the hazard management area within which vegetation must be managed to reduce and maintain low fuel loads.

The indicative HMA's have assumed that vegetation classified outside of the HMA's is forest. This is conservative and aims to allow for regrowth of vegetation on unmanaged land and potential changes between now and any subsequent development application.

Where residential buildings appear on individual lots on the Masterplan the land is assumed to be subdivided and the BAL 19 requirements of PD 5.1 have been applied from the building walls. In cases where vulnerable uses are proposed BAL 12.5 minimum distance of separation has been applied.

### 2.5. Limitations

The timing of the initial survey in late autumn and winter was not suitable for detecting the potential presence of threatened orchids. The winter survey was also not suitable for gaining a full floristic

inventory of some groundcover species such as grasses which may not have seeds used for identification. A spring survey was undertaken to compensate for these limitations.

Nevertheless, there may still be some seasonal or discreet species overlooked. To compensate for this, field data are supplemented with observations from the Tasmanian Natural Values Atlas which contains records of known or predicted threatened species records within 5km of the Site.

The presence of hollows was assessed from ground level with further assessment of potential hollow bearing limbs surveyed by a drone. In some instances access for the drone was not possible and these trees have been identified as potential HBTs. The FPA's guidelines on potential nesting trees has still been utilised to identify larger trees which may be close to hollow forming age and are of some conservation value. This being trees >70cm dbh in dry forest and trees >100cm dbh in wet forest are considered potential nesting trees for swift parrots<sup>6</sup>. Potential nesting trees for masked owls are considered to be trees >100cm dbh given their requirement for larger hollows<sup>7</sup>.

In addition, given the scale of the Site and the location of proposed developments, the survey focused on the areas of potential impact within each precinct, as well as targeting suitable habitat for threatened species.

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<sup>6</sup> Forest Practices Authority (2014) *Fauna Technical Note No. 3*

<sup>7</sup> Forest Practices Authority (2014) *Fauna Technical Note No. 17*

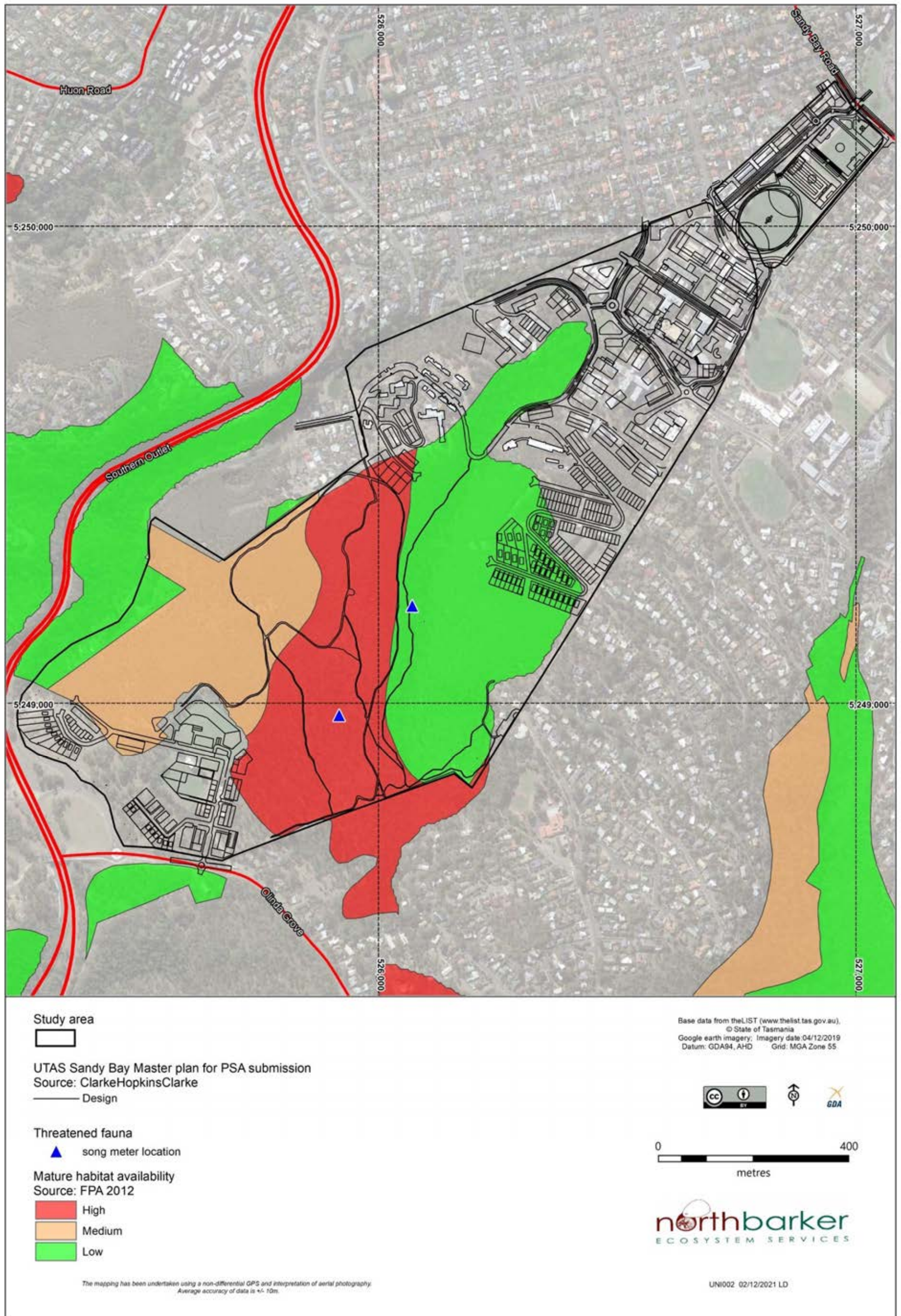


Figure 3: Mature Habitat mapping and song meter locations

### 3. Site Values

#### 3.1. Vegetation

Nine TASVEG 4.0 units have been mapped across the survey area including six native forest units and three modified land units. These are described in detail below and their extent across the Site is illustrated in Figure 4.

#### **DOV *Eucalyptus ovata* forest and woodland**

Approximately 1.4ha of this community occurs within the study area, to the west and south of the Mount Nelson playing fields. The original mapped extent<sup>8</sup> of this community has been altered following recent field investigations to that shown in Figure 4.

The area of DOV around the FRG patch, south of the sports field in precinct 5, comprises a mix of semi-mature *Eucalyptus ovata* trees and *E. pulchella* trees (>40cm dbh) in the canopy with a denser lower tree canopy of regenerating *E. ovata* trees. These areas with a greater prevalence of regenerating *E. ovata* have been assigned to DOV based upon the EPBC listing advice which includes co-dominant patches where *E. ovata* has a “greater cover or a greater stem density than any other species in the tree canopy”. The statement is somewhat ambiguous as it does not define which tree canopy it is referring to but states further that “it is often the case that *E. ovata* is a smaller tree than cohabitants” and “allowing for stem density factors in such situations so that the identity of a patch does not change readily if the larger tree dies”. Therefore, these areas have been mapped as DOV.

A previously mapped section attributed to DOV along the eastern side of the entrance to the sports fields has been reassigned to DPU due to the prevalence of mature *E. pulchella* and lack of mature *E. ovata* and low stem density of regenerating *E. ovata* trees in this area. This is also the case for the triangular area of DPU mapped on the western side of the access track and adjacent to Olinda Grove. The road reserve area where a roundabout is proposed contains several larger *E. pulchella* (40-60cm dbh) with some smaller *E. ovata* (generally <25cm dbh). This area is also likely to constitute DPU.

Around the sports fields, it appears that a number of mature *E. ovata* trees were planted following the construction of the fields as they occur in a row along the north-western edge of the smaller field (Plate 3). A number of smaller *E. ovata* trees of a single cohort occur adjacent to this row of planted trees. Other mature *E. ovata* trees within this community are growing from the batter slope of the fields indicating that they either regenerated following the construction of the field or were planted (Plate 4). The sports fields were constructed in the 1980s using fill from road works on the southern outlet (UTas 2012). Batter slopes around the fields contain a number of exotics in the groundlayer including blackberry, gorse and briar rose.

Within the mapped DOV community the condition of the vegetation varies greatly depending upon the age class of the trees, structural and floristic diversity as well as prevalence of exotics in the understorey. One small better quality section occurs below the southern tip of the lower field. This area comprises mature *E. ovata* and *E. pulchella* trees with an understorey of scattered shrubs and graminoids and few exotics (Plate 5). The majority of the DOV mapped comprises smaller *E. ovata* trees with a sparse understorey of scattered shrubs and grasses (Plate 6).

The floristic and structural composition of this community is provided below.

<b>DOV: Vascular plant species list</b>	
Trees:	<i>Acacia melanoxylon</i> , <i>Eucalyptus ovata</i> var. <i>ovata</i> , <i>Eucalyptus pulchella</i> , <i>Eucalyptus viminalis</i> subsp. <i>viminalis</i>
Tall Shrubs:	<i>Allocasuarina littoralis</i> , <i>Allocasuarina verticillata</i> , <i>Bedfordia salicina</i> , <i>Bursaria spinosa</i> subsp. <i>spinosa</i> , <i>Dodonaea viscosa</i> subsp. <i>spatulata</i> , <i>Leptospermum scoparium</i> , <i>Pultenaea daphnoides</i>
Shrubs:	<i>Cassinia aculeata</i> subsp. <i>aculeata</i> , <i>Daviesia ulicifolia</i> , <i>Epacris impressa</i> , <i>Exocarpos strictus</i> , <i>Pomaderris elliptica</i> , <i>Pultenaea juniperina</i>
Low Shrubs:	<i>Leucopogon virgatus</i> , <i>Lissanthe strigosa</i> subsp. <i>subulata</i> , <i>Pimelea humilis</i> , <i>Styphelia humifusa</i>
Herbs:	<i>Acaena novae-zelandiae</i> , <i>Dianella revoluta</i> , <i>Senecio linearifolius</i> var. <i>linearifolius</i>

<sup>8</sup> NBES (2019) Natural Values Constraints: University of Tasmania Sandy Bay



Graminoids:	<i>Diplarrena moraea</i> , <i>Juncus pallidus</i> , <i>Lepidosperma laterale</i> , <i>Lomandra longifolia</i>
Grasses:	<i>Austrostipa</i> sp., <i>Poa labillardierei</i> , <i>Rytidosperma</i> sp., <i>Themeda triandra</i>
Weeds:	<i>Dactylis glomerata</i> , <i>Erica lusitanica</i> , <i>Reseda luteola</i> , <i>Rosa rubiginosa</i> , <i>Rubus fruticosus</i> , <i>Ulex europaeus</i>



Plate 3: Row of mature planted *E. ovata* adjacent to sports field



Plate 4: *E. ovata* occurs along the fill batter of the Mt Nelson sports field.



Plate 5: Small patch (0.2ha) of better quality DOV



Plate 6: Other patch (0.26ha) with younger *E. ovata* trees and scattered shrubs.

DOV is listed as a High Priority Biodiversity Value under the COH IPS and *Eucalyptus ovata* forest and woodland is a listed threatened community under Schedule 3A of the Tasmanian NC Act.

In addition, areas of DOV which meet specific condition thresholds are listed as a Threatened Ecological Community (TEC) under the EPBC Act. Patches must be at least 0.5ha or greater and must have at least 50% native perennial vegetation cover in the understorey AND at least 15 native understorey species per 0.5ha<sup>9</sup>. While the mapped extent of DOV is greater than 0.5ha, this includes vegetation along the batter slopes which do not have at least 50% native cover in the understorey due to weeds.

Some smaller patches of higher quality DOV surrounding the batters are likely to meet the native cover and diversity thresholds but are smaller than the minimum patch size of 0.5ha. The conservation advice notes the following:

- Revegetated or replanted sites, or areas of vegetation regeneration, can be included as part of the protected ecological community, provided that the revegetated area meets the Key diagnostic characteristics and at least the minimum condition thresholds; and
- Gaps in the canopy, degraded and regenerating areas of lower quality are still part of the patch, until a decision is made to the contrary.

<sup>9</sup> Department of the Environment (2021)

Based on this, it can be assumed that the areas of lower quality along the batter slopes should be included as part of the larger patch. Therefore, taking a conservative approach based upon the conservation advice, we must conclude that the entire patch of DOV (1.4ha) meets the condition thresholds under Category B3 of the conservation advice.

**DGL *Eucalyptus globulus* dry forest and woodland**

Approximately 10.55ha of DGL has been mapped across the study area. This community generally occupies eastern facing slopes with the largest patch occurring to the east of the Mt Nelson sports fields and extending down towards Rifle Range Creek. This area contains a number of larger blue gums and is in good condition with limited weeds. The understorey comprises a diversity of both shrubs and graminoids (Plate 7) (refer to list below). The exception to this is the southern edge, along adjacent properties, which has been cleared in the understorey for fire protection (Plate 8).

Another patch of DGL occupies a damp gully head along a drainage line that feeds into the Rifle Range Creek from just below the University Mt. Nelson Villas (Plate 9). Smaller modified patches also occur around the CSIRO building (Plate 10) and along the edge of Proctors Creek between Proctors Rd and the university student accommodation. These areas generally contain a reduced floristic assemblage within the understorey with the latter dominated by exotics in the understorey.

**DGL: Vascular plant species list**

Trees:	<i>Acacia melanoxylon</i> , <i>Eucalyptus globulus</i> subsp. <i>globulus</i> , <i>Eucalyptus ovata</i> var. <i>ovata</i> , <i>Eucalyptus pulchella</i> , <i>Eucalyptus viminalis</i> subsp. <i>viminalis</i>
Tall Shrubs:	<i>Acacia dealbata</i> subsp. <i>dealbata</i> , <i>Allocasuarina verticillata</i> , <i>Banksia marginata</i> , <i>Bedfordia salicina</i> , <i>Bursaria spinosa</i> subsp. <i>spinosa</i> , <i>Dodonaea viscosa</i> subsp. <i>spatulata</i> , <i>Exocarpos cupressiformis</i> , <i>Leptospermum scoparium</i> , <i>Pultenaea daphnoides</i>
Shrubs:	<i>Bossiaea prostrata</i> , <i>Epacris impressa</i> , <i>Exocarpos strictus</i> , <i>Goodenia ovata</i> , <i>Pultenaea juniperina</i>
Low Shrubs:	<i>Lissanthe strigosa</i> subsp. <i>subulata</i> , <i>Styphelia humifusa</i>
Herbs:	<i>Geranium potentilloides</i> var. <i>potentilloides</i> , <i>Gonocarpus tetragynus</i> , <i>Senecio glomeratus</i>
Graminoids:	<i>Diplarrena moraea</i> , <i>Juncus pallidus</i> , <i>Lepidosperma elatius</i> , <i>Lepidosperma gunnii</i> , <i>Lomandra longifolia</i>
Grasses:	<i>Agrostis</i> sp., <i>Austrostipa aphylla</i> , <i>Poa labillardierei</i> , <i>Themeda triandra</i>
Weeds:	<i>Cardamine hirsuta</i> , <i>Euphorbia peplus</i> , <i>Genista monspessulana</i> , <i>Myosotis</i> sp, <i>Rubus fruticosus</i> , <i>Vicia</i> sp., <i>Reseda luteola</i>



Plate 7: DGL below Mt Nelson sports field



Plate 8: DGL with cleared understorey for fire protection.



Plate 9: DGL along drainage line below UTAS Mt Nelson villas.



Plate 10: Smaller patch of DGL near CSIRO building

The previously mapped extent of DGL has been modified slightly following the field surveys to that shown in Figure 4. This figure represents a more accurate distribution of DGL. Where there is a high proportion of *Eucalyptus pulchella* (> 30%) present in the canopy, these areas have been mapped as DPU. Areas dominated by *Allocasuarina verticillata* with scattered emergent *Eucalyptus globulus* have been mapped as NAV.

DGL is listed as a High Priority Biodiversity Value under the CoH IPS. *Eucalyptus globulus* dry forest and woodland is a listed threatened community under Schedule 3A of the Tasmanian NC Act.

### **DVG *Eucalyptus viminalis* grassy forest and woodland**

Approximately 2.25ha of this community occurs within the study area, the majority of which is located southwest of the Mount Nelson sports field, up to Proctors Road. This area is relatively flat and the community occurs as an open grassy woodland with scattered mature *E. viminalis* (Plate 11). *E. pulchella* and *E. ovata* also occur to a lesser extent. A small area of *E. obliqua* has been included in this mapped unit given its small size and the scale of the mapping undertaken. The DVG community is generally in moderate condition with evidence of past clearing and scattered patches of exotics present in the groundlayer. A floristic summary of the community is provided below. A smaller unit of mapped DVG is located around the northern and eastern edges of the Life Sciences building along Churchill Avenue and TT Flynn Street. Here the DVG occurs on a steep batter and comprises mixed age *E. viminalis* with *E. pulchella* and *E. globulus*. The community is somewhat modified and contains a number of planted native and exotic shrubs (Plate 12).

**DVG: Vascular plant species list**

Trees:	<i>Eucalyptus obliqua</i> , <i>Eucalyptus ovata</i> var. <i>ovata</i> , <i>Eucalyptus pulchella</i> , <i>Eucalyptus viminalis</i> subsp. <i>viminalis</i>
Tall Shrubs:	<i>Acacia dealbata</i> subsp. <i>dealbata</i> , <i>Acacia mearnsii</i> , <i>Allocasuarina verticillata</i> , <i>Bedfordia salicina</i> , <i>Bursaria spinosa</i> subsp. <i>spinosa</i> , <i>Dodonaea viscosa</i> subsp. <i>spatulata</i> , <i>Exocarpos cupressiformis</i> , <i>Leptospermum scoparium</i> , <i>Ozothamnus ferrugineus</i> , <i>Pultenaea daphnoides</i>
Shrubs:	<i>Coprosma quadrifida</i> , <i>Epacris impressa</i> , <i>Exocarpos strictus</i> , <i>Lomatia tinctoria</i>
Low Shrubs:	<i>Lissanthe strigosa</i> subsp. <i>subulata</i> , <i>Styphelia humifusa</i>
Herbs:	<i>Geranium potentilloides</i> var. <i>potentilloides</i>
Graminoids:	<i>Diplarrena moraea</i> , <i>Juncus pallidus</i> , <i>Lomandra longifolia</i>
Weeds:	<i>Dactylis glomerata</i> , <i>Rosa rubiginosa</i> , <i>Rubus fruticosus</i> , <i>Ulex europaeus</i>



Plate 11: Open grassy *Eucalyptus viminalis* woodland within the site.



Plate 12: Modified DVG along slopes surrounding the Life Sciences building.

DVG is listed as a Low Priority Biodiversity Value under the CoH IPS. *Eucalyptus viminalis* grassy forest and woodland is not a listed threatened community under Schedule 3A of the NC Act or the EPBC Act.

**DPU *Eucalyptus pulchella* forest and woodland**

Approximately 25.45ha of this community occurs within the study area, predominately through the central portion of the bushland reserve. It generally occupies drier northwest facing slopes on dolerite. The dominant tree species within the areas mapped as DPU is *Eucalyptus pulchella*, although *E. viminalis*, *E. ovata* and *E. globulus* are also present. This community is generally in good condition across the Site although it varies greatly in structural diversity and maturity. Some areas comprise a single cohort of dense regrowth (Plate 13) while other areas are more open with scattered mature *E. pulchella* (Plate 14). The understorey within the DPU contains native plants in all strata (see species list below), with the understorey character changing from shrubby (Plate 15) to sedgey or grassy depending upon aspect, fire history and disturbance. Where DPU occurs adjacent to residential properties the understorey has been cleared for fire protection (Plate 16).

**DPU: Vascular plant species list**

Trees:	<i>Acacia melanoxylon</i> , <i>Eucalyptus globulus</i> subsp. <i>globulus</i> , <i>Eucalyptus ovata</i> var. <i>ovata</i> , <i>Eucalyptus pulchella</i> , <i>Eucalyptus viminalis</i> subsp. <i>viminalis</i>
Tall Shrubs:	<i>Acacia dealbata</i> subsp. <i>dealbata</i> , <i>Acacia mearnsii</i> , <i>Acacia verticillata</i> , <i>Allocasuarina littoralis</i> , <i>Allocasuarina verticillata</i> , <i>Bedfordia salicina</i> , <i>Beyeria viscosa</i> , <i>Bursaria spinosa</i> subsp. <i>spinosa</i> , <i>Dodonaea viscosa</i> subsp. <i>spatulata</i> , <i>Exocarpos cupressiformis</i> , <i>Leptospermum scoparium</i> , <i>Pultenaea daphnoides</i>
Shrubs:	<i>Acacia stricta</i> , <i>Bossiaea prostrata</i> , <i>Cassinia aculeata</i> subsp. <i>aculeata</i> , <i>Dillwynia glaberrima</i> , <i>Exocarpos strictus</i> , <i>Goodenia ovata</i> , <i>Lomatia tinctoria</i> , <i>Pimelea nivea</i> , <i>Pultenaea juniperina</i> , <i>Solanum laciniatum</i>

Low Shrubs:	<i>Acacia myrtifolia</i> , <i>Hibbertia hirsuta</i> , <i>Leucopogon virgatus</i> , <i>Lissanthe strigosa</i> subsp. <i>subulata</i> , <i>Pimelea humilis</i> , <i>Styphelia humifusa</i>
Herbs:	<i>Acaena echinata</i> , <i>Dianella revoluta</i> , <i>Drosera peltata</i> , <i>Euchiton japonicus</i> , <i>Gonocarpus tetragynus</i> , <i>Goodenia lanata</i> , <i>Linum marginale</i> , <i>Oxalis perennans</i> , <i>Stackhousia monogyna</i> , <i>Thelymitra pauciflora</i> , <i>Veronica gracilis</i> , <i>Wahlenbergia</i> sp.
Graminoids:	<i>Carex breviculmis</i> , <i>Lepidosperma elatius</i> , <i>Lepidosperma gunnii</i> , <i>Lepidosperma laterale</i> , <i>Lomandra longifolia</i> , <i>Luzula</i> sp., <i>Schoenus apogon</i>
Grasses:	<i>Austrostipa aphylla</i> , <i>Ehrharta</i> sp., <i>Poa sieberiana</i> , <i>Rytidosperma</i> sp., <i>Themeda triandra</i>
Climbers:	<i>Cassytha glabella</i> , <i>Cassytha pubescens</i> , <i>Comesperma volubile</i>
Weeds:	<i>Briza minor</i> , <i>Centaurium erythraea</i> , <i>Cirsium vulgare</i> , <i>Erica lusitanica</i> , <i>Hypochaeris radicata</i> , <i>Plantago lanceolata</i> , <i>Ranunculus repens</i> , <i>Rosa rubiginosa</i> , <i>Sonchus oleraceus</i> , <i>Vicia</i> sp.



Plate 13: Area of young *E. pulchella* regrowth.



Plate 14: More open area of DPU with scattered mature *E. pulchella*



Plate 15: DPU with dense understorey located on sheltered lower slopes near WGL along Rife Range Creek.



Plate 16: DPU with cleared understorey for fire protection.

DPU is listed as a Low Priority Biodiversity Value under the CoH IPS. *Eucalyptus pulchella* forest and woodland is not a listed threatened community under Schedule 3A of the NC Act or the EPBC Act.

### **WGL *Eucalyptus globulus* wet forest**

Approximately 7.56ha of WGL occurs within the study area, the majority of which is along Rifle Range Creek with some smaller degraded patches along Proctors Creek near French Street and Churchill Avenue.

The vegetation on either side of the Rifle Range Creek is open-forest dominated by *Eucalyptus globulus* with a closed-scrub to closed-forest understorey dominated by *Beyeria viscosa* (pinkwood)

and *Bedfordia salicina* (Tasmanian blanketleaf) and thus separating from DGL (Plate 17 and Plate 18).

The area of WGL along Proctors Creek on the northern boundary of the site is highly modified although it does contain a number of large mature *Eucalyptus globulus*. The understorey is predominately cleared and contains a number of exotic species including willow, cotoneaster and poplar (Plate 19).

**WGL: Vascular plant species list**

Trees:	<i>Acacia melanoxylon</i> , <i>Eucalyptus globulus</i> subsp. <i>globulus</i> , <i>Eucalyptus pulchella</i>
Tall Shrubs:	<i>Acacia verticillata</i> subsp. <i>verticillata</i> , <i>Allocasuarina littoralis</i> , <i>Banksia marginata</i> , <i>Bedfordia salicina</i> , <i>Beyeria viscosa</i> , <i>Dodonaea viscosa</i> subsp. <i>spatulata</i> , <i>Exocarpos cupressiformis</i> , <i>Pomaderris apetala</i> subsp. <i>apetala</i>
Shrubs:	<i>Coprosma quadrifida</i> , <i>Pultenaea juniperina</i>
Herbs:	<i>Acaena novae-zelandiae</i> , <i>Oxalis perennans</i> , <i>Pterostylis</i> sp.
Graminoids:	<i>Carex appressa</i> , <i>Lepidosperma laterale</i> , <i>Lepidosperma longitudinale</i>
Grasses:	<i>Poa labillardierei</i> , <i>Rytidosperma</i> sp.
Ferns:	<i>Dicksonia antarctica</i> , <i>Pteridium esculentum</i> subsp. <i>esculentum</i>
Climbers:	<i>Billardiera</i> sp., <i>Cassytha pubescens</i>
Weeds:	<i>Cardamine hirsuta</i> , <i>Centaureum erythraea</i> , <i>Cirsium vulgare</i> , <i>Clematis vitalba</i> var. <i>vitalba</i> , <i>Dactylis glomerata</i> , <i>Digitalis purpurea</i> , <i>Euphorbia peplus</i> , <i>Genista monspessulana</i> , <i>Myosotis</i> sp., <i>Reseda luteola</i> , <i>Rubus fruticosus</i>



Plate 17: Vegetation along the upper section of Rifle Range Creek



Plate 18: WGL along the lower sections of Rifle Range Creek



Plate 19: Degraded WGL along drainage line adjacent to French St

WGL is listed as a Medium Priority Biodiversity Value under the CoH IPS. *Eucalyptus globulus* wet forest is not a listed threatened community under Schedule 3A of the NC Act or the EPBC Act.

However, this vegetation type provides important foraging and nesting habitat for the nationally listed critically endangered swift parrot.

**NAV *Allocasuarina verticillata* forest**

Approximately 18.5ha of NAV occurs within the study area and generally dominates where dolerite is abundant as surface rock on the property (Plate 20), particularly areas which have been burnt frequently and most recently. The structure of NAV varies from open-heath in more recently burnt areas to closed-forest in the longest unburnt areas. The *Allocasuarina verticillata* forms a dense almost mono species dominant layer although the occasional eucalypt is present either as an emergent or as codominant with the *Allocasuarina* (Plate 21). There are other shrubs scattered in the community and some patches with a distinct graminoid layer (Plate 22 and Plate 23) (refer to the community species list below).

**NAV: Vascular plant species list**

Trees:	<i>Acacia melanoxylon</i> , <i>Eucalyptus globulus</i> subsp. <i>globulus</i> , <i>Eucalyptus pulchella</i> , <i>Eucalyptus viminalis</i> subsp. <i>viminalis</i>
Tall Shrubs:	<i>Allocasuarina verticillata</i> , <i>Bursaria spinosa</i> subsp. <i>spinosa</i> , <i>Dodonaea viscosa</i> subsp. <i>spatulata</i> , <i>Exocarpos cupressiformis</i>
Shrubs:	<i>Goodenia ovata</i>
Low Shrubs:	<i>Lissanthe strigosa</i> subsp. <i>subulate</i> , <i>Styphelia humifusa</i>
Herbs:	<i>Acaena novae-zelandiae</i> , <i>Gonocarpus tetragynus</i> , <i>Oxalis perennans</i> , <i>Wahlenbergia</i> sp.
Graminoids:	<i>Lepidosperma elatius</i> , <i>Lepidosperma gunnii</i> , <i>Lepidosperma inops</i> , <i>Lomandra longifolia</i>
Grasses:	<i>Austrostipa stuposa</i> , <i>Poa sieberiana</i>
Ferns:	<i>Cheilanthes austrotenuifolia</i>
Weeds:	<i>Centaurium erythraea</i> , <i>Lysimachia arvensis</i>



Plate 20: NAV with dolerite surface rock



Plate 21: Dense cover of *Allocasuarina verticillata*



Plate 22: Closed NAV forest with sparse shrubs and limited groundcover



Plate 23: NAV with dense groundcover of graminoids

NAV is listed as a Low Priority Biodiversity Value under the CoH IPS. *Allocasuarina verticillata* forest is not a listed threatened community under Schedule 3A of the NC Act or the EPBC Act.

### **FRG FUM, FUR Modified Land**

The remainder of the survey area (40.52ha) comprises a mix of modified land. These are discussed briefly below.

- FRG: Regenerating cleared land (2.78ha)

This unit describes areas of land which have been cleared in the past and then left to regenerate or have been revegetated with native plantings. There is an area of native restoration plantings to the south of the Mt Nelson sports field. Plantings in this area include young *Eucalyptus ovata*, *E. globulus*, *Acacia melanoxylon*, *Callistemon* sp., and *Banksia marginata* (Plate 24).

- FUM: Extra-urban miscellaneous (5.35ha)

This unit represents areas where native vegetation has been replaced with human infrastructure in rural and remote areas. It covers the old quarry site (Plate 25), Mt Nelson sports field and infrastructure associated with Tas Water and mobile towers.

- FUR: Urban areas (32.39ha)

This includes developed areas of the Site as well as the Mt Nelson villas.





**Plate 24: Area of native restoration plantings south of Mt Nelson sports field**



**Plate 25: Quarry area along Proctors Rd.**

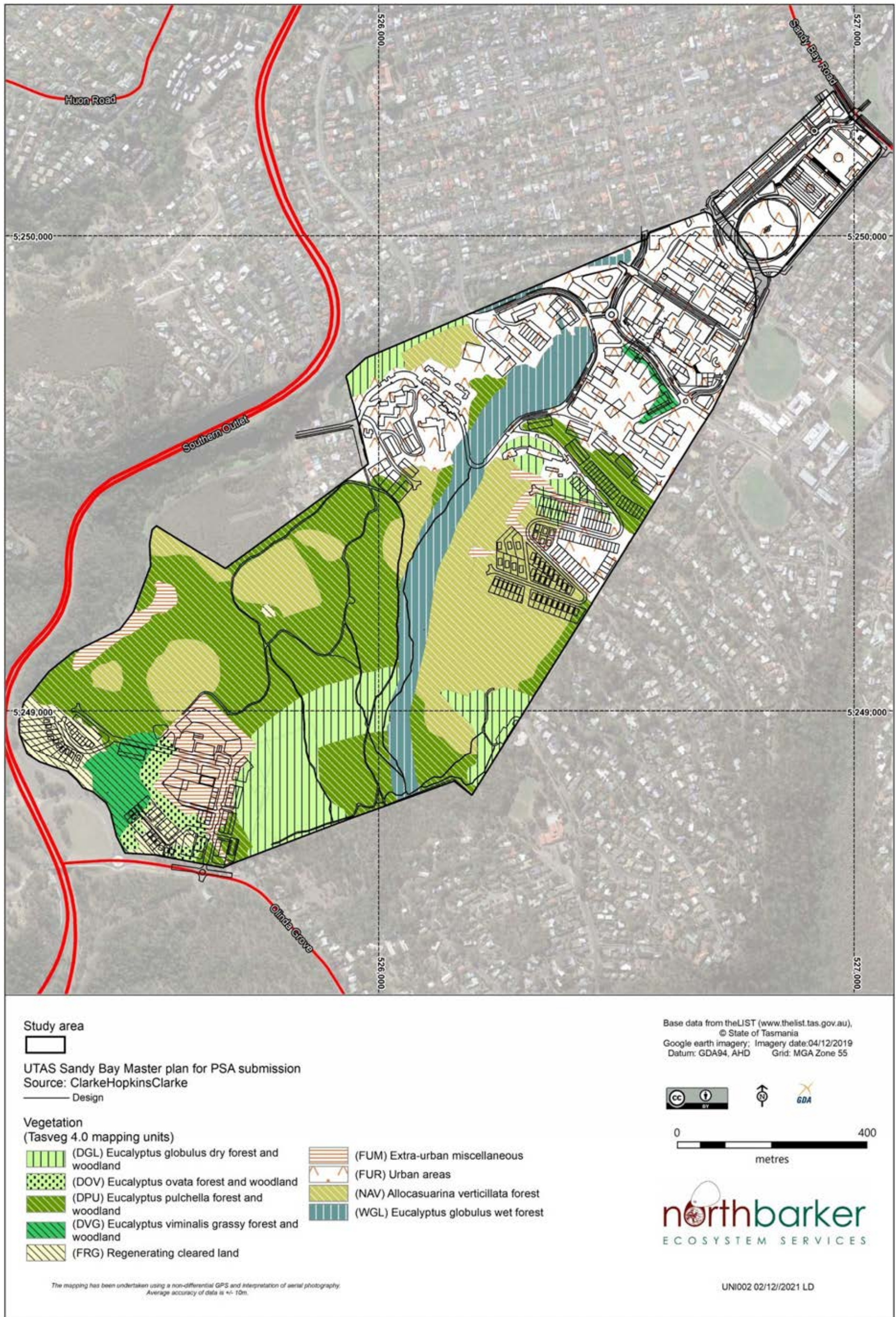


Figure 4: Vegetation community mapping within the survey area

### 3.2. Plant Species of conservation significance

A total of 128 vascular plant taxa have been recorded by NBES within the survey area during the current field investigation as well as previous assessments undertaken within the study area (Appendix 1). A total of 29 exotic species have been recorded, including 8 declared weeds. No threatened flora species have been recorded to date.

Based upon the risk assessment undertaken as part of the Natural Values Constraint report (NBES 2019), a total of nine threatened flora species were assessed to have a moderate to high potential to occur within the site. Three of these species, *Austrostipa bigeniculata*, *Scleranthus fasciculatus* and *Senecio squarrosus*, have been previously recorded within the Site based upon the literature review and Natural Values Report<sup>10</sup>. Based upon the field investigation, an updated assessment of the likelihood of each species occurring onsite is provided below. A summary of constraint based upon the likelihood of occurrence within each vegetation type is provided in Table 6. This table has been updated following the recent threatened flora surveys in October 2021. Figure 5 illustrates the biodiversity constraints across the survey area (includes threatened flora and fauna habitat as well as threatened vegetation).

An initial threatened flora survey was undertaken on the 12<sup>th</sup> and 13<sup>th</sup> October 2021. A total of 24 person hours were spent traversing areas of suitable habitat within the proposed development footprints and associated HMAs. This initial survey focused on those threatened flora which were identifiable at the time. A second survey was undertaken on the 27<sup>th</sup> October to check for flowering of *Thelymitra* sp. (sun orchids) which were identified during the initial survey. Another final survey for *Prasophyllum perangustum* and *Austrostipa bigeniculata* was undertaken on the 11<sup>th</sup> November 2021. The survey focused on areas of suitable habitat for *Prasophyllum perangustum* (DPU) within the proposed development footprint as well as previous recorded locations of *Austrostipa bigeniculata* as shown in the bushland reserve BMP (2012). Another attempt to identify the *Thelymitra* sp. to species level was also undertaken during this final spring survey.

#### ***Austrostipa bigeniculata***

*Austrostipa bigeniculata* is found mainly in the south-east and Midlands in open woodlands and grasslands on fertile soils, where it is often associated with *Austrostipa nodosa*. The bushland reserve Biodiversity Management Plan (2012) identifies five locations of this species within the survey area. Two behind properties on Oberon Ct, one within DPU in the central part of the Site, one on the edge of DPU behind the STEPS building and one within the HMA near the second bend of Nelson Rd. None of these records are shown in the NVR<sup>11</sup> which also does not list the species as being recorded within 500m of the Site. The majority of records within 5km of the Site are from the Queens Domain. In addition, the bushland reserve BMP (2012) does not state the source of the records or the accuracy of the locations shown in Figure 6 of the plan.

Dry forest/woodland types within the survey area (DPU, DGL, DVG and DOV) provide suitable habitat for this species, particularly DPU which seems to be the primary vegetation unit where previous records are located based upon the Biodiversity Management Plan. The timing of the survey in winter was outside the suitable survey period for this species.

This species typically flowers from November to January. Further survey for this species was undertaken on the 11<sup>th</sup> November 2021. The survey focused on locations shown in Figure 6 of the BMP (2012). Several specimens of *Austrostipa* were collected and analysed, none of which were identified as *A. bigeniculata*.

#### ***Carex gunniana***

The habitat of *Carex gunniana* is poorly understood and highly variable. It includes wet eucalypt forest, sandy heathlands, margins of streams, littoral sands, shingle with seepage, damp grasslands within dry forest and rough pasture. There is one record of this species within 500m of the study area<sup>11</sup>. This record is from 1990 and located along Lambert Rivulet, approximately 400m east of the site. This perennial sedge flowers from October to March and mature inflorescences are required for identification.

<sup>10</sup> nvr\_1\_20-Jul-2021.pdf

<sup>11</sup> nvr\_1\_20-Jul-2021.pdf

WGL along Rifle Range Creek provides marginal habitat for this species. Targeted searches undertaken on the 12<sup>th</sup> and 13<sup>th</sup> October in areas of suitable habitat near the development footprint failed to locate this species.

### ***Hyalosperma demissum***

*Hyalosperma demissum* grows on rock pavements or shallow sandy soils in some of Tasmania's driest regions, and also in scalded patches in *Eucalyptus amygdalina* heathy/grassy woodland. The underlying substrate is mostly Jurassic dolerite. According to the NVR this species has not been recorded within 500m of the site and the two records from within 5km of the site are from the Queens Domain in 1898. Numerous surveys since the mid-1980s have not been able to relocate this species at this site<sup>12</sup>.

Although the timing of the survey in winter was outside the suitable survey period for this species, it is considered highly unlikely to occur within the study area.

Targeted searches undertaken on the 12<sup>th</sup> and 13<sup>th</sup> October in areas of suitable habitat within the development footprint failed to locate this species.

### ***Prasophyllum perangustum***

*Prasophyllum perangustum* is known only from one small population in Knocklofty Park in the foothills of Mt. Wellington about 350 m above sea level. It occurs in grassy *Eucalyptus pulchella* forest on well-drained clay loam and skeletal clay loam derived from dolerite.

Areas of DPU across the site represent suitable habitat for this species, although its likelihood of occurrence is considered very low. Despite a BAC rating of 1, the likelihood of constraint for this species has been downgraded to 4 as it is considered very unlikely to occur onsite.

A targeted survey for this species was undertaken on the 11<sup>th</sup> November 2021. Given the extent of potential suitable habitat across the study area (DPU covers 25.25ha) the survey focused on areas of DPU located within the proposed development footprint. Several individuals of *Prasophyllum brevifolium* were observed during the survey within areas of DPU near the Mt Nelson sports field entrance. No individuals of *Prasophyllum perangustum* were observed and the species is considered highly unlikely to occur within the study area.

### ***Scleranthus fasciculatus***

This species can occur in modified environments including modified woodlands, with most known sites being Poa grassland/grassy woodland. The NVR shows one record of this species from 2011 located onsite near the entrance to the Mt Nelson sports field. Suitable habitat for this species includes areas of grassy woodland, specifically DOV, DVG, DPU and DGL.

A detailed targeted survey for this species was undertaken on the 13<sup>th</sup> October in areas of suitable habitat within the development footprint. Searches targeted areas surrounding the previous record at Mt Nelson. No individuals of this species were identified during the survey.

### ***Senecio squarrosus***

*Senecio squarrosus* occurs in a wide variety of habitats. One form occurs predominantly in lowland damp tussock grasslands. The more widespread and common form occurs mainly in dry forests (often grassy) but extends to wet forests and other vegetation types. The bushland reserve Biodiversity Management Plan (2012) identifies three locations of this species within the survey area. One is near Churchill Avenue and the Union building, a second is located on College Rd near the CSIRO building and the third is located at the end of Baintree Avenue, behind private residences on Oberon Court. None of these records are shown in the NVR<sup>11</sup> which also does not list the species as being recorded within 500m of the Site. The majority of records within 5km of the Site are from near Hobart College and west of the southern outlet near Ridgeway reservoir.

<sup>12</sup> Threatened Species and Marine Section (2014) Listing Statement for *Hyalosperma demissum* (moss sunray).

Targeted searches undertaken on the 12<sup>th</sup> and 13<sup>th</sup> October in areas of suitable habitat within the development footprint failed to locate this species. Targeted searches at locations shown in the University BMP also failed to locate the species.

### ***Thelymitra bracteata***

According to the NVR this species has not been recorded within 500m of the Site, although there are 36 records within 5km of the Site. Survey for this species will be undertaken in spring within areas of suitable habitat, with emphasis on the development footprint.

Targeted surveys undertaken in October 2021 located several individuals of *Thelymitra* species in precincts 3 and 5. These were not in flower at the time of the survey. A second survey of recorded individuals was undertaken on the 27<sup>th</sup> October 2021 when weather conditions were favourable (sunny and warm). Unfortunately, flowers were not developed enough to ascertain to species level. Further investigation was undertaken on the 11<sup>th</sup> November 2021. Three different species of *Thelymitra* were recorded during this survey including *T. pauciflora*, *T. ixiodes* and *T. rubra*. These were all recorded within areas of DPU and DGL around the Mt Nelson sports field and entrance. No individuals of the threatened *Thelymitra bracteata* were observed.

### ***Vittadinia burbridgeae* and *V. muelleri***

These species can occur in modified environments including native “lawns”, on roadside remnants and modified grassland. There are four records of these species within 500m of the site, dated around 2011. The records are concentrated along Olinda Grove, near the entrance to Hobart College. Further survey in spring will be undertaken for these species which will be in flower from November.

Targeted searches undertaken on the 12<sup>th</sup> and 13<sup>th</sup> October in areas of suitable habitat within the development footprint failed to locate this species.

Table 6: Likelihood of Constraint for Threatened flora

Species*	TSP Act	EPBC Act	BAC	Likelihood of Constraint									
				DOV	DGL	DPU	DVG	WGL	NAV	FRG	FUM	FUR	FPE
<b><i>Austrostipa bigeniculata</i></b> <b>doublejointed speargrass</b>	r		3#	3	3	3	3	4	4	4	4	4	4
<i>Carex gunniana</i> mountain sedge	r		3#	4	4	4	4	3	4	4	4	4	4
<i>Hyalosperma demissum</i> moss sunray	e		2#	4	4	4	4	4	4	4	4	4	4
<i>Prasophyllum perangustum</i> knocklofty leek-orchid	e	CR	1#	4	4	4	4	4	4	4	4	4	4
<b><i>Scleranthus fasciculatus</i></b> <b>spreading knawel</b>	v		3#	3	3	3	3	4	4	4	4	4	4
<b><i>Senecio squarrosus</i></b> <b>leafy fireweed</b>	r		3#	3	3	3	3	3	4	4	4	4	4
<i>Thelymitra bracteata</i> leafy sun-orchid	e		2#	4	4	4	4	4	4	4	4	4	4
<i>Vittadinia burbridgeae</i> smooth new-holland-daisy	r		3#	4	3	3	3	4	4	4	4	4	4
<i>Vittadinia muelleri</i> narrowleaf new-holland-daisy	r		3#	4	3	3	3	4	4	4	4	4	4

r, v, e Species listed as rare, vulnerable or endangered under the TSP Act

CR Species listed as critically endangered under the EPBC Act

\* Species shown in **BOLD** have been previously recorded within the study area

# BAC demoted to 4 within development footprint and HMAs following threatened flora survey

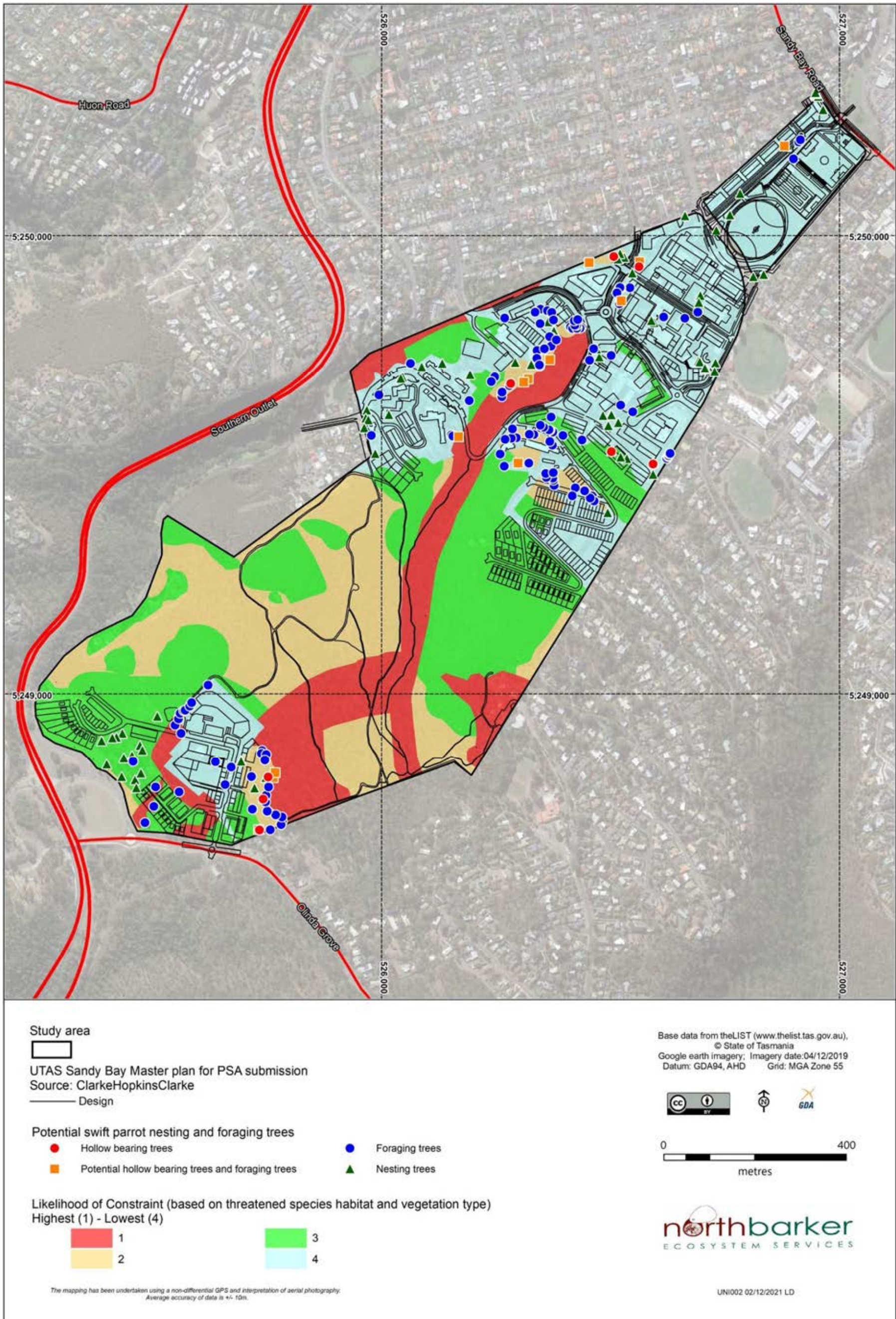


Figure 5: Biodiversity Constraint based on threatened species habitat and threatened vegetation

### 3.3. Threatened Fauna habitat

Based upon the risk assessment undertaken as part of the Natural Values Constraint report (NBES 2019), a total of 12 threatened fauna species have been previously recorded within 5km of the Site. Of these species, the swift parrot and the eastern barred bandicoot are known to occur onsite and an additional five species have a high-moderate probability of occurrence. Based upon the field investigation, an updated assessment of the likelihood of each species occurring onsite is provided below. A summary of constraint based upon the likelihood of occurrence within each vegetation type is provided in Table 8. This table has been updated following the recent den surveys in October 2021. Figure 5 illustrates the biodiversity constraints across the survey area (includes threatened flora and fauna habitat as well as threatened vegetation).

#### Swift parrot

The Site is located within a Swift Parrot Important Breeding Area (which are broad regions that contain a mix of important breeding and feeding locations within proximity to each other). Certain areas of the bushland reserve as well as isolated mature trees within the main Site area offer high quality foraging and nesting habitat for the swift parrot. Significant survey effort was spent mapping the condition of foraging and nesting habitat across vegetated areas of the Site in accordance with the FPA definitions outlined in Section 2.3. Table 7 outlines the extent of each density class of swift parrot foraging and nesting habitat. The distribution of this habitat is illustrated in Figure 6 and Figure 7.

Table 7: Extent and quality of swift parrot habitat across vegetated areas of the site

Habitat density class	Foraging Habitat (ha)	Nesting Habitat (ha)
High	12.16	8.96
Medium	3.63	7.01
Low	48.02	36.12
Negligible	42.41	54.14

All swift parrot foraging trees (*Eucalyptus globulus* and *E. ovata*  $\geq 40$ cm dbh) and all potential nesting trees (eucalyptus trees  $\geq 70$ cm dbh) were surveyed across the lower and middle parts of the campus where they occur outside vegetated areas. The location of these trees is also shown in Figure 6 and Figure 7. Appendix 2 provides details of these trees including species, dbh, height range and the Tree Protection Zone (TPZ).

Swift parrots are listed as critically endangered under the EPBC Act and endangered under the TSP Act and subsequently have a BAC rating of 1. The following likelihood of constraint classes have been assigned based upon habitat class:

- High quality foraging and nesting habitat: Likelihood of constraint class 1
- Medium quality foraging and nesting habitat: Likelihood of constraint class 1
- Low quality foraging and nesting habitat: Likelihood of constraint class 3
- Negligible foraging and nesting habitat: Likelihood of constraint class 4

These constraint levels have been incorporated into Figure 5.

Further habitat tree surveys were undertaken between the 9<sup>th</sup>-12<sup>th</sup> August 2021 to delineate the location of such trees within areas of high constraint which overlap with the proposed development footprint. Around 100 additional foraging and/or potential nesting trees were surveyed in precincts 3, 4 and 5. These trees are included in Appendix 2 and the relevant figures.

All potential nesting trees ( $\geq 70$ cm dbh) were assessed from ground level for the presence of hollows. Those identified as containing potential hollows which are located within the proposed development footprint were surveyed with use of a drone to ascertain hollow presence. Of the 204 habitat trees surveyed and listed in Appendix 2, eight are hollow-bearing trees (HBTs) and an additional 13 are potential HBTs. These were either unable to be surveyed with the drone or are located outside the Masterplan for PSA submission footprint and therefore will not be impacted.



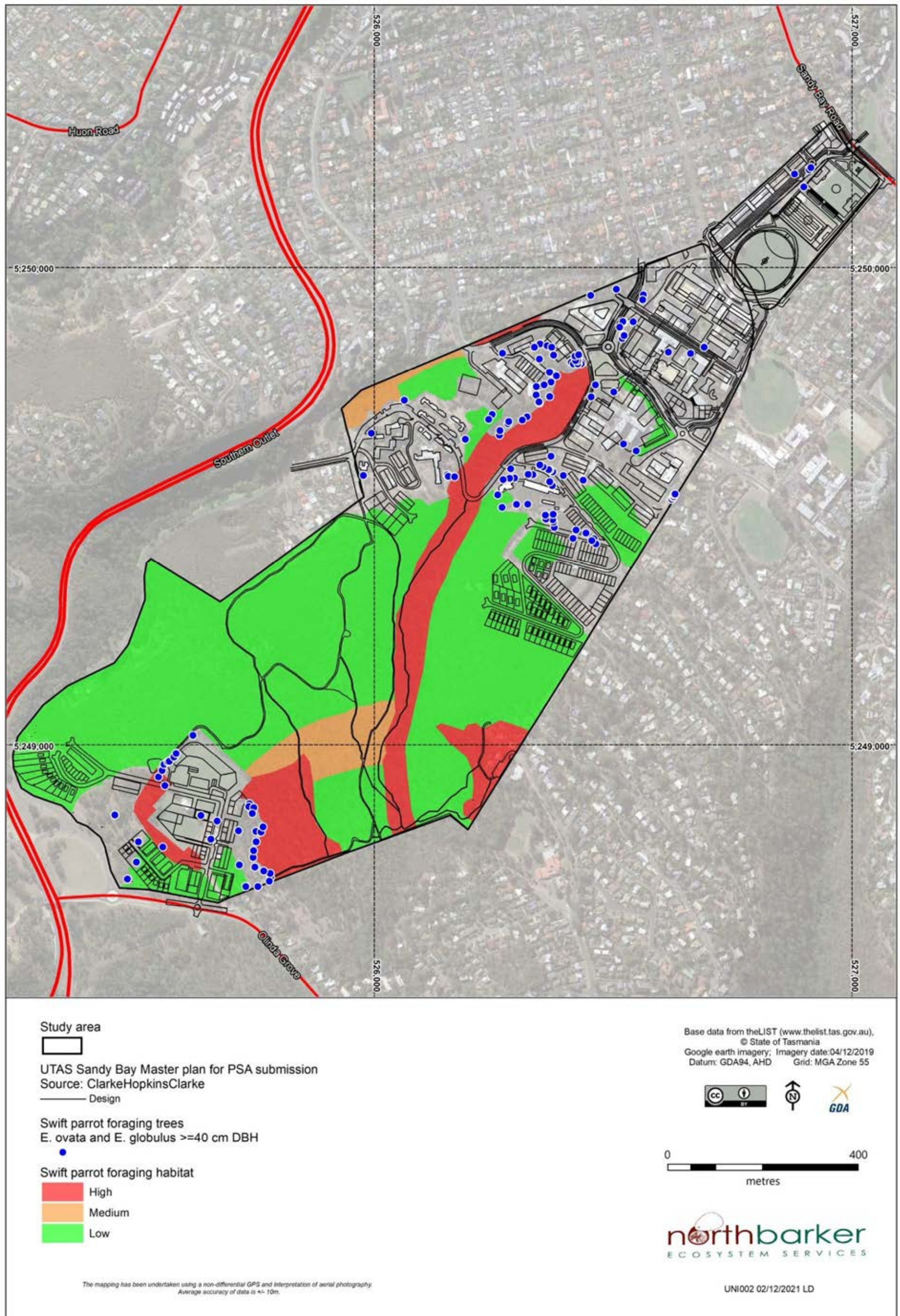


Figure 6: Swift parrot foraging habitat within the survey area

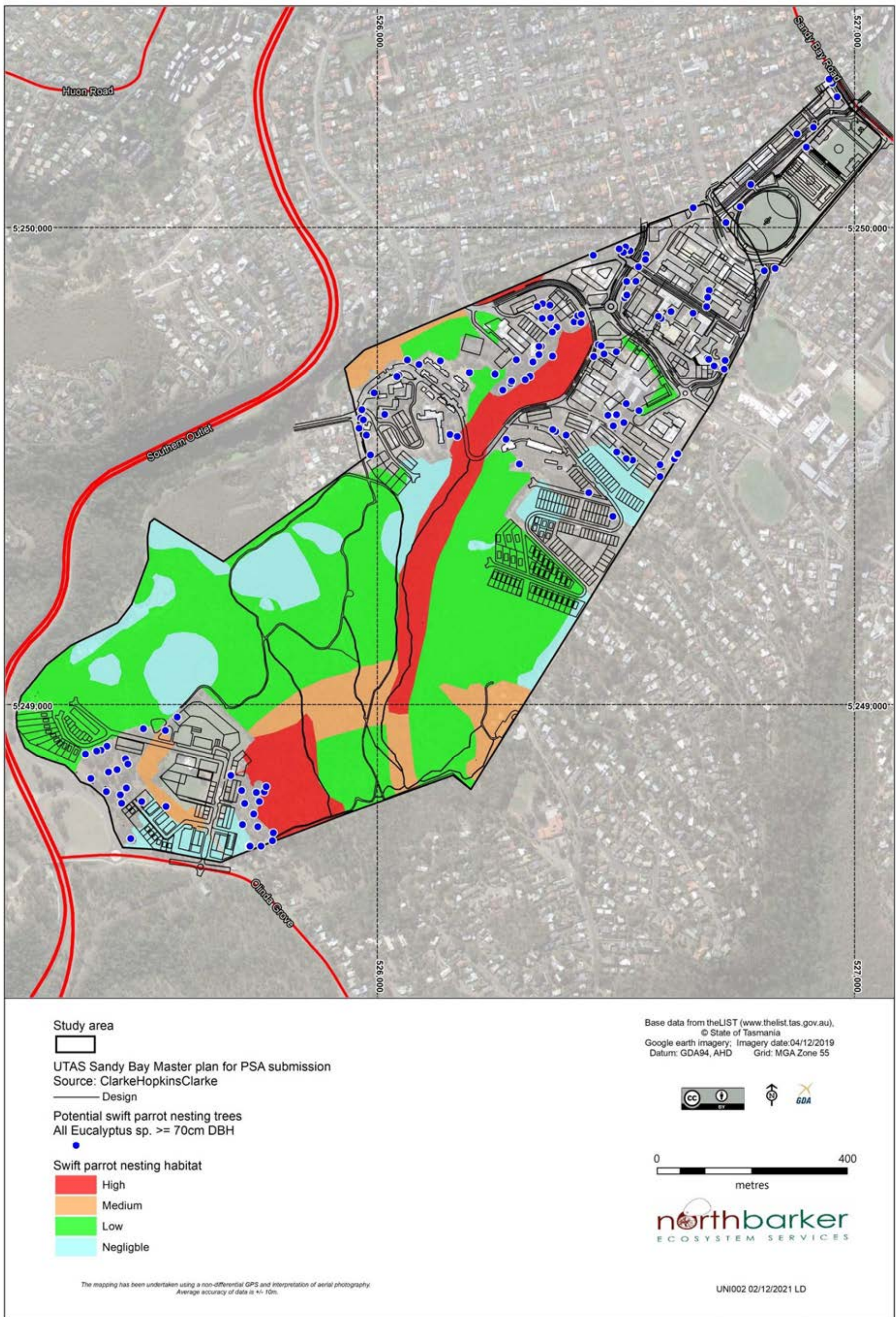


Figure 7: Swift parrot nesting habitat within the survey area

**eastern barred bandicoot**

This species is extremely common in peri urban locations in southeast Tasmania, with the combination of open areas for foraging and dense areas for sheltering. Urban forest remnants are particularly good for this species, as they enable them to venture into adjacent suburban gardens and lawns for foraging at night, and then return to the remnant vegetation for shelter in the day. While no bandicoot nests were observed on the site during the surveys, the species can safely be assumed to be present at least some of the time based on the area and the habitat quality. In addition, the bushland reserve Biodiversity Management Plan (2012) notes previous sightings of this species on the site and there are a number of records on the NVR<sup>13</sup>.

As outlined previously in Section 2.3, this species is a BAC 2 based upon its listing as Vulnerable under the EPBC Act. However, given its prevalence within SE Tasmania, nesting habitat has been demoted to BAC 3 and foraging habitat demoted to BAC 4. All areas of the site, with the exception of FUR in the lower parts of the campus, represent suitable foraging habitat for this species. Areas of dry forest/woodland with dense groundcover offer suitable nesting habitat for this species.

**grey goshawk**

The NVR shows one previous sighting of this species within the study area and 18 observations within 500m of the site. The species is likely to utilise habitat in the Site for foraging and be seen flying over the Site. Within the north western Tasmanian core range the nesting habitat for this species is mature riparian blackwood (*Acacia melanoxylon*) forest, or other types of forest with mature blackwood elements and a watercourse nearby. However, in the south east of Tasmania, the species is also known to nest in *Acacia dealbata* and Eucalyptus species, particularly in protected gullies. As such the wet forest along Rifle Range Creek represents suitable nesting habitat for this species but no nests have been reported or observed by NBES. Nests are likely to be present in the broader area, given there are 153 records on the NVR attributed to within 5 km.

WGL along Rifle Range Creek has been assigned a likelihood of constraint class 2 for nesting habitat for this species.

**chaostola skipper**

Suitable habitat for this species includes the food plants *Gahnia radula* and *G. microstachya*. Neither of these species have been recorded on Site either during the recent surveys or previous assessments undertaken by NBES. In addition, the flora list included in the bushland reserve Biodiversity Management Plan (2012) does not list any *Gahnia* species for the property. The NVR shows no records within 500m and only 3 records within 5km of the Site.

Based on the lack of habitat for this species, its likelihood of occurrence is considered to be very low based only on the possibility of having overlooked a rare occurrence of habitat and has been assigned a likelihood of constraint class 4.

**tasmanian wedge-tailed eagle**

This species is unlikely to nest in the study area but it may occasionally utilise it for foraging. The closest eagle nest is approximately 3.5km south of the site near Taroona. Nest sites and suitable nesting habitat is BAC 1, however, based on the low likelihood of the species utilising the Site for nesting, the constraint class is 4.

**spotted-tailed quoll**

The study area is outside the core habitat for this species, in addition this species is not known to do well in a peri urban environment. There are less than ten observations for this species within 5km of the Site, these being concentrated around larger tracts of bushland near Fern Tree, The Springs and Mt Wellington. While some areas of the Site do provide potential denning habitat for this species, including areas of dense groundcover, rocky outcrops, rock piles etc, the likelihood of the Site being utilised by a female (which requires around 100ha home range) for denning is considered low. However, wandering males may utilise the site from time to time.

<sup>13</sup> nvr\_1\_20-Jul-2021.pdf

Subsequently, vegetation types offering potential denning habitat are BAC 2, with a moderate-low likelihood of occurrence, the likelihood of constraint is 3. Foraging habitat within the site is BAC 4, with a likelihood of constraint class 4.

The targeted den survey in October 2021 failed to locate any den sites within the development footprints and HMA of precincts 3, 4 and 5. The likelihood of constraint in these areas has been reduced to low-nil and this is reflected in Table 8 and Figure 5.

### **eastern quoll**

High habitat heterogeneity can benefit this species in the same way it does the eastern barred bandicoot. The eastern quoll can be present in peri urban locations particularly when located directly adjacent to large areas of high quality habitat as occurs in the bushland reserve around the Rifle Range Creek. Thus, the species is likely to be present in the area and may utilise semi-cleared fringe environments; this is supported by the abundance of observations (246) within 5 km and the last record reported in January 2021.

The eastern quoll sleeps in dens made under rocks, in underground burrows or fallen logs<sup>14</sup>. While no dens have been observed within the survey area, dry forest/woodland types provide potential denning habitat for this species and have been assigned a likelihood of constraint class 2 (based on BAC 1 and moderate likelihood). Foraging habitat within the site is BAC 4 and constraint class 4.

The targeted den survey in October 2021 failed to locate any suitable opportunities for den sites within the development footprints and HMA of precincts 3, 4 and 5. This is predominantly due to the open understorey and lack of structures in these particular areas. As a result of this knowledge the likelihood of constraint in these specific areas has been reduced to low and this is reflected in Table 8 and Figure 5.

### **mount mangana stag beetle**

The known range of the Mt Mangana stag beetle includes wet forests south and west of Hobart, part of South Bruny Island, and parts of the Tasman and Forestier peninsulas. This species is confined to wet forest with an abundant supply of large rotting logs. There are only two records of this species within 5km of site the last recorded in 1998.

Areas of WGL provide marginal habitat for this species, although the presence of large rotting logs is limited along the creekline. Based upon the low likelihood of this species occurring onsite, a constraint class of 4 has been assigned to all vegetation units.

### **forty-spotted pardalote**

Potential habitat for the forty-spotted pardalote is any forest and woodland supporting *Eucalyptus viminalis* (white gum) where the canopy cover of *E. viminalis* is greater than or equal to 10% or where *E. viminalis* occurs as a localised canopy dominant or co-dominant in patches exceeding 0.25 ha. The *E. viminalis* on the property are potential foraging habitat for the forty-spotted pardalote. These foraging trees are scattered across the site but generally occur within the DVG, DOV and DPU vegetation units and as isolated trees within the lower and mid campus.

There are ten records of the forty-spotted pardalote within 500m of the Site, including one near the Life Sciences building in 2012 and a couple near Nelson Rd and Mt Nelson Primary School in 2021 and 2013, respectively. While the forty-spotted pardalote does not feature on the bird list provided in the bushland reserve Biodiversity Management Plan (2012), given the proximity of the Mt Nelson area, and the last verified observations for the species in February 2021 and viable habitat trees on Site, the species may utilise the site to some degree for foraging in non breeding seasons.

### **tussock skink**

Potential for this species in this area is low as there are only four records from within a 5 km range, that latest record from 1998. This is a species known from grasslands or woodlands and most frequently found in the Midlands. While some areas of dry woodland/forest on the Site do support suitable areas of tussock grasses, the likelihood of this species occurring onsite is considered low.

<sup>14</sup> DEC (2021) *Dasyurus viverrinus* in Species Profile and Threats Database

### **Tasmanian devil**

This species is frequently recorded within the wider study area with 261 records within 5km of the Site. There are a couple of records within 500m of the site along the southern outlet from 2012 and 2018 and another record from Ridgeway reservoir from 2018. The species may utilise the study area for foraging from time to time although the southern outlet and residential developments east and north of the Site are likely to restrict the movements of this species to and from the site. Suitable denning habitat within the site is generally limited. Rocky areas which may provide denning habitat are generally vegetated with dense *Allocasuarina verticillata* and on steep slopes which is likely to inhibit devil movements. Large hollow logs are also generally scarce across the site. A number of local residents utilise the reserve for dog walking (both on and off lead was observed during the survey) and the presence/scent of dogs may deter devils from utilising habitats within the Site.

The FPA technical note 10 refers to significant habitat for the Tasmanian devil is a patch of potential denning habitat where a 'cluster' of three or more entrances (large enough for a devil to pass through) occur within 100m of each other and where no other clusters may be found within a 1km radius (i.e. an isolated cluster). These are given the highest priority for protection because (a) there is the potential for multiple individuals to be breeding there, so disturbance could have a particularly high local impact and (b) these features would imply that denning habitat is limited in the area, and its loss would be most likely to exert a high long-term impact on the local population.

Significant den sites and denning habitat are assigned a BAC 1 for the Tasmanian devil. Based upon the field assessments, the likelihood of a significant den site within the study area is low and therefore a constraint level of 3 is assigned. Foraging habitat is constraint class 4.

The targeted den survey in October 2021 failed to locate any den sites within the development footprints and HMA of precincts 3, 4 and 5. The likelihood of constraint in these areas has been reduced to low-nil and this is reflected in Table 8 and Figure 5.

### **masked owl**

The dry forest habitat is in the core range of the masked owl. There are more than a dozen records of masked owls within 5000 m of the site but there are no nest records in this area. The mature forest habitat most likely to support suitable trees for nesting is illustrated in Figure 3.

The song meters indicated in Figure 3 were collected following three months in the field. The most common call recorded was that of the brush tailed possum. However, a single call was recorded that could not definitively be attributed to a brush tail possum and was possibly the screech call of a masked owl based upon opinions of two ecologists, two others believe it was a possum. Regardless, a single call over a 3 month period would suggest that if present the masked owl is likely to have been foraging within its range which can be considerable and in the order of 2500 ha depending on habitat productivity. The lack of more calls over a 3 month period suggests that no nest or roost site is within the catchment of the song metres.

### **Targeted den survey**

A targeted den survey was undertaken in conjunction with the threatened flora survey on the 12<sup>th</sup> and 13<sup>th</sup> of October. The survey focused on the development footprint and associated HMAs in precincts 3, 4 and 5. A total of 24 person hours were spent surveying potential den sites of quolls and devils. The majority of habitat is generally lacking in structure, especially areas of NAV which generally have a sparse bare ground layer. Rocky areas surveyed within the development footprints generally lacked suitable crevices/caves suitable for denning animals. Areas of DGL, DVG and DPU around Mt Nelson sports field support some larger trees with basal hollows as a result of past fires (Plate 26). These burnt out tree bases are generally not used for denning due to openness/exposure but may be used for short-term cover. A number of rabbit warrens were observed around the Mt Nelson sports field (Plate 27). Evidence of rabbit scats show these are being used by rabbits. No devil or quoll scats were observed during the den survey and no active den sites were observed during the survey.



**Plate 26: Example of basal hollow in burnt tree**



**Plate 27: Rabbit warren around sports field**

Table 8: Likelihood of Constraint for Threatened fauna

Species	TSP Act	EPBC Act	CoH IPS <sup>15</sup>	Habitat Type	BAC	Likelihood of Constraint									
						DOV	DGL	DPU	DVG	WGL	NAV	FRG	FUM	FUR	FPE
grey goshawk <i>Accipiter novaehollandiae</i>	e		H - M	nest	2	4	4	4	4	2	4	4	4	4	4
chaostola skipper <i>Antipodia chaostola</i>	e	EN	H - M	sessile	1	4	4	4	4	4	4	4	4	4	4
tasmanian wedge-tailed eagle <i>Aquila audax subsp. fleayi</i>	e	EN	H	nest	1	4	4	4	4	4	4	4	4	4	4
spotted-tailed quoll <i>Dasyurus maculatus</i>	r	VU	M - L	den site	2	3	3	3	3	3	4	4	4	4	4
				den site IN FOOTPRINT & HMAs	2	4	4	4	4	4	4	4	4	4	4
				foraging	4	4	4	4	4	4	4	4	4	4	4
eastern quoll <i>Dasyurus viverrinus</i>		EN	H - M	den site	1	2	2	2	2	3	3	4	4	4	4
				den site IN FOOTPRINT & HMAs	1	4	4	4	4	4	4	4	4	4	4
				foraging	4	4	4	4	4	4	4	4	4	4	4
mount mangana stag beetle <i>Lissotes menalcas</i>	v		H - M		3	4	4	4	4	4	4	4	4	4	4

<sup>15</sup> If breeding habitat is present and dependant on significance of occurrence.

Species	TSP Act	EPBC Act	CoH IPS <sup>16</sup>	Habitat Type	BAC	Likelihood of Constraint									
						DOV	DGL	DPU	DVG	WGL	NAV	FRG	FUM	FUR	FPE
forty-spotted pardalote <i>Pardalotus quadragintus</i>	e	EN	H - M	colony	2	4	4	4	3	4	4	4	4	4	4
eastern barred bandicoot <i>Perameles gunnii</i>		VU	L	nest	3	3	3	3	3	3	4	4	4	4	4
				foraging	4	4	4	4	4	4	4	4	4	4	4
tussock skink <i>Pseudemoia pagenstecheri</i>	v		H - M	sessile	3	4	4	4	4	4	4	4	4	4	4
tasmanian devil <i>Sarcophilus harrisii</i>	e	EN	H - M	Significant den site	1	3	3	3	3	3	3	4	4	4	4
				den site IN FOOTPRINT & HMAs	1	4	4	4	4	4	4	4	4	4	4
				foraging	4	4	4	4	4	4	4	4	4	4	4
masked owl <i>Tyto novaehollandiae</i>	e	VU	H	nest	2	4	3	3	4	3	4	4	4	4	4

r, v, e Species listed as rare, vulnerable or endangered under the TSP Act  
 EN, VU Species listed as endangered or vulnerable under the EPBC Act

<sup>16</sup> If breeding habitat is present and dependant on significance of occurrence.



### 3.4. Weeds

The NVR<sup>17</sup> shows records of 24 listed declared weeds within 500m of the Site. Weeds are generally concentrated around disturbed edges and along drainage channels, specifically Proctors Creek. The Horticultural Research Centre also has a concentration of environmental weeds. Declared weeds recorded during the current survey are illustrated in Figure 8 and include:

- montpellier broom – recorded in the lower section of Rifle Range Creek.
- Spanish heath – scattered occurrences around the Mt Nelson sports field (Plate 28)
- fennel – in area of FRG near the Mt Nelson sports field.
- Chilean needlegrass - The NVR shows four records of Chilean needle grass, including two near Hytten Hall, one below university accommodation and one near the student union building. Unable to be located during surveys.
- blackberry – common in disturbed areas around Mt Nelson sports field, along Proctors Creek and the lower section of Rifle Range Creek.
- gorse – recorded around Mt Nelson sports field in DVG and DOV and along Proctors Rd near the quarry and College Rd;
- willow – along Proctors Creek.
- pampas grass – noted at one location in DPU between the Steps building and the Horticultural Research Centre (Plate 29).
- Californian thistle – behind houses on Oberon Court and near the Horticultural Research Centre.

Other environmental weeds which are common throughout disturbed areas include cotoneaster, sweet pittosporum, traveller's joy (*Clematis* sp.) and briar rose (Plate 30 and Plate 31).



Plate 28: Spanish heath in DOV near Mt Nelson sports field.



Plate 29: Pampas grass in area of DPU.

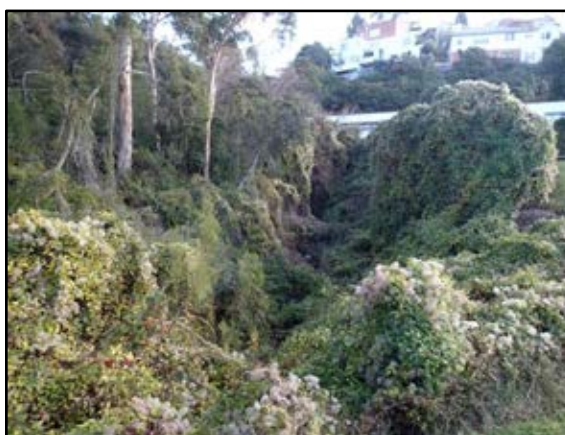


Plate 30: Clematis sp. is prevalent along Proctors Creek.



Plate 31: Large cotoneaster along the steep slope between Proctors Creek and the university accommodation

<sup>17</sup> nvr\_1\_20-Jul-2021.pdf

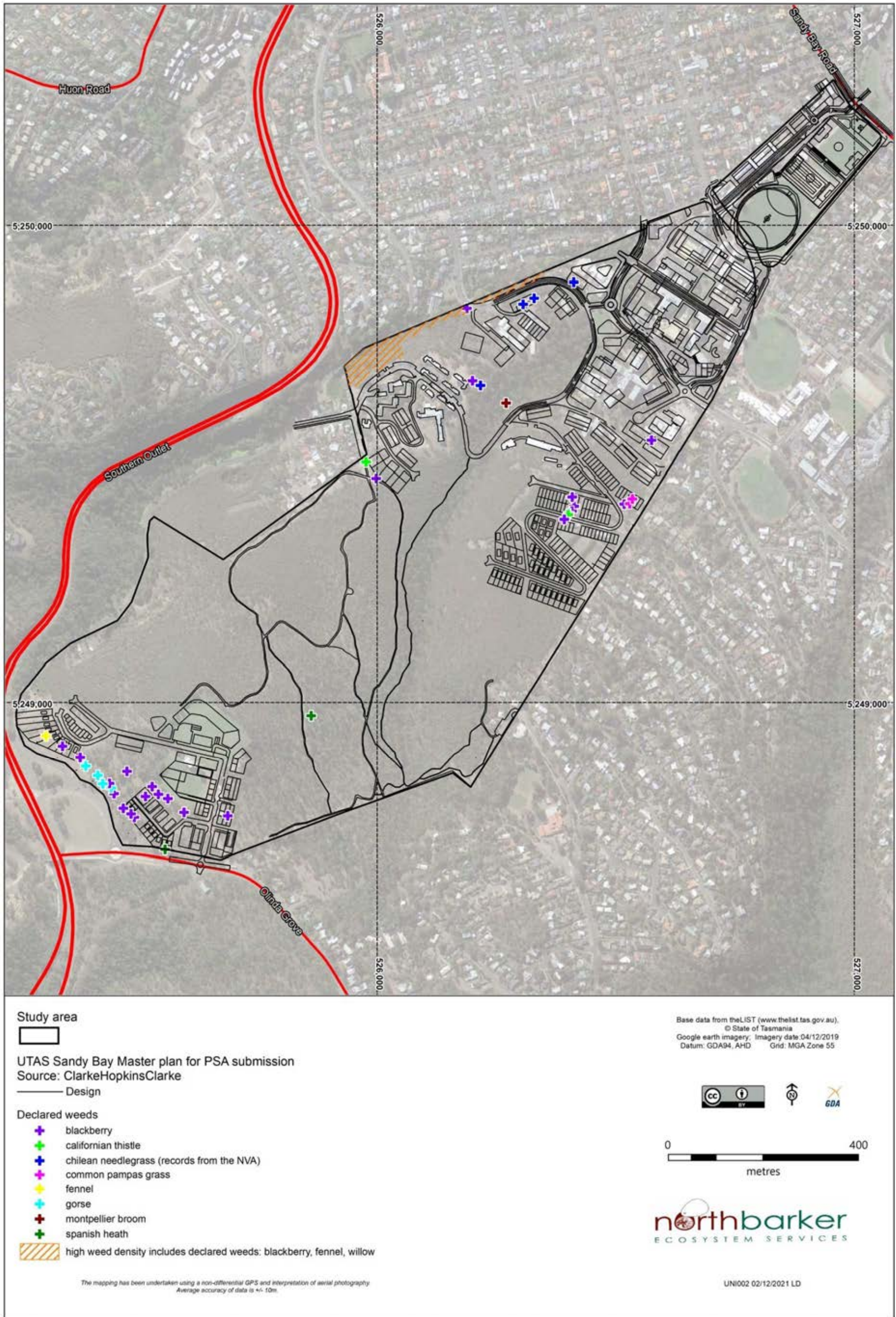


Figure 8: Distribution of declared weeds across the survey area

## 4. Impact Assessment

### 4.1. Vegetation communities

The extent of impact to vegetation communities as a result of construction and establishment of HMAs is shown in Figure 9. This is based on the Masterplan for PSA submission. The areas directly impacted by the design are reported by Precinct in Table 9. Table 9 also reports total areas impacted by the design and total areas included as HMA's. Direct impacts of the design include a 5 metre buffer around the edge of the development footprint to accommodate construction impacts. Vegetation management associated with the bushfire HMA's are discussed further in Section 4.5. Nevertheless, impacts associated with establishing the HMAs would not require total clearance of all vegetation. Within the HMAs vegetation would be managed to meet specific criteria, this could include the retention of some trees where there are sufficient gaps in the canopy. Thus, important habitat trees may be able to be retained in the HMA's.

The percentage of each vegetation unit to be directly impacted as a result of the proposal has also been reported in Table 9. The total extent of each vegetation unit across the greater Hobart Council area is also provided in the table to give a regional context to potential impacts. Impacts to these communities are discussed in further detail below by precinct zone (includes only direct impacts associated with construction).

#### ***Precincts 1 and 2***

There are no mapped vegetation units in Precincts 1 and 2. Impacts to trees in these areas are discussed in more detail in Section 4.3.

#### ***Precinct 3***

Development in this zone will impact upon 0.61ha of mapped DGL which occurs in two small patches to the southeast of the CSIRO building. The loss of these areas is not considered significant given the quality and extent of DGL to be retained.

Areas of NAV, DPU and a small section DVG will also be impacted in this precinct. These communities are not listed as threatened and are low priority under the CoH IPS.

#### ***Precinct 4***

Development in this zone will impact upon 0.07ha of WGL around the lower edge of Hytten Hall. This represents an impact to 0.93% of WGL across the site. Impacts would be limited to the edge of the community and would not fragment the riparian corridor. Specific mitigation measures would be implemented to minimise indirect impacts to adjacent areas of WGL as well as Rifle Range Creek, located downslope of the development footprint. This community is listed as medium priority under the CoH IPS.

An area of DPU and a small section of NAV would also be impacted in this precinct. These communities are not listed as threatened and are low priority under the CoH IPS.

#### ***Precinct 5***

Development footprint in this zone will impact upon 0.27ha of DGL and 0.33 ha of DOV located around the perimeter of the Mt Nelson sports field. The Masterplan for PSA submission has been revised to reduce impacts to areas of high quality DGL and retain mature eucalypts >100cm dbh which occur in these communities.

The Masterplan for PSA submission has been revised to reduce impacts to DOV and potentially retain some smaller areas of DOV amongst the proposed development. Table 9 indicates that about 25% of DOV would be directly impacted by the design footprint. The small areas to be retained are fragmented, such that these remnant smaller patches of DOV lose ecological value. Therefore, using the precautionary principle, assessment of impact to the entire area of DOV (1.4ha) is supposed. This community is listed under state and national legislation and is high priority under the CoH IPS.

Given the location of the DOV around the Mt Nelson sports field, particularly on the filled batters, any earthworks to level this area are likely to impact upon the majority of the DOV. A referral under the EPBC Act would be necessary if impacts to this community cannot be avoided. The DOV also provides foraging and potential nesting habitat for the swift parrot which is also a MNES.

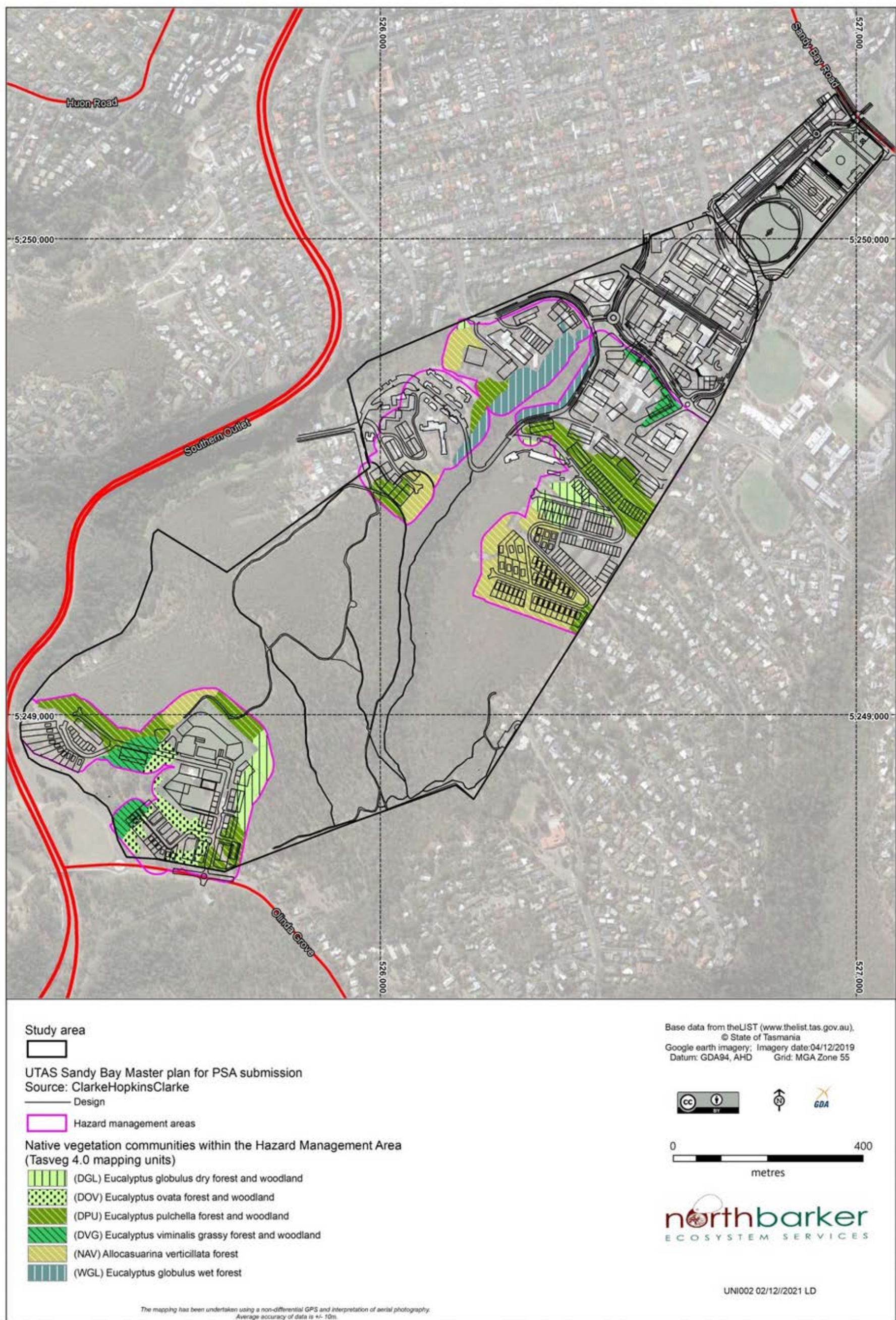


Figure 9: Extent of vegetation to be impacted by development and HMAs

**Table 9: Area of vegetation and impacted by precinct (hectares)**

Vegetation unit	NV Act	EPBC Act	CoH IPS Priority	Total area in CoH LGA (ha)	BAC	Precinct 1	Precinct 2	Precinct 3	Precinct 4	Precinct 5	Design impact (ha)	HMA's impact (ha)	No Impact (ha)	Total in survey area (ha)
<b>DGL</b>	Threatened	-	High	172.78	2	-	-	0.61	-	0.27	<b>0.88</b>	<b>0.89</b>	<b>8.78</b>	<b>10.55</b>
<b>DOV</b>	Threatened	CE	High	17.08	1	-	-	-	-	0.33	<b>0.33</b>	<b>0.92</b>	<b>0.16</b>	<b>1.4</b>
<b>DPU</b>	-	-	Low	984.3	4	-	-	1.46	0.27	1.07	<b>2.81</b>	<b>2.37</b>	<b>20.28</b>	<b>25.45</b>
<b>DVG</b>	-	-	Low	97.13	4	-	-	0.4	-	0.63	<b>1.03</b>	<b>0.43</b>	<b>0.79</b>	<b>2.25</b>
<b>WGL</b>	-	-	Medium	133.37	3	-	-	-	0.06	0	<b>0.06</b>	<b>1.88</b>	<b>5.62</b>	<b>7.56</b>
<b>NAV</b>	-	-	Low	81.08	4	-	-	2.58	0.22	0.03	<b>2.83</b>	<b>1.91</b>	<b>13.77</b>	<b>18.5</b>
<b>FRG</b>	-	-	-	-	-	-	-	-	-	2.08	<b>2.08</b>	<b>0.36</b>	<b>0.34</b>	<b>2.78</b>
<b>FUM</b>	-	-	-	-	-	-	-	0.44	-	3.16	<b>3.6</b>	<b>0.69</b>	<b>1.07</b>	<b>5.35</b>
<b>FUR</b>	-	-	-	-	-	6.46	7.83	5.75	6.32	0	<b>8.37</b>	<b>5.67</b>	<b>2.82</b>	<b>32.39</b>
<b>TOTAL (ha)</b>	-	-	-	-	-	<b>6.46</b>	<b>7.83</b>	<b>11.23</b>	<b>6.88</b>	<b>8.21</b>	<b>21.98</b>	<b>15.11</b>	<b>53.63</b>	<b>106.23</b>

## 4.2. Threatened flora species

Despite several targeted surveys in early and late spring, no threatened flora species were recorded within the proposed development footprint.

## 4.3. Impacts to threatened fauna habitat

A number of nationally listed fauna species may utilise the habitat on the property for foraging. These include the eastern barred bandicoot, spotted quoll, eastern quoll, wedge-tailed eagle, masked owl, forty-spotted pardalote, and Tasmanian devil. The biodiversity constraint mapping based upon fauna habitat assessment has indicated that this proposal is unlikely to cause a measurable decline to these species based upon the loss of foraging habitat. The majority of available foraging habitat would be unaffected and would not be fragmented as a result of the Masterplan. In addition, no known den/nest sites would be impacted based upon the Masterplan design. A small amount of potential denning habitat for the eastern quoll, spotted quoll and Tasmanian devil would be affected, but again this is minor given the extent of such habitats which would be retained.

The majority of the Masterplan for PSA submission falls within areas of low to nil constraint. Areas to be impacted are located around the edge of the existing campus and the Mt Nelson sports field. Core areas of habitat within the bushland reserve would remain largely untouched and would not be fragmented so as to restrict fauna movement through the wider locality.

### *swift parrot*

The Masterplan for PSA submission will have a direct impact upon 0.98 ha of high and medium quality habitat for the swift parrot. The extent of impacts to mapped areas of swift parrot habitat is illustrated in Figure 6 and Figure 7 and detailed below in Table 10. It should be noted that this includes mapped areas of swift parrot habitat and does not include individual trees. These are discussed separately below.

Table 10: Impacts to swift parrot habitat (ha)

	Precinct 1	Precinct 2	Precinct 3	Precinct 4	Precinct 5	Design impact (ha)	Total in study area (ha)	% to be directly impacted
<b>Swift Parrot Foraging Habitat</b>								
High	-	-	-	-	0.16	0.16	12.16	1.32%
Medium	-	-	-	-	-	-	3.63	0%
Low	-	-	4.37	0.45	3.19	8.01	48.02	16.68%
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>4.37</b>	<b>0.45</b>	<b>3.35</b>	<b>8.17</b>	<b>63.81</b>	<b>12.8%</b>
<b>Swift Parrot Nesting Habitat</b>								
High	-	-	-	-	0.06	0.06	8.96	0.67%
Medium	-	-	-	-	0.14	0.14	7.01	2%
Low	-	-	2.72	0.42	1.82	4.96	36.12	13.73%
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>2.72</b>	<b>0.42</b>	<b>2.02</b>	<b>5.16</b>	<b>52.09</b>	<b>9.9%</b>

Impacts to mapped stands of swift parrot forest habitat are restricted to precincts 3, 4 and 5. In total the Masterplan will impact upon 8.17ha (12.8%) of swift parrot foraging habitat and 5.16ha (9.9%) of swift parrot nesting habitat. The majority of these impacts would occur within areas of low quality habitat with only a small amount of high-medium quality foraging (0.16ha) and nesting (0.2ha) habitat to be affected. These impacts alone are unlikely to significantly impact upon the swift parrot. However, the cumulative loss at the Site including at least 30 additional foraging or nesting trees (Table 11) represents a significant impact based on decreasing the availability or quality of habitat to the extent that the species is likely to decline and adversely affecting habitat critical to the survival of the species. The opportunity to secure areas through offsetting and legislative protection of high-medium quality habitat that is at risk of loss would assist in reducing impacts to this species.

Appendix 2 provides details of all the swift parrot potential foraging and nesting trees which were surveyed (outside of the mapped swift parrot habitat areas). These trees along with their Tree Protection Zone (TPZ) are shown on Figure 10 and Figure 11. A TPZ has a radius of 12 \* the diameter of the tree; encroachment should not normally exceed 10%. An assessment has been made based upon the Masterplan (also shown on the figures) as to which trees may be removed, retained and those which require further assessment. This is shown in Figure 12. Where there is more than 10% encroachment into the TPZ an arborist may be required to ascertain whether the tree may be able to be retained. Some trees are also included in this category where it is unclear based upon the Masterplan drawing. Appendix 2 provides details of the trees to be affected and a summary is provided in Table 11 below based upon precinct.

**Table 11: Summary of impacts to swift parrot trees**

Precinct	No. of foraging trees	No. of nesting trees	Trees to be removed	Trees to be retained	Further assessment required
1	4	10	6	1	4
2	12	24	9	13	4
3	41	29	9	35	11
4	45	44	3	48	12
5	37	35	3	38	16
<b>TOTAL</b>	<b>139</b>	<b>142</b>	<b>30*</b>	<b>135**</b>	<b>47***</b>

\* includes 11 foraging trees, 12 potential nesting trees and 7 foraging and nesting trees as well as 1 Hollow Bearing Tree (HBT) and 1 potential HBT

\*\*includes 47 foraging trees, 47 potential nesting trees and 41 foraging and nesting trees as well as 5 HBT and 11 potential HBTs

\*\*\*includes 12 foraging tree, 14 potential nesting trees and 21 foraging and nesting trees as well as 2 HBTs and 1 potential HBT

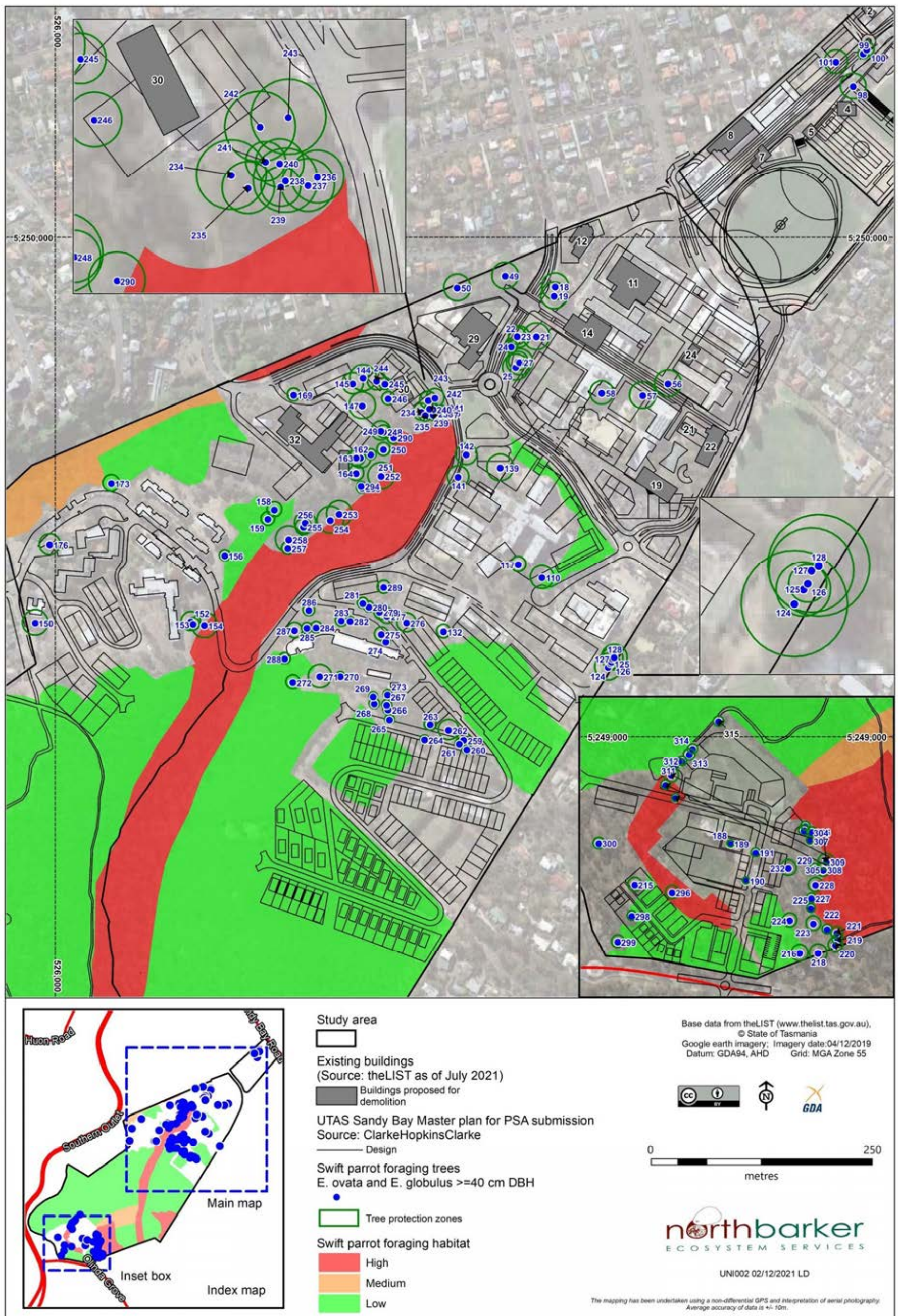


Figure 10: Swift parrot foraging trees with TPZs and Masterplan for PSA submission overlay



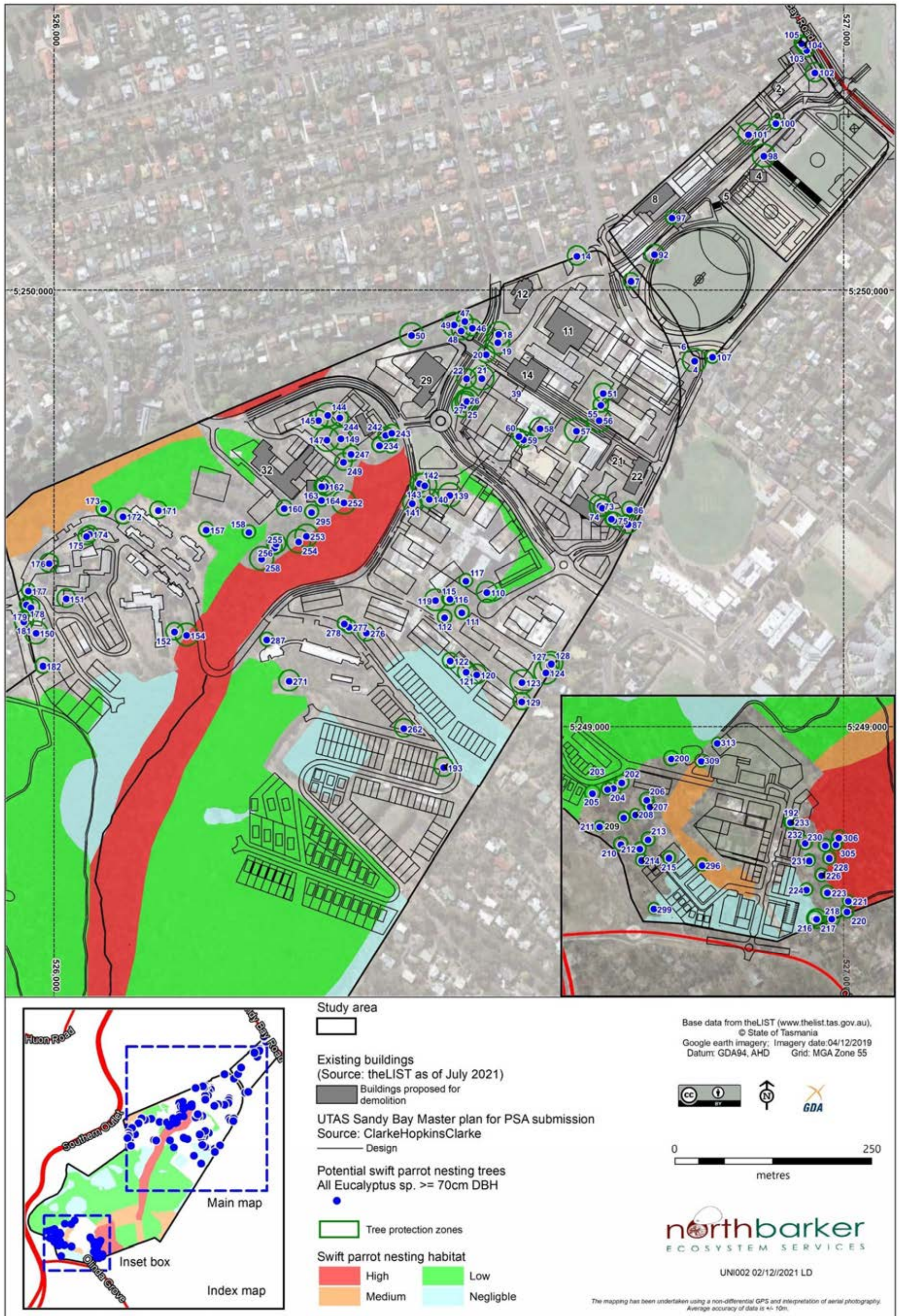


Figure 11: Swift parrot nesting trees with TPZs and Masterplan for PSA submission overlay

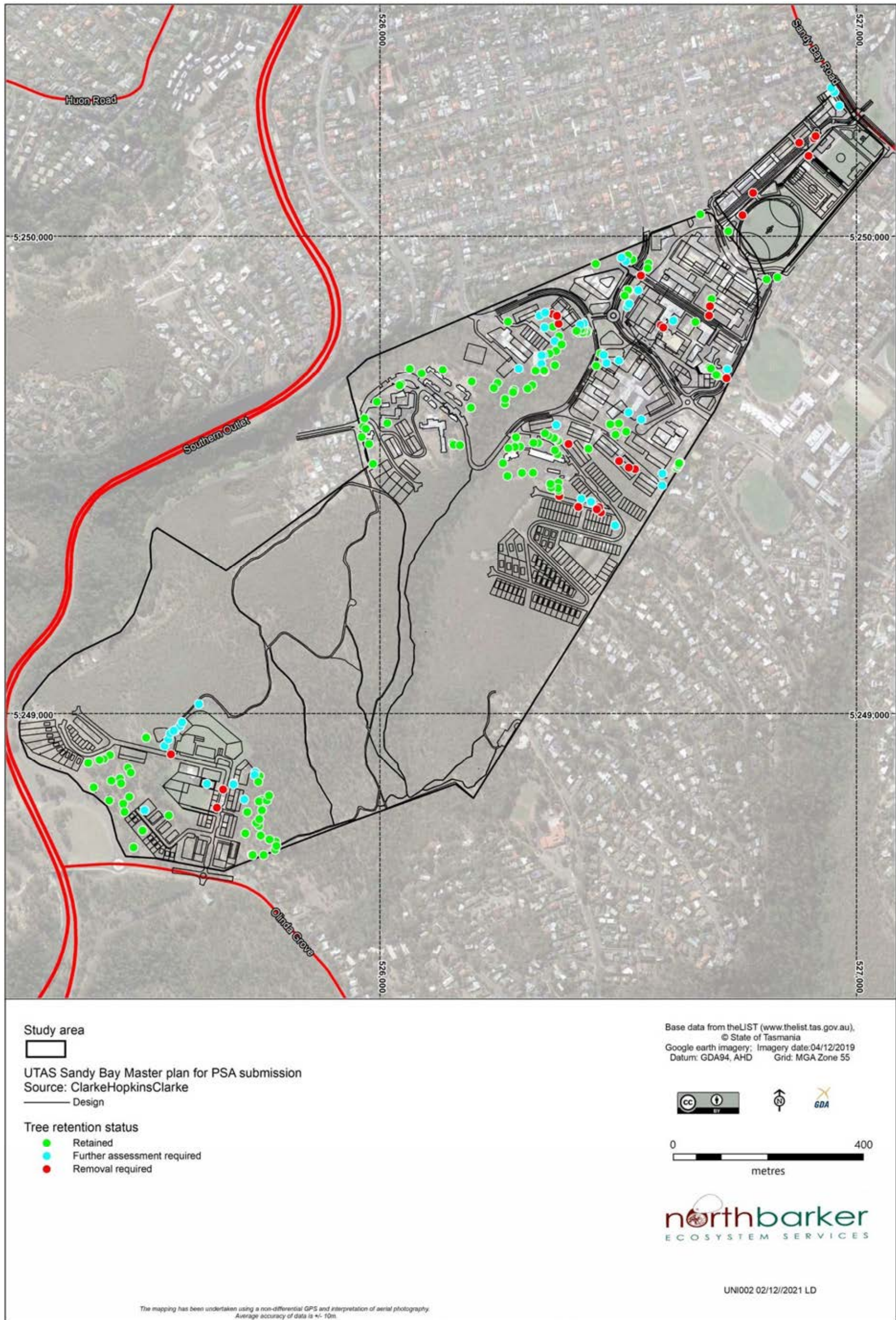


Figure 12: Retention and removal plan of swift parrot trees surveyed

#### 4.4. Weeds

Appropriate management of important weeds during construction and following completion of the development would mitigate the risk of these species persisting at the Site or being spread into surrounding areas.

#### 4.5 Bushfire Hazard Management

The Tasmanian Fire Service (TFS) developed a Community Bushfire Mitigation Plan in 2016 (CBMP). The plan was developed to inform and assist with bushfire mitigation in the bushland reserve, Olinda Grove and more broadly in Mt Nelson. The TFS identifies the land as subject to potentially high bushfire risk.

The objectives of the plan revolve around increasing the capability of the fire management agencies for fire suppression. The plan identifies fuel management units in which fuel reduction burns occur, that are separated by fire breaks and fire trails, strategic fire management infrastructure and mitigation requirements. The TFS bushfire mitigation plan is supported by maps illustrating the extent of fire breaks and trails and the fuel management units (FMU's).

The plan outlines strategic mitigation works that are possible within the existing landscape and identified where additional mitigation works are required. In particular the plan identifies drooping sheoak forest (Tasveg NAV) as a challenge for hazard management primarily due to the persistence of elevated fuel once ground fuels have been reduced. This means that even following low intensity fuel reduction burns the forest remains a hazard that may require physical modification to mitigate. NAV is now widespread in the study area including in association with the development footprint.

In this context it is unusual that the TFS advised that NAV may be treated as woodland when calculating the minimum distance of separation from buildings. We believe that the structure is most similar to scrub based on AS3959 but have applied the requisite minimum distances of woodland to the NAV based on TFS advice.

Figure 13 below illustrates the indicative extent of BAL 12.5 and BAL 19 bushfire hazard management areas. Appendix 3 lists the dimensions of each Hazard Management Area (HMA) in relation to each building use in each precinct.

Table 12 lists the area of bushfire prone vegetation types that are within each bushfire hazard management area. These areas require fuel loads to be reduced to and maintained at low levels. Vegetation such as trees and shrubs can be retained in the HMA's but must be managed and arranged in such a way as to present a low threat. This should include pruning tree branches so that foliage is greater than 2 m above the ground and general ground cover is less than 100 mm long but may allow retention, canopies of flammable trees should be separated by 3 m to reduce the chance of fire spreading and planting of low flammability vegetation and arranging vegetation to act as a curtain to reduce ember attack can be included.

**Table 12. The area (ha) of each native vegetation type within indicative hazard management areas (HMA)**

<b>Vegetation type</b>	<b>HMA (ha)</b>
DGL	0.89
DOV	0.92
DPU	2.45
DVG	0.42
FRG	0.36
NAV	1.94
WGL	1.88
<b>Grand Total</b>	<b>8.85</b>

### Tasmanian Fire Service Advice

Engagement with the Tasmanian Fire Service (TFS) resulted in a number of points being discussed informally.

The substantive informal advice is:

- The implementation of bushfire hazard mitigation in response to the concept master plan should consider the Community Bushfire Mitigation Plan (CBMP). The design of the FMU's in the CBMP can and will be reconsidered in response to the approved master plan in the due course of the revision process. The updated CBMP should reconcile bushfire hazard management with ecological fire management and could be considered as additional mitigation to the application of HMA's.
- The location of the school in precinct 4 initiated a discussion of the need for vulnerable uses to be as far as possible from bushfire prone vegetation. However, it is possible that in the existing land use and with the application of additional landscape management including the Fire Management Units for fuel reduction and irrigation of the DGL in Rifle Range Gully the bushfire hazard may be mitigated sufficiently to justify the location of the school. Additionally, sufficient mitigation may ultimately lead to the councils Fire Prone Vegetation layer being modified to be further from the proposed locations of vulnerable uses.
- Access, carparking and regress, particularly in a bushfire emergency should be demonstrated in the context of the CoH IPS 2015 Bushfire Code and Planning Directive 5.1/Directors Determination 2.2. In particular this will require consideration of the design of roads in line with the Objectives of PD 5.1 and specifications detailed in E6.1 of the Hobart IPS which are:
  - allow safe access and egress for residents, fire fighters and emergency service personnel;
  - provide access to the bushfire-prone vegetation that enables both property to be defended when under bushfire attack and for hazard management works to be undertaken;
  - are designed and constructed to allow for fire appliances to be manoeuvred;
  - provide access to water supplies for fire appliances; and (e) are designed to allow connectivity, and where needed, offering multiple evacuation points.
- TFS will require a minimum of BAL 19 minimum separation distances for residential development. BAL 19 has been applied in our assessment other than where vulnerable uses require the additional protection of BAL 12.5.
- The indicative HMA's described below and in Appendix 3 may be able to be reduced where mitigating influences exist; for example by applying a lower slope class by following the direction of the likely fire path. Alternatively, a performance solution including the application of Method 2 fuel and site assessments may satisfactorily demonstrate that smaller HMA's can deliver the building protection (BAL 19 or better) and personal safety requirements of the regulations.

TFS are not in a sufficiently informed position to formally support or otherwise the Masterplan for PSA submission in regard to meeting the Deemed to Satisfy solutions for access or the provision of water for fire fighting. Should the design of these two elements not meet the deemed to satisfy solutions then an evidence based Performance Solution would need to be developed and supported by TFS as to how the objectives will be met.

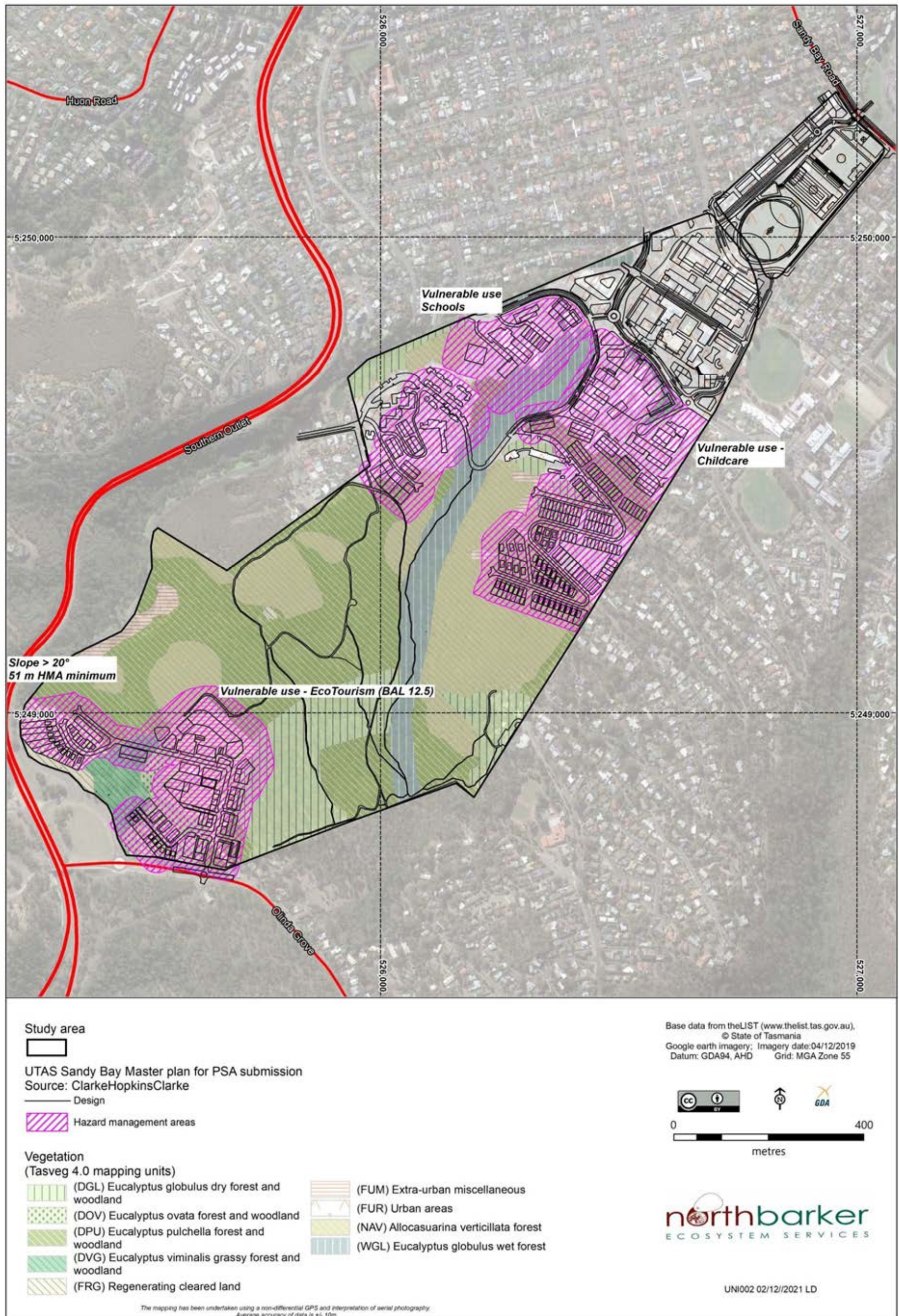


Figure 13. The extent of indicative bushfire hazard management areas

## 5. Legislative Implications

### 5.1. Tasmanian Threatened Species Protection Act 1995

Despite targeted spring time surveys, no threatened flora species have been identified within the development footprint or HMAs. Fauna habitat in the form of foraging resources (eg blue and black gums for swift parrots) is not protected. However, the removal of nests or dens would require a permit. For example, if nesting hollows of the swift parrot are present, in any species of tree, then a Permit is required to remove the trees.

### 5.2. Tasmanian Weed Management Act 1999

Hobart is Zone A municipality for infestations of Chilean needle grass (*Nassella neesiana*) and pampas grass (*Cortaderia* sp.). According to the provisions of the *Weed Management Act 1999* Zone A municipalities are those which eradication of a declared weed is the principal management objective. These municipalities are either free of the declared weed, host only small, isolated infestations, or host larger infestations which are deemed eradicable because a strategic management plan exists and the resources required to implement it have been or are likely to be secured.

Hobart is a Zone B municipality for infestations of spanish heath (*Erica lusitanica*), blackberry (*Rubus fruticosus*), montpellier broom (*Genista monspessulana*), fennel (*Foeniculum vulgare*), gorse (*Ulex europaeus*), Californian thistle (*Cirsium arvense* var. *arvense*) and willow (*Salix* sp.). According to the provisions of the *Weed Management Act 1999* Zone B municipalities are those which host large, widespread infestations of the declared weed that are not deemed eradicable because the feasibility of effective management is low at this time, therefore the objective is containment of infestations. This includes preventing spread of the declared weed from the municipality and preventing spread to properties currently free of them and properties which have developed or are implementing a local integrated weed management plan for these weeds. As well there is a requirement to prevent spread of the weeds to properties containing sites for significant flora, fauna and vegetation communities. Disturbances associated with the future development of this property may exacerbate the existing infestations. As such the threat to adjacent properties and the bushland reserve may be increased.

Quarantine measures should include wash down of earth moving machinery operating in the vicinity of weeds before leaving the site to prevent weeds being taken offsite. Preliminary weed control prior to construction, supplemented with follow up measures to target any regenerating plants, can significantly reduce any chance of weeds being spread off site and into adjacent vegetated areas.

Properties containing declared weeds are potentially subject to the directives of the Regional Weed Management Officer.

### 5.3. Tasmanian Land Use and Planning Approvals Act 1993 (LUPAA)

LUPAA states that 'in determining an application for a permit, a planning authority must (amongst other things) seek out the objectives set out in Schedule 1'.

Schedule 1 includes 'The objectives of the Resource Management and Planning System of Tasmania' which are (amongst other things):

'To promote sustainable development of natural and physical resources and the maintenance of ecological processes and genetic diversity'.

Sustainable development includes 'avoiding, remedying or mitigating any adverse effects of activities on the environment'. Regulation to fulfil these objectives is directed through the Hobart Planning Scheme.

### 5.4. Hobart Interim Planning Scheme 2015

The reserve is entirely within the municipality of the City of Hobart and so development is governed by the CoH Interim Planning Scheme 2015. The majority of native vegetation on the subject site (bushland reserve) exists under a Biodiversity Protection planning scheme overlay. Should the reserve be rezoned for another purpose, then subsequent subdivision within the Biodiversity Protection Area must meet the standards set out in the planning scheme.

The objectives of the standards for subdivision in a Biodiversity Protection Area are to ensure that:

- a) works associated with subdivision resulting in clearance and conversion or disturbance will not have an unnecessary or unacceptable impact on priority biodiversity values;

b) future development likely to be facilitated by subdivision is unlikely to lead to an unnecessary or unacceptable impact on priority biodiversity values.

The standards include acceptable solutions or alternatively Performance Criteria. None of the acceptable solutions for meeting the objectives can be met by the proposal and so the proposal must rely on the schemes Performance Criteria.

The Performance Criteria differentiate between Low, Moderate and High priority biodiversity values. Each category is defined in Table E10.1 in the scheme. It is clear in the categorisation that the habitat for fauna need be actual OR potential and that the significance is to be judged against fauna habitat assessment considerations described in E10.1A. On this basis the following priorities were determined for biodiversity values within the impact footprint and HMA's. This does not preclude the balance of the habitat being of higher priority for one or more biodiversity values.

Values identified in this assessment relevant to Table E10.1

Priority	Value
High	Areas of DGL and DOV.
High	Areas of high-medium quality foraging/nesting habitat for the swift parrot. Potential grey goshawk habitat (WGL)
Moderate	Areas of WGL along Rifle Range Creek
Moderate	Tasmanian devil, eastern quoll and spotted-tail quoll foraging habitat and potential denning habitat
Low	Areas of DGV, DPU and NAV
Low	Potential masked owl nesting and foraging habitat Eastern barred bandicoot foraging and potential nesting habitat.

For **low priority** biodiversity values the subdivision works and fire hazard management measures must be designed to minimise impacts.

For **moderate priority** biodiversity values the subdivision works and fire hazard management measures must also be designed to minimise impacts. Additionally, moderate biodiversity values outside of the impact of works and fire hazard management must be retained and protected by instruments on the land title.

For **high priority** biodiversity values the standards for low and moderate values apply but additionally special circumstances must exist to allow development to be permitted. In this case it is argued that the implementation of the Masterplan for PSA submission will result in a significant long term social and economic community benefit and there is no feasible alternative location for the proponent to undertake the development.

In an iterative mitigation process the Masterplan has been modified significantly to that currently proposed for PSA submission. The intention was to minimise impacts to priority biodiversity values to comply with the Performance criteria in the CoH IPS.

The extent of Precinct 3 has been reduced significantly from that initially proposed. This has greatly reduced impacts to areas of NAV as well as swift parrot habitat around the Mt Nelson Villas. The majority of development in this precinct is now confined to cleared areas within the Horticulture Research Centre.

Precinct 4 of the Masterplan for PSA submission was modified to reduce direct impacts to WGL at the northern end of Rifle Range Creek.

Precinct 5 has undergone several changes to avoid areas of threatened vegetation. Additional surveys of swift parrot trees were undertaken in high constraint areas to further inform the design and reduce impacts. The majority of the buildings in precinct 5 have been designed within previously cleared areas including the existing sports fields and areas mapped as FRG. Where possible, buildings have been removed where swift parrot trees are located.

Offsets and the retention/management of native vegetation outside the development area is discussed further below in Section 5.6.

E10.8.1 Subdivision

<p><b>Performance Criteria P1</b></p> <p>Clearance and conversion or disturbance must satisfy the following:</p> <p>(a) if <b>low priority</b> biodiversity values:</p> <p>(i) subdivision works are designed and located to minimise impacts, having regard to constraints such as topography or land hazard and the particular requirements of the subdivision;</p> <p>(ii) impacts resulting from future bushfire hazard management measures are minimised as far as reasonably practicable through appropriate siting of any building area;</p>	<p>Predominantly works have been deliberately located outside of native vegetation and habitats.</p> <p>Bushfire Hazard Management Areas are limited in extent and hence minimised by the compact character of the building areas. The impact of hazard management will be mitigated by retaining as many canopy trees as possible and maintaining the understorey as native.</p>
<p>(b) if <b>moderate priority</b> biodiversity values:</p> <p>(i) subdivision works are designed and located to minimise impacts, having regard to constraints such as topography or land hazard and the particular requirements of the subdivision;</p> <p>(ii) impacts resulting from future bushfire hazard management measures are minimised as far as reasonably practicable through appropriate siting of any building area;</p> <p>(iii) moderate priority biodiversity values outside the area impacted by subdivision works, the building area and the area likely impacted by future bushfire hazard management measures are retained and protected by appropriate mechanisms on the land title;</p>	<p>Works have deliberately been located to avoid WGL and the majority of the extent of endangered and vulnerable mammal and bird foraging and breeding habitats. Targeted surveys found no mammal dens or grey goshawks nests within the footprint.</p> <p>Bushfire Hazard Management Areas are limited in extent and hence minimised by the compact character of the building areas. The impact of hazard management will be mitigated by retaining as many habitat trees as possible and maintaining the understorey as native. A habitat tree retention plan has been provided.</p> <p>The balance of moderate priority biodiversity values are to be retained on the property and a management plan designed and implemented that will at least sustain and aim to enhance the quality of the DGL.</p>
<p>(c) if <b>high priority</b> biodiversity values:</p> <p>(i) subdivision works are designed and located to minimise impacts, having regard to constraints such as topography or land hazard and the particular requirements of the subdivision;</p> <p>(ii) impacts resulting from future bushfire hazard management measures are minimised as far as reasonably practicable through appropriate siting of any building area;</p> <p>(iii) high priority biodiversity values outside the area impacted by subdivision works, the building area and the area likely impacted by future bushfire hazard management measures are retained and protected by appropriate mechanisms on the land title;</p> <p>(iv) special circumstances exist;</p>	<p>Works have deliberately been located to avoid as many habitat trees of the swift parrot and areas of DGL and DOV as practicable. Targeted surveys have been completed of the footprint to ensure that no additional High Priority values will be impacted. Where these have been found further modifications have been made to avoid and hence minimise the impact.</p> <p>Bushfire Hazard Management Areas are limited in extent and hence minimised by the compact character of the building areas. The impact of hazard management will be mitigated by retaining as many habitat trees as possible and maintaining the understorey as native. A habitat tree retention plan has been provided</p> <p>The balance of high priority biodiversity values are to be retained on the property and a management plan designed and implemented</p>



	<p>that will at least sustain and aim to enhance the habitat values.</p> <p>The implementation of the Masterplan for PSA submission will result in a significant long term social and economic community benefit and there is no feasible alternative location for the proponent.</p>
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**5.5. Commonwealth Environment Protection and Biodiversity Conservation Act 1999**

The EPBCA is structured for self-assessment; the proponent must determine whether or not the project is likely to have a significant impact on a matter of national environmental significance (MNES) such as a listed threatened species or community. If this is likely then the Department of Agriculture, Water and the Environment may consider the proposed activity is a ‘controlled action’ which would require approval from the Commonwealth Minister.

A review of this process is provided in Appendix 4.

A number of nationally listed fauna species may utilise the habitat on the property for foraging. These include the eastern barred bandicoot, spotted quoll, eastern quoll, wedge-tailed eagle, masked owl, forty-spotted pardalote, and Tasmanian devil. The likelihood of constraint mapping based upon fauna habitat assessment has indicated that this proposal is unlikely to cause a measurable decline to these species based upon the loss of foraging habitat. The majority of available foraging habitat would be unaffected and would not be fragmented as a result of the concept plan. In addition, no known den/nest sites would be impacted based upon the current masterplan design. A small amount of potential denning habitat for the eastern quoll, spotted quoll and Tasmanian devil would be affected, but again this is minor given the extent of such habitats which would be retained.

Similarly, the probability of the nationally listed flora species, *Prasophyllum perangustum* (knocklofty leek-orchid) being impacted by the proposed development is considered extremely remote. Recent surveys confirmed the absence of this species within the development footprint.

The DOV forest (1.4 ha) meets the condition thresholds (Category B3) of the critically endangered community *Tasmanian Forests and Woodlands Dominated by Black Gum or Brookers Gum*. However, the direct impact on 0.33 ha is not considered to meet the significant impact criteria for ecological communities. The fuel management of 0.92 ha will not substantially reduce the quality or integrity of the community and so too will not cause a significant impact. Nevertheless due to the conformity with the listed ecological community the proposal should be referred for a decision.

Future development of the Site will also reduce available habitat for the swift parrot within the survey area. The masterplan would affect 1.25 ha of medium to high quality forest habitat and 30 foraging and/or nesting trees for this species outside of stands of forest. There would be 13.5 ha of high quality habitat located outside the development footprint in the bushland reserve.

If impacts to MNES cannot be avoided then referral under the EPBC Act would be required.

**Offsets**

Offsets are a means of compensating for losses of biodiversity values due to development. In one way or another, the regulatory processes described above each require offsets under some circumstances. In most cases offsets are required when particular thresholds of loss occur or when residual impacts remain after avoidance and mitigation efforts are completed.

Planning schemes usually require offsets that comply with the Southern Tasmanian Councils Authority Biodiversity Offsets Guidelines (2012), the TSPA applies the DPIPWE offsets policy and the EPBC employs a complex metric to calculate the nature of offsets (refer to Appendix 4).

The EPBC offset calculator (metric) includes the quality of the habitat lost and the quality of the habitat to be protected. The metric weighs the habitat to be protected using a measure of risk or loss with and without future formal protection, for example a covenant, as well as the potential management outcomes for improving the condition of the offset. Estimates of confidence regarding to risk of future loss and management outcomes are also input data which further complicate the estimate of the area required to offset a loss.

The result is that a proposed offset area that is already relatively secure from loss due to any other land use constraint, for example a council planning scheme, is down weighted very significantly. Consequently, a far greater area of land is required to offset an impact. Conversely, land that is at imminent risk of loss, for example has an approved Forest Practices Plan, scores very highly and so a relatively small area is required to meet the offset requirement.

The EPBC offset Policy and the assessment guide (metric) is available at this link.

<https://www.awe.gov.au/environment/epbc/publications/epbc-act-environmental-offsets-policy>

Based upon the Masterplan for PSA submission there are impacts to a total of 9.74 ha of native habitat under the Masterplan footprint and 8.85 ha managed in bushfire hazard management areas. These areas contributed at some level to MNES habitats including the mammals and birds described above.

However, it is the only the swift parrot for which significant impacts are likely to occur under the Masterplan and hence require offsets for a residual impact. The areas include 1.25 ha of high to medium quality swift parrot foraging and/or potential nesting habitat and at least 30 swift parrot foraging and/or nesting trees.

For the swift parrot a stand of around 4 ha is likely to be required to meet the habitat offset requirements plus an unpredicted requirement to offset 30 potential habitat trees. In some instances individual trees are offset at a ratio of 5:1 or through financial compensation to the council. This offset may be able to be met on the bushland reserve if bushfire management can reduce the risk of loss of hollow bearing trees.

The EPBC offset calculator example in Appendix 5 is for 1.25 ha of medium to high quality swift parrot habitat. In this example it is apparent that the input data are multivariate and variable and that the output or predicted are required for an offset is entirely dependent upon the size, quality and potential for management of the candidate offset area.

The actual quantum required is contingent on reaching agreement with Department of Agriculture Water and the Environment (DAWE) on the level of risk of loss and quality of habitat with and without the proposed type of protection, for example covenant or management agreement.

At UTAS, the bushland reserve is already considered to be relatively secure due to its tenure and planning scheme constraints and so the level of risk to this land if used as an offset would be low. Thus its contribution may not meet the requisite level of 90% to offset impacts directly.

Securing the balance of habitats on the bushland reserve through legislative protection would assist in mitigating impacts to the relevant species only if the level of protection afforded them is significantly raised and targeted management improved the habitat and supported the recovery of the MNES. A management plan for the remaining areas of the bushland reserve which details the outcomes is recommended. A management plan should include as a minimum;

- An ecological burning plan to ensure adequate cover is maintained for MNES mammals
- Ecological burning practices that protect hollow bearing trees from degradation by fire including fuel reduction burning.
- Weed control and ongoing management
- Feral animal control (namely feral cats which are known to occupy the reserve)
- Vegetation condition monitoring and adaptive management aimed at sustaining the ecological character necessary to support the MNES that are present or likely to utilise the site.

## 6. Summary and recommendations

This report includes findings and impacts based upon the UTAS Sandy Bay Masterplan PSA submission and includes the findings of recent Spring surveys for threatened flora. The Masterplan has been revised significantly, particularly around the Precinct 5 to avoid areas of high quality swift parrot habitat as well as areas of higher quality DOV.

A summary of the findings and recommendations are provided below by precinct:

### Precinct 1

- No threatened vegetation impacted
- No threatened flora impacts anticipated
- Contains 11 swift parrot foraging and/or potential nesting trees including one potential Hollow Bearing Tree (HBT)
- Avoid foraging and nesting trees where possible. Priority to retain should be given to large mature blue gums and black gums (>70cm dbh).

### Precinct 2

- No threatened vegetation impacted
- No threatened flora impacts anticipated
- Contains 26 swift parrot foraging and/or potential nesting trees including one HBT and two potential HBTs
- Includes eleven trees (nine blue gums and two white peppermints) listed on the Hobart City Council (CoH) significant tree register. Five are proposed for removal based upon the Masterplan
- Avoid foraging, nesting and CoH significant trees where possible. Priority to retain should be given to large mature blue gums and black gums (>70cm dbh).

### Precinct 3

- No threatened flora impacts anticipated.
- 0.61ha of threatened *Eucalyptus globulus* dry forest and woodland (DGL) to be impacted. Reduce impact where possible. Significance considered to be low given the young age of trees, small patch size and fragmented nature
- Contains 55 swift parrot foraging and/or potential nesting trees including two HBTs and one potential HBT
- Avoid swift parrot habitat trees where possible. Priority to retain should be given to large mature blue gums and black gums (>70cm dbh).

### Precinct 4

- No threatened flora impacts anticipated.
- 0.07ha of *Eucalyptus globulus* wet forest (WGL) to be impacted. WGL is listed as medium priority under the CoH Interim Planning Scheme (IPS). It is not a threatened community under state or federal legislation. Minimise impacts where possible. Investigate options to retain larger blue gums in this community.
- Contains 63 swift parrot foraging and/or potential nesting trees including 2 HBTs and 6 potential HBTs
- Avoid swift parrot habitat trees where possible. Priority to retain should be given to large mature blue gums and black gums (>70cm dbh).

### Precinct 5

- No threatened flora impacts anticipated.
- Threatened vegetation: 0.27ha of DGL and 0.33ha of *Eucalyptus ovata* forest and woodland (DOV) to be directly impacted and 0.92 ha in a bushfire Hazard Management Area (HMA). Both are listed as threatened under the *Nature Conservation Act 2002* (NC Act) and DOV is listed as critically endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Both are high priority under the CoH IPS.
- Approximately 0.16ha of high quality swift parrot foraging habitat to be directly impacted.
- Approximately 0.2ha high-medium quality swift parrot nesting habitat to be directly impacted.
- Reducing impacts to DOV and DGL would reduce impacts to swift parrot high quality habitat.

- Contains 57 swift parrot foraging and/or potential nesting trees including 3 HBTs and 3 potential HBTs
- If impacts to DOV and swift parrot habitat cannot be avoided then referral under the EPBC Act will be required.

It is important to note that the construction of buildings within areas supporting swift parrots brings with it a risk of creating bird strike hazards. Collision with fences, windows and vehicles is recognised as a key cause of mortality in swift parrots. The level of risk would be determined by the architectural details of the proposed development and other infrastructure such as fences. Large windows, reflective glass and chain link fences are particularly hazardous and should be avoided. Development design should be in accordance with recognised best practice. To minimise this risk standard practise for infrastructure development as outlined in the Tasmanian Bird Collision Code (Pfennigwerth (2008)) should be applied.

### ***Hobart Interim Planning Scheme 2015***

The proposal is unable to meet the CoH Interim Planning Schemes Acceptable Solutions and thus must rely on the Performance Criteria for impacts on low, medium and high priority biodiversity values. The iterative development of the Masterplan in response to natural values demonstrates that the Performance criteria can all be met including the Special Circumstances required for high priority biodiversity values. The Special Circumstances being a significant long term social and economic community benefit and there is no feasible alternative location for the proponent to undertake the development.

### ***EPBC Act 1999***

*Flora:* No impacts are anticipated on threatened flora species and so no offsets are required.

*Vegetation:* No offsets are required for vegetation that is not listed on the EPBC.

*Threatened ecological community:* Following the avoidance and minimisation of impacts through design the residual direct impact to DOV is 0.33 ha. A further 0.92 ha is in fuel modified hazard management areas. The fuel management in an HMA need not remove the adversely affect the short grassy and sedgy understorey vegetation and as such can be a sustainable management regime not considered to cause a significant impact to the community.

Based on the loss of 0.33 ha no significant impact to DOV forest is anticipated. Nevertheless due to the conformity with the critically endangered ecological community the proposal should be referred.

### *Threatened Fauna:*

A number of nationally listed fauna species may utilise the habitat on the property for foraging. These include the eastern barred bandicoot, spotted quoll, eastern quoll, wedge-tailed eagle, masked owl, forty-spotted pardalote, and Tasmanian devil. The likelihood of constraint mapping based upon fauna habitat assessment has indicated that this proposal is unlikely to cause a measurable decline to these species based upon the loss of foraging habitat.

Based on the likely impact on swift parrot habitat the proposal should be referred to the Commonwealth to determine if the proposal should be a controlled Action. The EPBC offset calculator suggests that somewhere in the order of 4 ha of swift parrot habitat will be required to offset the impact. Additionally, the loss of at least 30 habitat trees will be required to be offset at a ratio yet to be determined.

There is 13.5 ha of high quality habitat located outside the development footprint in the bushland reserve. As such the balance of the land within the bushland reserve supports the swift parrot values that require offsetting. However, additional tenure security such as through a conservation covenant under the *Nature Conservation Act 2002* and a management plan to sustain the habitat values of Matters of National Environmental Significance (MNES) would be a minimum requirement for the offset proposal to meet the requisite standard.

A range of possible additional actions to offset impacts are potentially acceptable under the EPBC offset policy. These include rehabilitation of degraded habitat or establishing plantings to expand habitat, as well as education and research aimed at improving the management and conservation status of the habitats.

If efforts to offset the impact are acceptable then it is possible that the proposal could be permitted to proceed in the particular manner provisions under Section 77A of the Act rather than be a controlled Action.

***Bushfire hazard management***

The Masterplan for PSA submission is demonstrated to be able to meet the deemed to satisfy requirements for bushfire Hazard Management Areas based on BAL 19 and BAL 12.5 minimum distance of separation between all building types and the fire prone vegetation. There remains further potential to mitigate the hazard in conjunction with the Community Bushfire Mitigation Plan 2016 and additional landscape management.

Additional information regarding the design of access and regress, particularly emergency escape and the provision of water supply, is required to satisfy the objectives of the code and to meet the certification requirements of a Bushfire Hazard Management Plan. Further engagement with the Tasmanian Fire Service (TFS) during the development of the BHMP will assist in gaining support for the Masterplan from the TFS.

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- University of Tasmania (2012) Sandy Bay Campus University Reserve Biodiversity Management Plan, draft only.

## Appendix 1: Vascular Plant Species list

### Species list - project: UNI002

**Status codes:**

ORIGIN	NATIONAL SCHEDULE	STATE SCHEDULE
i - introduced	EPBC Act 1999	TSP Act 1995
d - declared weed WM Act	CR - critically endangered	e - endangered
en - endemic to Tasmania	EN - endangered	v - vulnerable
t - within Australia, occurs only in Tas.	VU - vulnerable	r - rare

Name	Common name	Status
<b>DICOTYLEDONAE</b>		
<b>APIACEAE</b>		
<i>Foeniculum vulgare</i>	fennel	d
<b>ASTERACEAE</b>		
<i>Bedfordia salicina</i>	tasmanian blanketleaf	en
<i>Cassinia aculeata subsp. aculeata</i>	dollybush	
<i>Cirsium arvense var. arvense</i>	Californian thistle	d
<i>Cirsium vulgare</i>	spear thistle	i
<i>Euchiton japonicus</i>	common cottonleaf	
<i>Hypochaeris radicata</i>	rough catsear	i
<i>Leontodon saxatilis</i>	hairy hawkbit	i
<i>Ozothamnus ferrugineus</i>	tree everlastingbush	
<i>Senecio glomeratus</i>	shortfruit purple fireweed	
<i>Senecio linearifolius var. linearifolius</i>	common fireweed groundsel	
<i>Sonchus oleraceus</i>	common sowthistle	i
<b>BORAGINACEAE</b>		
<i>Myosotis sp</i>	forget me not	i
<b>BRASSICACEAE</b>		
<i>Cardamine hirsuta</i>	hairy bittercress	i
<b>CAMPANULACEAE</b>		
<i>Wahlenbergia sp.</i>	bluebell	
<b>CASUARINACEAE</b>		
<i>Allocasuarina littoralis</i>	black sheoak	
<i>Allocasuarina verticillata</i>	drooping sheoak	
<b>CRASSULACEAE</b>		
<i>Crassula sp.</i>		i
<b>DILLENACEAE</b>		
<i>Hibbertia hirsuta</i>	hairy guineaflower	
<b>DROSERACEAE</b>		
<i>Drosera peltata</i>	pale sundew	
<b>ERICACEAE</b>		
<i>Epacris impressa</i>	common heath	
<i>Erica lusitanica</i>	spanish heath	d

<i>Leucopogon virgatus</i>	common beard-heath	
<i>Lissanthe strigosa subsp. subulata</i>	peachberry heath	
<i>Styphelia humifusa</i>	native cranberry	
<b>EUPHORBIACEAE</b>		
<i>Beyeria viscosa</i>	pinkwood	
<i>Euphorbia pepus</i>	petty spurge	i
<b>FABACEAE</b>		
<i>Acacia dealbata subsp. dealbata</i>	silver wattle	
<i>Acacia mearnsii</i>	black wattle	
<i>Acacia melanoxylon</i>	blackwood	
<i>Acacia myrtifolia</i>	redstem wattle	
<i>Acacia stricta</i>	hop wattle	
<i>Acacia verticillata</i>	prickly mooses	
<i>Acacia verticillata subsp. verticillata</i>	prickly mooses	
<i>Bossiaea prostrata</i>	creeping bossiaea	
<i>Daviesia ulicifolia</i>	spiky bitterpea	
<i>Dillwynia glaberrima</i>	smooth parrotpea	
<i>Genista monspessulana</i>	canary broom	d
<i>Pultenaea daphnoides</i>	heartleaf bushpea	
<i>Pultenaea juniperina</i>	prickly beauty	
<i>Ulex europaeus</i>	gorse	d
<i>Vicia sp.</i>	vetch, tare	i
<b>GENTIANACEAE</b>		
<i>Centaurium erythraea</i>	common centaury	i
<b>GERANIACEAE</b>		
<i>Geranium potentilloides var. potentilloides</i>	mountain cranesbill	
<i>Pelargonium australe</i>	southern storksbill	
<b>GOODENIACEAE</b>		
<i>Goodenia lanata</i>	trailing native-primrose	
<i>Goodenia ovata</i>	hop native-primrose	
<b>HALORAGACEAE</b>		
<i>Gonocarpus tetragynus</i>	common raspwort	
<b>HEMEROCALLIDACEAE</b>		
<i>Dianella revoluta</i>	spreading flaxlily	
<b>LAURACEAE</b>		
<i>Cassytha glabella</i>	slender dodderlaurel	
<i>Cassytha pubescens</i>	downy dodderlaurel	
<b>LINACEAE</b>		
<i>Linum marginale</i>	native flax	
<b>MYRTACEAE</b>		
<i>Callistemon sp.</i>	bottlebrush	
<i>Eucalyptus globulus subsp. globulus</i>	tasmanian blue gum	
<i>Eucalyptus obliqua</i>	stringybark	
<i>Eucalyptus ovata var. ovata</i>	black gum	
<i>Eucalyptus pulchella</i>	white peppermint	en
<i>Eucalyptus viminalis subsp. viminalis</i>	white gum	
<i>Leptospermum scoparium</i>	common tea-tree	
<b>OXALIDACEAE</b>		
<i>Oxalis perennans</i>	grassland woodsorrel	



**PITTOSPORACEAE**

*Billardiera* sp. apple-berry  
*Bursaria spinosa* subsp. *spinosa* prickly box

**PLANTAGINACEAE**

*Digitalis purpurea* foxglove i  
*Plantago lanceolata* ribwort plantain i  
*Veronica gracilis* slender speedwell

**POLYGALACEAE**

*Comesperma volubile* blue lovecreeper

**PRIMULACEAE**

*Lysimachia arvensis* scarlet pimpernel i

**PROTEACEAE**

*Banksia marginata* silver banksia  
*Lomatia tinctoria* guitarplant en

**RANUNCULACEAE**

*Clematis vitalba* var. *vitalba* travellers joy i  
*Ranunculus lappaceus* woodland buttercup  
*Ranunculus repens* creeping buttercup i

**RESEDACEAE**

*Reseda luteola* weld i

**RHAMNACEAE**

*Pomaderris apetala* subsp. *apetala* common dogwood  
*Pomaderris elliptica* yellow dogwood

**ROSACEAE**

*Acaena echinata* spiny sheeps burr  
*Acaena novae-zelandiae* common buzzy  
*Cotoneaster* sp. cotoneaster i  
*Rosa rubiginosa* sweet briar i  
*Rubus fruticosus* blackberry d

**RUBIACEAE**

*Coprosma quadrifida* native currant

**SALICACEAE**

*Salix* sp. willow d

**SANTALACEAE**

*Exocarpos cupressiformis* common native-cherry  
*Exocarpos strictus* pearly native-cherry

**SAPINDACEAE**

*Dodonaea viscosa* subsp. *spatulata* broadleaf hopbush

**SOLANACEAE**

*Solanum laciniatum* kangaroo apple

**STACKHOUSIACEAE**

*Stackhousia monogyna* forest candles

**THYMELAEACEAE**

*Pimelea humilis* dwarf riceflower

*Pimelea nivea* bushmans bootlace en

**VALERIANACEAE**

*Centranthus ruber subsp. ruber* red valerian i

**MONOCOTYLEDONAE**

**ASPARAGACEAE**

*Lomandra longifolia* sagg

**CYPERACEAE**

*Carex appressa* tall sedge  
*Carex breviculmis* shortstem sedge  
*Lepidosperma elatius* tall swordsedg  
*Lepidosperma gunnii* narrow swordsedg  
*Lepidosperma inops* fan sedge en  
*Lepidosperma laterale* variable swordsedg  
*Lepidosperma longitudinale* spreading swordsedg  
*Schoenus apogon* common bogsedg  
*Schoenus sp.* bogsedg

**IRIDACEAE**

*Diplarrena moraea* white flag-iris

**JUNCACEAE**

*Juncus pallidus* pale rush  
*Luzula sp.* luzula

**LAXMANNIACEAE**

*Arthropodium milleflorum* pale vanilla-lily  
*Arthropodium sp.* vanilla lily  
*Thysanotus patersonii* twining fringelily

**ORCHIDACEAE**

*Chiloglottis triceratops* threehorned bird-orchid  
*Prasophyllum brevilibre* shortlip leek-orchid  
*Pterostylis sp.* greenhood  
*Thelymitra ixiooides* spotted sun-orchid  
*Thelymitra pauciflora* slender sun-orchid  
*Thelymitra rubra* pink sun-orchid

**POACEAE**

*Agrostis sp.* blown grass  
*Austrostipa aphylla* leafless speargrass en  
*Austrostipa sp.* speargrass  
*Austrostipa stuposa* corkscrew speargrass  
*Briza minor* lesser quaking-grass i  
*Cortaderia sp* pampasgrass d  
*Dactylis glomerata* cocksfoot i  
*Ehrharta sp.* ricegrass  
*Poa labillardierei* silver tussockgrass  
*Poa sieberiana* grey tussockgrass  
*Poa sp.* poa  
*Rytidosperma sp.* wallabygrass  
*Themeda triandra* kangaroo grass

**PTERIDOPHYTA**

**ADIANTACEAE**

*Cheilanthes austrotenuifolia* green rockfern

**DENNSTAEDTIACEAE**

*Pteridium esculentum subsp. esculentum* bracken

**DICKSONIACEAE**

*Dicksonia antarctica* soft treefern

**Appendix 2: Details of swift parrot habitat trees**

Precinct	Tree ID	Scientific Name	Common Name	Easting GDA94	Northing GDA94	DBH (m)	TPZ (m)	Forage tree	Nesting tree	Removal required	Retained	Further assessment required*	Hollow assessment
1	7	<i>Eucalyptus viminalis</i>	white gum	526731	5250012	0.8	9.6		X		X		
1	92	<i>Eucalyptus sp.</i>		526760	5250046	1.2	14.4		X	X			
1	97	<i>Eucalyptus amygdalina</i>	black peppermint	526783	5250092	0.7	8.4		X	X			
1	98	<i>Eucalyptus ovata</i>	black gum	526899	5250171	1.2	14.4	X	X	X			
1	99	<i>Eucalyptus ovata</i>	black gum	526910	5250207	0.5	6	X		X			
1	100	<i>Eucalyptus ovata</i>	black gum	526914	5250212	0.7	8.4	X	X	X			
1	101	<i>Eucalyptus ovata</i>	black gum	526881	5250194	1.1	13.2	X	X	X			Potential HBT
1	102	<i>Eucalyptus pulchella</i>	white peppermint	526964	5250276	1	12		X			X	
1	103	<i>Eucalyptus pulchella</i>	white peppermint	526953	5250304	0.8	9.6		X			X	
1	104	<i>Eucalyptus pulchella</i>	white peppermint	526949	5250311	0.8	9.6		X			X	
1	105	<i>Eucalyptus pulchella</i>	white peppermint	526947	5250313	0.8	9.6		X			X	
<b>SUBTOTAL PRECINCT 1</b>								<b>4</b>	<b>10</b>	<b>6</b>	<b>1</b>	<b>4</b>	
2	4	<i>Eucalyptus amygdalina</i>	black peppermint	526811	5249911	2	15		X		X		
2	14	<i>Eucalyptus viminalis</i>	white gum	526662	5250043	1.2	14.4		X		X		
2	18#	<i>Eucalyptus globulus</i>	blue gum	526563	5249945	2	15		X	X			
2	19#	<i>Eucalyptus globulus</i>	blue gum	526562	5249934	1.8	15	X	X		X		
2	20	<i>Eucalyptus pulchella</i>	white peppermint	526547	5249919	0.9	10.8	X			X		
2	21#	<i>Eucalyptus globulus</i>	blue gum	526542	5249889	2.4	15	X			X		
2	22	<i>Eucalyptus globulus</i>	blue gum	526522	5249888	1.2	14.4		X	X			
2	23	<i>Eucalyptus globulus</i>	blue gum	526520	5249889	0.63	9.6		X	X			
2	24	<i>Eucalyptus globulus</i>	blue gum	526513	5249877	0.6	7.2		X		X		
2	25#	<i>Eucalyptus globulus</i>	blue gum	526519	5249854	1.3	15		X		X		
2	26#	<i>Eucalyptus globulus</i>	blue gum	526521	5249861	0.9	10.8		X	X			

Precinct	Tree ID	Scientific Name	Common Name	Easting GDA94	Northing GDA94	DBH (m)	TPZ (m)	Forage tree	Nesting tree	Removal required	Retained	Further assessment required*	Hollow assessment
2	27#	<i>Eucalyptus globulus</i>	blue gum	526523	5249860	1.5	15		X	X			
2	51#	<i>Eucalyptus pulchella</i>	white peppermint	526696	5249870	1.2	14.4		X		X		
2	55#	<i>Eucalyptus pulchella</i>	white peppermint	526692	5249855	0.8	9.6		X	X			
2	56#	<i>Eucalyptus globulus</i>	blue gum	526690	5249835	1.3	15		X	X			
2	57#	<i>Eucalyptus globulus</i>	blue gum	526662	5249822	1.3	15	X	X		X		Potential HBT
2	58#	<i>Eucalyptus globulus</i>	blue gum	526615	5249825	1.1	13.2	X	X		X		HBT
2	59	<i>Eucalyptus pulchella</i>	white peppermint	526595	5249811	0.8	9.6	X	X			X	
2	60	<i>Eucalyptus pulchella</i>	white peppermint	526589	5249815	0.7	8.4	X	X			X	
2	73	<i>Eucalyptus viminalis</i>	white gum	526691	5249727	1.1	13.2	X	X		X		
2	74	<i>Eucalyptus viminalis</i>	white gum	526694	5249725	0.9	10.8	X	X			X	Potential HBT
2	75	<i>Eucalyptus viminalis</i>	white gum	526709	5249709	0.8	9.6		X		X		
2	76	<i>Eucalyptus viminalis</i>	white gum	526706	5249711	0.7	8.4		X		X		
2	86	<i>Eucalyptus viminalis</i>	white gum	526729	5249723	0.8	9.6	X	X	X			
2	87	<i>Eucalyptus viminalis</i>	white gum	526727	5249704	1	12	X	X	X			
2	107	<i>Eucalyptus amygdalina</i>	black peppermint	526834	5249916	0.7	8.4	X	X			X	
<b>SUBTOTAL PRECINCT 2</b>								<b>12</b>	<b>24</b>	<b>9</b>	<b>13</b>	<b>4</b>	
3	110	<i>Eucalyptus globulus</i>	blue gum	526548	5249618	1.1	13.2	X	X			X	
3	111	<i>Eucalyptus viminalis</i>	white gum	526517	5249592	0.7	8.4		X		X		
3	112	<i>Eucalyptus viminalis</i>	white gum	526495	5249586	0.7	8.4		X		X		
3	115	<i>Eucalyptus viminalis</i>	white gum	526500	5249609	0.7	8.4		X		X		
3	116	<i>Eucalyptus viminalis</i>	white gum	526501	5249609	0.7	8.4		X		X		
3	117	<i>Eucalyptus globulus</i>	blue gum	526522	5249632	0.7	8.4	X	X			X	
3	119	<i>Eucalyptus viminalis</i>	white gum	526483	5249607	1.1	13.2		X		X		
3	120	<i>Eucalyptus pulchella</i>	white peppermint	526535	5249514	1	12		X	X			
3	121	<i>Eucalyptus pulchella</i>	white peppermint	526522	5249517	0.9	10.8		X	X			

Precinct	Tree ID	Scientific Name	Common Name	Easting GDA94	Northing GDA94	DBH (m)	TPZ (m)	Forage tree	Nesting tree	Removal required	Retained	Further assessment required*	Hollow assessment
3	122	<i>Eucalyptus pulchella</i>	white peppermint	526502	5249531	0.8	9.6		X	X			HBT
3	123	<i>Eucalyptus viminalis</i>	white gum	526593	5249504	2.5	15		X			X	HBT
3	124	<i>Eucalyptus globulus</i>	blue gum	526623	5249516	1.5	15	X	X		X		
3	125	<i>Eucalyptus globulus</i>	blue gum	526625	5249520	0.6	7.2	X			X		
3	126	<i>Eucalyptus globulus</i>	blue gum	526627	5249522	0.4	4.8	X			X		
3	127	<i>Eucalyptus globulus</i>	blue gum	526628	5249526	1	12	X	X		X		
3	128	<i>Eucalyptus globulus</i>	blue gum	526630	5249527	1.2	14.4	X	X		X		
3	129	<i>Eucalyptus viminalis</i>	white gum	526592	5249480	0.9	10.8		X			X	
3	132	<i>Eucalyptus globulus</i>	blue gum	526437	5249556	0.6	7.2	X			X		
3	139	<i>Eucalyptus globulus var. compacta</i>	blue gum	526501	5249741	1.4	15		X			X	
3	140	<i>Eucalyptus sp.</i>		526475	5249736	1	12		X			X	
3	141	<i>Eucalyptus globulus</i>	blue gum	526454	5249731	1	12	X	X		X		
3	142	<i>Eucalyptus ovata</i>	black gum	526463	5249756	1	12	X	X		X		
3	143	<i>Eucalyptus viminalis</i>	white gum	526469	5249753	2	15		X			X	
3	193	<i>Eucalyptus viminalis</i>	white gum	526493	5249396	1	12		X			X	
3	259	<i>Eucalyptus globulus</i>	blue gum	526460	5249434	0.6	7.7	X		X			
3	260	<i>Eucalyptus globulus</i>	blue gum	526464	5249423	0.5	5.5	X		X			
3	261	<i>Eucalyptus globulus</i>	blue gum	526455	5249430	0.4	4.9	X		X			
3	262	<i>Eucalyptus globulus</i>	blue gum	526443	5249446	1.0	11.5	X	X			X	
3	263	<i>Eucalyptus globulus</i>	blue gum	526422	5249452	0.6	7.0	X				X	
3	264	<i>Eucalyptus globulus</i>	blue gum	526416	5249435	0.4	4.8	X		X			
3	265	<i>Eucalyptus globulus</i>	blue gum	526376	5249457	0.5	5.4	X		X			
3	266	<i>Eucalyptus globulus</i>	blue gum	526375	5249469	0.5	5.6	X			X		
3	267	<i>Eucalyptus globulus</i>	blue gum	526373	5249473	0.5	5.5	X			X		
3	268	<i>Eucalyptus globulus</i>	blue gum	526359	5249475	0.5	5.9	X			X		

Precinct	Tree ID	Scientific Name	Common Name	Easting GDA94	Northing GDA94	DBH (m)	TPZ (m)	Forage tree	Nesting tree	Removal required	Retained	Further assessment required*	Hollow assessment
3	269	<i>Eucalyptus globulus</i>	blue gum	526358	5249483	0.4	4.8	X			X		
3	270	<i>Eucalyptus globulus</i>	blue gum	526321	5249506	0.4	4.8	X			X		
3	271	<i>Eucalyptus globulus</i>	blue gum	526298	5249506	1.1	13.1	X	X		X		potential HBT
3	272	<i>Eucalyptus globulus</i>	blue gum	526268	5249499	0.7	7.9	X	X		X		
3	273	<i>Eucalyptus globulus</i>	blue gum	526374	5249485	0.4	5.0	X			X		
3	274	<i>Eucalyptus globulus</i>	blue gum	526372	5249545	0.4	4.8	X			X		
3	275	<i>Eucalyptus globulus</i>	blue gum	526367	5249553	0.7	7.8	X	X		X		
3	276	<i>Eucalyptus globulus</i>	blue gum	526396	5249566	0.9	10.8	X	X	X			
3	277	<i>Eucalyptus globulus</i>	blue gum	526374	5249574	0.7	8.9	X	X		X		
3	278	<i>Eucalyptus globulus</i>	blue gum	526368	5249578	0.7	8.6	X	X		X		
3	279	<i>Eucalyptus globulus</i>	blue gum	526365	5249579	0.5	6.0	X			X		
3	280	<i>Eucalyptus globulus</i>	blue gum	526353	5249584	0.5	6.0	X			X		
3	281	<i>Eucalyptus globulus</i>	blue gum	526346	5249588	0.5	6.0	X			X		
3	282	<i>Eucalyptus globulus</i>	blue gum	526332	5249568	0.4	4.8	X			X		
3	283	<i>Eucalyptus globulus</i>	blue gum	526322	5249569	0.6	6.8	X			X		
3	284	<i>Eucalyptus globulus</i>	blue gum	526294	5249561	0.5	6.5	X			X		
3	285	<i>Eucalyptus globulus</i>	blue gum	526283	5249560	0.5	5.9	X			X		
3	286	<i>Eucalyptus globulus</i>	blue gum	526285	5249580	0.6	6.6	X			X		
3	287	<i>Eucalyptus globulus</i>	blue gum	526269	5249558	0.7	8.6	X	X		X		
3	288	<i>Eucalyptus globulus</i>	blue gum	526258	5249526	0.5	6.4	X			X		
3	289	<i>Eucalyptus globulus</i>	blue gum	526370	5249606	0.6	7.4	X				X	
<b>SUBTOTAL PRECINCT 3</b>								<b>41</b>	<b>29</b>	<b>9</b>	<b>35</b>	<b>11</b>	
4	46	<i>Eucalyptus viminalis</i>	white gum	526530	5249953	0.9	10.8		X		X		
4	47	<i>Eucalyptus pulchella</i>	white peppermint	526520	5249961	0.8	9.6		X		X		
4	48	<i>Eucalyptus viminalis</i>	white gum	526516	5249949	1	12		X			X	

Precinct	Tree ID	Scientific Name	Common Name	Easting GDA94	Northing GDA94	DBH (m)	TPZ (m)	Forage tree	Nesting tree	Removal required	Retained	Further assessment required*	Hollow assessment
4	49	<i>Eucalyptus globulus</i>	blue gum	526507	5249957	1.5	15	X	X			X	HBT
4	50	<i>Eucalyptus globulus</i>	blue gum	526453	5249944	2.5	15	X	X		X		Potential HBT
4	144	<i>Eucalyptus globulus</i>	blue gum	526347	5249842	1.5	15	X	X			X	
4	145	<i>Eucalyptus globulus</i>	blue gum	526335	5249835	1.2	14.4	X	X			X	
4	147	<i>Eucalyptus globulus</i>	blue gum	526346	5249811	1.3	15	X	X			X	
4	149	<i>Eucalyptus viminalis</i>	white gum	526363	5249812	1.2	14.4		X		X		
4	150	<i>Eucalyptus globulus</i>	blue gum	525977	5249566	1.2	14.4	X	X		X		
4	151	<i>Eucalyptus viminalis</i>	white gum	526015	5249610	1	12		X		X		
4	152	<i>Eucalyptus globulus</i>	blue gum	526153	5249568	0.9	10.8	X	X		X		
4	153	<i>Eucalyptus globulus</i>	blue gum	526155	5249565	0.6	7.2	X			X		
4	154	<i>Eucalyptus globulus</i>	blue gum	526168	5249563	1.2	14.4	X	X		X		Potential HBT
4	156	<i>Eucalyptus globulus</i>	blue gum	526191	5249642	0.5	6	X			X		
4	157	<i>Eucalyptus viminalis</i>	white gum	526193	5249697	0.8	9.6		X		X		Potential HBT
4	158	<i>Eucalyptus globulus</i>	blue gum	526247	5249694	0.7	8.4	X	X		X		
4	159	<i>Eucalyptus globulus</i>	blue gum	526239	5249684	0.6	7.2	X			X		
4	160	<i>Eucalyptus viminalis</i>	white gum	526291	5249724	0.8	9.6		X			X	
4	162	<i>Eucalyptus globulus</i>	blue gum	526344	5249752	1	12	X	X			X	
4	163	<i>Eucalyptus globulus</i>	blue gum	526339	5249752	0.8	9.6	X	X			X	
4	164	<i>Eucalyptus globulus</i>	blue gum	526339	5249735	0.7	8.4	X	X			X	
4	169	<i>Eucalyptus globulus</i>	blue gum	526268	5249823	0.6	7.2	X			X		
4	171	<i>Eucalyptus viminalis</i>	white gum	526132	5249722	0.9	10.8		X		X		
4	172	<i>Eucalyptus viminalis</i>	white gum	526087	5249714	0.8	9.6		X		X		
4	173	<i>Eucalyptus globulus</i>	blue gum	526063	5249724	0.8	9.6	X	X		X		
4	174	<i>Eucalyptus sp.</i>		526045	5249692	0.9	10.8		X		X		



Precinct	Tree ID	Scientific Name	Common Name	Easting GDA94	Northing GDA94	DBH (m)	TPZ (m)	Forage tree	Nesting tree	Removal required	Retained	Further assessment required*	Hollow assessment
4	175	<i>Eucalyptus sp.</i>		526041	5249689	0.9	10.8		X		X		
4	176	<i>Eucalyptus globulus</i>	blue gum	525994	5249655	1	12	X	X		X		
4	177	<i>Eucalyptus viminalis</i>	white gum	525968	5249620	1	12		X		X		
4	178	<i>Eucalyptus viminalis</i>	white gum	525965	5249602	0.7	8.4		X		X		
4	179	<i>Eucalyptus viminalis</i>	white gum	525971	5249598	0.9	10.8		X		X		
4	181	<i>Eucalyptus viminalis</i>	white gum	525962	5249581	1	12		X		X		
4	182	<i>Eucalyptus viminalis</i>	white gum	525986	5249525	0.8	9.6		X		X		
4	234	<i>Eucalyptus globulus</i>	blue gum	526412	5249804	0.8	9.5	X	X		X		
4	235	<i>Eucalyptus globulus</i>	blue gum	526417	5249800	0.6	7.1	X			X		
4	236	<i>Eucalyptus globulus</i>	blue gum	526436	5249803	0.6	7.2	X			X		
4	237	<i>Eucalyptus globulus</i>	blue gum	526433	5249801	0.6	7.2	X			X		
4	238	<i>Eucalyptus globulus</i>	blue gum	526427	5249802	0.7	8.8	X	X		X		
4	239	<i>Eucalyptus globulus</i>	blue gum	526426	5249800	0.5	5.4	X			X		
4	240	<i>Eucalyptus globulus</i>	blue gum	526425	5249807	0.6	6.6	X			X		
4	241	<i>Eucalyptus globulus</i>	blue gum	526422	5249807	0.5	5.4	X			X		
4	242	<i>Eucalyptus globulus</i>	blue gum	526420	5249817	0.8	9.6	X	X			X	
4	243	<i>Eucalyptus globulus</i>	blue gum	526428	5249819	0.9	10.2	X	X			X	
4	244	<i>Eucalyptus globulus</i>	blue gum	526362	5249839	0.9	10.7	X	X	X			
4	245	<i>Eucalyptus globulus</i>	blue gum	526371	5249835	0.6	6.8	X		X			
4	246	<i>Eucalyptus globulus</i>	blue gum	526375	5249819	0.6	7.4	X		X			
4	247	<i>Eucalyptus viminalis</i>	white gum	526376	5249793	0.8	10.0		X		X		
4	248	<i>Eucalyptus globulus</i>	blue gum	526370	5249781	0.6	7.1	X			X		
4	249	<i>Eucalyptus globulus</i>	blue gum	526367	5249782	0.9	10.8	X	X			X	
4	250	<i>Eucalyptus globulus</i>	blue gum	526370	5249762	0.6	7.4	X			X		
4	251	<i>Eucalyptus globulus</i>	blue gum	526355	5249756	0.5	6.0	X			X		

Precinct	Tree ID	Scientific Name	Common Name	Easting GDA94	Northing GDA94	DBH (m)	TPZ (m)	Forage tree	Nesting tree	Removal required	Retained	Further assessment required*	Hollow assessment
4	252	<i>Eucalyptus globulus</i>	blue gum	526367	5249732	2.0	24.0	X	X		X		potential HBT
4	253	<i>Eucalyptus globulus</i>	blue gum	526320	5249689	1.2	14.4	X	X		X		potential HBT
4	254	<i>Eucalyptus globulus</i>	blue gum	526310	5249682	1.3	15.6	X	X		X		potential HBT
4	255	<i>Eucalyptus globulus</i>	blue gum	526279	5249674	0.8	9.1	X	X		X		
4	256	<i>Eucalyptus globulus</i>	blue gum	526281	5249679	1.0	12.0	X	X		X		HBT
4	257	<i>Eucalyptus globulus</i>	blue gum	526262	5249650	0.6	7.2	X			X		
4	258	<i>Eucalyptus globulus</i>	blue gum	526263	5249660	1.3	15.6	X	X		X		
4	290	<i>Eucalyptus globulus</i>	blue gum	526381	5249775	0.6	7.7	X			X		
4	293	<i>Eucalyptus globulus</i>	blue gum	526345	5249718	0.5	6.0	X			X		
4	294	<i>Eucalyptus globulus</i>	blue gum	526344	5249720	0.4	4.8	X			X		
4	295	<i>Eucalyptus viminalis</i>	white gum	526326	5249720	0.7	8.6		X		X		
<b>SUBTOTAL PRECINCT 4</b>								<b>45</b>	<b>44</b>	<b>3</b>	<b>48</b>	<b>12</b>	
5	188	<i>Eucalyptus ovata</i>	black gum	525637	5248854	0.4	4.8	X				X	
5	189	<i>Eucalyptus ovata</i>	black gum	525637	5248854	0.4	4.8	X				X	
5	190	<i>Eucalyptus ovata</i>	black gum	525658	5248804	0.4	4.8	X		X			
5	191	<i>Eucalyptus ovata</i>	black gum	525671	5248842	0.4	4.8	X		X			
5	192	<i>Eucalyptus viminalis</i>	white gum	525685	5248859	0.7	8.4		X			X	
5	200	<i>Eucalyptus viminalis</i>	white gum	525510	5248951	1	11.6		X		X		
5	202	<i>Eucalyptus obliqua</i>	stringybark	525434	5248914	0.9	10.8		X		X		
5	203	<i>Eucalyptus viminalis</i>	white gum	525421	5248906	1.1	12.6		X		X		
5	204	<i>Eucalyptus obliqua</i>	stringybark	525412	5248904	0.8	9.6		X		X		
5	205	<i>Eucalyptus obliqua</i>	stringybark	525388	5248898	1	11.8		X		X		
5	206	<i>Eucalyptus viminalis</i>	white gum	525472	5248888	0.9	10.9		X		X		
5	207	<i>Eucalyptus obliqua</i>	stringybark	525477	5248877	0.8	9.6		X		X		

Precinct	Tree ID	Scientific Name	Common Name	Easting GDA94	Northing GDA94	DBH (m)	TPZ (m)	Forage tree	Nesting tree	Removal required	Retained	Further assessment required*	Hollow assessment
5	208	<i>Eucalyptus viminalis</i>	white gum	525455	5248865	0.7	8.4		X		X		
5	209	<i>Eucalyptus viminalis</i>	white gum	525437	5248861	0.7	8.8		X		X		
5	210	<i>Eucalyptus viminalis</i>	white gum	525432	5248819	0.9	10.8		X		X		
5	211	<i>Eucalyptus viminalis</i>	white gum	525400	5248847	0.7	8.4		X		X		
5	212	<i>Eucalyptus viminalis</i>	white gum	525462	5248812	0.8	9.6		X		X		
5	213	<i>Eucalyptus viminalis</i>	white gum	525474	5248827	0.9	10.6		X		X		
5	214	<i>Eucalyptus viminalis</i>	white gum	525464	5248795	0.8	9		X		X		
5	215	<i>Eucalyptus ovata</i>	black gum	525506	5248799	0.8	9.6	X	X			X	
5	216	<i>Eucalyptus globulus</i>	blue gum	525731	5248705	0.9	11.3	X	X		X		potential HBT
5	217	<i>Eucalyptus viminalis</i>	white gum	525733	5248705	1.9	22.8		X		X		HBT
5	218	<i>Eucalyptus globulus</i>	blue gum	525756	5248705	1	12	X	X		X		
5	219	<i>Eucalyptus globulus</i>	blue gum	525783	5248724	0.6	7.3	X			X		
5	220	<i>Eucalyptus globulus</i>	blue gum	525780	5248716	0.8	10.1	X	X		X		
5	221	<i>Eucalyptus globulus</i>	blue gum	525782	5248733	0.7	8.5	X	X		X		
5	222	<i>Eucalyptus globulus</i>	blue gum	525769	5248738	0.6	6.6	X			X		
5	223	<i>Eucalyptus globulus</i>	blue gum	525750	5248746	0.9	10.2	X	X		X		
5	224	<i>Eucalyptus globulus</i>	blue gum	525718	5248750	0.8	9.6	X	X		X		
5	225	<i>Eucalyptus globulus</i>	blue gum	525746	5248766	0.5	5.9	X			X		
5	226	<i>Eucalyptus pulchella</i>	white peppermint	525741	5248772	0.9	10.2		X		X		HBT
5	227	<i>Eucalyptus globulus</i>	blue gum	525747	5248780	0.6	6.7	X			X		
5	228	<i>Eucalyptus globulus</i>	blue gum	525753	5248799	0.8	9.8	X	X		X		
5	229	<i>Eucalyptus globulus</i>	blue gum	525752	5248820	0.6	7.2	X			X		HBT
5	230	<i>Eucalyptus pulchella</i>	white peppermint	525746	5248818	0.8	10.1		X		X		
5	231	<i>Eucalyptus pulchella</i>	white peppermint	525722	5248795	0.8	9		X		X		
5	232	<i>Eucalyptus globulus</i>	blue gum	525716	5248822	0.9	10.7	X	X			X	

Precinct	Tree ID	Scientific Name	Common Name	Easting GDA94	Northing GDA94	DBH (m)	TPZ (m)	Forage tree	Nesting tree	Removal required	Retained	Further assessment required*	Hollow assessment
5	233	<i>Eucalyptus pulchella</i>	white peppermint	525693	5248853	0.9	10.2		X			X	
5	296	<i>Eucalyptus ovata</i>	black gum	525557	5248788	0.8	9.4	X	X		X		
5	298	<i>Eucalyptus ovata</i>	black gum	525502	5248756	0.5	6.4	X			X		
5	299	<i>Eucalyptus ovata</i>	black gum	525483	5248721	0.7	8.6	X	X		X		
5	300	<i>Eucalyptus ovata</i>	black gum	525457	5248855	0.6	7.2	X			X		
5	301	<i>Eucalyptus globulus</i>	blue gum	525739	5248878	0.5	6	X				X	
5	302	<i>Eucalyptus globulus</i>	blue gum	525737	5248872	0.6	7	X				X	
5	303	<i>Eucalyptus globulus</i>	blue gum	525748	5248870	0.6	6.6	X			X		
5	304	<i>Eucalyptus ovata</i>	black gum	525745	5248858	0.4	4.8	X			X		
5	305	<i>Eucalyptus globulus</i>	blue gum	525763	5248819	0.8	9.4	X	X		X		potential HBT
5	306	<i>Eucalyptus globulus</i>	blue gum	525767	5248830	0.9	10.8	X	X		X		potential HBT
5	307	<i>Eucalyptus ovata</i>	black gum	525562	5248916	0.4	4.8	X		X			
5	308	<i>Eucalyptus ovata</i>	black gum	525548	5248934	0.5	6.36	X				X	
5	309	<i>Eucalyptus ovata</i>	black gum	525556	5248948	0.8	10.08	X	X			X	
5	310	<i>Eucalyptus ovata</i>	black gum	525560	5248960	0.5	5.64	X				X	
5	311	<i>Eucalyptus ovata</i>	black gum	525567	5248966	0.4	4.8	X				X	
5	312	<i>Eucalyptus ovata</i>	black gum	525571	5248967	0.5	6.36	X				X	
5	313	<i>Eucalyptus ovata</i>	black gum	525581	5248976	0.7	7.8	X	X			X	
5	314	<i>Eucalyptus ovata</i>	black gum	525585	5248983	0.6	6.6	X				X	
5	315	<i>Eucalyptus ovata</i>	black gum	525621	5249022	0.6	7.2	X				X	
<b>SUBTOTAL PRECINCT 5</b>								<b>37</b>	<b>35</b>	<b>3</b>	<b>38</b>	<b>16</b>	
<b>TOTAL ALL PRECINCTS</b>								<b>139</b>	<b>142</b>	<b>30</b>	<b>135</b>	<b>47</b>	

Note: # indicates trees listed on the CoH significant tree register

\* some encroachment into the TPZ is likely based on the concept masterplan. An assessment by an arborist may be required to determine whether the tree can be retained if there is more than 10% encroachment.

**Appendix 3. Details of dimensions of hazard management areas (To property boundary = TPB)**

Precinct – Building type	Vulnerable Use	BAL	Aspect	Veg	Slope	Min distance
3.1 - Residential		19	Northwest	Forest	Upslope	23
3.3 A to C - Residential		19	West	Forest	5 to 10	34
3.4 - Residential		19	Northwest	Forest	5 to 10	34
			Southwest	Forest	0 to 5	27
			Southeast	Forest	Upslope	23
3.14 - Residential		19	SouthWest	Forest	Upslope	23
			Northwest	Woodland	5 to 10	23
3.17 - Residential		19	West	Forest	0 to 5	27
			North	Forest	10 to 15	41
3.19 - Residential		19	West	Woodland	0 to 5	18
3.21 - Residential		19	West	Woodland	15 to 20	36
3.22 - Residential		19	West	Woodland	15 to 20	36
3.23 - Residential		19	South	Woodland	upslope	15
			West	Woodland	15 to 20	36
4.1 - 4.3 Residential		19	East	Forest	5 to 10	34
			South	Upslope	23	
			West	LTV		Boundary
			Northeast	LTV	10 to 15	
4.4 - Education		12.5	East	LTV		Boundary
			South west	Forest	upslope	32
			West	Forest	15 to 20	67
			North	Forest		Boundary
4.5-4.13 - Residential		19	Northwest	LTV		Boundary
			South east	Woodland	15 t o 20	36
			Southwest	Forest	upslope	23
5.1 – Eco Tourism	Yes	12.5	East	Forest	10 to 15	56
			South	LTV		
5.2 – Eco Tourism	Yes	12.5	Northeast	Forest	10 to 15	56
			Northwest	Woodland	15 to 20	48
5.3 – Eco Tourism	Yes	12.5	Northwest	Woodland	15 to 20	48
5.6 - 5.7 & 5.16 Residential		19	East	Forest	5 to 10	34
			South	Forest	0 to 5	27
			West	Forest	0 to 5	27
			North	Forest	0 to 5	38
5.5 & 5.11 - Office		12.5	South	Forest	0 to 5	27
5.8 Residential (central)		19	North	Forest	10 to 15	41
			South	Forest	0 to 5	27
			West	Forest	0 to 5	27
5.8 - Residential (west)		19	Northeast	Forest	10 to 15	41
			North west	Forest	> 15-20	>51
5.8 Residential (central)		19	North east	Forest	10 to 15	41

			East	Forest	Flat	23
			South	Woodland	0 to 5	18
			West	woodland	5 to 10	23
5.8 Residential (south)		19	North east	Forest	Flat	23
			South east	Forest	0 to 5	27
			South	Forest	0 to 5	27
			North	Forest	0 to 5	27
5.9 - Residential (north west)		12.5	South	Grassland	5 to 10	13
			West	Grassland	5 to 10	13
			North	Forest	> 20	51
			East	Woodland	0 to 5	18
5.9 - Residential (south east)		12.5	South	Forest	0 to 5	27
			Southwest	Grassland	5 to 10	13
			Southwest	Forest		34
			Northwest	Woodland	0 to 5	18
5.10 Eco Tourism	Yes	12.5	Southwest	Forest	0 to 5	32
			Northwest	Forest	10 to 15	56
5.13 - Residential		19	East	Forest	15 to 20	51
			North	Forest	15 to 20	51
5.14 - 5.15 Residential		19	East	Forest	10 to 15	41
3.23 - Residential		19	South	Woodland	upslope	15
			West	Woodland	15 to 20	36

## Appendix 4: Review of the EPBC process<sup>18</sup>

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC) is the Australian Government's primary environmental legislation. It provides the legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities, migratory species and heritage places. These values are defined in the EPBC Act as matters of national environmental significance (MNES).

The EPBC Act focuses Australian Government interests on the protection of MNES, with the states and territories having responsibility for matters of state and local significance. MNES that are known to occur at the UTAS Sandy Bay Site include swift parrots, eastern barred bandicoots and the listed community *Tasmanian Forests and Woodlands dominated by Black Gum or Brookers Gum*. Other MNES may or are at least likely to occur from time to time within the Site based upon available habitat.

The EPBC legislation applies to anyone whose activity is **likely** to have a significant impact on the nationally protected matters. It is very important to note that in this context "likely" does not need to be greater than a 50% chance of occurring. It need only be a real or remote chance of occurring. If the Action requires mitigation to avoid significant impacts then it is likely to require referral.

If a proponent is uncertain as to whether the activity could cause a significant impact then a decision can be gained by referral to the Minister. The purpose of the referral process is to determine whether or not a proposed Action (development or land use proposal) will need formal assessment and approval under the EPBC Act. It is effectively a screening process and is the only way to gain legal surety.

A referral decision will be one of the following:

**Controlled action:** this means that a significant impact on a nationally protected matter is likely, and the activity needs to undergo federal assessment. A method of assessment will then be chosen, which will vary depending on the scale and complexity of the activity. The method can include just the referral document, existing documentation with further information provided, or an Environmental Impact Assessment (EIS) or Public Environment Report (PER). The EIS and PER respond to guidelines set by the government.

**Not controlled action, particular manner:** this means the activity does not need to be further assessed but must be carried out in the manner described in the decision.

**Not controlled action:** this means the activity does not need further assessment because it is not likely to have a significant impact on nationally protected matters.

**Action clearly unacceptable:** this means the activity cannot proceed because it is clear it will have an unacceptable impact on nationally protected matters. This is essentially a decision to refuse approval for the project.

The assessment time frame following referral can be as short as 20 days, if the Action is judged by the minister to not require approval or else is considered on the strength of existing documentation, but can stretch to 12 months and beyond where an EIS is requested.

**Exemptions:** The EPBC Act exempts certain actions from the need for assessment and approval. The exemptions apply to lawful continuations of land use that started before 16 July 2000 or actions that were legally authorised before 16 July 2000, the date of commencement of the EPBC Act.

These exemptions allow for the continuation of activities that were fully approved by state and local governments or otherwise lawful activities that commenced before the EPBC Act came into force ('prior authorisation'), and which have continued without substantial interruption ('continuing uses').

Under the **prior authorisation exemption**, assessment and approval under the EPBC Act is not required if:

<sup>18</sup> The following discussion is in part(s) summarised, copied or paraphrased from various Australian Government web based information.

- before 16 July 2000, the action was authorised by a *specific environmental authorisation* under a law of the Commonwealth, state or a self-governing territory before 16 July 2000; and
- as at 15 July 2000, no further *environmental authorisation* was necessary to allow the action to be taken lawfully; and
- the specific environmental authorisation remains in force at the time the action is taken (in limited circumstances a renewal may satisfy this requirement).

Under the **continuing use exemption**, assessment and approval under the EPBC Act is not required if:

- the action commenced before 16 July 2000; and
- the use of land was lawful; and
- the action has continued in the same location without enlargement, expansion or intensification.

Any enlargement, expansion, or intensification of an existing use **is not a continuation of a use**. If you propose to enlarge, expand or intensify the action it is not covered by this exemption and, if the enlargement, expansion or intensification is likely to have a significant impact on a MNES, you should refer the action for assessment and approval. Any change in the location or the nature of the use that results in a substantial increase in its impact is not a continuation of use.

Whether or not the Action is covered by the continuing use exemption will depend on the particular circumstances.

New listings of threatened animal or plant species or ecological communities or national heritage places would not affect the application of exemptions to activities that are covered by the exemptions outlined above.

**Self Assessment:** There is a process for self assessment to determine if a development or land use proposal (Action) is likely to have a significant impact on MNES and so if referral is necessary or warranted for legal surety.

The process includes determining if MNES are present, are likely to be directly or indirectly impacted, and includes assessment against criteria to measure the significance of the impact.

Where there are multiple MNES present and judgment as to whether the impact is significant is “marginal” then completion of this self assessment is highly recommended to:

1. assist in making a decision on whether Commonwealth approval is necessary and
2. to act as evidence of due diligence and your assessment and mitigation process should a third party or the Commonwealth call the Action in for compliance assessment.
3. contribute to the process in the event that the Action is referred. The information in the self assessment will support the referral to assist the “minister” to make a decision as to whether the Action is a “controlled Action” and what the assessment method should be.

In this case, whether or not a decision to “refer” the Action is made, much of the information collected and presented in the self assessment is needed anyway. This is because a number of MNES are known to be present on and around the site and potential impacts upon some of them need to be demonstrably avoided.

The following link provides information on environmental offsets under the EPBC Act. Offsets are likely to be required if impacts to MNES cannot be avoided.

<https://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy>



### Appendix 5: Example of EPBC offset calculator

Impact calculator						Offset calculator																	
Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact	Units	Information source	Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)	Start area and quality	Future area and quality without offset	Future area and quality with offset	Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset required	Cost (\$ total)	Information source	
<i>Ecological communities</i>						<i>Ecological Communities</i>																	
Area of community	Yes	Area of community	Area	10	Hectares	Adjusted hectares	Yes	100	Hectares	100	20	Start area (hectares)	Risk of loss [1] without offset	Risk of loss [2] with offset	0.00	100%	0.00	0.00	0.00	100%	100%	\$0000	\$0000
			Quality	5	Scale 0-10								Future area without offset (adjusted hectares)	Future area with offset (adjusted hectares)									
			Total quantum of impact	500	Adjusted hectares								Future quality without offset (scale of 0-10)	Future quality with offset (scale of 0-10)									
<i>Threatened species habitat</i>						<i>Threatened species habitat</i>																	
Area of habitat	Yes	Swift parrot	Area	1.25	Hectares	Adjusted hectares	Yes	100	Hectares	100	20	Start area (hectares)	Risk of loss [1] without offset	Risk of loss [2] with offset	0.00	100%	0.00	0.21	0.00	95.82%	Yes	\$0000	\$0000
			Quality	5	Scale 0-10								Future area without offset (adjusted hectares)	Future area with offset (adjusted hectares)									
			Total quantum of impact	100	Adjusted hectares								Future quality without offset (scale of 0-10)	Future quality with offset (scale of 0-10)									
Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact	Units	Information source	Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)	Start value	Future value without offset	Future value with offset	Raw gain	Confidence in result (%)	Adjusted gain	Net present value	% of impact offset	Minimum (90%) direct offset required	Cost (\$ total)	Information source	

An example of the input and output data used in the EPBC offset calculator

*Swift parrot habitat* - 1.25 ha of medium and high quality swift parrot foraging and nesting habitat using a covenant and management to improve the condition. This example requires 4 ha of high quality habitat to offset the loss of 1.25 ha of habitat.

REPORTING TO INFORM THE MASTERPLAN DESIGN

# Conservation Management Plan (Volume 1)

Paul Davies Architect

UTAS Sandy Bay Masterplan  
Conservation Management Plan  
Volume 1

December 2021



for CHC and UPPL  
by Paul Davies Pty Ltd

Revision	Date	Issued By
Draft 1	8 <sup>th</sup> September 2021	Paul Davies

Report reviewed by:	
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## 1.0 Introduction

### 1.1 Background

#### Location

UTAS Sandy Bay Site is located on the south-western side of Sandy Bay Road. The Site occupies approximately 105 hectares of land (1,049,135m<sup>2</sup>) and extends in a south-west direction approximately 2km past Churchill Avenue. It is bounded by residential development and Proctors Road to the north and west, Earl Street to the south-east and further residential development continuing up the hill to the west. The street frontage to Sandy Bay Road extends for approximately 180m. The campus contains a large number of buildings, mostly built as part of the university development, playing fields fronting Sandy Bay Road and at the upper end of the site near Proctors Road, extensive areas of bushland and a setting that moves from the urbanized residential developments around the lower campus to a bushland campus on the upper slopes.

The main campus development occupies gently rising land above the playing fields terminating at Churchill Avenue with three separate areas of development on the steeper land beyond Churchill Avenue.

The Site is located within the Hobart City Council local government area.

*Table 1: Property information based on LISTMap.*

Street address	Real property description
2 Churchill Avenue Sandy Bay	176312/1
2 Churchill Avenue Sandy Bay (this is also referred to as 306 Sandy Bay Road)	167420/1
2 Churchill Avenue Sandy Bay (this is also referred to as 6 Grace Street)	167420/2
60 Proctors Road Dynnyrne	28772/1
66 Proctors Road Dynnyrne	119071/1
Proctors Road Dynnyrne	119071/2



Figure 1: Location of UTAS Sandy Bay Campus. Source: LISTMap – Land Information Services Tasmania



Figure 2: Site Plan of UTAS Sandy Bay Campus. Source: LISTMap – Land Information Services Tasmania

## Administration

The Site is managed by the University of Tasmania and has been the main campus containing administration and property services.

## The Brief

This Conservation Management Plan (CMP) was commissioned by CHC on behalf of the UPPL to understand the potential heritage significance of the Site as a whole and of its component elements and then to develop strategies for the conservation of the heritage significance of the place.

The CMP is a guiding document for the management and future use of the Site in relation to heritage values. It sets out the Site's cultural significance and provides policies that direct the future management, adaptive re-use, new works and interpretation.

This Plan provides a documentary and physical analysis of the history of the place and makes an assessment of the significance of individual elements, the Site and the geographic context. The Plan identifies constraints and sets policies for the future management of the place in relation to the identified heritage values.

The Plan follows the guidelines of the *Assessing Historic Heritage Significance for application with the Historic Cultural Heritage Act 1995, Version 5 October 2011*, and addresses significance under the Tasmanian heritage assessment criteria. The Plan follows the principles and methodology of the Australia ICOMOS Burra Charter, 2013 and The Conservation Plan-Fifth Edition by James S. Kerr.

## 1.2 Heritage Listings

### Statutory Listings

#### Commonwealth Heritage List & National Heritage List

The Site is not listed on either the Commonwealth Heritage List (which can only apply to sites in Commonwealth government ownership) or the National Heritage List (which applies to sites of National heritage significance).

#### Tasmanian Heritage Register (THR)

UTAS Sandy Bay Site contains the following buildings listed on the Tasmanian Heritage Register.

Table 2: Details of Heritage Listings in Tasmanian Heritage Register

Place ID	Item Name	Address	Suburb	Postcode	Municipality	Heritage Place Status
7500	Christ College	2 Churchill Ave	Sandy Bay	7005	Hobart City Council	P.Reg

#### Hobart Interim Planning Scheme 2015

The Hobart Interim Planning Scheme 2015 includes the heritage listings affecting the site outlined in Table 3 below.

Table 3: Details of Heritage Listings in Hobart Interim Planning Scheme Table E13.1 Heritage Places

Ref No.	Name	Street No.	Street/Location	C.T.	General Description	Specific extent
185	Christ College		Baintree Avenue	127402/1	Part of 2 Churchill Avenue	
609	Arts Lecture Theatre,		Churchill Avenue	167424/1	Arts Lecture Theatre only, including the grounds within 3m of the building	
	Hawthorn Hedge		Earl Street			



Figure 3: Extract from the LISTMap overlay within the Hobart Interim Planning Scheme 2015. Note: Christ College is shown (circled red), however the plan does not include the Arts Lecture Theatre (circled blue). LISTMap appears to only show items that are on the Tasmanian Register.

Source: LISTMap – Land Information Services Tasmania

## Non-Statutory Listings

### National Trust of Australia (Tasmania)

There are no National Trust of Australia (Tasmania) listings on the site.

### Australian Institute of Architects (Tasmania)

The Tasmanian chapter of the Institute of Architects commenced awards around 1963 with 'triennial' awards and established annual awards in 1982.

The following buildings have received an Institute of Architects (Tasmania) Award:

1966	Dirk Bolt (in relation to Christ College) but an individual award
1988	Sports Pavilion (Building 5)
1989	Herbarium, Tasmanian (Building 36)
1991	Centenary Building (Building 10)
1993	CSIRO Building (Building 45)
1994	Old Commerce Building (Building 40a)
1995	University Apartments (Building 47c)
2000	Staff Club additions (18)
2003	Life Science Entry addition (34)
2004	Union Bar addition (21)
2008	Corporate Services Building addition (Building 31)

\* refer to drawings in Appendix 2 to locate the buildings on the campus

## 1.3 Previous Studies

There have been no previous heritage studies or assessments of the Site apart from the individual listings prepared for Heritage Council and Hobart City Council registers.

This CMP is based on the following documents, which contain more detailed historical background than is included herein; they should be read in conjunction with this Report.

- Sandy Bay A Social History - Nicola Goc
- The Rifle Range Estate, a History - Gwenda Lord
- The Golf Club Estate, a History - Gwenda Lord

The study has used the extensive archive of university drawings as a source of base information on architects, periods of development and how change has taken place across the campus.

## 1.4 Terms

Local	Refers to the Hobart Council area.
State	Refers to Tasmania

The following terms used in this report are defined in the Australian ICOMOS Burra Charter 2013.

Place	means a geographically defined area. It may include elements, objects, spaces and views. Place may have tangible and intangible dimensions.
Cultural significance	means aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups
Fabric	means all the physical material of the place including elements, fixtures, contents and objects.
Conservation	means all the processes of looking after a place so as to retain its cultural significance.
Maintenance	means the continuous protective care of a place, and its setting. Maintenance is to be distinguished from repair which involves restoration or reconstruction.
Preservation	means maintaining a place in its existing state and retarding deterioration.
Restoration	means returning a place to a known earlier state by removing accretions or by reassembling existing elements without the introduction of new material.
Reconstruction	means returning a place to a known earlier state and is distinguished from restoration by the introduction of new material.
Site	refers to the whole of the land that currently owned and managed by UTAS
Adaptation	means changing a place to suit the existing use or a proposed use
Use	means the functions of a place, including the activities and traditional and customary practices that may occur at the place or are dependent on the place.
Compatible use	means a use which respects the cultural significance of a place. Such a use involves no, or minimal, impact on cultural significance.
Setting	means the immediate and extended environment of a place that is part of or contributes to its cultural significance and distinctive character.
Related place	means a place that contributes to the cultural significance of another place.
Related object	means an object that contributes to the cultural significance of a place but is not at the place.
Associations	mean the connections that exist between people and a place.
Meanings	denote what a place signifies, indicates, evokes or expresses to people.
Interpretation	means all the ways of presenting the cultural significance of a place.



## 1.5 Abbreviations

AHC	Australian Heritage Council
ANHC	Australian Natural Heritage Charter
AHIMS	Aboriginal Heritage Management System
BCA	Building Code of Australia, part of the National Construction Code
CMP	Conservation Management Plan
DPIPWE	Department of Primary Industries, Parks, Water and Environment
DPW	Tasmanian Department of Public Works
EPBC	Commonwealth Environment Protection and Biodiversity Conservation Act 1999
THC	Tasmanian Heritage Council
THR	Tasmanian Heritage Register
ICOMOS	International Committee on Monuments and Sites
NAA	National Archives of Australia
NCC	National Construction Code of Australia (may also be referred to as The Building Code of Australia or BCA)
NHL	National Heritage List
PWS	Tasmania Parks & Wildlife Service
PoM	Plan of Management
RAHS	Royal Australian Historical Society
UNESCO	United Nations Educational Scientific and Cultural Organisation

## 1.6 Scope and Methodology

The methodology used is in accordance with the principles and definitions as set out in the guidelines to the Australia ICOMOS Burra Charter 2013 and its Practice Notes, the guidelines of the Department of Primary Industries, Parks, Water and Environment *Assessing Historic Heritage Significance for application with the Historic Cultural Heritage Act 1995 (Version 5 October 2011)* and J.S. Kerr's The Conservation Plan.

This methodology incorporates the following sections: Historical Background, Physical Analysis, Significance Assessment, Conservation and Management Principles and Management Policies.

Site inspections were conducted to assess the building and landscape elements of the Site and the potential for archaeological materials to occur. The inspections were not landscape or archaeological surveys.

This Plan evaluates the cultural heritage significance of the built and landscape features within the context of the Site. The CMP also considers and determines appropriate conservation management policies and guidelines for the future use of the place, which are consistent with the assessed cultural significance.

The methodology of the preparation of this Plan follows that set out in JS Kerr “The Conservation Plan”. The key elements of the study are:

- Understanding the Place through description and historical research site investigation and analysis looking at how the Site is used
- Setting out the significance of the Place through a statement of significance looking at the significance of the various parts of the Place
- Looking to the future by providing policies and strategies on the place as a whole as well as the various elements that make the Place.

## 1.7 Limits of the Plan

In the preparation of this CMP, a number of existing sources of information and research have been used, particularly university archives. The research was limited due to time and budgetary constraints and has focused on the university occupation of the site. The pre-European occupation of the Site and its early farming history have not been addressed in detail and the use of the site as a rifle range is set out but reference should be made to Gwenda Lord’s published history of the rifle range for detail on that period. Funding did not allow for extensive historical research into phases of development of the Site. The historical outline within this report provides sufficient background to provide an assessment of the Site and relevant policy recommendations. However, it is not intended to be an exhaustive history of the Site.

The uses and associations related to the Site and much of the research material is consequently based on secondary, as well as primary material.

Site investigation has been undertaken for built and landscape heritage elements. The authors have undertaken fieldwork, visiting each building and the Site generally to understand the current status of elements and their relationship to earlier stages of development. No intervention has been carried out in reaching the opinions and recommendations in the report. Fieldwork was constrained by COVID restrictions that arose after the main fieldwork was undertaken.

## 1.8 Authors

This Conservation Management Plan has been prepared by Paul Davies Pty Ltd., Architects and Heritage Consultants:

Paul Davies	Principal Consultant, Conservation Architect
Wendy Crane	Graduate Architect, Fieldwork, Data sheet preparation
Hannah Evans	Research Assistant, Data sheet preparation

## 1.9 Acknowledgements

The following people and groups have assisted in the preparation of this Plan:

Tasmanian Chapter Australian Institute of Architects

## 2.0 Historical Background

### 2.1 The site until 1951

#### 1813-1880

The area was not formally occupied until 1813 when Governor Macquarie made a land grant of 25 acres to George Brown from Norfolk Island. The holding was owned by John Eddington by 1825, presumably following Brown's death. Eddington was recorded as the owner in 1868 of 25 acres with "cottage and land". John Eddington died in 1869 and the property passed to his wife and then son. The farm was leased in 1872 to a William Cooper in 1872 and then Michael Kelly in 1879. Kelly's lease only survived a year as the government became the lessee in 1880 establishing a rifle range.<sup>3</sup>

#### 1880-1951

The rifle range was established around 1880 but the land was not acquired by the government until 1890 following the death of Elizabeth Eddington. However, some improvement works took place including an upgrade of the farm house that had been built on the site, including additions, to provide accommodation for a caretaker. Details of that work are not known, neither is the earlier history of the house.

In 1901 as a result of Federation, defense became a National concern and the rifle range was taken over by the Commonwealth.

When the range was established, the area contained farms with little residential development in the area but, by 1901, there was increasing development in the surrounding area and plans for sub-division that were seen, at least by local land owners, to be in conflict with the rifle range use with its potential for stray bullets to stray onto adjoining land.

In 1906, partially it would appear to address the issue of separation of the rifle range from adjoining properties as well as the increasing range of weapons, four additional parcels of land were added to the site, in 1908 a further area to the east and in 1915 a long narrow strip of land to the west of the site were added, extending the site from Sandy Bay Road to Proctors Road. These acquisitions form the basis of what is now the UTAS campus and substantially increased the site area.

---

<sup>3</sup> The information on grants is based on information set out in Gwenda Lord's publication "A History of the Rifle Range Site Sandy Bay".

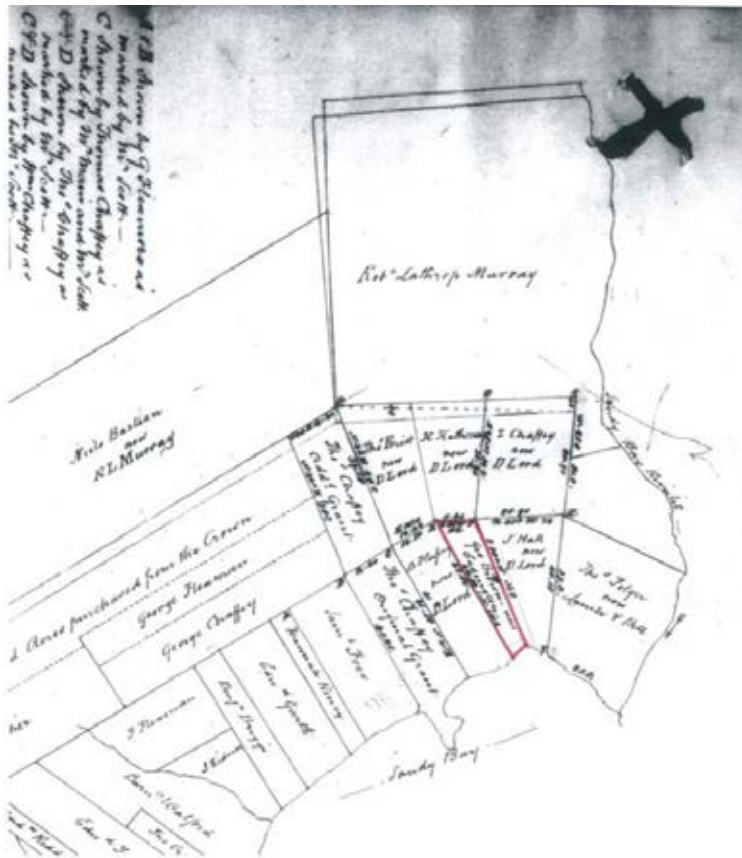


Figure 4: 1837 map of Sandy Bay grants to Norfolk Island Settlers. The subject site is overlaid approximately on the grants to Brown and DL Lord.

Source: SC285/32 Archives Office of Tasmania



Figure 5: Aerial photo from that shows the elevated Sandy Bay Road, Grace Street, the former farm residence and the rifle range club house with the development of the adjacent Golf Links Estate. The original golf club house can be seen set back and above Grace Street.

Source:



Figure 6: The amended sub-division plan, showing the Commonwealth acquisition of land between the then rifle range site and the new estate. The former golf club house can be seen at the end of View Street. Lot 7 (in the detail plan) was acquired by the University and forms part of the site of the Temporary Administration Building.

Source: History of the Rifle Range Site - Lord.

There was continuing agitation from the local community for the rifle range to close but the army was understandably resistant and it was not until after the first world war that pressure increased with Hobart City Council making representations to the Commonwealth to relocate the facility and for them to acquire the site.

At the same time, the University were facing problems with insufficient land and facilities at the Glebe and were looking for a new site for a campus. They identified the rifle range as a suitable site and approached the state government who, while supportive of the idea, would not intervene in Hobart Council's negotiations.

By the outbreak of the second world war Hobart Council ceased its negotiations with the Commonwealth to acquire the land and the premier, Edmund Dwyer-Gray, urged the vice Chancellor, Edmund Morris Miller, to work on a submission to the Commonwealth that involved transferring the site from the Commonwealth to the State government for use as the university campus. Negotiations progressed with the condition that an alternative rifle range be secured.

1941 saw the Commonwealth acquire land at Brighton for a new rifle range and in 1943 an agreement was reached to relocate the range and for the Sandy Bay site to transfer to the State. The transfer did not take place however until 1948 and the site was vested in the University in 1951.

## 2.2 UTAS - Post 1951

### 1951-1959

The initial use of the site by the University was very low key with the huts that had been built during the war for army use becoming temporary facilities to alleviate the over-flowing Glebe campus. Work progressed on master-planning the site and a first masterplan was developed by Professor Leslie Wilkinson from Sydney University. It was not adopted and on reflection,

Wilkinson who was by this time 70 years old, proposed a somewhat arcane plan with a strong Mediterranean character.

The campus works were overseen by the Chief Architect of the Public Works Department but most of the individual buildings were designed by consultant architects and often several firms or architects in collaboration.

It is not clear how the masterplan was actually developed but the earliest site plan discovered from 1957 was prepared by the Public Works Department under CB Rose as chief architect. It was used as the site plan for the soon to be built engineering and engineering workshop buildings (1957-1959). The plan shows both the state of the campus at the time and the masterplan intent that Rose, the chief Architect, laid out. The masterplan is ordered and regular and is a quite utilitarian approach to the site.

The layout responds to site constraints: the eastern and lower land, which was relatively flat was most suited to playing fields with a fringe of buildings and the central campus area which has a gentler slope than the upper campus allowed a regular building arrangement around a spine. The upper campus layout set potential buildings onto long narrow platforms that extended along contours to minimize site works and vehicle access generally fed into each building off new access roads that wound up the hillside with often steep driveways to individual sites.

The central campus arrangement is a relatively tight grid form with relatively easy circulation even with the considerable rise in topography but the upper campus has always had difficult access from the lower campus areas but also in relation to each building where there are considerable level changes.

The infrastructure elements that were established early in the development of the site were the extension of Grosvenor Street and the creation of Churchill Avenue as crossing points in the site that separated the campus into lower, middle and upper areas. The plan shows an intended layout for the middle and lower part of the upper campus but does not show much proposed development on the lower campus.

The buildings constructed up to 1959 are: \* Buildings coloured in blue are in the central campus area.

Table 4 : Buildings built between 1951 and 1959

Building	Architect	Site Building No.
1957		
• Administration (temporary)	SWT Blythe + Roderick W Cooper	(1)
• 6 Grace Street	SWT Blythe+ Roderick W Cooper	(2)
• Hytten Hall	John F Scarborough	(40)
1959		
• Engineering	Public Works	(8)
• Engineering Workshop	Public Works	(11)
• Vic-Chancellor’s Residence	Public Works	(38)
• Warden’s Lodge	Public Works	(40b)
• Rugby Changerooms and clubhouse	Public Works	(50)

- Students Union Building Stage 1      Blythe and Blythe      (21)
- Morris Miller Library                      John F Scarborough      (23)

By 1957 two buildings had been built, the temporary Administration Building (1) fronting Sandy Bay Road and a staff accommodation building at 6 Grace Street on the lower end of the campus to serve the faculties that had located into the existing huts and to establish the universities presence on the site.

These two buildings were designed by SWT Blythe in association with Roderick W Cooper. Blythe had been chief architect of Public Works and was shortly after this in private practice with his son and Cooper had an influential practice particularly in residential and church work.

Cooper worked on several other significant buildings on the campus including the Arts Theatre (27) and John Fisher College (47) and Blythe in combination with his son designed the original building beneath Lady Gowrie childcare (3), the first Uni Gym (4), the first University Club building, (18) the first Union Building (21) and Stage 1 of the Administration Building (22).

Blythe's role as a former chief architect along with an impressive record of public buildings across the State placed him in a good position to undertake much of the early work on the campus. McNeal and Woolley<sup>4</sup> observe that Blythe's significant work took place in the 1940s and is epitomized in the many school buildings that he designed and in particular Ogilvie High in New Town. The temporary Administration Building, now somewhat altered, is his most cohesive design on the campus.

The 1957 site plan shows a clear intent on the form of the site. The central campus was to have an open and spacious central avenue with large open spaces to each side with narrow buildings, geometrically arranged with wings to enclose courtyard areas. The upper end of the central campus featured a great hall that overlooked the buildings beneath and with an outlook to the Derwent across the landscaped forecourts.

Around this time, it is also noted that the former caretaker's cottage was relocated down the slope to its present site.

The following analysis drawings show the built and spatial arrangements of the Master Plan and how they now manifest on the Site.

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<sup>4</sup> Architecture on the Edge

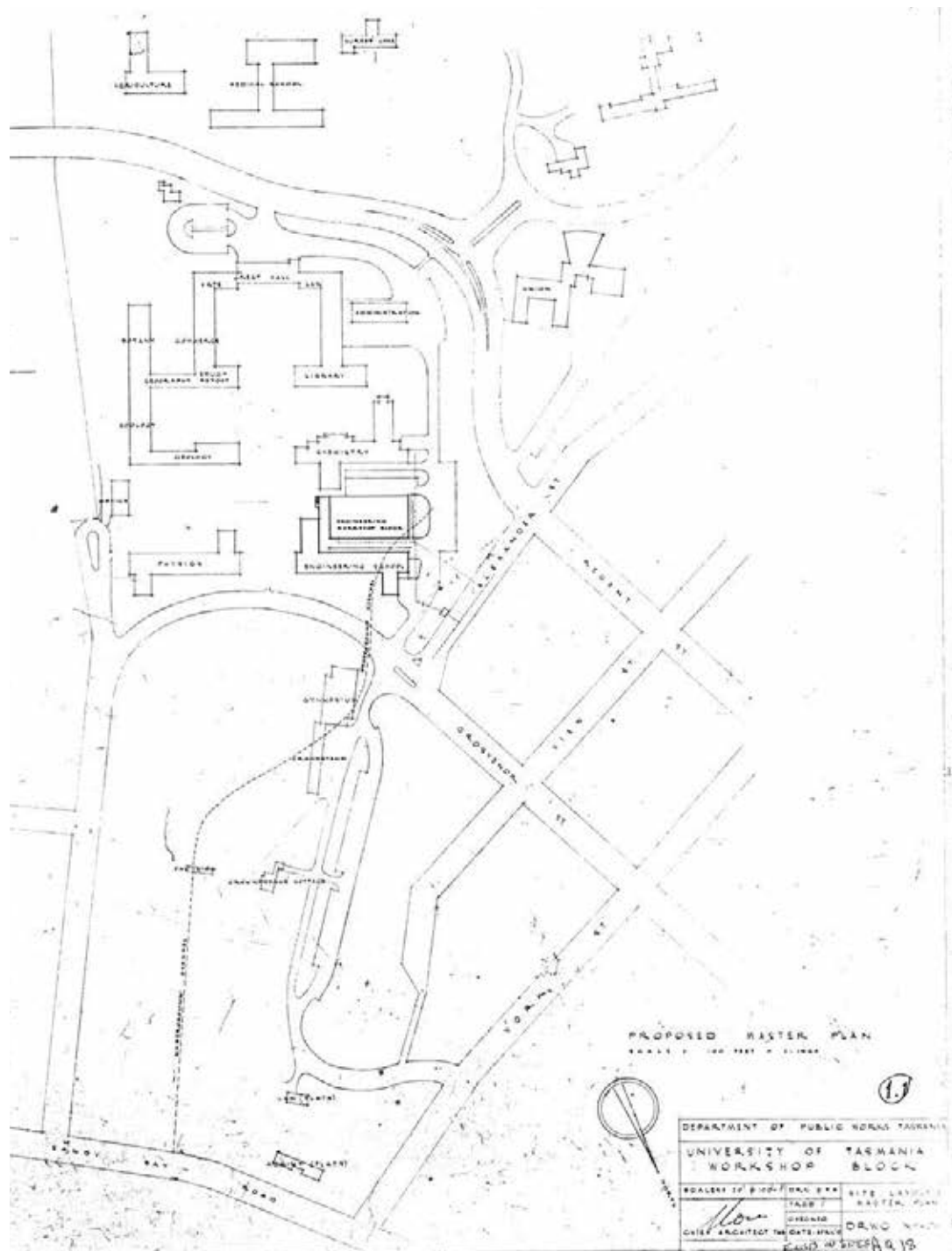


Figure 7: Proposed Master Plan CB Rose Chief Architect 1957. While this plan shows the set out for the Engineering Workshop, it would appear that the Master Plan was already extant and probably did not include the workshop building. The symmetry of the central spine is continued in the plan above Churchill Avenue with the Medical School, however while the general form was retained the uses of buildings changed. Topography can be seen to affect the planning also with Hytten Hall and the VC residence aligned to contours and not the regular grid and the Union Building set into the arc of the new road network and quite separated from the main campus.

Source: University Archives.



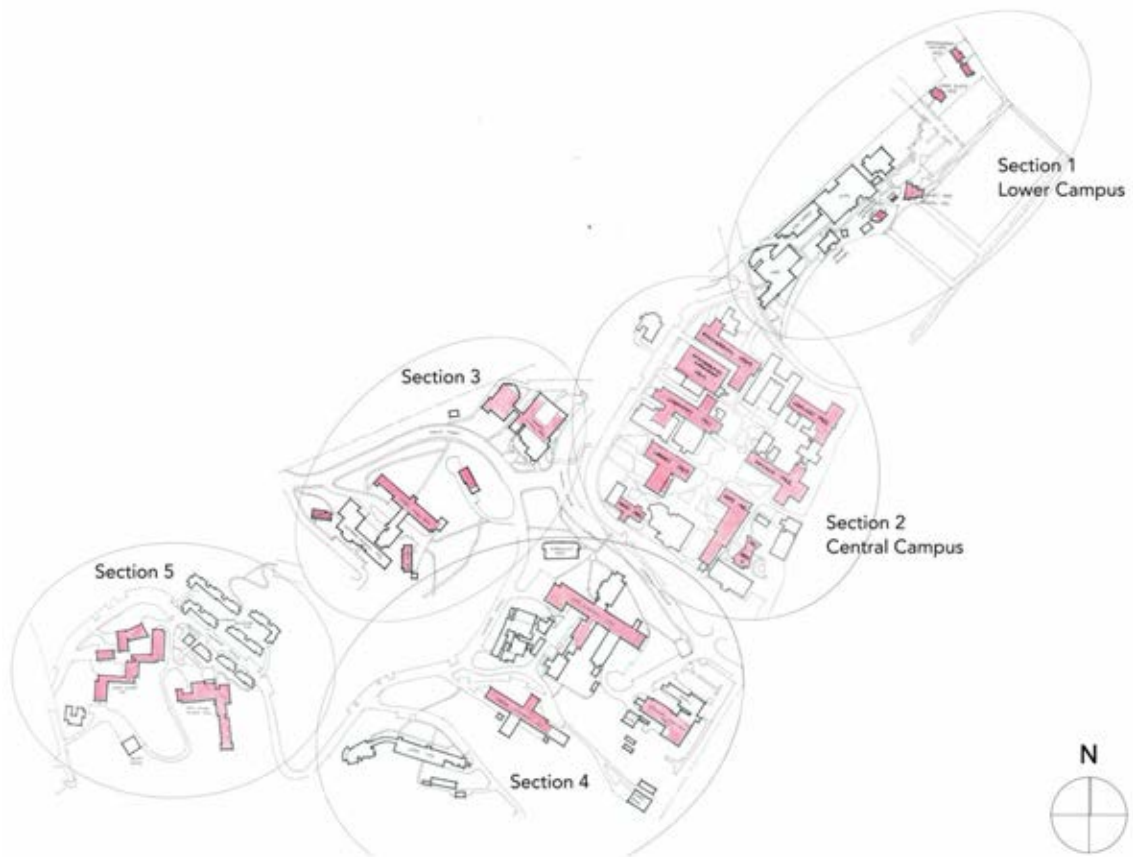


Figure 8: Overview Site Plan showing buildings built up to 1969 overlaid on current campus layout. The following figures provide enlarged views of sections 1-5.

Source: Paul Davies Pty Ltd

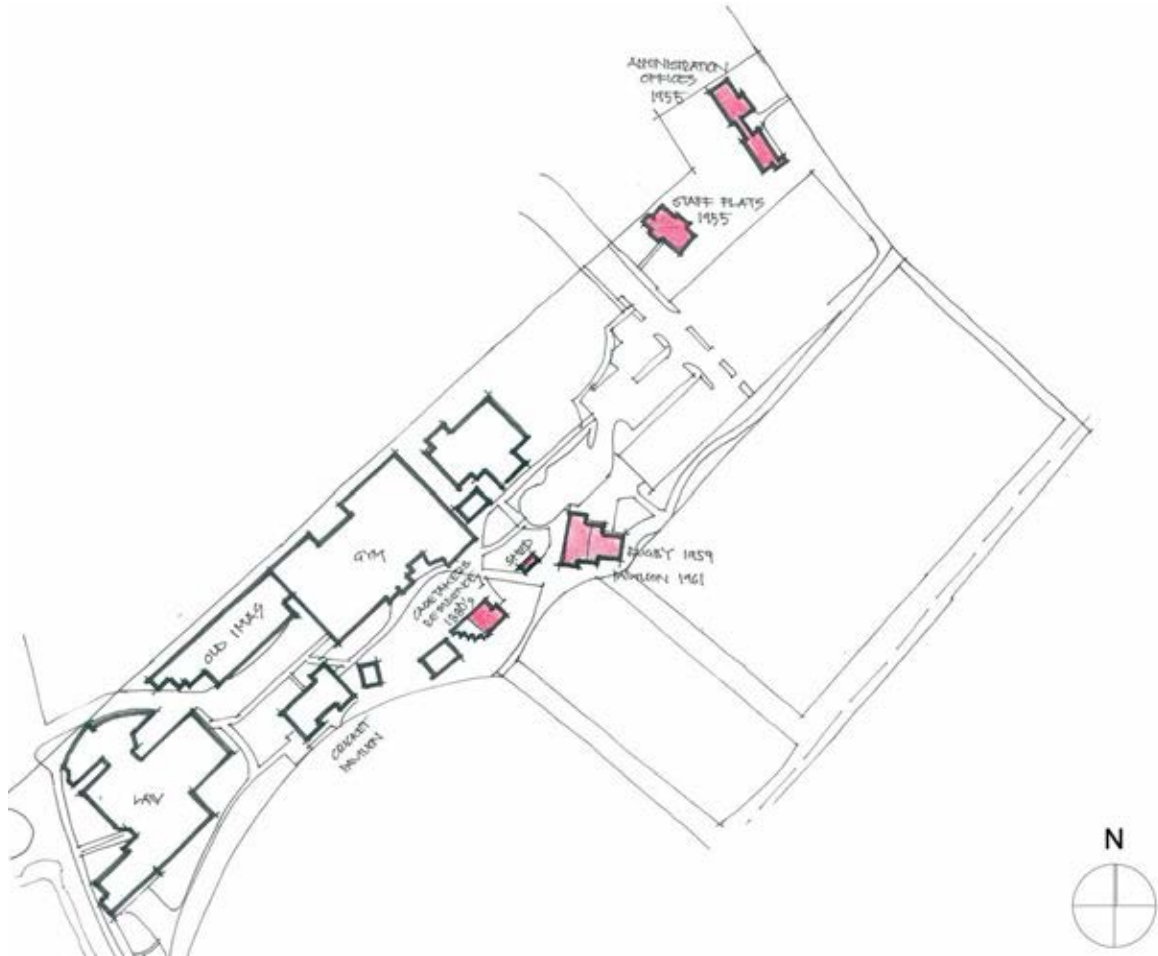


Figure 9: Lower Site Plan showing buildings built up to 1969 overlaid on current campus layout.

Source: Paul Davies Pty Ltd



Figure 10: Central Site Plan marking the buildings constructed to 1965 overlaid on current campus layout.

Source: Paul Davies Pty Ltd

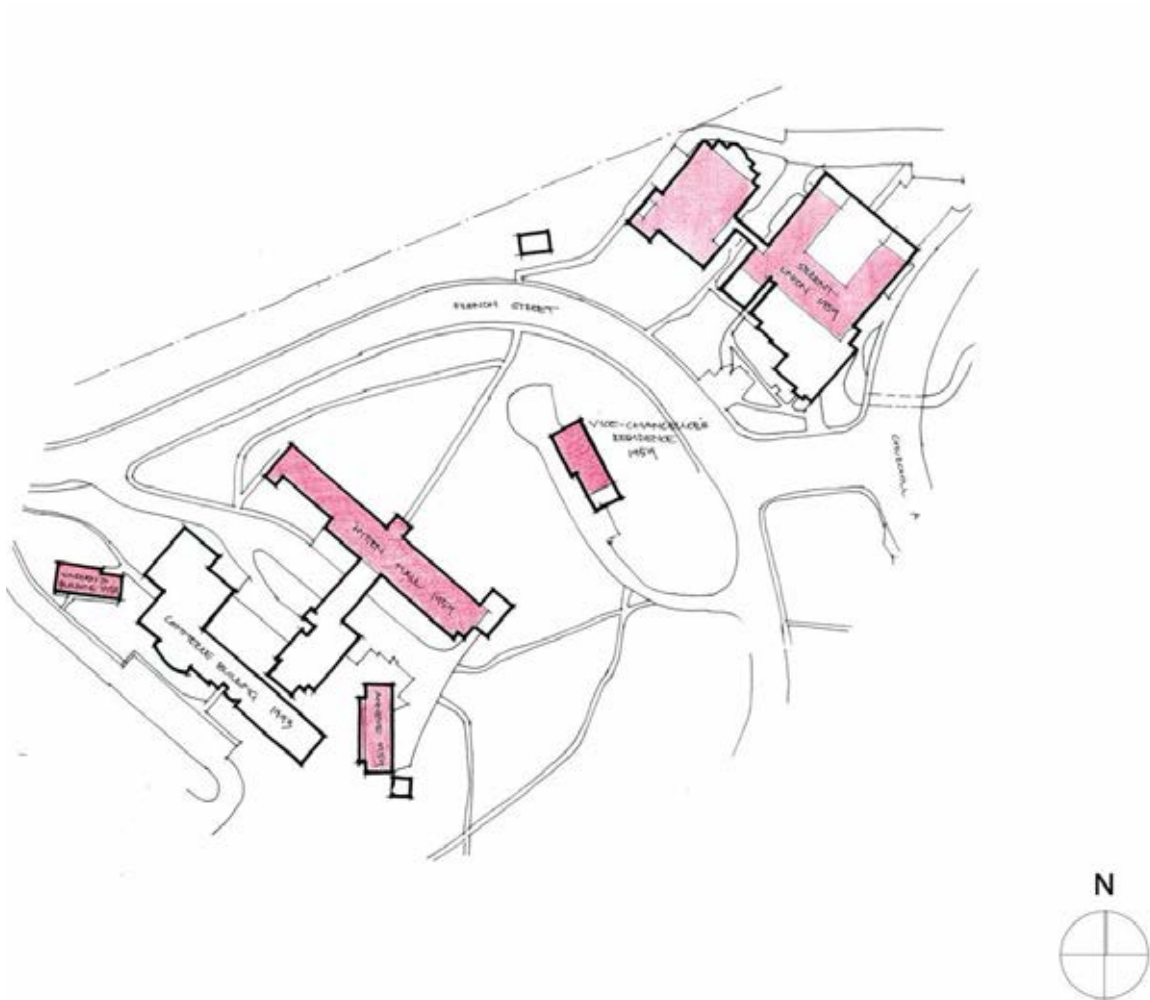


Figure 11: Site Plan Section 3 marking the buildings constructed to 1965 overlaid on current campus layout.

Source: Paul Davies Pty Ltd

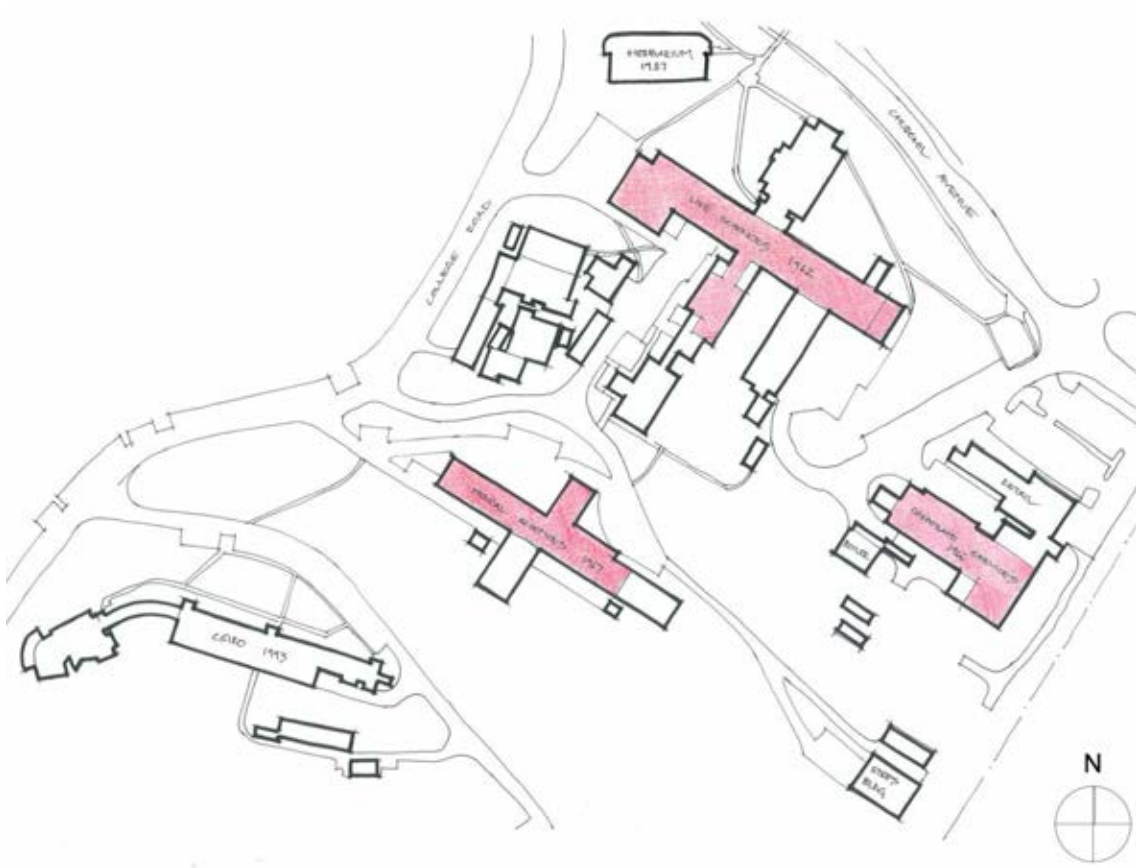


Figure 12: Site Plan Section 4 marking the buildings constructed to 1965 overlaid on current campus layout.

Source: Paul Davies Pty Ltd



Figure 13: Site Plan Section 5 marking the buildings constructed to 1965 overlaid on current campus layout.

Source: Paul Davies Pty Ltd

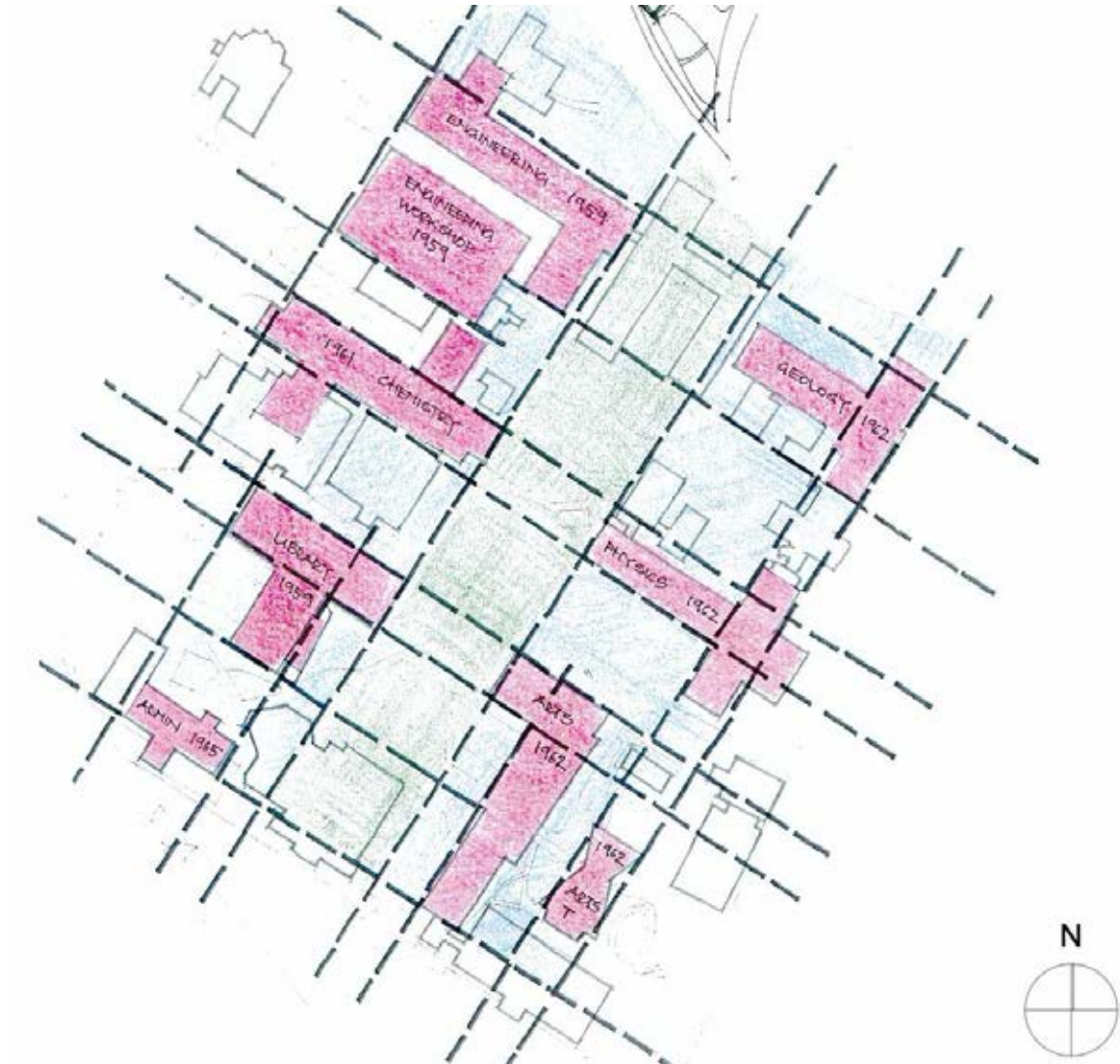


Figure 14: Central Campus Plan marking the buildings from 1959 to 1965 showing the arrangement of buildings in the first period of development. The buildings, even though all the buildings are of different designs, they follow a fairly strict arrangement of both built form and open space as indicated by the grid lines. The central avenue is open along its length. Paul Davies Pty Ltd



Figure 15: Central Campus plan marking the buildings from 1959 to 1965 with the remaining spatial arrangement related to the earlier buildings. The Administration building, of slightly later date than the other indicated buildings, while fitting within the grid arrangement is outside the core spatial arrangement of the spine walkway. A number of later buildings were constructed within established open spaces that changed the overall early site masterplan.

Source: Paul Davies Pty Ltd

Aspects of the plan that were built in close to their early form were:

- Engineering and the Engineering Workshop (8, 11)
- Chemistry (17)
- The southern sections of the Library (23)
- Physics and Geology, except their locations were reversed (12, 13)
- Most of the Arts Building (26)
- Part of the Student Union Building (21)



- Hytten Hall (40)
- The Medical School but separated into two faculties with agricultural science occupying the northern area (44)
- The Vice Chancellor's Residence (38)

The Administration Building was built close to the masterplan location but slightly further south.

Buildings that did not eventuate as planned included: Nurses quarters, Great Hall, Law, Optics, Botany, Zoology, Gymnasium and Grandstand.

It is also of interest to note the location of the caretaker's cottage, the early farmhouse that was adapted for use as part of the rifle range, as it was relocated further down the site as the playing fields and ovals were developed.



Figure 16: Chemistry Building main entry and glazed curtain wall northern façade.

Source: Paul Davies Pty Ltd. 2021



Figure 17: Arts Lecture Theatre (with addition of upper walkway).

Source: Paul Davies Pty Ltd. 2021



Figure 18: Morris Miller Library curtain wall façade set between brick end walls of the north-south wing.

Source: Paul Davies Pty Ltd, 2021



Figure 19: Medical Sciences Building with pre-cast spandrel panels and a later lecture theatre addition to the left.

Source: Paul Davies Pty Ltd, 2021



Figure 20: Arts Lecture Theatre.

Source: Paul Davies Pty Ltd, 2021



Figure 21: Geology Building with the much later upper floor addition and an early wing to the left of photo.

Source: Paul Davies Pty Ltd, 2021



Figure 22: Hytten Hall.

Source: Paul Davies Pty Ltd, 2021



Figure 23: Former temporary Administration Building.

Source: Paul Davies Pty Ltd, 2021



Figure 24: Former Vice-Chancellor's Residence.

Source: Paul Davies Pty Ltd, 2021

The early history of design on the site also demonstrates how architects were engaged. As noted above Blythe and Cooper designed the earliest buildings and then Public Works designed the next small group of elements:

- Engineering (8)
- Engineering Workshop (11)
- Vic-Chancellor's Residence (38)
- Warden's Lodge (40b)
- Rugby Changerooms and clubhouse addition (50)

Public Works undertook some additions after this but did not design any further new buildings on the site except for the Mathematics wing. At the same time, an interstate architect, John F Scarborough from Melbourne, was engaged to design Hytten Hall and the Morris Miller Library.

John Scarborough had already had an impressive career, in partnership with Robertson and Love until the second world war and then in his own practice. He had designed colleges, chapels and libraires and had been the President of the Victorian Chapter of the Institute of Architects.

Around the period of the Tasmanian commissions, his practice was designing library buildings for the ANU, Monash and Melbourne universities with great success and that experience is evident in the design of the Morris Miller Library building.

Bailleau Library at Melbourne University, designed by Scarborough, opened in 1959 and both it and Morris Miller Library demonstrate consistent design approaches and an understanding of modernism.

In contrast, Hytten Hall, the first student residential building on the campus (both buildings completed in 1959), is a transition building with a mix of traditional and modern elements that is

hard to understand in relation to the sophisticated and modernist library building design. It would appear that Scarborough's understanding of libraries and modernist forms as seen in the library at Sandy Bay and other campuses did not translate to the student accommodation building.

The Students Union building was also opened in 1959 to a design by Blythe and Blythe (Blythe was then in practice with his son). Its early form was closely related to the linear form of buildings on the campus with wings creating courtyards but this was lost as the building was extensively altered and extended over time.

## 1960-1970

After 1959, all campus architectural designs were undertaken by Tasmanian based architects.

The next group of main buildings were constructed between 1960 and 1962 with the three last buildings from this period of development built in 1965 and 1966. This marked the end of the major campus building phase and while buildings were added periodically after this time the core campus character was established.

The buildings are: \* Buildings coloured in blue are in the central campus area.

Table 5: Buildings built between 1960 and 1970

Building	Architect	Site Building No.
1961		
• Chemistry	D Hartley Wilson	(17)
1962		
• Arts	E Brian Howroyd and Cooper + Vincent	(26)
• Arts Lecture Theatre	E Brian Howroyd and Cooper + Vincent	(27)
• Christ College	Hartley Wilson Bolt	(47a)
• John Fisher College	Cooper Vincent McNeill	(47b)
• Physics	Bush, Haslock, Parkes, Shugg and Moon	(13)
• Geography	Harry Hope and John Jacob	(12)
• Life Sciences Building	Johnson Crawford and De Bavay	(34)
1965		
• Administration Building	SWT Blythe	(22)
1966		
• The Maintenance and Service Depot	WM Sampson + Harry Oldmeadow	(32)
• Medical Science	Johnston Crawford + de Bavay	(44)
• Mathematics	Public Works	(14)

Howroyd, Cooper, Vincent, Wilson, Bolt and McNeill are architects, working in a range of collaborations who were designing the significant campus buildings at a critical point in the universities development. Chemistry, Arts, Arts Lecture Theatre, Christ College and St John's College are, with the slightly earlier library, the core group of significant buildings on the campus. They are also buildings that have retained a high level of overall integrity, particularly in their external form and detail. This is of particular interest as there has been quite a high level of change including extensive additions that have altered the early appearance of many campus buildings.

Haslock was an important post war architect in Tasmania who won the first triennial architecture award for his Devonport Ferry terminal. The Physics building, designed while he was with BHPSM is however a more mundane building that does not compare in design quality with the group of buildings from that period that surround it.

McNeill and Woolley in their book 'Architecture on the Edge' set out a brief history of post 1950 modernist commercial buildings in Tasmania, including those at the university. They cite Philp, Lighton, Floyd and Beatties' MLC Building in Hobart from 1959 as perhaps the best example of modernism in Tasmania in the period. They describe the university campus buildings as "somewhat disappointing" with the exception of the Arts Theatre. This is a very critical analysis and there are several fine modernist buildings on the campus apart from the Arts Theatre. They also note that Bolt's Christ College (a residential building in contrast to a faculty building) is an important modernist building. The publication does not provide an in depth analysis of the campus but also does not consider the collective value of the early buildings and their setting.

The Mathematics building is an out of character addition to the site. The only building that appears to be designed by Public Works during this period, it is utilitarian and located at odds with the earlier masterplan intent. As with many of the additions, it required awkward level changes to connect it to the adjoining main building that has affected its ability (as with other the additions) to function over time.

The Medical Science Building, although now re-purposed has retained much of its integrity in form and detail.

The remaining buildings from this period, Physics, Geography, Life Sciences, Administration, and the Maintenance Building have all had extensive additions and change but also do not capture the design quality of the buildings noted above.

There is no commonality in the construction systems, finishes, levels through the site and materiality across the various buildings. Each is a bespoke design to address a specific brief and use.

The detailed design of the buildings is of historical interest. They are largely framed buildings with brickwork or panellised cladding, mostly flat roofs, often using curtain walls or continuous strips of fenestration for glazing and the more significant buildings have very well designed and impressive entries, foyers and public stairs. Very few buildings have external features that are integral to their design, the exception being the Arts Building that uses a water feature and wide colonnade to manage the changes of level across the frontage. This element is a key part of the overall design of that building.

Internally the buildings fall into several forms from the very open plan library through large span laboratories and lecture theatres to rows of small cell like offices opening off usually central corridors. A number of the buildings are structured around wings of more open and larger spaces and wings of small spaces. Relatively few buildings use perimeter corridors (Physics being an exception) placing offices and teaching spaces along the principal facades.

Most of the stair access (there were few lifts) is integrated into the design with stairs featuring as key design elements but there are also many external stairs, mostly added to allow for additions.

Apart from the main public spaces, such as the entry to the Chemistry Building - where the two level void allows for light and the sculptural treatment of the gallery along with inlaid floor finishes - the internal finishes of the majority of the buildings are utilitarian and basic, as could be expected for an institutional use.

Specific internal design elements of buildings from this decade that stand out from the general finishes are:

Table 6: Buildings built between 1960 and 1970 - Specific Elements of Significance

Building	Site Building No.	Building Element
Arts Building	26	Main foyer and stair with finishes and detail Eastern internal stair
Arts Lecture Theatre	27	Lecture Theatre Interior Foyer
Chemistry	17	Entry foyer and two storey void with sculptural elements and finishes Use of face brick to internal corridors and work spaces
Geology	12	Terrazzo inlaid floor finish in south-eastern foyer South foyer stairs Central stair

The above list demonstrates the overall utility of much of the internal design undertaken as there are relatively few elements of particular design significance. Most buildings have a main entry with stairs that is grander than the general interiors but a number of these are not outstanding.

The Arts Theatre Building is the exception to the regularized form of the campus with its curved parabola roof form. It is clearly designed in direct relationship to the adjacent former Arts Building and the two buildings create a very clear ensemble as would have been intended by their architects.

## 1970-1980

Both new buildings and additions to existing buildings took place during the 1970s across the campus. None of the buildings from this period were of the scale or design quality of the earlier



buildings. Law and the Arts Education buildings were the more major structures but both returned to more conservative design approaches.

The Law Building is now lost within a plethora of additions and is barely recognizable to its early form. It has had many additions in widely ranging styles that have created what could at best be seen as a confused set of forms.

The Arts Education Building is a pragmatic building sited without reference to the very fine Arts Lecture Theatre which it somewhat looms over and, unlike the earlier buildings, has an inflexible floor plan and construction system with perimeter offices and a large core area surrounded by an internal donut shaped corridor. It reflects a shift to utilitarianism with exposed blockwork walls and a highly cellular form.

The list of new buildings during this period are:

Table 7: Buildings built between 1970 and 1980

Building	Architect	Site Building No.
1971		
• STEPS Building	Johnson Crawford and De Bavay	(51)
• Law Building	Bush Park Shugg + Moon	(6)
1972		
• University Club	Blythe + Blythe	
1973		
• Uni Gym	Blythe + Blythe	(4)
1974		
• Computer Centre building		(28)
• Arts Education building	Philp Lighton Floyd + Beattie	(29)
1975		
• Lady Gowrie	Blythe + Blythe	(3)
1980		
• University Centre	Philp Lighton Floyd Beattie	(25)

Apart from Arts Education, which has had almost no significant change, the other buildings from this period have all undergone considerable change. Law, Uni Gym, University Club, Lady Gowrie and the University Centre are hard to recognize in relation to their early designed forms. Whatever design value they may have had in their original built form is now at least partly lost and the buildings have a very different form and presentation.

Blythe, now in practice with his son continued to work on the campus adding three buildings, the most interesting of which was the staff club. Bush, Park, Shugg and Moon added to their campus work with the Law building which was an unusual design that, as already noted, is almost now

unrecognizable. Johnson Crawford and De Bavay also continued working on the campus with the STEPS Building, a minor structure in a remote part of the site.

From this period only the Arts Education Building survives with any integrity. It was the first work of Philp Lighton Floyd + Beattie on the site. This firm also added the adjacent University Centre, completing that part of the early masterplan where the 'Great Hall' was proposed.

Overall, the 1970s period did not add any outstanding buildings to the campus.

## 1981-2021

A number of substantial buildings were added in the 1980s and early 1990s, again with many additions and alterations to existing buildings but only one building of substance, Pharmacy, has been built since the late 1990s. This reflects a number of activities of the University including establishing the Launceston Campuses at Inveresk and more recently the move to build new campus buildings within the city of Hobart and not at Sandy Bay. The 'decanting' of faculties has also seen buildings change use, in some case substantially.

This period also saw a range of new architects undertake work: Heffernan, Viney, Forward, Woolan, Wade, Morris-Nunn and Michael Cooper. The only building added by a firm that had previously worked on the campus was Pharmacy.

The dominant architectural presence on the campus over this time has been Michael Viney and Gary Forward. This is not only seen in new buildings but in the numerous additions and upgrades that adopt post-modern forms that Forward, in particular, added to the site. While each building is quite different in design approach there is a consistency of style across these works that is in strong contrast to the then established form of the campus.

Table 8: Buildings built between 1980 and 2021

Building	Architect	Site Building No.
1982		
• Institute of Agriculture	Heffernan Viney	(16)
1986		
• Cricket Pavilion	Forward Consultants	(5)
• Mathematics Wing	Public Works	(14)
1987		
• Herbarium	Michael Viney and Associates	(36)
1989		
• Centenary building	Michael Viney + Associates, Forward Consultants	(10)
1993		
• Commerce	Forward Viney Woolan	(40a)
• CSIRO	Forward Viney Wade and Morris-Nunn	(45)

1995

- University Apartments Michael Cooper + Associates (47c)

2007

- Pharmacy Bush Parkes Shugg + Moon (20)

The main buildings constructed during this period are the Centenary Building, Commerce, CSIRO, Pharmacy and the University apartments. The first three by Forward and Viney in various practice arrangements, the Apartments by Michael Cooper and Pharmacy by BPS+M.

Michael Cooper's father was part of architectural practices responsible for the Arts Lecture Theatre, Arts and John Fisher College and BPS+M had been a long-established practice in Hobart with several generations of architects.

The University Apartments do not form part of the central campus and relate to the earlier colleges in both use and siting. They adopt a more contemporary housing form as a small village in contrast to the quite institutional college form of the earlier residential developments.

CSIRO and Commerce are located on the upper slopes within bushland and continued the tradition of linear buildings stepping up the hillside on levelled platforms. The CSIRO building is perhaps the most successful building from this period and is the most convincing of the post-modern designs on the campus.

A number of buildings from this time (and additions) received Institute awards including: Herbarium; Centenary Building; Commerce; CSIRO; University Apartments; Staff Club additions; and the Cricket Pavilion. As noted earlier this perhaps reflects the way in which awards were made and the absence of awards when the core buildings on the campus were built. Many of the awards were for additions to existing buildings.

There was also a clear intent to change the character of the campus during this period by the new architects commissioned. This is seen in the way minor additions, particularly around building entries, were added in a consistent post-modern styling irrespective of the form of the building being added to.

The Centenary Building, the largest and most prominent later building on the campus was located within the central vista at the lower end of the main campus fundamentally changing the spatial structure of the site by blocking views to the east and the openness that was previously available from the central campus area.

Additions to buildings also had a cumulative impact on changing the character of the site. As with many institutional sites, additions often were added in quite random ways to address specific needs of a faculty and without much reference to the earlier spatial arrangement of the site. While some additions were finely executed most have not added to the aesthetic or spatial qualities of the site.

The additions during this period included:

Table 9: Buildings built between 1980 and 2021

Building	Architect	Year.
• Geography, roof addition	Forward and Associates	1988
• Gymnasium additions	Jacob, Allom, Wade	1988
• Law additions	Forward Consultants	1990
• Law additions	Eastman Heffernan Walch + Button	1993
• Gymnasium additions	Philp Lighton	1995
• Lady Gowrie 1 <sup>st</sup> floor addition	Blythe, Yeung, Menzies	1995
• Institute of Agriculture additions*		1995
• University Club east addition*	Forward Viney and Partners	2000
• Life Sciences Entry*		2003
• University Bar*	Jacob, Allom, Wade	2004
• Corporate Services addition*	Philp Lighton	2008
• Commerce Building re-purposed for student accommodation		2019-20
• Library entry	Forward and Partners	
• University Centre entries		
• Agricultural Science east wing	Forward and Partners	
• Vice chancellors Residence entry		

\* Additions marked with an asterix won Institute of Architect awards.

\*\* Note that this is not a comprehensive list of all additions on the campus.

The works listed above varied in scale from substantial works to quite minor entry elements but collectively they slowly changed the appearance of the campus.

The smaller works also demonstrate a wider use of architects than were commissioned for new buildings.

Internal changes have not been considered in this analysis but it is observed that most buildings have undergone ongoing internal change to accommodate changing teaching and research approaches but largely without major impact on the appearance and form of the campus.

It is also noted that the more minor built elements have not been addressed where they do not affect the key arrangements or spatial values of the campus.

## Summary

The campus in its current form contains a wide range and mix of built forms, styles, materials, architects and periods of development. The two predominant and more significant periods of development are the late 1950s to early 1960s where modernism can be seen to be explored with

some finesse and success. The later overlay of post-modernism has been a less successful addition to the overall campus form and quality.

Some early buildings remain with little change and interestingly they are also the most convincing designs.

## 2.3 Chronological History of Built Fabric

Refer to Attachment 1

## 2.4 UTAS Sandy Bay Site Description and Analysis of the Landscape

The Sandy Bay Site is a large land holding (approximately 105 hectares) that contains a range of landscape forms, from open playing fields to natural bushland. In its early days, prior to university use, the site comprised cleared farmland with wooded hills above and then the rifle range east of Churchill Avenue and the bushland, interspersed with cleared areas, to the west. Land was cleared over time to accommodate the rifle range use but the upper slopes remained wooded.

The creation of Churchill Avenue in the 1950s with the various road junctions and cuttings created a significant disconnection through the centre of the campus with roads winding up the slopes (French Street and College Road) providing access to Proctors Road and developments on the upper campus.

This pattern of development was determined from the initial masterplan with some of the earliest buildings, Hytten Hall and the VC residence intentionally set above the campus with views to the river. The VC residence siting is of interest as early photos show it angled towards the core campus with a commanding overview of the campus below.

### Lower Site

The lower part of the Site extending west from Sandy Bay rRad is the flatter part of the site that has had considerable modification with filling and levelling, has been an open landscape since the 1880s and probably earlier. A former creek line and swampy area was filled and the creek piped through the site and the lower areas raised considerably to bring them to the elevated level of Sandy Bay Road. The playing fields with the narrow band of buildings to the north forms one of the largest open spaces in the district.

The pattern of development along the northern edge with first a farm house and then the rifle range clubhouse and sheds was dictated by the slight elevation of the land above the creek and swamp areas and was continued by the university to provide for playing fields. The narrow strip of land along the north-western boundary was added to in 1915 with an acquisition from the adjoining Golf Course Estate that extended from Sandy Bay Road to Regent Street<sup>5</sup>.

The landforms are not of particular heritage significance but do reflect an open form that has characterized the place since the area developed as a suburb. Interestingly, the Earl Street

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hedgerow, a heritage item, is the only identified landscape heritage feature of the campus site in statutory listings.



Figure 25: Drainage plan of the arrangement to pipe water from the Golf Links Estate sub-division to the creek and for additional land to be added to the Rifle Range. The plan is useful in showing the creek line and swampy ground. The current University boundary follows the heavy line but includes the lot fronting Sandy Bay Road marked as swamp. Grace Street now extends into the campus site. The former Golf Club House remains as a residence on lot 270.

Source: Archives office of Tasmania

## Central Site Area

The central cSite area, created from open grassland, is an overlaid landscape form creating a new mature landscape form around a series of courtyards and a central walkway. The landscape and its various elements have varied over time in response to the addition of buildings but the overall form relates closely to the central pathway with distinctive courtyards.

The landscape steps up the slope with ramps, paths and stairs and contains areas of lawn, plantings, now mature trees, water features, sculptures and art works, seating and a generally informal arrangement that links the buildings.

The landscape around the core buildings is a now essential part of their overall form and setting even though not all of the pavements and elements are significant.

Key landscape elements include:

- the central walkway
- the library walkway and undercroft

- the elevated water feature and lower courtyard garden that forms part of the former Arts Building
- the mature trees both native and exotic
- a range of memorials<sup>6</sup>
- art works located strategically in the spaces.

Overall, it is the way in which the landscape connects the buildings that is most significant. There was a simple but effective spatial arrangement through the central campus that has now matured and is very successful in linking the various built elements even though not every building is of equal interest or value.

The areas around the edge of the central Site area have no particular heritage or heritage landscape value beyond providing a general landscape setting. Specific elements such as the amphitheatre and the entry area to Chemistry add to the overall value of the Site but much of the perimeter landscaping does not have particular value.

The area to the south of the central campus area, adjoining Churchill Avenue, contains parking and considerable level changes leading to the upper campus via an elevated footbridge and has no landscape or built character of note.

## Upper Site Area

The upper Site has a very different landscape form with a combination of the bushland, particularly on the steeper slopes descending towards the creeklines, cleared wooded areas with various cross slopes and defined areas of added landscape immediately around some of the buildings. Playing fields are located at the extremity of the upper campus near Proctors Road.

Buildings such as CSIRO and the University Colleges sit within the recovered landscape which creates a subtle setting but which also has inevitable issues around bushfire protection.

The area around Hytten Hall sees a form of grassland with retained trees and small amounts of localized added landscape and the once quite formal gardens around the former VC residence and Wardens Cottage are now less maintained and have also returned to a more open grassed landscape but retain their basic form with mature shrubs. The character in these areas was managed woodland that was established on the severely cleared land in the 1950s around the time of building.

The significant aspects of the upper campus landscape are the integration of buildings into the bushland setting and the lack of delineation in many areas between natural and added landscape. There are also many rock faces created from cutting to establish building platforms and roads and parking areas.

Pedestrian access through the upper campus is via a series of tracks and walkways that wind through the often steep bushland providing a subtle movement pattern through the site.

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<sup>6</sup> Memorials and Art Works have been separately assessed by UTAS and that is not replicated in this study. However, it is noted that both memorials and art works can have heritage significance which is considered later in the report.

The introduced landscape in this part of the campus does not appear to have any particular heritage values although the whole of the campus landscape form has biodiversity and natural values that are addressed in other reports.



Figure 26: The amphitheatre behind Arts Theatre.

Source: Paul Davies Pty Ltd, 2021



Figure 27: The area in front of the University Centre looking towards the former Arts Building.

Source: Paul Davies Pty Ltd, 2021



## 2.5 Views

The site as a whole has extensive views towards the river, across Sandy Bay and within the Site itself. These arise due to the site topography and most are incidental and do not have a value beyond enjoying the views that exist from almost the whole of the campus area.

The most significant view has been the central spine of the middle part of the campus that once had a vista to the river. The construction of the Centenary Building removed that vista and viewline. The views that remain that add to the heritage significance of the campus are those within the central area that link the various early buildings. There are no defined views as are often found in relation to a heritage place but rather it is the experience of the central space and the way in which the buildings connect to it and are seen from different point while traversing the central campus area that is significant.

Key future actions could be to open up the central vista to the river and to ensure that the central spine area with its various courtyard spaces remains as the key visual character of the central area.

Views from other parts of the Site will remain due to the large scale of the site and the ability to obtain views from many locations.



Figure 28: View to the Derwent River from the upper level of the Chemistry Building. The Engineering Workshop is in the foreground. Views across the Site vary but as the ground rises many levels of buildings and parts of the Site experience outlooks to the river, the eastern hills, to Mt Wellington and the surrounding residential areas.

Source: Paul Davies Pty Ltd 2021.



Figure 29: View to the Derwent River from the upper level of the Chemistry Building.

Source: Paul Davies Pty Ltd 2021.

## 2.6 Comparative Assessment

The comparison of like places is important in establishing an understanding of a place's cultural significance. This relates to identifying either a group of similar places that can be compared or establishing that a place is rare and there are few or no other similar examples. With more contemporary building forms it is possible to locate other similar examples but the usual method of comparison, which is to compare other heritage listed places as they have already been considered for their heritage value and can provide a good reference point for assessment, is not reliable as relatively few modern buildings are heritage listed.

Similarly, while a study has been made of architectural awards, that is also not necessarily a reliable measure of significance as awards tend to be made in relation to what is built in a one year or three year period and only in relation to other nominations. It is observable that the quality of buildings that have received awards is mixed as a result.

The following analysis focusses on buildings in Tasmania in particular from the late 1950s and 1960 period. This is the core establishment period of the campus. Later buildings are not considered in detail.

McNeill and Woolley helpfully identify a range of commercial buildings from this time period that they have assessed as significant, this forms a good starting point. There are other buildings in the State from this time period and general modernist style that are included.

The basis of the comparative analysis is to understand the range of similar buildings, noting that none will be identical, and how the university buildings fit into that cohort of places. A distinctive feature of the campus is that it is the only known location in the State where a number of buildings from the same time period and generally stylistic form are found. This is understandable as the establishment of a new campus of the scale of Sandy Bay is a rare undertaking particularly in a small State. Other campuses across Australia that fall into a similar group include NSW University in Kensington Sydney and ANU in Canberra. ANU was a new university and UNSW moved from a city site to a greenfield site and was upgraded in status from an institute to a University.

Key modernist buildings from the late 1950s-1970 period in Tasmania include<sup>7</sup>:

Table 10: Comparative Analysis

## Hobart

Building	Location and Description	Date and Architect
State Library	91 Murray Street	1959-62 FD Scarborough

Early curtain wall design in Tasmania, highly intact post war modernism example, free-standing, elevated above undercroft so that the building floats above the ground. A very refined modernist building.



Figure 30: Google Streetview image of the library from the corner of Murray Street.

<sup>7</sup> The comparative analysis is not a comprehensive list of modernist building and due to Covid restrictions it has not been possible to undertake fieldwork to inspect sites.

Building	Location and Description	Date and Architect
NAB Tower	Collins and Elizabeth Streets  International style, solid concrete walls with podium. The building is the fore-runner of later commercial development that adopted more solid forms and the use of podiums to relate the lower scale to the street form.	1968



Figure 31: Google streetview image of the building from near the corner of Elizabeth and Collins Streets

Federal Building (tower section)	188 Collins Street  Late period building using a concrete spandrel panel system rather than curtain walling. The building form marks a strong shift away from the light-weight appearance of earlier modernist buildings. Built at the end of the early Modernist period in Tasmania it does not strongly relate in form or materiality to the UTAS buildings.	1969-73
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Figure 32: Google street view image.

Building	Location and Description	Date and Architect
Commercial Building	39 Murray Street	Not known

A curtain wall clad framed building that is similar in form to some of the UTAS buildings, but of a much larger scale being 12 storeys in height. The use of coloured panels and a strong rhythmic façade pattern is consistent with the some the UTAS Site buildings.



Figure 33: Google maps view from near the corner of Murray and Collins Streets.

LJ Hooker Building

65 Murray Street/Liverpool St

11 Storey modernist building, frame partially exposed with curtain wall cladding, set above street level with the use of a recessed ground floor of greater height than upper floors. This is a similar design approach as seen on the State Library building.



Figure 34: Google maps image looking along Murray Street

Building	Location and Description	Date and Architect
Commercial Building	123 Murray Street Small-scale International style building with curtain wall and vertical concrete spandrel panels. One of the few buildings of this style in Hobart and designed as an infill building where most modernist buildings were free-standing.	1960



Figure 35: 123 Murray Street. Google Maps

Ashfield Court	17 Margaret St Sandy Bay Curtain wall and masonry curved apartment building set partially on pilotti. One of the most interesting modernist buildings in Hobart with a curved curtain wall and refined detailing.	1961 Frank Starry
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Figure 36: Aerial view of Ashfield Court showing its curved form.

## Devonport

Building	Location and Description	Date and Architect
Marine Board Building	48 Formby Road  Curtain wall building on pilotti with curtain wall over two levels. A well crafted early modernist building using round concrete columns with the building set above. Unusual for an early example of modernism in a regional town.	



Figure 37: Marine Board Building. Paul Davies.

## Launceston

Building	Location and Description	Date and Architect
Earl's Court	51 Brisbane Street  Curtain walled two levels with masonry elements, hybrid building and an early example of this form of design.	1956



Figure 38: Googlamps image.

Building	Location and Description	Date and Architect
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Myer Building

Brisbane Street

c1960

Steel framed brick and panel clad building. A more traditional building in appearance despite its steel framing.



Figure 39: Myer Building. Paul Davies.

Pumping Station

Don Goldsworthy

1967

Quirky modernist building that may be compared to the Arts Theatre in that they are both one-off design approaches.



Figure 40: Googemaps Image.



Building	Location and Description	Date and Architect
Intersport Building	St John Street Curtain walled two levels, small scaled modernist building with an interesting use of forms and angles.	c1960s



Figure 41: Googmaps Image.

## Other

Building	Location and Description	Date and Architect
Lake Echo Power Station	Power Station Building Modernist curtain wall building in an industrial setting. The design illustrates the wide range of application of the framed and curtain wall design approach that is seen across the UTAS Site.	c1960



Figure 42: Lake Echo Power Station with its simple curtain wall form with brick solid end walls. Paul Davies.

## Discussion

The buildings that relate most closely to those on the Sandy Bay Campus are the group of steel framed curtain walled buildings found in larger cities and towns in the State that were built around 1960. Buildings such as the Myer Building in Launceston, the NAB tower and the Federal Building in Hobart adopt a different typology and form to the early campus buildings.

The buildings that provide the clearest comparative value are the State Library, 123 Bathurst Street and Ashfield Court in Hobart and the Marine Board building in Devonport. The only building of similar scale to the campus buildings is the State Library.

The library, Bathurst Street and the Marine Board Building are all heritage listed and Ashfield Court was recommended for listing in the Sandy Bay Heritage Study.

A number of buildings constructed by Hydro Tasmania adopted a modernist idiom, Hydro was the largest business enterprise in the State and consistently built in the style of the period when not building utilitarian structures. Lake Echo is a good example of a finely designed modernist building, adopting industrial forms, in a location that would rarely be seen. It has limited comparative value but demonstrates that the uptake of modernism was largely government and institutions.

The early campus buildings share a general design approach but with quite different expressions and it is of interest that the central campus buildings in particular have a cohesive framed character with varying forms of light-weight cladding mixed often with solid built elements.

As noted earlier, modernism as seen in the use of curtain walled buildings with steel frames, did not have a long life in Tasmania and there are relatively few examples.

It is not surprising that the State Library Building provides perhaps the best comparative analysis as it was designed by Scarborough who also designed the University Library. While there are substantial design differences between these building and the University Library is an earlier building, the refinement of Scarborough's design forms can be seen when comparing the two buildings. At the State Library, the whole building is contained within the curtain wall form and (apart from a later ground floor infill area) was designed to float above the two streets it fronts. The structure is set back from the façade creating a light-filled interior. Similar elements can be seen at Morris-Miller Library in the undercroft area and the mixed use of solid spandrel panels and glass panels beneath windows. The building is similarly light-filled.

The design of the Engineering and Geology buildings was less refined and while they are clearly modernist buildings using similar forms and materials they both do not have the confidence or sophistication of the Library or the former Arts Building.

Arts is one of the most interesting buildings on the campus and apart from its use of cellular façade design and elements of curtain walling it draws on a range of influences that were seen in European modernism. It is the only early building on the campus to engage through its design with its setting as seen in the loggia along the frontage and the design of the reflection pool. The stairs, like the library building are clearly visible on the exterior with solid walls with punched out Le Corbusier type windows breaking up the otherwise highly rhythmic design of the facades.

The Chemistry building is difficult to define but also uses a refined curtain wall system and sculptural entry and foyer. This is the most expressive of the building foyers on the campus. Placing clear glass cladding over brickwork internal walls is both an odd and interesting design approach that creates a striking main façade. Chemistry is one of the few buildings to detail interior spaces using face brickwork in contrast to rendered walls which gives it a bespoke appearance.

The Arts Theatre is a unique building that does not easily compare to other buildings of the time, It is the most expressive building on the campus and has been recognized through heritage listing as an outstanding design.

The other teaching buildings from the early period do not have the same design quality as the buildings noted above.

Christ College, also heritage listed, has been recognized as a pivotal building in modernism in Tasmania but also in establishing new directions in Tasmanian architecture. It has no real comparative basis.

The late 1950s and early 1960s saw experimentation in modernism in the State and small number of refined and very fine designs were built. The campus is of particular interest as, even though not every building from that period exemplifies modernism, it is the only grouping of modernist buildings that has existed and still exists.

## 2.7 Conclusion

The key modernist buildings on the campus and in particular Christ College, Arts Theatre, former Arts building, the Morris Miller Library and the Chemistry Building are part of a small and significant group of similar buildings in the State that exemplify the late 1950s shift to modernism in commercial architecture that lasted less than a decade before a less refined commercial idiom was established as the predominant form for new commercial buildings.

## 3.0 Significance Assessment

Cultural significance is defined in The Burra Charter (2013), published by Australia ICOMOS, as:

*Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations.*

*Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects*

Setting out the cultural significance of a place assists in identifying what aspects of the place contribute to that significance and the relative contribution of the various elements of the place to that significance. This understanding is essential to allow management of the place that can guide future work in a way that retains its significance. The following section sets out the nature of the significance of the site by looking at:

- what has been assessed in previous studies,
- the criteria established under the Historic Cultural Heritage Act 1995 and setting out the significance of the place to address those criteria
- the various attributes of the place and how they contribute to significance.

This CMP adopts the standard methodology set out in “The Conservation Plan” by JS Kerr that is the benchmark for undertaking heritage assessments.

### 3.1 Recognised Heritage Status

As set out earlier in the study two buildings and a hedge are currently heritage listed. The inclusion of these items provides no detail or background as to why they were included on heritage schedules.

### 3.2 Assessment of Significance

#### Criteria for Assessing Cultural Heritage Significance

*Assessing Historic Heritage Significance (Version 5 October 2011) for application with the Historic Cultural Heritage Act 1995*, was developed by the Heritage Office and Department of Primary Industries, Parks, Water and Environment to provide the basis for assessment of the heritage significance of an item by evaluating its significance by reference to the following criteria.

Table 11: Criteria for Assessing Cultural Heritage Significance.

Criterion (a)	the place is important to the course or pattern of Tasmania's history;
Criterion (b)	the place possesses uncommon or rare aspects of Tasmania's history;
Criterion (c)	the place has the potential to yield information that will contribute to an understanding of Tasmania's history;
Criterion (d)	the place is important in demonstrating the principal characteristics of a class of place in Tasmania's history;
Criterion (e)	the place is important in demonstrating a high degree of creative or technical achievement;
Criterion (f)	the place has a strong or special association with a particular community or cultural group for social or spiritual reasons;
Criterion (g)	the place has a special association with the life or works of a person, or group of persons, of importance in Tasmania's history;
Criterion (h)	the place is important in exhibiting particular aesthetic characteristics.

The above criteria for cultural and relative values provide three thresholds (National, State or Local, i.e. in Australia, Tasmania or the local region) for determining the level of significance.

## Significance

The heritage significance of the Site and specific elements is complex. The place is a large area and while its use as a university campus is significant, the actual Site as a whole is not of heritage significance. Its size, constituency and content result in most of the site not having specific heritage value.

The place has other values to the city and community such as bushland and open space, but they are not heritage values. Similarly, it may be argued that views across the Site from adjoining properties are significant, but they are not with regard to heritage value. Such considerations relate more closely to amenity.

There is one remnant building from its use prior to being a rifle range - the cottage - which has historic significance. It is not an exceptional building and would not be otherwise heritage listed for reasons such as design, aesthetics, specific associations or social values. It has also been altered and relocated on the site. Its value relates to the former uses of the Site.

There is also a remnant building from the use of part of the Site as a rifle range, a small brick ammunition store. The structure is unprepossessing but does have some significance as part of the use of the site as a rifle range. The other rifle range elements that included a club house were removed long ago. All other aspects of the rifle range use apart from the shape of the lower part of the site (fan-shaped to allow for firing) are now gone.

Collectively, the university buildings may be considered to have some heritage value as the whole site was developed for university use and the various buildings demonstrate not only uses but the development of the campus both architecturally and as an institution. They also demonstrate an evolution of design and building forms over a 50+ year time frame. However, only a small

number of buildings demonstrate design excellence, innovation and high aesthetic value. It is not sufficient for an element, building or otherwise, to be considered significant just because it is part of a larger collection of elements, unless firstly the larger group is of particular significance and then the specific element makes an important contribution to that significance. Again, simply being part of the campus is not a reason for any specific element having significance.

For the built elements to be of individual significance to the Site they need to satisfy a number of thresholds that then in turn relate to the assessment criteria set out in the Tasmanian Cultural Heritage Act. This applies whether the element is of local or State level significance.

The thresholds that apply to the campus as a whole and its component elements are:

- 1 Contribution to the overall quality and form of the place, that is the collective value that the site or parts of the site may have.
- 2 The individual design and aesthetic quality of the element.
- 3 The relationship of a particular element with its setting and the elements of significance around it.
- 4 Associations with a prominent architect/designer.
- 5 Demonstration of technological achievement, innovation or stylistic variation of importance.
- 6 The integrity of the place or element in relation to its significant designed (and built) form, noting that integrity is only relevant if a place is otherwise assessed to be significant.
- 7 Its significance, on a comparative basis, with other similar significant places in Hobart and Tasmania.
- 8 When the element was designed and built.

Social significance is not included in the above list as the campus as a whole has a level of social significance that sits apart from individual elements. The numerous students and staff who have spent time working and studying on the campus form an alumnae that as a whole would value the campus and specific elements, usually those that they either worked or studied in or perhaps shared facilities such as the student union building. It is difficult to attribute social significance to specific buildings as there would be no consistent or generally agreed approach to doing this. Perhaps, social significance is best seen in the spatial arrangement of the campus and the retention of key spaces and elements with a range of built forms that allow the retention of memory of the place into the future.

The campus has also been a place of innovation as that is the nature of university research and learning. However, the innovation, while taking place there is not actually reflected in the built or physical form of the place. That significance is related to the role of universities in carrying out such work and is more correctly linked to the people who undertook that work.

Some of the built elements demonstrate innovation in design and that can be reflected in heritage significance.

Most of the early buildings shared a general construction approach, that is they were steel framed buildings with concrete floors and various forms of applied cladding. Later buildings varied from

this as construction methods shifted. The earliest buildings were not innovative and used quite traditional construction forms of load-bearing brickwork and a combination of concrete and timber floors. It is of interest that most of the major buildings from the late 1950s and 1960s used steel frame construction with light weight cladding, but this was consistent with buildings of similar scale across the State and country as that form of construction took over from earlier construction methods.

It is also important to observe that the landscape setting of the campus, that is the introduced landscape in contrast to the bushland setting, while having significance as the element that links the various buildings and creates the sense of place, is not of great significance for its detailed design, form, materiality and layout. Rather, it is the creation of a landscape form to create the core area of the campus that is significant and which now allows a refined and mature setting for the various elements and activities that take place.

This discussion, in essence, narrows considerations of significance. On the basis that in time the campus will not accommodate the university, perhaps apart from the colleges and minor uses, consideration of significance also has to be thought of without the university use on the site and how any significant values can be retained, interpreted and if new uses and adaptation of elements takes place how significance may affect those actions.

As this CMP is being prepared in anticipation of a major change of use, it is valid to consider the place beyond its university activities.

### How to consider significance in relation to Late Twentieth Buildings

There is no agreed approach to periods of history and their relative significance but there are adages that can be applied that reflect the established approach to assessing heritage significance.

The first is that places from the first 50 years of settlement in Australia are all seen as having high significance and nearly all are heritage listed, generally on State heritage registers. The second is that places from the last 50 years of history are too close to us to make balanced decisions about what may have heritage significance as we are too close to them and they were created within our experience.

Neither of these positions is absolutely correct but they are a useful framework to help consider heritage value. Buildings in the early periods of establishing a foreign presence in Australia are quite rare and form a relatively small group of places so naturally attract attention. Tasmania has a higher rate of retention of this period of development than other states and that is reflected in the heritage listings as, effectively everything from that period that is known and that retains reasonable integrity will be on a heritage register. Conversely, almost nothing from the last 50 years, that is post 1970, appears on heritage registers.

The establishment of the Sandy Bay Campus, that is the key early development phase from the late 1950s to the late 1960s falls just outside that 50 year period and is now sufficiently distant to place it historically within an understanding of the development of design and building in Tasmania. While the period is described as modernism, that is not to be confused with being contemporary.

## Levels of Significance

Table 12: Levels of Significance.

National Heritage Listing	<p>National heritage comprises items significant in a nation-wide historical or geographical context or attributed to an important and identifiable contemporary national community. For research potential, historical, aesthetic and/or technical/research significance an item must be a fine representative example or be rare in the national context.</p> <p>Social significance at a national level would require recognition of an item's importance to the people of Australia or to an important and identifiable nation-wide community.</p>
State Heritage Listing	<p>State heritage comprises items in a state-wide historical or geographical context or attributed to an important and identifiable contemporary state-wide community. For research potential, historical, aesthetic and/or technical/research significance an item must be a fine representative example or be rare in the state-wide context.</p> <p>Social significance at a state level would require recognition of an item's importance to the people of Tasmania or to an important and identifiable state-wide community. Most Aboriginal, multicultural and religious communities operate throughout the State; however, the item would have to be important to the entire group, not just a local branch.</p>
Local Heritage Listing	<p>Local heritage comprises items significant in a local historical or geographic context or to an identifiable contemporary local community. The local context is defined in the analysis and statement of significance of the item. In a council heritage study the local context will approximate the local government area. When considering social significance, it is important to identify the local community, which values the item. This needs to be established through consultation with community groups such as local historical societies.</p> <p>Indications of local social significance are often found in media coverage and local community group publications.</p>

It is clear from the earlier discussion and following assessments that there are no parts or elements of the site of National Heritage significance.

There are elements of both State and Local significance and generally those values, as the campus relates to the University of Tasmania are aligned. The exceptions are some of the small elements that are campus specific and do not have a relationship to the State as a whole.

The following table takes the threshold matters and set them out against each of the built elements of the place to provide an indication of which elements of the campus should be considered for their heritage value.

Buildings that achieve an initial assessment that includes significance that is high or exceptional and which retains a good level of integrity are coloured green in the table where they were built prior to 1970 and blue where built after that date.

These are the elements that should be considered for further detailed assessment for potential heritage significance.



## Sandy Bay Site Buildings

\* Institute of Architects Award

\*\*\* State heritage listed

Levels of Significance: E = Exceptional. H = High. M = Moderate. L = Low or minimal.

Column 8 indicates elements that were built prior to 1970.

Table 13: Levels of Significance of Built Elements.

Bldg No	Name	Date of Construction	Original Architect	1	2	3	4	5	6	7	8
1	301 Sandy Bay Rd Research	1955	SWT Blythe + Roderick W Cooper	M	M	L	H	L	M	L	•
2	6 Grace Street	1955	SWT Blythe in association with Roderick W Cooper	L	M	L	H	L	M	L	•
3	Childcare (Lady Gowrie)	1974 -75	Blythe and Blythe Architects	L	L	L	M	L	L	L	
4	Uni Gym	1973	DPW -Tasmania. Chief architect S.T. Tomlinson in association with Blythe and Blythe	L	L	L	M	L	L	L	
5	Cricket Pavilion*	1986	Forward Consultants	M	M	L	H	L	L	L	
6	Law	1971	DPW -Tasmania. Chief architect S.T. Tomlinson in association with Bush Park Shugg and Moon	L	L	L	M	L	L	L	
8	Engineering	1957	DPW -Tasmania. Chief Architect C.D Rose	H	M	H	M	M	M	L	•
9	Surveying	1979	Philp Lighton Floyd and Beattie	L	L	L	M	L	L	L	
10*	Centenary Building*	1989	Michael Viney and Associates with Forward Consultants	M	M	L	H	M	H	M	
11	Engineering Workshop	1957	DPW -Tasmania. Chief Architect C.D Rose	M	M	M	M	M	M	L	•

Bldg No	Name	Date of Construction	Original Architect	1	2	3	4	5	6	7	8
12	Earth Sciences Geography and Environment CODES	1961	DPW -. Chief Architect C.D Rose in association with Harry Hope and John Jacob	M	M	M	M	L	L	L	•
13	Physics	1961	DPW -Tasmania in association with Bush Haslock Parkes Shugg and Moon	H	M	H	H	L	M	L	•
14	Mathematics	1966	DPW -Tasmania. Chief Architect S.T. Tomlinson	L	L	L	M	L	L	L	•
15	Horticultural Research Centre	1967	Johnson Crawford and De Bavay	L	L	L	M	L	L	L	•
16	Tas Institute of Agriculture (TIA)	1972	DPW -Tasmania. Chief Architect S.T Tomlinson in association with Johnson Crawford and De Bavay	M	M	M	M	M	M	M	
17	Chemistry/ Central Science Laboratory	1957	D Hartley Wilson	H	H	H	H	H	H	H	•
18*	University Club	1971	DPW -Tasmania. Chief architect Tomlinson in association with Blythe and Blythe	L	M	M	M	L	L	L	
20	Pharmacy	2007	Bush Parkes Shugg and Moon	H	H	M	H	M	M	M	
21*	TUU Building*	1958?	Blythe and Blythe	M	M	L	M	L	L	L	•
22	Administration Building	1962	Department of Public Works - Tasmania in association with Philp Lighton Floyd Beattie	M	L	L	M	L	M	L	•
23	Library, Morris Miller	1958	John F.D. Scarborough	E	E	H	H	H	H	H	•
24	Studio Theatre	1980	Philip Lighton Floyd Beattie	M	M	L	M	L	M	L	

Bldg No	Name	Date of Construction	Original Architect	1	2	3	4	5	6	7	8
25	University centre, Lazenby's café, Classics museum, John Elliot	1974	Philip Lighton Floyd Beattie in association with Civil and Civic	M	M	L	M	L	M	L	
26	Psychology Social Sciences	1959	R Brian Howroyd with Cooper and Vincent	E	E	H	H	H	H	H	•
27** *	Arts Lecture Theatre***	1959	E Brian Howroyd with Cooper and Vincent	E	E	H	H	E	H	E	•
27b	Terrapin										
28	Psychology Research Centre	1974	Philp Lighton Floyd and Beattie	L	L	L	M	L	L	L	
29	Humanities	1974	Philp Lighton Floyd and Beattie	M	M	L	M	L	M	L	
32*	Corporate Services*	1962-64	WM Sampson / Harry Oldmeadow Architects	L	M	L	M	L	L	L	•
32a	Boiler House	1972	DPW – Tasmania. Chief Architect S.T Tomlinson in association with Philp Lighton Floyd Beattie	L	L	L	M	L	L	L	
34	Life Sciences Building Agricultural Science	1962	DPW – Tasmania in association with Johnston Crawford & De Bavay	M	M	M	M	L	L	L	•
35	Life Sciences Glasshouse	1962	DPW -Tasmania in association with Johnson Crawford and De Bavay  (Building B and D Remain)	L	L	L	M	L	L	L	•
36*	Herbarium*	1987	Michael Viney and Associates	M	M	M	H	M	M	M	
38	Research House	1957	Public Works - Rose	M	L	M	M	L	L	L	•
40	Hytten Hall, Education,	1952-55	John FD Scarborough	H	M	M	H	L	M	L	•

Bldg No	Name	Date of Construction	Original Architect	1	2	3	4	5	6	7	8
40a*	Old Commerce Building*	1992	Forward Viney Woolan	M	M	M	H	M	M	M	
40b	Old Commerce Annex	1958	Philp Lighton Floyd Beattie	L	L	L	M	L	L	L	•
40c	Old Warden's Lodge	1957	Public Works - Rose	M	L	M	M	L	L	L	•
44	Old Medical Sciences	1966	DPW -Tasmania. Chief architect S.T. Tomlinson in association with Johnston Crawford and de Bavay  Sketch plans 1964 CD Rose	M	M	M	M	L	L	L	•
45*	CSIRO*	c1991	Michael Viney and Associates with Forward Consultants	H	H	H	H	H	H	H	
47a**	Christ College*** Voted most significant building in the 30 years following the war by an architectural panel	1960-1969	Hartley Wilson and Partners / Hartley Wilson & Bolt Architects	E	E	E	E	H	H	E	•
47b	John Fisher College		Cooper Vincent and McNeill	H	H	H	H	M	M	M	•
47c*	University Apartments*		Michael Cooper and Associates	M	M	M	M	M	H	M	
47d	The Lodge	1964	Hartley Wilson and. Bolt Architects				H				•
49	Old IMAS			L	L	L	L	L	L	L	
50	Rugby Pavilion/Club	1959	DPW -Tasmania. Chief architect C.D Rose	M	M	M	M	L	M	L	•
51	STEPS building	1971?	DPW -Tasmania. Chief architect S.T Tomlinson in association with Johnson Crawford and De Bavay	L	L	L	M	L	L	L	

Bldg No	Name	Date of Construction	Original Architect	1	2	3	4	5	6	7	8
52	Community Health Clinic	1984	University of Tasmania – Buildings Branch	L	L	L	L	L	M	L	
53	Childcare Cottage	c1880s		H	M	M	L	L	M	M	•
53a	Brick Storeroom	c1914		M	L	M	L	L	M	M	•

### 3.3 Detailed Statement of Significance for the Site

The following assessment of significance addresses the Site as a whole.

#### Course or Pattern

##### *Criterion (a)*

*The place is important to the course or pattern of Tasmania's history.*

The development of the University campus at Sandy Bay was a major development in the State in the provision of tertiary education and in the development of a large educational facility. While the University had already had a long and distinguished history at Glebe, its expansion and 'coming of age' in relation to campuses being developed in parts of Australia marks the Sandy Bay Site as a significant place.

The establishment of a completely new campus also was a rare development in Tasmania.

The earlier use of parts of the Site as a rifle range is also significant in demonstrating the importance of defense and training of the military in close proximity to the City.

#### Aspects of Tasmania's History

##### *Criterion (b)*

*The place possesses uncommon or rare aspects of Tasmania's history.*

While not the only tertiary campus in the State, it is the most extensive and main campus of the university and contains bespoke buildings designed for the university faculties and associated facilities.

It is rare that so many prominent local and several interstate architects were engaged to design the range of facilities and there is no other place in the State where this has occurred to such an extent.

#### Information

##### *Criterion (c)*

*The place has the potential to yield information that will contribute to an understanding of Tasmania's history.*

Some attributes of the place have the ability provide information about Tasmania's history. In particular the two remaining pre-University buildings and the very significant early group of buildings including Arts Theatre Arts, the Library, Chemistry and Christ and St John Colleges are among the most outstanding modernist buildings of their time.

## Social significance

### *Criterion (d)*

*The place is important in demonstrating the principal characteristics of a class of place in Tasmania's history.*

The place as a whole and its more significant elements demonstrate the development of a university campus and major public work from the 1950 and 1960 period in particular.

The buildings demonstrate the principal and significant characteristics of modernist commercial/institutional buildings.

## Achievement

### *Criterion (e)*

*The place is important in demonstrating a high degree of creative or technical achievement.*

Aside from the activities of the university that include high levels of achievement in many areas, the campus does demonstrate a high level of creativity and achievement in a number of the built and other elements as set out in detail in the assessments. A number of individual buildings demonstrate exceptional and high levels of creativity and technical achievement where other elements do not. The various sculptures and art works demonstrate very high levels of creativity and achievement. Generally, the landscape form of the site does not demonstrate this characteristic.

## Association

### *Criterion (f)*

*The place has a strong or special association with a particular community or cultural group for social or spiritual reasons.*

The campus has a strong association with the generations of staff and students who studied and lived there. The Site also has strong cultural links within the Sandy Bay community who use and are connected to the site. Part of this value relates to individual's links to specific buildings and places however there is no specific place that demonstrates a value across the various individuals who may have connections to the site.

The retention of the Site as a place that retains elements of its university use including buildings, elements and landscape is important to retaining the underlying value of the place within the community.

## Association - People

### *Criterion (g)*

*The place has a special association with the life or works of a person, or group of persons, of importance in Tasmania's history.*

The University has numerous associations with significant people, however most of these do not directly relate to the buildings or site and will continue to be part of the university tradition wherever the campus is located.

Associations that are significant in relation to the place are those with particular buildings - Morris Miller Library for example, named after the then Vice-Chancellor, a small number of memorials located around the site that relate to students or staff and the links of specific significant buildings to prominent architects.

## Aesthetic Characteristics

### *Criterion (h)*

*The place is important in exhibiting particular aesthetic characteristics.*

The Site exhibits a strong aesthetic character as a whole that is principally derived from its scale, the topography, the bushland setting, the open space and the now mature interlinking added landscape form. While some of these relate to heritage values they also relate to the role of the place within the southern area of Hobart as a major open space and recreation area. The landscape aesthetic values generally have a secondary heritage role.

Specific landscape aesthetic heritage values reside in the central walkway of the core campus area which is a constructed landscape that links the various significant built elements and other Site features. The mature landscape form was an intended and is now a key part of the setting of the elements or heritage value.

The numerous art works across the campus have high aesthetic value both as individual works and as part of the campus form.

The single listed heritage landscape item, the Earl Street hedge, that relates to the earlier subdivisions taking place around the then rifle range, is a dominant streetscape element that defines the southern edge of the campus along the Earl Street alignment.

A number of individual buildings have high aesthetic significance as set out in detail below however, most site elements do not demonstrate aesthetic values that support them being of heritage significance.

## 3.4 Individual Elements of Significance

The discussion on significance indicated a range of buildings that have potential heritage significance. They are:

Table 14: Assessment of Significance of potential heritage items.

No	Name	Year	Architect	a	b	c	d	e	f	g	h
Pre-University Buildings											
53	Childcare Cottage	c1880s		•	-	-	-	-	-	-	•
			<p>The Cottage is the earliest element remaining on the Site and has historic significance in particular in connection with its use as a farmhouse, with the Rifle Range and finally as part of the University campus. The building has been relocated so that its significance now is not strongly linked to its specific setting. Consequently, while it is an important Site element, its final setting should be determined to allow it to be seen in relation to its range of historic values.</p>								
53a	Brick Storeroom	c1914		•	-	-	-	-	-	-	-
			<p>the brick store building is a small modest structure that appears to relate to the Rifle Range period where it was used for storage. It has some historic significance but is not a key site element.</p>								
University Built between 1956 and 1969											
8	Engineering	1957	DPW -Tasmania. Chief Architect C.D Rose	•	-	-	-	-	-	-	-
			<p>The Engineering Building is an early campus building that remains reasonably intact to its planned form. It was a competent, but uninspiring design that adopted a quite utilitarian approach to a new style – modernism. The building has some heritage significance as part of the early campus elements but does not have significance for its aesthetic form, innovation in design or as an exemplar of the style.</p> <p>It does not have State level heritage significance.</p> <p>It has moderate local significance.</p>								
13	Physics	1961	DPW -Tasmania in association with Bush Haslock Parkes Shugg and Moon	•	-	-	-	-	-	-	-



No	Name	Year	Architect	a	b	c	d	e	f	g	h
			<p>The Physics Building was part of the early campus form but is an otherwise non-distinctive building in design, form and detail. Of the early campus buildings it is the least interesting architecturally. It has had a range of additions and while its form can be seen it does not make a particular aesthetic contribution to the campus.</p> <p>It does not have State level heritage significance.</p> <p>It has very moderate local significance.</p>								
17	Chemistry/ Central Science Laboratory	1957	D Hartley Wilson	•	•	•	-	•	-	•	•
			<p>The Chemistry building is one of the most striking on the campus. Designed with an impressive two level entry foyer complete with sculptural forms in the ceiling soffit, a double height portico and a well designed main façade, interestingly facing away from the central walkway, the building demonstrates a sophisticated use of modern form and materiality. Designed by Hartley Wilson, an associate of Bolt, it continues the design quality seen in the college buildings.</p> <p>It demonstrates a significant pattern of development in the State and is an exemplar example of its style. It has high aesthetic and associational significance and explores forms of modernism in a nuanced way.</p> <p>It has State level heritage significance.</p> <p>It has high local significance.</p>								
23	Library, Morris Miller	1958	John F.D. Scarborough	•	•	•	-	•	•	•	•
			<p>The Morris Miller Library is one of a group of state and university libraries in Tasmania, Melbourne and Canberra designed by John F Scarborough. His works including the Tasmania State Library, ANU Library and Bailleau Library at Melbourne University, are a very significant grouping of buildings that separately and collectively demonstrate the development of research library buildings. Each is well-designed and all adopt modernism in a refined and sophisticated form.</p> <p>The building is one of the key campus buildings that stands out for its quality and design excellence.</p> <p>It has State level heritage significance.</p> <p>It has high local significance.</p>								

No	Name	Year	Architect	a	b	c	d	e	f	g	h
26	Psychology Social Sciences	1959	R Brian Howroyd with Cooper and Vincent	•	•	•	-	•	-	•	•
			<p>The Psychology building, designed by the same architects as the Arts Theatre building, adopts a more formal design than the adjacent Theatre Building but introduces design elements and features that give it a highly distinctive form that stands out from most of the campus buildings. The use of colour, patination, the marking of stairs and entries with breaks in the otherwise strong modular form all draw from the European modern movement with the influence of Le Corbusier and artists such as Mondrian clearly evident.</p> <p>The building is, with the library the most successful building 'in the round' with a fully resolved massing and form. It features finely designed entries, external water feature and colonnade that are not found elsewhere on the campus.</p> <p>It has State level heritage significance.</p> <p>It has high local significance.</p>								
27** *	Arts Lecture Theatre***	1959	E Brian Howroyd with Cooper and Vincent	•	•	•	-	•	-	•	•
			<p>The Arts Theatre building, designed by the same architects and in conjunction with the adjacent Psychology Building, is a bespoke design using parabolic roof forms and a splayed floor plan, reflecting the uses within the building. It is experimental in form and design and is the only early campus building to break from the orthodoxy of a rectilinear plan form.</p> <p>Its uniqueness is reflected in the existing heritage listing.</p>								
40	Hytten Hall, Education,	1952-55	John FD Scarborough	•	-	-	-	-	-	-	-
			<p>Hytten Hall, the first residential college that has ceased that use and is now used for educational use as a general campus building, is one of the early campus buildings which explored the edges of modernism but used a traditional built form that does not reflect the strength of the slightly later campus buildings. Designed by John Scarborough who later did the library building, it does not demonstrate the same design skill or resolution as the later building.</p> <p>The building does not have the design integrity or aesthetic qualities of the buildings that followed it but was designed by a prominent architect and does form part of the early campus form.</p>								

No	Name	Year	Architect	a	b	c	d	e	f	g	h
				<p>It retains a reasonable level of integrity given its change of use. It does not have State level heritage significance.</p> <p>It has very moderate local significance.</p>							
47a ***	Christ College*** Voted most significant building in the 30 years following the war by an architectural panel	1960- 1969	Hartley Wilson and Partners / Hartley Wilson & Bolt Architects	•	•	•	•	•	•	•	•
47b	John Fisher College		Cooper Vincent and McNeill	•	•	-	•	-	•	-	•
				<p>The College does not have the same level of significance as Christ College, which is an exemplar modernist building, but is a fine college residential building that is well-designed and marks the transition into modernism.</p> <p>It has historic, associational, aesthetic and social significance</p> <p>It has State level heritage significance.</p> <p>It has local heritage significance.</p>							
47d	The Lodge	1964	Hartley Wilson and Bolt Architects	•	•	•	-	-	-	-	•
				<p>The Lodge forms part of Christ College but is separately noted as it is not clear whether it forms part of that State and local listing. The building was not assessed separately and is included here for completeness. Any future study of Christ College should include an assessment of the The Lodge.</p>							
University Buildings built after 1970											
10*	Centenary Building*	1989	Michael Viney and Associates with Forward Consultants	-	-	-	-	-	-	•	•
45*	CSIRO*	c1991	Michael Viney and Associates with Forward Consultants	-	-	-	-	-	-	•	•
20	Pharmacy	2007	Bush Parkes Shugg and Moon	-	-	-	-	-	-	•	•

The pre-University period buildings are significant in demonstrating the earlier uses of the site and are the last elements of those uses. They have historical value in demonstrating a former pattern of use that no longer remains and some aesthetic value. Both buildings have heritage significance even though they are quite modest structures.

The three more recent buildings have some aesthetic value and are associated with significant architectural practices. They are the most interesting of the newer buildings on the campus but overall do not have broader heritage significance.

Of the ten early campus buildings, seven stand out as buildings that have heritage significance in a range of areas, noting that three of these are already heritage listed (The Lodge appears to be included in the listing of Christ College).

### 3.5 Graded Areas of Significance

The following assessment of elemental significance is set out on the basis of the statement of significance for the place and the relative values of the various component parts of the place. The elements of highest significance are those that are essential to conserve and understand the significance of the place.

The concept of graded significance provides for management of the various elements of the place with a level of finesse that acknowledges the potential for an ongoing active use of the site and the need to implement changes and new uses while retaining those parts of the place that are unique and provide evidence of the development of the site.

Table 15: The graded levels of significance.

Grading	Justification	Status
Exceptional	Rare or outstanding element directly contributing to an item's local and State significance.	Fulfils criteria for local or State listing.
High	High degree of original fabric. Demonstrates a key element of the item's significance. Alterations do not detract from significance.	Fulfils criteria for local or State listing.
Moderate	Altered or modified elements. Elements with little heritage value, but which contribute to the overall significance of the item.	Fulfils criteria for local or State listing.
Little	Alterations detract from significance. Difficult to interpret.	Does not fulfil criteria for local or State listing.
Intrusive	Damaging to the item's heritage significance.	Does not fulfil criteria for local or State listing.

Table 16: The graded levels of significance.

Building	Building element	Level of significance
Morris Miller Library	<b>Exterior</b>	
	Original Facades	High
	Entry additions	Intrusive
	Fenestration	High
	Undercroft	High
	<b>Interior</b>	
	General	Moderate
	Central Stairs	Moderate
	East and west stairs	High
Arts Theatre	<b>Exterior</b>	High
	<b>Interior</b>	High
Psychology Building	<b>Exterior</b>	
	Original and early Facades	High
	Terrace	High
	Water Feature	High
	Southern stair addition	Intrusive
	Changes to entry doors	Intrusive
	<b>Interior</b>	
	Main entry foyer	High
	Secondary stair	High
	Balance of interior	Moderate to low
Chemistry Building	<b>Exterior</b>	
	Early facades	High
	Additions - facade	Low
	Entry portico	High
	Entry stairs and walls	High
	<b>Interior</b>	
	Entry foyer including mezzanine and sculptural elements	High
	Main corridors	Moderate
	Laboratories and Ancillary spaces	Low
	North stair	Low
	South stair	Low
	Lecture Theatre	Moderate

Building	Building element	Level of significance
Cottage	<b>Exterior</b>	
	Form at time of university use commenced	High
	<b>Interior</b>	
	General	
Former Ammunition Store	<b>Exterior</b>	Moderate
	<b>Interior</b>	Low
Christ College	<b>Exterior</b>	
	Original form and fabric	High
	Additions and Changes	Low
	<b>Interior</b>	
St John College	<b>Exterior</b>	
	Original form and fabric	High
	Additions and Changes	Low
	<b>Interior</b>	
Geology	<b>Interior</b>	
	Terrazzo floor at entry	High
General	Honour boards	High
	Art Works in buildings	High
	Art Works external	High
	Memorials	High

### 3.6 Setting (Curtilage)

The setting can be either the site on which a building or series of built elements are found or it may be the space around a heritage item or place that is required to preserve the significance of that place that may be a larger or smaller area than the actual Site itself.

The concept of setting recognises that significance can be affected by what takes place in the immediate and broader setting of significant elements of a place that may extend beyond the physical boundaries of the place.

The Site is a large area much of which is not occupied by buildings or active uses, university or ancillary. While the whole site in one sense is significant as the place, not all parts of the Site have the same heritage significance. It is understood that the Site is to be retained as a site but is to have a range of new uses and possible developments. Retaining the place as an entity will address any overall significance that the place has historically irrespective of future uses or developments.

As the Site is large and in most areas is fringed with open space, bushland or playing fields, the current site boundaries capture its overall value. This also relates to the earlier use as a rifle range that occupied a similar overall land holding in its later period of use.

Within the site several specific areas have value as they provide the setting for individual elements of significance or contain other values such as natural values that are recognised beyond a heritage consideration. It is reasonable to conclude that a retention of open space for recreational use, bushland for both environmental and recreational use and areas of open grassland all contribute to retaining a setting.

The central Site area has a specific landscape form that provides a setting for the key core campus buildings. The central walkway, courtyards and specific garden areas all contribute to creating a setting around the built elements that adds to their overall significance. Similarly the addition of art works and site features enhances that setting.

Other landscape elements that have developed over time, with the exception of the heritage listed Earl Street hedgerow, make a minor contribution to the heritage concepts of setting.

The significant setting can then be defined as:

- i The Site area with its various forms, topography and landscape types.
- ii The central part of the Site that surrounds the identified significant built elements and which creates the central walkway and landscaped courtyard areas
- iii open recreational areas near Sandy Bay Road

## 4.0 Conservation and Management Principles

This section considers the constraints and opportunities on the site that arise from significance, use, client requirements and statutory constraints.

### 4.1 Client Requirements

This CMP has been commissioned by the CHC on behalf of UPPL to provide guidance as they plan for adaptation and changes of use to the Site.

The first objective is to understand the significance of the site in terms of the site and levels of significance of the component parts within the Site.

The second objective is to articulate conservation management policies and strategies, consistent with the assessed heritage significance that direct the future management, conservation, adaptive re-use, new works and interpretation of the Site.

The third objective has been to provide an understanding of the place as a whole.

### 4.2 Principles

#### Conservation

The site has some heritage significance, but that significance falls into two principal areas. Firstly, the significance of the place as a university campus and secondly the significance of specific aspects and elements of the place that individual and in some areas collectively demonstrate aspects of heritage significance that are not just related to the use of the place for teaching and research. Consequently, conservation also can be considered in two ways.

The first is the ongoing life of the university while it remains on the campus and as it relocates to a new campus model and the second is conserving physical aspects of the place that have significance not only as a campus but in the development of Tasmania.

Conservation can be the retention of elements, careful adaptation of other elements, planning for new works that respond to the built and spatial qualities of the retained significant elements be that buildings or place and ensuring that the setting around significant elements is retained in future works.

#### Principles

- To protect the significant built cultural features and historic associations of the place
- To allow for public access and interpretation
- To inform and educate the community about the history of the place and its setting
- To provide an appropriate landscape setting for the place in the context of the place



### 4.3 Opportunities, Constraints and Issues Arising from Significance

A relatively small number of site elements have specific high heritage significance. These elements are generally to be retained but will mostly require adaptation as their current uses cease and their layouts and internal detail will not be suitable for new uses.

A number of buildings and elements have moderate heritage significance which provides potentially for greater flexibility in approach. The issue of recycling buildings and adapting them for new uses, where they are not of high heritage value is not a heritage issue, but the retention of structures that can be adapted does assist in retaining the overall form of the campus.

### 4.4 Constraints, Issues and Opportunities Arising from the Physical Condition

The buildings on the campus vary in age, condition, maintenance and adaptability. There is no correlation between significance and physical attributes such as condition or compliance. Generally, newer buildings will be in better overall condition, will have greater levels of building compliance and will be potentially easier to adapt than older buildings.

The early buildings on the campus have reached a point in their life cycle where major works may be required and services and fittings are approaching their end of useful life. This provides challenges on how to retain significance.

Some buildings are not capable of reasonable re-use for a range of reasons including in several low head height to floors, narrow access corridors and non-complying egress. As most of the buildings are public buildings in that they were designed for large volumes of people, many are generously designed and capable of adaptation.

A detailed assessment of physical condition is being undertaken separately to this study with a focus on the buildings that are assessed as most significant to understand the potential impacts of change.

### 4.5 Constraints, Issues and Opportunities Arising from the Australia ICOMOS Burra Charter

The standards of the Burra Charter (2013) are referred to widely by heritage agencies and practitioners and are obligatory for conservation agencies receiving Australian Government funding. The Charter defines cultural significance as 'aesthetic, historic, scientific or spiritual value for past, present or future generations'. This cultural significance is 'embodied in the place itself, its setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different people or communities'.

The Guidelines to the Burra Charter - Cultural Significance (Australia ICOMOS 1988) define social value (2.6) as embracing 'the qualities for which a place has become a focus of spiritual, political, national or other cultural sentiment to a majority or minority group'.

The Australia ICOMOS Burra Charter provides nationally accepted principles for the conservation of places of cultural significance.

## 4.6 Statutory and Other Controls

As separate assessments of these matters are being undertaken they are not discussed in this report except to note it is likely that the scope of works proposed to most buildings to be retained will be extensive as it will involve changes of use and at least some reconfiguration. This will require compliance with current codes. Where elements of significance are affected by such issues there will be a need to consider heritage values, compliance requirements and potential actions to retain significance and achieve compliance. This will involve a nuanced approach. Elements that may be affected are stairs and entry areas of buildings, egress, level changes and the need for equitable access, addition of lifts and the incorporation of services.

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## 5.0 Policy

### 5.1 Preamble

This section of the conservation management plan looks at the various elements, uses and associations of the buildings and site and sets out a range of policies for their future management. The conservation policy as a whole is based on recognition of issues raised in the analysis, assessment and procedure sections of the report, particularly the significance of the place and its component parts.

The aim of developing policies is to provide a solid foundation for all future conservation recommendations including remedial work, prioritization of identified works and actions as well as protection of items and functional uses. Conservation policies are aimed at balancing the owner's requirements with the need for the retention and conservation of significant functional relationships and fabric and to facilitate appropriate interpretation and possibly adaptive re-use of the site, which ultimately ensures its viability and community value.

The conservation policy for the property has been prepared to provide advice on how to manage the site and conserve the identified cultural heritage values.

#### Policy - General

The Site is proposed to have major change firstly in the relocation of the university uses and then the repurposing of the site including the landscape and buildings and the addition or replacement of a range of buildings to accommodate new uses. Some buildings are capable of adaptation to new uses, other are not. The focus of the policy is to ensure that identified significant buildings are retained in their significant form and that adaptation work is undertaken carefully and within the intent of the original design. Less significant or non-significant buildings may undergo adaptation, but those elements are not constrained by heritage considerations.

Aspects of the site that currently exist that will continue and which will assist in managing the significance of the place are the ongoing high level of public access to the site that has existed, the retention key buildings and areas of landscape and the ability to interpret the history of the site in many ways.

#### Policy – General:

- 5.1.1 Establishing achievable and appropriate uses for the significant buildings and areas of the Site is the key future activity that will ensure the retention of significance.
- 5.1.2 Appropriate funding to ensure that the significant elements of the place are conserved is to be established.
- 5.1.3 Where conflict arises between use and heritage values, as an over-riding principle, heritage values should prevail. This may require creative and innovative ways to implement new uses and change that work within the heritage framework of the buildings and Site.

## Policy - Use

Generally, the buildings will change in use, where they are retained, from educational and research uses to commercial, civic and residential uses. Some buildings will adapt with relative ease and others will require substantial change, particularly internal change.

The key factors in determining a use for the significant elements of the place are:

- It should not involve change to the significant fabric, as identified, that would adversely affect significance.
- Uses should be selected that are best fits with the form, construction and detail of the buildings to limit the extent of intervention that may be required.
- It should be economically viable and preferably self-supporting.

### Policy - Use:

5.1.4 Select uses for significant buildings that require the least intervention and which can fit within the overall structure, form and detail of the building without undue impacts on significance.

5.1.5 Ensure that the setting of significant buildings has uses that retain the current overall landscape form of an open activated campus.

## Policy - Fabric

An important aspect of managing heritage values is to conserve significant fabric, that is the built and landscape elements that give the place significance. Given the nature of the buildings significant fabric can be seen in three areas: external fabric; internal fabric related to entry areas, stairs and major public areas; other parts of the buildings.

The following table sets out the significant fabric of each of the identified significant buildings.

Table 17: Policy - Fabric

Building	Building element	Level of significance	Policy
Morris Miller Library	<b>Exterior</b>		
	Original Facades	High	1 Retain all elements 2 Replicate damaged or failed elements
	Entry additions	Intrusive	1 Remove and reinstate early entry form
	Fenestration	High	1 Retain all elements 2 Replicate damaged or failed elements
	Undercroft	High	1 Retain
	<b>Interior</b>		
	General	Moderate	1 Retain some open areas and central void space 2 Provide for adaptation for new uses.

	Central Stairs	Moderate	1 Retain if possible
	East and west stairs	High	1 Retain in current form 2 Minor adaptation for compliance
<b>Arts Theatre</b>	<b>Exterior</b>	High	1 Retain all original finishes and elements 2 Potentially remove later additions
	<b>Interior</b>	High	1 Recover early interior form 2 Remove added elements in foyer 3 Remove added elements in theatre space
<b>Psychology Building</b>	<b>Exterior</b>		
	Original and early Facades	High	1 Retain all elements 2 Replicate damaged or failed elements
	Terrace	High	1 Retain
	Water Feature	High	1 Retain
	Southern stair addition	Intrusive	1 Remove and replace with original stair design
	Changes to entry doors	Intrusive	1 Redesign to more sympathetic form
	<b>Interior</b>		
	Main entry foyer	High	1 Retain all early finishes and reinstate missing elements 2 Retain stair 3 Retain lift allowing for car upgrades 4 Adjoining corridors, retain connections to foyer
Secondary stair	High	1 Retain current detail and form	
Balance of interior	Moderate to low	1 Allow for adaptation for new uses including changing the spatial arrangement of the interior	
<b>Chemistry Building</b>	<b>Exterior</b>		
	Early facades	High	1 Retain all early finishes and reinstate missing elements 2 Remove ductwork when obsolete
	Additions - facade	Low	1 Retain or remove as required 2 Reinstate missing façade or undertake further work in these areas
	Entry portico	High	1 Retain intact to early form
	Entry stairs and walls	High	1 Retain, only undertake careful adaptation for access requirements
	<b>Interior</b>		
Entry foyer including mezzanine and sculptural elements	High	1 Retain intact including floor finishes, sculptural ceiling finishes, face brick walls and other decorative elements	

	Main corridors	Moderate	1 Retain as face brick
	Laboratories and Ancillary spaces	Low	1 Adapt as required
	North stair	Low	1 No requirement
	South stair	Low	1 No requirement
	Lecture Theatre	Moderate	1 Retain if possible
<b>Cottage</b>	<b>Exterior</b>		
	Form at time of university use commenced	High	1 Retain cottage core external form and detail 2 It is noted the building was moved by the university and it is possible to move it again. 3 Additions should be removed and ideally returned to cottage form
	<b>Interior</b>		
	General		1 Interior has been significantly altered, retain remnant elements.
<b>Former Ammunition Store</b>	<b>Exterior</b>	Moderate	1 Retain exterior form.
	<b>Interior</b>	Low	1 no requirements
<b>Christ College</b>	<b>Exterior</b>		
	Original form and fabric	High	1 Retain significant form and materials
	Additions and Changes	Low	1 Remove or allow managed change
	<b>Interior</b>		Not inspected
<b>St John College</b>	<b>Exterior</b>		
	Original form and fabric	High	1 Retain significant form and materials
	Additions and Changes	Low	1 Remove or allow managed change
	<b>Interior</b>		Not inspected
<b>Geology</b>	<b>Interior</b>		
	Terrazzo floor at entry	High	1 Retain in situ, or if this area of building is not to be retained relocate to new selected position on site.
<b>General</b>	Honour boards	High	1 Retain with university
	Art Works in buildings	High	1 Retain with university
	Art Works external	High	1 Retain on site or relocate to new university campus areas
	Memorials	High	1 Retain on site ideally in situ, if to be relocated, refer to specific policy.

### Policy - Fabric:

- 5.1.6 Significant building fabric, both internally and externally should be retained and conserved within future programs of conservation or adaptation. Conservation priorities shall generally respond to the level of significance of an item.
- 5.1.7 Preservation and ongoing maintenance of original and significant fabric should be carried out using appropriate conservation methods and treatments with recording of any new work.
- 5.1.8 Removal of intrusive elements or fabric of little significance is permitted
- 5.1.9 Where new fittings, fixtures or architectural elements are to be introduced they should be designed/selected to be sympathetic with the visual qualities of the existing building fabric and to minimise the loss of existing significant fabric in the building.

### Policy - Maintenance

The significant elements of UTAS Sandy Bay Site require regular maintenance to ensure long-term conservation. This should follow an established program of works with clear responsibility for implementation and monitoring.

There is an ongoing need to implement a regular maintenance program on the buildings and site that attends to short, medium and longer term needs.

#### Policy - Maintenance:

- 5.1.10 Undertake ongoing maintenance of significant building fabric and grounds on a cyclical basis. A maintenance programme should provide for a regular inspection of the buildings and grounds with remedial action to be taken where required. No maintenance work or repairs should negatively impact on significant fabric.
- 5.1.11 The university should ensure adequate, consistent and long term funding is made available for the implementation of ongoing program of maintenance for significant buildings and grounds.

### Policy - Interpretation

Interpretation of significant places reveals long-term connections within our cultural identity. Interpretation of historic buildings and cultural landscapes reveals the storylines of a community, which will increase the public's understanding and appreciation of the significance of the place.

Interpretation could focus on a number of themes or aspects of the place that can be established through an interpretation plan and consequent policy. Once the areas of the building to be used for interpretation are established the themes can be developed.

Aspects of the history of the place that could be interpreted are:

- Aboriginal history
- Early farming history
- The Rifle Range period

- University acquisition and development of the site

#### Policy - Interpretation:

- 5.1.12 An interpretation plan should be prepared to accompany major future works that sets out a coherent and organised approach to interpreting the history of the place as a university campus and its uses prior to that time.
- 5.1.13 A history of the university at Sandy Bay should be commissioned to provide a detailed record of both the development of the campus and the activities and work that took place over the 70-80 year use of the Site.

#### Policy - Adaptation

##### Background

#### Policy - Adaptation:

- 5.1.14 Adaptation of significant buildings may take place provided that significant fabric and spatial arrangements in and around the buildings, as identified in this CMP, are not adversely impacted.
- 5.1.15 Adaptation should take place to areas of generally lower significance.
- 5.1.16 Advice on how to integrate new uses and services must be taken from an experienced heritage practitioner if works are proposed that may affect elements of high significance.

#### Policy - Vistas, Views and Setting

The scale of the site, its topography and its setting on the slopes results in extensive views and vistas from many parts of the Site. This is a characteristic of the Sandy Bay area and is not unique to the site. However, views are part of the character of the site that has been reinforced in the initial site layout and in the placement of many of the buildings and open spaces.

The key vista is the central walkway between the main buildings that was designed as a seeping vista to the river. Over time, the addition of the Centenary Building along with a maturing landscape has affected that vista.

There are also a range of internal vistas and views that are not of individual significance but which collectively establish the character of the Site.

#### Policy - Vistas, Views and Setting:

- 5.1.17 Any future works or changes should seek to:
- Retain and enhance significant views to and from the site.
  - Retain and manage significant views and vistas, utilising the skills and knowledge of specialists in landscaping and arboricultural practices.
  - Consider impacts on views and vistas when redeveloping parts of the site, or adjacent sites or if considering new buildings.
  - Incorporate plantings on the site in ways that enhance the visual (and historical) aspects of the site.



## Policy - Procedural Requirements

As the place is of heritage significance, there is a responsibility on the owner to ensure that works that take place are in accordance with the recommendations of this CMP and ongoing heritage advice and any current or future listings that take place.

Procedurally any works require consent. Depending on the type of heritage listing (State or local) different consents will be required from Hobart City Council or the Tasmanian heritage Council.

### Policy - Procedural Requirements:

5.1.18 Do not undertake works on site without appropriate consents.

## Policy - Archival Records

Management of records associated with the conservation of the place forms an important component of an effective management strategy. The safe storage of these records in a publicly accessible archive is important.

Records relating to the history of UTAS Sandy Bay Campus are held by the University and by public archives and repositories. As part of the current project and as good site management UTAS have detailed digital records of buildings plans and documents that form a very sound basis for understanding the place.

### Policy - Archival Records:

5.1.19 Archival records that relate to the UTAS Sandy Bay Campus should be maintained preferably as a single collection or where this is not possible all related records should be referenced with the UTAS archive.

5.1.20 Copy any original records and ensure that original material is stored securely and in appropriate environmental conditions.

5.1.21 A permanent archive should be established to house all research material, maintenance records, original building elements found. The archive should also store all future materials found or records produced, and generally be available for specialist consultants and interested groups to inspect.

5.1.22 Retain and manage an accurate archival record of works, maintenance, changes in use and interpretation in a central repository.

5.1.23 Records of any changes and the reasons for decisions are to be retained for future works.

## Policy - Conservation Management

The Burra Charter recommends that conservation policy should be open to future review. The management body should regularly review these policies in particular if some unforeseen change of use is required, or if new information comes to light.

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The engagement of suitably qualified consultants and trades people with knowledge of cultural landscapes and traditional building technology should be a prerequisite in future works at the place.

#### Policy - Conservation Management:

- 5.1.24 Care of the building fabric and ongoing maintenance should be the responsibility of the owner and/or trustees.
- 5.1.25 All works to significant fabric are to be carried out by contractors and consultants trained in the conservation of historic buildings with suitable qualifications in their profession, trade or craft.
- 5.1.26 All works are to be carried out using traditional materials and techniques unless modern equivalents provide substantial conservation benefits or work is carried out on non-significant fabric.
- 5.1.27 The conservation policies should be reviewed within five years, but no later than 10 years, or at the time of future programmes of upgrading. The review should be based on guidelines and principles of J.S. Kerr's The Conservation Plan and Australia ICOMOS The Burra Charter

#### Policy - Movable Heritage

Moveable Heritage associated with UTAS Sandy Bay Campus will remain the property of the university and will be moved when various faculties and departments relocate. It is not anticipated that any moveable heritage will remain on the site once the site is no longer used as a campus. Memorials and sculptures are not included in this group.

#### Policy - Movable Heritage:

- 5.1.28 Significant items of movable heritage associated with UTAS Sandy Bay Campus should be retained and managed by the University.
- 5.1.29 Items that have no significant association with UTAS Sandy Bay Campus may be disposed of or used elsewhere.

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## 6.0 Bibliography

[LIST]

## 7.0 Attachments

- Attachment 1 Chronological History of Built Fabric
- Attachment 2 Campus plans showing Buildings and additions to buildings subject to Institute of Architect (Tasmanian Chapter) Awards

## Attachment 1: Chronological History of Built Fabric

Table 18: Policy - Chronology

Bldg. No.	Name	Previous Name	Date of Construction / original drawings	Original Architect	Date opened	Major Additions/ Extensions	Date of Extension	Architect for Extension
1	301 Sandy Bay Road Research (old admin building)	Temporary Administration Building	1955	SWT Blythe + Roderick W Cooper		Internal alterations	1972	Department of Public Works - Tasmania. Chief architect Tomlinson in association with MG Vincent
						Conversion from Temporary Admin Building	1964?	S.W.T Blythe
2	6 Grace Street	Staff Apartments	1955	SWT Blythe in association with Roderick W Cooper				
3	Childcare (Lady Gowrie)		1974 -75	Blythe and Blythe Architects		First Floor Addition	1995	Blythe Yeung Menzies
						Landscape Works	1994	Sue Small Landscape Architect
4	Uni Gym		1973	Department of Public Works - Tasmania. Chief architect S.T. Tomlinson in association with Blythe and Blythe		Change rooms and Weights room	1995	Philp Lighton Architects
						Stage 2 - Multipurpose	1990	Jacob Allom Wade
						Stage 1 - Aerobics	1988	Jacob Allom Wade
						Additional Squash Courts and Amenities	1982	Blythe Hudson Yeung Architects

Bldg. No.	Name	Previous Name	Date of Construction / original drawings	Original Architect	Date opened	Major Additions/ Extensions	Date of Extension	Architect for Extension
						Squash Courts	Pre 1982	Blythe Yeung Associates Architects
5	<b>Cricket Pavilion*</b>	University Sports Pavilion	1986	Forward Consultants	1988?			
6	Law	Law	1971	Department of Public Works - Tasmania. Chief architect S.T. Tomlinson in association with Bush Park Shugg and Moon		Extension	1993	Eastman Heffernan Walch and Button
						Stage 3: South-eastern Extension and Alterations	1990	Forward Consultants
						Stage 2: Library Extension	1989	Forward Consultants
						Stages 1 - South-eastern Extension and Alterations	1988	Forward Consultants
7								
8	Engineering	Engineering	1957	Department of Public Works - Tasmania. Chief Architect C.D Rose	1959	Alterations level 1 and 2	1984	University of Tasmania: Buildings Branch
9	Surveying	Surveying	1979	Philp Lighton Floyd and Beattie		Additions	1989	Drafting Services Tasmania

Bldg. No.	Name	Previous Name	Date of Construction / original drawings	Original Architect	Date opened	Major Additions/ Extensions	Date of Extension	Architect for Extension
10*	Centenary Building*	<b>Centenary Building</b>	1989	Michael Viney and Associates with Forward Consultants		Minor interior alterations Levels 2, 3 & 4	2006	B Hill /P Gard
11	Engineering Workshop	Engineering Workshop	1957	Department of Public Works - Tasmania. Chief Architect C.D Rose	1959	Addition – Southern Wing	1988	
12	Earth Sciences Geography and Environment CODES	Geography and Environment	1961	Department of Public Works - Tasmania. Chief Architect C.D Rose in association with Harry Hope and John Jacob	1962	Geology/Geography extension	1969	Department of Public Works - Tasmania. Chief Architect S.T Tomlinson
						Geology Building Extension (III)	1971	Department of Public Works - Tasmania. Chief Architect S.T Tomlinson in association with Lawrence Howroyd and Associates
						Environmental Studies Relocation – level 4 addition	1988	Forward Consultants
						CODES Building addition	1989	Michael Viney and Associates with Forward Consultants
						Extension to Codes : new Levels 3 - 4	1993	Forward Viney Woolan
13	Physics	Physics	1961	Department of Public Works - Tasmania in association with Bush Haslock Parkes Shugg and Moon	1962	Physics extension	1967	Department of Public Works - Tasmania (S.T. Tomlinson)

Bldg. No.	Name	Previous Name	Date of Construction / original drawings	Original Architect	Date opened	Major Additions/ Extensions	Date of Extension	Architect for Extension
						Mathematics Wing (see building 14)	1966	Department of Public Works - Tasmania. Chief Architect S.T. Tomlinson
						IASOS – New infill to undercroft of area of existing building	1988	Forward Consultants
14	Mathematics	Mathematics	1966	Department of Public Works - Tasmania. Chief Architect S.T. Tomlinson		Mathematics Computing Wing	Pre 1986	University of Tasmania: Buildings Branch
						Covered Linkway between Mathematics Building and Computing Wing	1986	University of Tasmania: Buildings Branch
15	Horticultural Research Centre		1972 1967	Johnson Crawford and De Bavay		Single storey extension	1989	Drafting Services Tasmania
16	Tas Institute of Agriculture (TIA)	Bio Medical Library	1972	Department of Public Works - Tasmania. Chief Architect S.T. Tomlinson in association with Johnson Crawford and De Bavay		Extension Linking Life Sciences to the Tasmanian Institute of Agriculture	c2000	?
17	Chemistry/ Central Science Laboratory	Chemistry	1957	D Hartley Wilson	1961	Alterations	1967	Department of Public Works - Tasmania. Chief architect Tomlinson



Bldg. No.	Name	Previous Name	Date of Construction / original drawings	Original Architect	Date opened	Major Additions/ Extensions	Date of Extension	Architect for Extension
						South-eastern Extension	1970/71	Department of Public Works - Tasmania. Chief architect Tomlinson in association with Bush Park Shugg and Moon
						Single Storey South Addition - accommodation for Pharmacy	1979	J.N Pettifor - University Architect
						Eastern Extension to the 1979-80 J.N. Pettifor wing	1982	Heffernan and Viney Architects
						Addition Floor to the 1982 Heffernan & Viney Extension	1995	Forward Viney Woolan
18*	University Club	University Club	1971	Department of Public Works - Tasmania. Chief architect Tomlinson in association with Blythe and Blythe	1972	Addition (Stores)	1974	Blythe and Blythe Architects
						First Floor Addition - Campus Credit Union	1983	Chris Holland
						First Floor extension - Campus Credit Union	1986	Chris Holland Architect
						Alterations	1996	Forward Viney and Woolan Architects
						Addition*	2000	

Bldg. No.	Name	Previous Name	Date of Construction / original drawings	Original Architect	Date opened	Major Additions/ Extensions	Date of Extension	Architect for Extension
49								
20	Pharmacy		2007	Bush Parkes Shugg and Moon	2008			
21*	TUU Building*	Union Building	1958?	Blythe and Blythe	1959	Additions - Stage 3	1960-61	S.W.T Blythe
						Additions - Stage 4	1967	Department of Public Works - Tasmania. Chief architect S.T Tomlinson in association with Blythe and Blythe
						Additions - Stage 5	Post 1967	Blythe and Blythe
						Alterations	1976-77	Blythe and Blythe
						Additions	1980	Blythe Yeung Associates
						Bar	1984	Philp Lighton Floyd Beattie
						Alterations	1987-88	Michael Viney and Associates
						Alterations	1996	Gaetano Palmese Design Studio
						Bar* CHECK	2004	Jacob Allom Wade
22	Administration Building	Administration Building	1962	Department of Public Works - Tasmania in association with Philp Lighton Floyd Beattie	1965	Stage 2 Addition	1970	Department of Public Works - Tasmania. Chief architect S.T. Tomlinson in association with M G Vincent
						Alterations	1984	ToM?
23	Library, Morris Miller	Library	1958	John F.D. Scarborough	1959	Extensions	1968	Department of Public Works - Tasmania. Chief architect S.T. Tomlinson

Bldg. No.	Name	Previous Name	Date of Construction / original drawings	Original Architect	Date opened	Major Additions/ Extensions	Date of Extension	Architect for Extension
24	Studio Theatre		1980	Philip Lighton Floyd Beattie				
25	University centre, Lazenby's café, Classics museum, John Elliot	Teaching Centre	1974	Philip Lighton Floyd Beattie in association with Civil and Civic	c1980	Extension for organ	1990	Michael Viney Architects
						Alterations for University Bistro	1995-6	Eastman Heffernan Walch and Button
26	Psychology Social Sciences	Arts	1959	R Brian Howroyd with Cooper and Vincent	1962	Alterations - accommodation for Sociology	1981	ToM?
						Alterations	1984	University of Tasmania : Buildings branch - ToM?
						Infil Breezeway	1989	
27***	<b>Arts Lecture Theatre***</b>	Arts Theatre	1959	E Brian Howroyd with Cooper and Vincent	1962	Exit Doors	1965	Department of Public Works - Tasmania. Chief architect S.T. Tomlinson
						Lecture Theatre Projection Room alterations	1973	M Vincent
						Addition	1990	M Viney and Associates with Forward Consultants
27b	Terrapin							

Bldg. No.	Name	Previous Name	Date of Construction / original drawings	Original Architect	Date opened	Major Additions/ Extensions	Date of Extension	Architect for Extension
28	Psychology Research Centre	Computer Centre Building	1974	Philp Lighton Floyd and Beattie		Floor Addition	1985	Architecture & Urban Design Partners in association with Trinity Projects Pty Ltd
						Toilet block annex	1988	Drafting Services (Tasmania)
						Northern Extension	1990/91	Forward and Viney
						Interior Alterations	1997	Drafting Services (Tasmania)
29	Humanities	Arts Commerce Education Building	1974	Philp Lighton Floyd and Beattie				
30								
31								
32*	Corporate Services*	Maintenance and Services Depot	1962-64	WM Sampson / Harry Oldmeadow Architects	1966	<b>Third-storey addition and alterations Addition*</b>	2005-2008	Philp Lighton Architects
32a	Boiler House	Boiler House	1972	Department of Public Works – Tasmania. Chief Architect S.T Tomlinson in association with Philp Lighton Floyd Beattie				
33								
34	Life Sciences Building Agricultural Science	Life Sciences	1962	Department of Public Works – Tasmania in association with Johnston Crawford & De Bavay	1962	Agriculture Addition	1965	Johnston Crawford & De Bavay

Bldg. No.	Name	Previous Name	Date of Construction / original drawings	Original Architect	Date opened	Major Additions/ Extensions	Date of Extension	Architect for Extension
	Plant Science Zoology					Biology Addition	1970-73	Department of Public Works - Tasmania. Chief architect S.T. Tomlinson in association with Johnson Crawford and De Bavay.
						Addition	1976	University of Tasmania - Architects Branch?
						New Solvent Store	1978	Philp Lighton Floyd Beattie Architects
						Lecture Theatre Extension	1986-87	Michael Viney and Associates
						Extension – Second Floor	1995	Forward Viney Woolan
35	Life Sciences Glasshouse		1962	Department of Public Works - Tasmania in association with Johnson Crawford and De Bavay (Building B and D Remain)				
			1964	Johnson Crawford and De Bavay (Phytotron Building – Building E)		Botany Department New Field Store (Extension to Phytotron)	1979	ToM
			1966	Department of Public Works Chief Architect S.T. Tomlinson				

Bldg. No.	Name	Previous Name	Date of Construction / original drawings	Original Architect	Date opened	Major Additions/ Extensions	Date of Extension	Architect for Extension
36*	<b>Herbarium*</b>		1987	Michael Viney and Associates	1989?			
37								
38	Research House	Vice Chancellors Residence	1957	Public Works - Rose	1959	Additions	1967	Public Works
39								
40	Hytten Hall, Education, English Language Centre	Hall of Residence Hytten Hall	1952-55	John FD Scarborough	1959	New residential wing	Pre 1967	Department of Public Works Tasmania. Chief Architect S. T. Tomlinson
						Additional Tutorial space	1967	Tomlinson
						Alterations - Conversion to The Centre for Education	1980	JN Pettifor - University Architect
						Lecture Room Addition	1994	Eastman Heffernan Walch and Button
40a*	<b>Old Commerce Building*</b>	Economics & Commerce	1992	Forward Viney Woolan	1993			
40b	Old Commerce Annex	Staff Quarters and Janitors Residence The Centre for Education Arts & Crafts Building	1958	Philp Lighton Floyd Beattie	1959	Major adaptation to the Centre for Education Arts & Crafts Building	1980	J. N. Pettifor – University Architect
40c	Old Warden's Lodge							
41								
42								
43								

Bldg. No.	Name	Previous Name	Date of Construction / original drawings	Original Architect	Date opened	Major Additions/ Extensions	Date of Extension	Architect for Extension
44	Old Medical Sciences	Medical Science	1966	Department of Public Works - Tasmania. Chief architect S.T. Tomlinson in association with Johnston Crawford and de Bavay  Sketch plans 1964 CD Rose	1967	Animal House Additions	1967	Johnston Crawford and de Bavay
						Southern Wing Third Floor Addition	1971	Department of Public Works - Tasmania. Chief architect S.T. Tomlinson in association with Johnston Crawford and de Bavay
						Alterations DID THESE HAPPEN?	1977	Philp Lighton Floyd Beattie
						Southern extension to the Southern Wing	1984	John Button
						Alterations	1997	Eastman Heffernan Walch Button
45*	CSIRO*		c1991	Michael Viney and Associates with Forward Consultants	1993?			
46								

Bldg. No.	Name	Previous Name	Date of Construction / original drawings	Original Architect	Date opened	Major Additions/ Extensions	Date of Extension	Architect for Extension
47a***	<b>Christ College***</b> Voted most significant building in the 30 years following the war by an architectural panel	Christ College  Block A, B, C, D  Block E  Squash Court  Block F, H  Block G, I	1960-1969  1960  1964  1965  1966  1969	Hartley Wilson and Partners / Hartley Wilson & Bolt Architects	1971	Escape Stair – Block C	1978	Brian Walch
47b	John Fisher College	St John Fisher College		Cooper Vincent and McNeill	1962			
47c*	<b>University Apartments*</b>	University Apartments		Michael Cooper and Associates	1995?			
47d	The Lodge	Wardens Lodge	1964	Hartley Wilson and Bolt Architects	1959	Extension	1992	Drafting Services Tasmania
48								
49	Old IMAS					Alterations	2018	Preston Lane
50	Rugby Pavilion/Club		1959	Department of Public Works - Tasmania. Chief architect C.D Rose		Changeroom additions	1961	Department of Public Works - Tasmania. Chief architect C.D Rose



Bldg. No.	Name	Previous Name	Date of Construction / original drawings	Original Architect	Date opened	Major Additions/ Extensions	Date of Extension	Architect for Extension
51	STEPS building	Animal House	1971?	Department of Public Works - Tasmania. Chief architect S.T Tomlinson in association with Johnson Crawford and De Bavay		Proposed Sheep Holding facility (additional building?)	1987	Drafting Services Tasmania
52	Community Health Clinic		1984	University of Tasmania - Buildings Branch				
53	Childcare Cottage	Riflerange managers house (former)	c1880s		c1880s	New Annex	1988	Drafting Services Tasmania
						Extension to Annex		Drafting Services Tasmania
						Alterations within Extension to Annex		Drafting Services Tasmania
						Infill link between cottage and Annex	1991	Drafting Services Tasmania
						Landscape Works	1994	Sue Small
53a	Brick Storeroom	Rifle Range storage Building	c1914		c1914			

Attachment 2: Campus plans showing Buildings and additions to buildings  
subject to Institute of Architect (Tasmanian Chapter) Awards

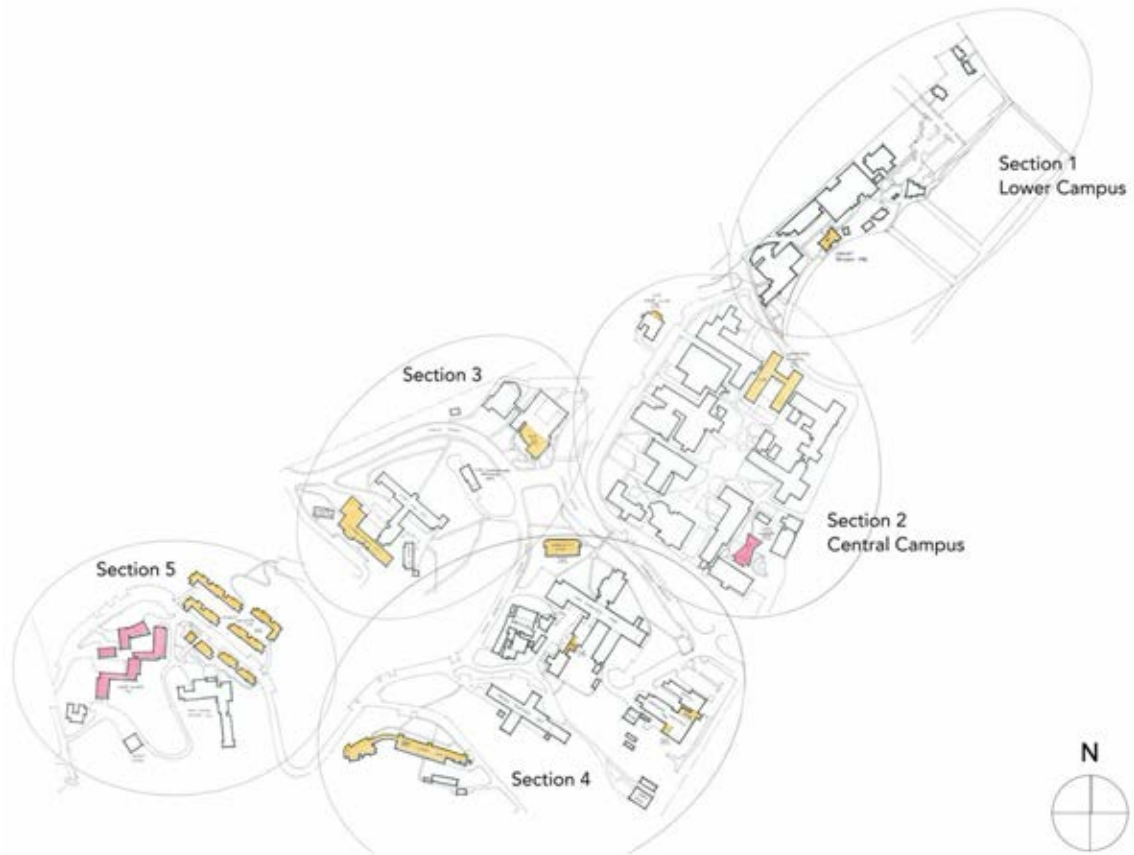


Figure 43: AIA awarded Buildings Plan

Source: Paul Davies Pty Ltd

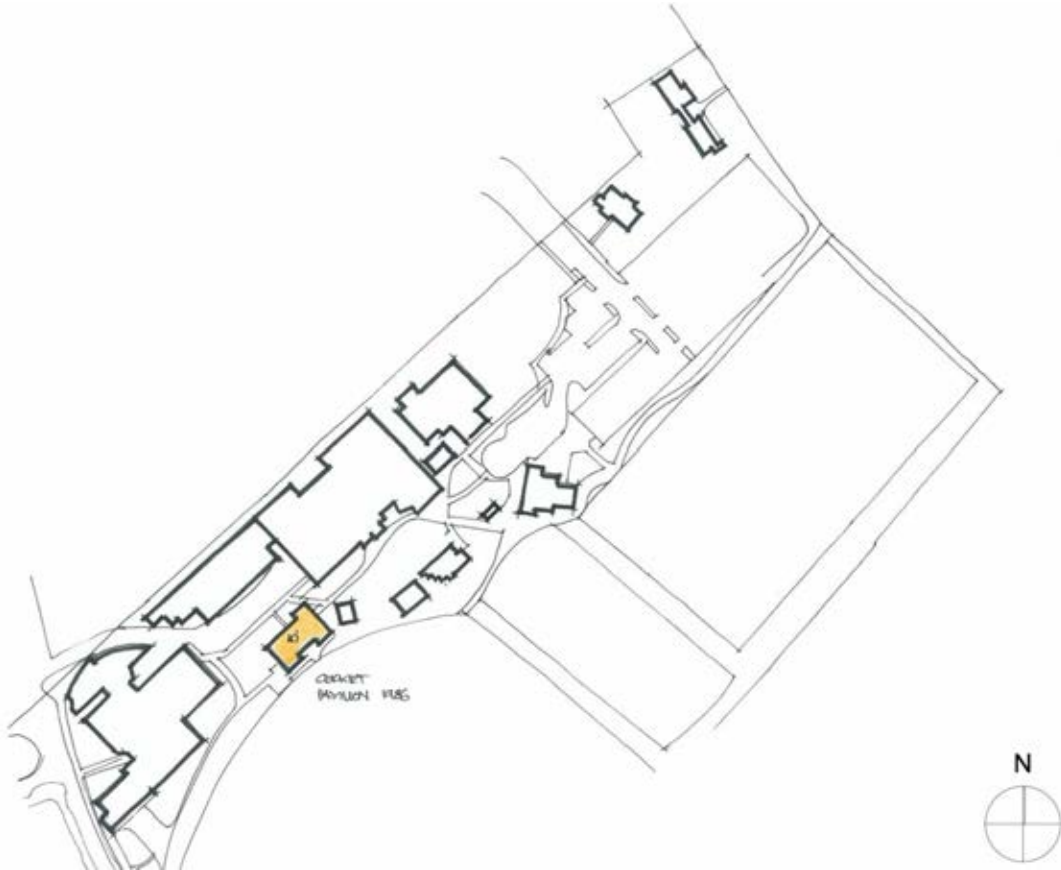


Figure 44: AilA award Buildings on lower part of Site.

Source: Paul Davies Pty Ltd



XX

Source: Paul Davies Pty Ltd

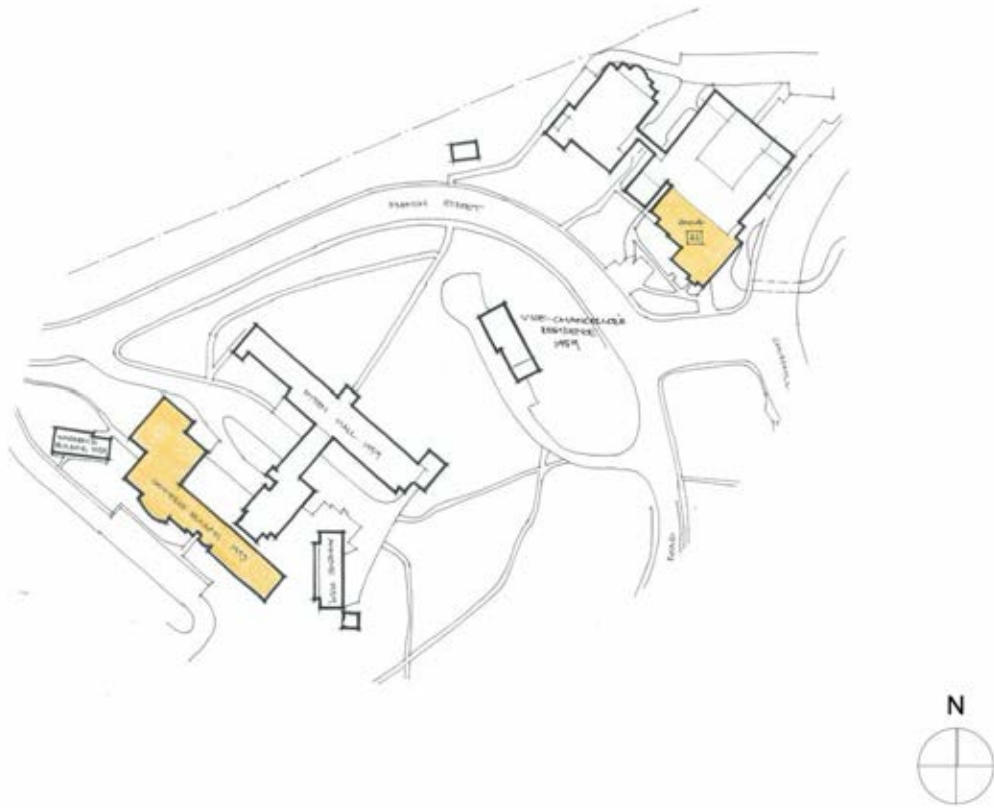


Figure 45: AIA award Buildings on upper part of Site drawing 1.

Source: Paul Davies Pty Ltd

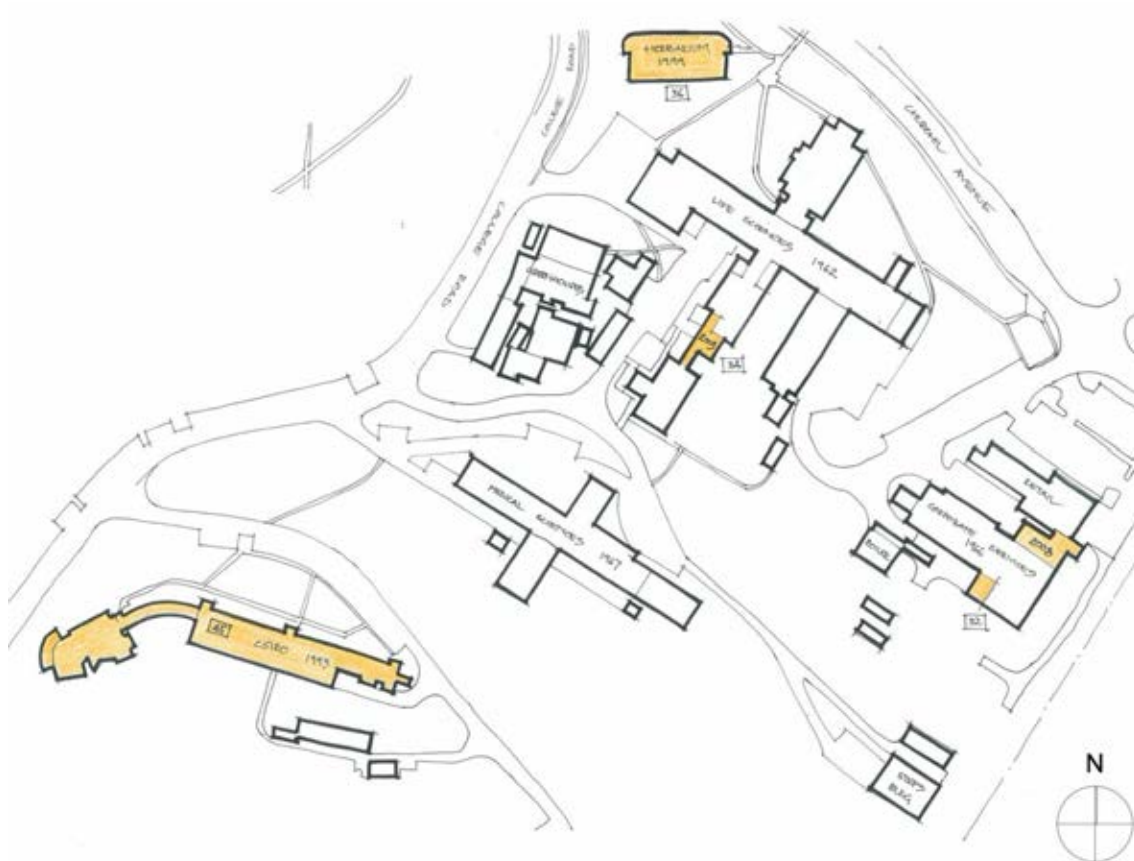


Figure 46: AIA award Buildings on upper part of Site drawing 2.

Source: Paul Davies Pty Ltd



Figure 47: AIA award Buildings on upper part of Site drawing 3.

Source: Paul Davies Pty Ltd

